Interagency Standards for Fire and Fire Aviation Operations

Department of the Interior
Bureau of Land Management
National Park Service
U.S. Fish and Wildlife Service
Bureau of Indian Affairs

Department of Agriculture
Forest Service

2018

January 2018
NFES 2724

Chapter 1	**Federal Wildland Fire Management Policy Overview**
Chapter 2	**BLM Program Organization and Responsibilities**
Chapter 3	**NPS Program Organization and Responsibilities**
Chapter 4	**FWS Program Organization and Responsibilities**
Chapter 5	**USFS Program Organization and Responsibilities**
Chapter 6	**BIA Program Organization and Responsibilities**
Chapter 7	**Safety and Risk Management**
Chapter 8	**Interagency Coordination and Cooperation**
Chapter 9	**Fire Management Planning**
Chapter 10	**Preparedness**
Chapter 11	**Incident Management and Response**
Chapter 12	**Suppression Chemicals and Delivery Systems**
Chapter 13	**Firefighter Training and Qualifications**
Chapter 14	**Firefighting Equipment**
Chapter 15	**Communications**
Chapter 16	**Aviation Operations and Resources**
Chapter 17	**Fuels Management**
Chapter 18	**Reviews and Investigations**
Chapter 19	**Dispatch and Coordination System**

Interagency Standards for Fire and Fire Aviation Operations

January 2018
NFES 2724

Produced by the Interagency Standards for Fire and Fire Aviation Operations Group, National Interagency Fire Center, Boise, ID.

This document is posted at https://www.nifc.gov/policies/pol_ref_redbook.html.

Published copies of this document may be ordered from the National Interagency Fire Center, Great Basin Cache Supply Office, Boise, ID 83705-5354. Consult the current *NWCG National Fire Equipment System Catalog Part 2: Publications* for current prices and ordering procedures posted at https://www.nwcg.gov/?q=publications/449-2.

Release Date: January 2018

(This page intentionally left blank.)

NATIONAL INTERAGENCY FIRE CENTER
3833 S. Development Avenue
Boise, Idaho 83705-5354
January 1, 2018

To: Agency Personnel

From: Fire and Aviation Directors
Bureau of Land Management
U.S. Forest Service
U.S. Fish and Wildlife Service
National Park Service
Bureau of Indian Affairs

Subject: *Interagency Standards for Fire and Fire Aviation Operations*

The Fire and Aviation Directors of the Bureau of Land Management, U.S. Forest Service, U.S. Fish and Wildlife Service, National Park Service, and Bureau of Indian Affairs have directed the Interagency Standards for Fire and Fire Aviation Operations Group (ISOG) to annually revise, publish, and distribute the federal *Interagency Standards for Fire and Fire Aviation Operations*, and issue errata to this document.

The *Interagency Standards for Fire and Fire Aviation Operations*, states, references, or supplements policy and provides program direction for Bureau of Land Management, U.S. Forest Service, U.S. Fish and Wildlife Service, National Park Service, and Bureau of Indian Affairs fire and fire aviation program management.

Employees engaged in fire suppression and fire management activities will comply with interagency and agency-specific health, safety, and fire management policy documents.

For the Bureau of Land Management, this document provides policy and guidance as referenced in *BLM Manual Section (MS) 9200 Fire Program Management*.

For the USDA Forest Service, this document provides guidance for implementing safe and effective fire and aviation management operations based on policy in *Forest Service Manual 5100* and *5700*.

Release Date: January 2018

For the U.S. Fish and Wildlife Service, this document provides guidance for implementaion of 621 FW 1.

For the National Park Service, this document supplements *Reference Manual 18.*

For the Bureau of Indian Affairs, this document provides guidance on field level fire operations, in addition to policy referenced in the *Indian Affairs Manual (IAM) Section 90*.

This document addresses specific action items that are contained in the *Guidance for Implementaiton of Federal Wildland Fire Management Policy (February 13, 2009).*

The contents of this book are not to be modified. Supplemental agency-specific direction of a more restrictive nature may be issued separately.

Suggestions for modification of the publication should be sent to your agency representatives listed on this page.

Howard Hedrick
Acting Assistant Director, Fire & Aviation, Bureau of Land Management

Larry Sutton
Assistant Director, Operations, Fire & Aviation Management, U.S. Forest Service

Chris Wilcox
Chief, Fire Management Branch, U.S. Fish and Wildlife Service

William Kaage
Chief, Division of Fire and Aviation, National Park Service

Aaron Baldwin
Branch Chief, Wildland Fire Management, Bureau of Indian Affairs

Interagency Standards for Fire and Fire Aviation Operations Group agency respresentatives:

Marlene Eno-Hendren, BLM
Brian Achziger, BLM
Bill Van Bruggen, FS
Evans Kuo, FS
Ted Mason, FWS
Ben Pratt, FWS
Chad Fisher, NPS
Jordan McKnight, NPS
Garth Fisher, BIA

Release Date: January 2018

Table of Contents

Chapter 1 1
Federal Wildland Fire Management Policy Overview 1
Scope 1
Purpose 1
Review and Update of the 1995 Federal Wildland Fire Management Policy (January 2001) 1
Guiding Principles of the Federal Wildland Fire Management Policy 1
Elements of the Federal Wildland Fire Management Policy 3
Guidance for Implementation of Federal Wildland Fire Management Policy (February 13, 2009) 5
Definitions 6
Wildland Fire 6
Fire Type 6
Wildfire Management Objectives 6
Response to Wildfire 7
Initial Response 7
Initial Attack (IA) 7
Extended Attack 7
Extended Attack Incident 7
Suppression 7
Protection 8
Prescribed Fire 8
Fire Operations Doctrine 8
Purpose of Fire Operations Doctrine 8
The Nature of Fire Operations 8
Wildland Fire Operations Risk Management 8
Fire Preparedness 8
Fire Operations Command Philosophy 9
Fire Leadership 9
Fire Suppression 9
Principles of Suppression Operations 10
Principles of Fire Suppression Action 10
Cost Effective Fire Operations 11

Chapter 2 13
BLM Wildland Fire and Aviation Program Organization and Responsibilities 13
Introduction 13
Sexual Harassment, Harassment Non-Sexual and Illegal Discrimination 13
Employee Conduct 14
Examples of Misconduct 14
BLM Fire Operations Website 15
National Wildfire Coordinating Group (NWCG) Relationship to BLM 15
Fire and Aviation Directorate 15
Program Manager Responsibilities 15
Assistant Director, Fire and Aviation (FA-100) 15
Deputy Assistant Director, Fire and Aviation (FA-100) 15
Equal Employment Opportunity Manager (EEO) (FA-120) 17
Support Services Division Chief (FA-200) 17
Fire Operations Division Chief (FA-300) 18
Budget and Evaluation Division Chief (FA-400) 19

Aviation Division Chief (FA-500) 19
Fire Planning and Fuels Management Division Chief (FA-600) 20
External Affairs Division Chief (FA-700)....20
State Director (SD)....21
District Manager (DM)....21
Management Performance Requirements for Fire Operations 23
Post Incident Review....25
Fire Staff Performance Requirements for Fire Operations 26
Delegation of Authority....29
Delegation for State Fire Management Officers (SFMO)....29
Delegation for District Fire Management Officers (DFMO) 29
BLM Operational Duty Officer (ODO) 30
State and National Duty Officers 31
Incident Business 31
BLM Fire Management Position Titles and Fire Department Cooperator Equivalencies 31
Agreements with Cooperators (Rangeland Fire Protection Association (RFPA) and Local Fire Department) 32
Safety and Occupational Health Program....33
Safety and Health Responsibilities for the Fire Program....33
Employee Safety and Health Program Responsibility....36
Emergency Notification and Contact Information 37
Employee Advocacy....38
BLM Fire and Aviation Honor Guard....38
BLM Mobile Fire Equipment Policy....39
Introduction....39
Policy and Guidance 39
Fire Equipment Committees....39
BLM National Fire Equipment Program (NFEP)....39
BLM Fire Equipment Status Report (FES)....40
BLM Engine Use Report (EUR) 40
Equipment Development....40
Fire Equipment Standardization....40
Fire Engine and Command Vehicle Identifier Standards....40
Improvement and Deficiency Reporting 40
Acquisition of Working Capital Fund Equipment....41
Funding....41
BLM Mobile Fire Equipment Ordering....41
Equipment Modification/Retrofitting....42
600 Class Command Vehicle Procurement Standards....42
Property Transfer/Replacement....42
Conversions....43
BLM Engine Equipment Inventory 43
Fire Equipment Maintenance and Care Standards....43
Fire Equipment Maintenance Procedure and Record (FEMPR)....43
Equipment Bulletins and Equipment Alerts 44
BLM Implementation of the Department of the Interior (DOI) Authorization for Use of Government Passenger Carrier(s) for Home-to-Work Transportation....44
Lights and Siren Response....45
BLM Firefighters....46
Introduction....46
BLM Firefighter Priority for Use 46
BLM Fire Operations Group National Preposition Strategy....46

Mobilization of BLM Firefighters 46
Preparedness Funding 47
Suppression Funding 47
Short-Term Severity (State-Level Severity) 47
National-Level Severity Funding 48
National Preposition Funding 48
State Discretionary Preposition Funding 49
BLM Fire Training and Workforce Development 50
BLM Fire Training and Workforce Development Program 50
BLM Standards for Fire Training and Workforce Development 50
BLM Firefighters General Non-Fire Training Requirements 51
Administratively Determined (AD) and Emergency Firefighters (EFF) 51
Agency Permanent, Career Seasonal, and Temporary Firefighters 51
Driver Training for Regular Drivers of Fire Equipment 52
BLM Firefighter Mandatory Physical Fitness Standards 52
BLM National Fire Operations Fitness Challenge 53
Interagency Fire Program Management Standards 53
BLM Hand Crews 54
BLM Hand Crew Standards (all crew types) 54
BLM Hand Crew Standards by Type 54
BLM Interagency Hotshot Crews (IHCs) 56
BLM IHC Locations 56
BLM IHC Annual Crew Mobilization 57
BLM IHC Decertification and Recertification 57
BLM IHC Size 58
BLM IHC Status Reporting System 58
BLM IHC Training and Qualification Requirements 59
BLM Fire Suppression Modules 59
BLM Fire Suppression Module Mobilization 60
BLM Wildland Fire Modules 60
BLM Engines 60
BLM Engine Ordering 60
BLM Engine Typing 60
BLM Engine Minimum Staffing Requirements 60
BLM Engine Training and Qualification Requirements 61
BLM Engine Driver Requirements 62
BLM Smokejumpers 63
BLM Smokejumper (SMKJ) Operations 63
BLM Smokejumper Mission 63
BLM Smokejumper Coordination and Dispatch 63
BLM Ram-Air Parachute System Management 63
BLM Smokejumper Aircraft 64
BLM Smokejumper Training 64
BLM Smokejumper Training and Qualification Targets 65
BLM Smokejumper Jump Proficiency Guideline 65
BLM Smokejumper Physical Fitness Standards 65
Retesting 66
BLM Exclusive Use Helitack Crews 66
BLM Exclusive Use Helicopter Locations 67
Target (Desired) Exclusive Use Helitack Crew Qualifications and Composition 67
Management Actions for Noncompliant Remote Automatic Weather Stations (RAWS) 68
Sagebrush Rangeland and Sage-Grouse Conservation Related to Wildland Fire 69
BLM Use of the Wildland Fire Decision Support System (WFDSS) 71

BLM Global Positioning System (GPS) Datum and Coordinate Format Standard **71**

Chapter 3 ..... **73**
National Park Service Program Organization and Responsibilities **73**
Introduction **73**
Employee Conduct **73**
Agency Administrator Roles **73**
Director 73
Regional Director 74
Park Superintendent 74
Agency Administrator Management Performance Requirements for Fire Operations **74**
Fire Management Staff Roles **80**
National Office 80
Regional Office 80
Park 80
Fire Management Staff Performance Requirements for Fire Operations **81**
Fire Management Leadership Board **84**
Requirements for Fire Management Positions **85**
Training **85**
Training for Fire Management Officers 85
NPS Firefighters General Training Requirements 85
Structural Fire and Hazardous Materials Response **86**
Structural Fire Response Requirements (Including Vehicle, Trash, and Dumpster Fires) 86
Delegation of Authority **87**
Delegation for Regional Fire Management Officers 87
NPS Duty Officer (DO) **87**
Engine Operating Standards **88**
Vehicle Color and Marking 88
Engine Module Standards 88
Lights and Siren Response **89**
Vehicle Maintenance, Repairs and Replacement **89**
Annual Safety Inspections, Scheduled Maintenance, and Daily Inspections 90
Fixed Ownership Rates (FORs) 90
Equipment Bulletins and Equipment Alerts **90**
NPS Firefighter Target Physical Fitness Standards **91**
National Fire Operations Fitness Challenge 91
Wildland Fire Uniform Standards **91**
Fire Management Credentials 92
NPS Use of WFDSS **93**
National Park Service Specific Qualifications and Qualifications Exceptions **93**

Chapter 4 ..... **95**
U.S. Fish and Wildlife Service Program Organization and Responsibilities **95**
Introduction **95**
Agency Administrator Roles **95**
Director 95
Chief, National Wildlife Refuge System 95
Regional Director 95
Regional Chief and Refuge Supervisors 96

Project Leader/Refuge Manager....96
Management Performance Requirements for Fire Operations....96
Fire Management Staff Roles....102
National Office....102
Fire Director....102
Regional Office....102
Regional Fire Management Coordinator (RFMC)....102
Refuge....102
Zone Fire Management Officer (ZFMO)....102
National Fire Leadership Team....106
Line Officer Team (LOT)....107
Delegation of Authority....107
Regional Fire Management Coordinator....107
Zone Fire Management Officer (ZFMO)....107
Inter-refuge Agreements....108
Fire Duty Officer....108
Wildland Fire Field Attire....108
Fire Severity Funding....108
Fire Reporting....108
Individual Fire Report....109
Fish and Wildlife Service Use of WFDSS....109
Final Wildland Fire Record....109
Physical Fitness and Conditioning....110
Training....110
Agency Administrator Training....110
Zone Fire Management Officer Training....111
FWS Firefighter General Training Requirements....111
Agency Permanent, Career Seasonal, and Temporary Firefighters....111
Administratively Determined (AD) and EFF Required Training....111
Fish and Wildlife Service Specific Qualifications....111
FWS Global Positioning System (GPS) Datum and Coordinate Format Standard....111

Chapter 5....113
USDA Forest Service Wildland Fire and Aviation Program Organization and Responsibilities....113
Introduction....113
Vision and Objectives for Fire Management....113
Foundational Doctrine....113
Mission....114
Wildland Fire Response Principles....114
Leadership and Accountability....115
The Operational Environment....115
Risk Management....115
Operations....115
Wildfire Response....115
Specific Line Officer Responsibilities for Fire and Aviation at the Field Level....118
Responsibilities....118
Preparedness....119
Wildfire Response....119
Responsibilities and Oversight....120
Safety....121

Fuels....121
Prescribed Fire....121
Agency Administrator Roles and Responsibilities for Incident Management....123
Agency Administrator Core Competencies....123
Agency Administrator Certification Program....123
Guidelines....124
Evaluation Process....125
Currency....126
Guidance on the Selection of Coaches....126
Definitions....126
Specific Fire Management Staff Responsibilities for Fire Operations at the Field Level....127
Preparedness....127
Wildfire Response....128
Safety....129
Prescribed Fire....129
Fire and Aviation Management (FAM) Duty Officer....129
Fire Management Position Requirements....130
Structure Exposure Protection Principles....130
Mission and Role....130
Strategic Principles....131
Tactical Applications....131
Structure Protection Definition....131
USFS Role....131
Local Government Role....133
Cost....133
Tactical Operating Principles....133

Chapter 6....135
BIA Program Organization and Responsibilities....135
Bureau of Indian Affairs Fire Management Policy....135
BIA Mission....135
BIA Fire Operations Website....135
Branch of Wildland Fire Management Organization....135
Agency Administrator's Roles....136
Director, Bureau of Indian Affairs....136
Director, Office of Trust Services....136
Division Chief, Forestry and Wildland Fire Management....136
Branch Chief, Wildland Fire Management....136
BIA Fire Leadership Team....138
Regional Directors....138
Agency Superintendent (unless excepted in regional directives)....139
Tribal Contracts/Compacts....141
Fire Management Administration....141
Guiding Principles....141
Inherently Federal Activities....141
Program Operational Standards....142
Program Planning....142
Fire Program Workload Shares....142
Fire Occurrence Data and Reporting....143
Records Management for Fire Reports....143
Fire Weather/RAWS....143
Bureau and Tribal NFDRS Weather Stations....144
Non-NFDRS Weather Stations....144
Weather Station Naming Conventions....144

Station Identifiers....145
Weather Module in Wildland Fire Management Information (WFMI)....145
Program Preparedness....145
Preseason Agreements, Contracts and Operating Plans....145
Tribal Disaster Assistance....146
Tribal Support for Emergency Support Function (ESF)....146
National Program Preparedness/Readiness Reviews....146
FireCode Business Rules....146
Wildland Fire Management Funding....149
Preparedness Activity....149
Fire Facility Construction and Maintenance Activity....149
Suppression Activity....150
Interagency Severity Funding Request Procedures....150
Qualification of Need....150
Narrative Statement....151
Requested Resources....151
Budget Management....151
Program Budget Annual Appropriations....152
Funded Program Procedures....152
One-Time Funding....152
Procedures for One-Time Funding Submission....152
National Model 52 Wildland Engine Program....153
Mission/Policy....153
Replacement Guidelines....153
Organization....153
Administration....153
Emergency Repairs....154
Non-Emergency/Non-Suppression Repairs....154
National Aviation Program....154
Aviation Program Goals....154
Regional Office Level....155
Agency/Field Office Level....155
Aviation Safety....156
Flight Request and Approval....156
Safety and Risk Management....156
Motor Vehicle Operation Policy....156
Business Management and Administration....156
Casuals Hired as Drivers When Employed by BIA....156
Request for Funding Authorization....157
Acquisitions....157
Emergency Equipment Rental Agreements (EERA)....157
Wildland Fire Decision Support System (WFDSS)....157
Fuels Management, Planning & Implementation....158
Prescribed Fire Review....158

Chapter 7....159
Safety and Risk Management....159
Introduction....159
Policy....159
Guiding Principles....159
Goal....160
Definitions....160
Risk Management Process....160
Job Hazard Analysis (JHA)/Risk Assessment (RA)....160

Work/Rest **161**
Length of Assignment **161**
Assignment Definition 161
Length of Assignment 162
Days Off 162
Assignment Extension 163
Single Resource/Kind Extensions 164
Incident Management Team Extensions 164
Maximum Consecutive Days Worked – Home Unit 164
Driving Standard **164**
General Driving Policy 164
Non-Incident Operations Driving 166
Mobilization and Demobilization 166
Incident Operations Driving 166
Fire Vehicle Operation Standards 167
Management Controls to Mitigate Exposure **167**
Wildland Fire Field Attire **167**
Personal Protective Equipment (PPE) **167**
Required Fireline PPE 168
Wildland Fire Boot Standard 168
Fire Shelters 168
Head Protection 169
Eye and Face Protection 169
Hearing Protection 170
Neck Protection 170
Leg Protection 170
Respiratory Protection 170
Specialized or Non-Standard Personal Protective Equipment (PPE) 171
High Visibility Vests 171
Fireline Safety **172**
Incident Briefings 172
LCES – A System for Operational Safety 172
Right to Refuse Risk 172
Smoke and Carbon Monoxide 172
Location of Fire Camps and Plans to Remain in Place 173
Standard Safety Flagging 173
Emergency Medical Planning and Services **173**
Incident Medical Emergency Management Planning 173
Air Ambulance Coordination 174
Incident Emergency Medical Services 174
Required Treatment for Burn Injuries **175**
ABA Burn Injury Criteria 176
Severity Determination 176
Percentage Total Body Surface Area (TBSA) – Rule of 9s or Rule of Palms 177
Explosives, Munitions, and Unexploded Ordinance **177**
Notifications 178
Discovery of Explosives/Munitions/UXO Associated with Former Defense Sites 178
Industrial and Naturally Occurring Hazardous Materials Exposure **178**
Hazardous Materials Response 179
Dump and Spill Sites 179
Wildland Fires In or Near Oil/Gas Operations 180
Wildland Fires In or Near Radioactive Locations 181
Wildland Fires In or Near Coal Seams 181
Hazardous Water Sources 182
Hydrogen Cyanide (HCN) Exposure 182

Safety for Personnel Visiting Fires....183
Visits to Incident Base Camps or Non-Fireline Field Locations....183
Fireline Logistical Support....183
Minimum Requirements for Visits to the Fireline/RX Burns....183
Non-Escorted Visits....184
Escorted Visits....184
Helicopter Observation Flights....184
Fixed-Wing Observation Flights....185
Six Minutes for Safety Training....185
SAFENET....185
Safety Alert System....186
Accident/Injury Reporting....186
Agency Reporting Requirements....187
OSHA Reporting Requirements....187
Critical Incident Management....187
Critical Incident Stress Management (CISM)....188
Critical Incident Peer Support (CIPS)....188
Critical Incident Peer Support Groups....188

Chapter 8....189
Interagency Coordination and Cooperation....189
Introduction....189
National Wildland Fire Cooperative Agreements....189
USDOI and USDA Interagency Agreement for Fire Management....189
DOI, USDA, and DOD Interagency Agreement....189
National Wildland Fire Management Structure....190
Wildland Fire Leadership Council (WFLC)....190
Wildland Fire Executive Council (WFEC)....190
Federal Fire Policy Council (FFPC)....190
Fire Executive Council (FEC)....191
Fire Management Board (FMB)....192
National Wildfire Coordinating Group (NWCG)....193
Interior Fire Executive Council (IFEC)....193
Office of Wildland Fire (OWF)....193
Multi-Agency Management and Coordination....194
National Multi-Agency Coordinating (NMAC) Group....194
Geographic Area Multi-Agency Coordinating (GMAC) Groups....194
National Dispatch/Coordination System....194
Local and Geographic Area Drawdown....194
National Ready Reserve (NRR)....194
Interagency Incident Business Management Handbook....195
Standards for Cooperative Agreements....195
Agreement Policy....195
Types of Agreements....196
National Interagency Agreements....196
Regional/State Interagency Agreements....196
Local Interagency Agreements....196
Emergency Assistance....196
Contracts....196
Elements of an Agreement....197
Annual Operating Plans (AOPs)....197
General Elements of an Annual Operating Plan....197
Fiscal Responsibility Elements of an Annual Operating Plan....200

All-Hazards Coordination and Cooperation 201
Stafford Act Disaster Relief and Emergency Assistance 201
Homeland Security Act 202
Homeland Security Presidential Directive-5 202
National Response Framework 202
National Incident Management System (NIMS) 202
Emergency Support Function (ESF) Annexes 203
National Oil and Hazardous Substances Pollution Contingency Plan (NCP, 40 CFR 300) 204
Post-Katrina Emergency Management Reform Act 204
Presidential Policy Directive-8 204
All-Hazards Coordination and Cooperation 205
NWCG Role in Support, Coordination, and All-Hazards Response by Wildland Fire Agencies 205
USFS All-Hazards Guiding Principles and Doctrine 206
All-Hazard Incident Management Teams (IMTs) and Other Non-Wildland Fire IMTs 208
International Wildland Fire Coordination and Cooperation 208
U.S. – Mexico Cross Border Cooperation on Wildland Fires 208
U.S. – Canada, Reciprocal Forest Firefighting Arrangement 209
U.S. – Australia/New Zealand Wildland Fire Arrangement 209
International Non-Wildland Fire Coordination and Cooperation 209
International Disasters Support 209

Chapter 9 211
Fire Management Planning 211
Purpose 211
Policy 211
Agency Planning Guidance 212
Department of Interior (DOI) 212
U.S. Forest Service (FS) 212
Other Resources 213
Concepts and Definitions 213
Land/Resource Management Plan 213
Fire Management Plan 213
Fire Management Unit 213
Compliance 213
Spatial Fire Management Plan (SFMP) 214
Spatial Fire Management Plan Mapsheet 214
Spatial Fire Management Plan Map Set 214
Connection to Other Plans 214

Chapter 10 215
Preparedness 215
Preparedness Overview 215
Preparedness Planning 215
Fire Danger Rating 216
Communication of Fire Danger 217
Fire Danger Operating Plan 217
Preparedness Level Plans 219
Step-up/Staffing Plans 220
Staffing Level 220
Initial Response/Pre-planned Dispatch Plans 221
Fire Prevention/Mitigation Plans 221
Fire Danger PocketCard for Firefighter Safety 223
Managing Weather Data in WIMS 223

Management Actions for Remote Automated Weather Stations (RAWS) 224
Noncompliance Report 224
Portable RAWS 224
Predictive Service Areas 224
National Predictive Services Fire Potential Outlooks and Advisories.....225
National Significant Wildland Fire Potential Outlook 225
National 7-day Significant Fire Potential Outlook 225
Fuels and Fire Behavior Advisories 225
National Intelligence Products.....226
Local Unit Seasonal Tracking.....226
Fire Severity Funding.....227
Typical Uses.....227
Authorization 228
State/Regional-Level Fire Severity Funding 228
National-Level Fire Severity Funding 228
Appropriate Fire Severity Funding Charges and Activities 229
Labor 229
Vehicles and Equipment.....229
Aviation 229
Travel and Per Diem 229
Prevention Activities 230
Inappropriate Fire Severity Funding Charges 230
Interagency Severity Requests 230
Requesting Fire Severity Funding 230
Sequence of Action and Responsible Parties for Severity Funding Requests 231
Labor Cost Coding For Fire Severity Funded Personnel 231
Documentation 232
Severity Funding Reviews.....232
Qualification for Professional Liability Insurance Reimbursement.....232

Chapter 11 233
Incident Management and Response..... 233
National Response Framework 233
National Incident Management System.....233
Incident Management and Coordination Components of NIMS.....233
Incident Command System (ICS).....233
Wildfire Complexity.....233
Wildfire Risk and Complexity Assessment 234
Command Organizations.....234
Incident Command 234
On-site Command Organizations 235
Incident Characteristics.....236
Type 5 Incident Characteristics 236
Type 4 Incident Characteristics 236
Type 3 Incident Characteristics 236
Type 3 Incident Command 237
Type 2 Incident Characteristics 238
Type 2 Incident Command 238
Type 1 Incident Characteristics 238
Type 1 Incident Command 239
Incident Management Teams 239
Area Command 239
Type 1 Incident Management Teams 240
National Incident Management Organization (NIMO).....240
Type 2 Incident Management Teams 241

Unified Command....241
All-Hazard Incident Management Teams (IMTs) and Other Non-Wildland Fire IMT....241
Coordination and Support Organizations....241
Buying/Payment Teams....242
Multi-Agency Coordination (MAC)....242
Wildland Fire Decision Support System (WFDSS)....243
Initial Decision....244
New Decision....245
A new decision is required when:....245
WFDSS Decision Approval and Publication....245
WFDSS Approval Authorities by Agency....246
WFDSS Support....247
Managing the Incident....248
Agency Administrator Definition....248
Agency Administrator Responsibilities....248
Agency Administrator Representative Responsibilities....249
Resource Advisor Responsibilities....250
Use of Trainees....251
Incident Action Plan....251
Incident Status Reporting....251
Incident History and Financial Records....251
Document and Computer Security....252
Transfer of Command....252
Release of Incident Management Teams....252
Team Evaluation....253
Unit/Area Closures....253
Incident Emergency Management Planning and Services....253
Fire Management in Wilderness....253
Operational Guidelines for Aquatic Invasive Species....254
Operational Guidelines for Invasive Species....255
Responding to Non-Wildland Fire Incidents....255
Wildland Urban Interface....255
Structure, Vehicle, Dumpster, Trash, and Landfill Fires....256
Public Emergency Medical Response....257
Post-Wildfire Activities....257
Burned Area Emergency Response (BAER) Teams....259
Incident Business Management....260
Cost Management....260
Large Fire Cost Review (FS)....260
Cache Management....261
Type 1 and 2 National Interagency Support Caches....261
Type 3 Support Caches....261
Type 4 Local Caches....262
Inventory Management....262
System Implementation....262
Accountability....262
Trackable Items....262
Durable Items....262
Consumable Items....262
Incident Management and Environmental Sustainability....263
Incident-to-Incident Transfer of Supplies and Equipment....263
Fire Loss Tolerance Reporting for Type 1 and 2 Incidents....263
Incident Supply and Equipment Return Procedures....264
Cache Returns and Restock Procedures....264
Incident Replacement of Government Property....264

Chapter 12 267
Suppression Chemicals and Delivery Systems 267
Policy for Use of Fire Chemicals 267
Types of Fire Chemicals 267
Long-Term Retardant 267
Fire Suppressant Foam 267
Wet Water 268
Water Enhancer (Gel) 268
Safety Information 268
Personnel Safety 268
Aerial Application Safety 269
Interagency Policy for Aerial and Ground Delivery of Wildland Fire Chemicals Near Waterways and Other Avoidance Areas 269
Definition of Waterway 270
Definition of Waterway Buffer 270
Definition of Additional Mapped Avoidance Areas 270
Guidance for Pilots 270
Exceptions for Aerial Delivery of Long-Term Retardant on USDA Forest Service Lands (2011 Record of Decision) 271
Exceptions for All Other Agencies and All Other Fire Chemicals 271
Reporting Requirements of Aerially Delivered Wildland Fire Chemicals Into Waterways, Waterway Buffer Areas and Mapped Avoidance Areas 271
Endangered Species Act (ESA) Emergency Consultation 272
Operational Guidelines for Invasive Species 273

Chapter 13 275
Firefighter Training and Qualifications 275
Introduction 275
Standards 275
Qualification and Certification Process 276
Non-NWCG Agency Personnel Qualifications 276
Non-NWCG Agency Personnel Use on Prescribed Fire 276
Incident Qualifications and Certification System (IQCS) 277
Certification of Non-Agency Personnel 278
Incident Qualification Card 278
Incident Qualification Card Expiration Dates 279
Universal Training Requirements 279
Annual Fireline Safety Refresher Training 279
Medical Examinations 281
Arduous Fitness Level – Department of Interior Wildland Firefighter Medical Standards Program (DOI MSP) 281
Medical Exam Process for Light and Moderate Fitness Levels 283
Health Screen Questionnaire (HSQ) 284
Work Capacity Tests 284
Work Capacity Test (WCT) Categories 284
Work Capacity Test Categories 284
Work Capacity Test (WCT) Administration 285
Work Capacity Test – Retesting 286
Physical Fitness 287
Physical Fitness and Conditioning 287
Minimum Age Requirements for Hazardous Duty Assignments on Federal Incidents 288
Engine Modules 288

Helicopter Modules **288**
Smokejumpers (SMKJ) **288**
Smokejumper Policy 288
Smokejumper Communications 288
Smokejumper Training 288
Smokejumper Target Qualifications 289
Smokejumper Medical Standards 289
USFS Smokejumper Physical Fitness Standards 289
Interagency Hotshot Crews (IHC) **289**
IHC Policy 289
IHC Certification 290
Annual Crew Pre-Mobilization Process 290
Annual IHC Readiness Review 290
IHC Organization 290
IHC Availability Periods 290
National IHC Status Reporting System 291
IHC Communications 291
IHC Transportation 291
Other Hand Crews **291**
Policy 291
Wildland Fire Modules (WFM) **293**
WFM Policy 293
WFM Types and Certification 294
WFM Availability Periods 294
WFM Organization 294
Chainsaw Operators and Fallers **296**

Chapter 14 ..... **299**
Firefighting Equipment **299**
Introduction **299**
Policy **299**
Firefighting Engine/Water Tender Common Standards **299**
Driving Standard 299
Engine/Tactical Water Tender Water Reserve 299
Chocks 299
Fire Extinguisher 299
Nonskid Surfaces 299
First Aid Kit 300
Gross Vehicle Weight (GVW) 300
Speed Limits 300
Lighting 300
Emergency Light Use 300
Fire Equipment Maintenance and Inspections 300
Mobile Attack (Pump and Roll) 301
Firefighting Engines **301**
Operational Procedures 301
Engine Typing 301
Fire Engine Staffing 302
Engine Inventories 302
Water Tenders **302**
Water Tender Typing 302
Water Tender Qualifications and Staffing Standards 302
Dozers/Tractor Plows **303**
Dozer/Tractor Plow Training and Qualifications 303
Dozer/Tractor Plow Physical Fitness Standards 303

Dozer/Tractor Plow Operational Procedures 303
All-Terrain Vehicles (ATV)/Utility Terrain Vehicles (UTV) 304
Required PPE 305
Vehicle Cleaning/Invasive Species Prevention 307
Incident Remote Automated Weather Stations 307
Aerial Ignition Devices 308
Ground Ignition Devices and Transporting/Dispensing Fuel 308

Chapter 15 309
Communications 309
Policy 309
Dispatch Recording Devices 309
Cellular/Satellite Phone Communications 309
Radio Communications 309
Radio Contracts 309
Radio Frequency Management 310
Daily Operational Frequency Management 310
Mutual Aid Frequency Management 310
Incident Frequency Management 310
Aviation Operations Frequency Management 311
Pre-assigned National Frequencies 311
National Air Guard Frequency (168.6250 MHz) 311
National Flight Following Frequency (168.6500 MHz) 312
National Interagency Air Tactics Frequencies (166.6750 MHz, 167.9500 MHz, 169.1500 MHz, 169.2000 MHz, 170.0000 MHz) 312
National Interagency Airtanker Base Frequency (123.9750 MHz) 312
Smokejumper and Rappel/RADS Air-to-Ground Frequency (168.550 MHz) 312
Government-wide Area Common User Frequencies (163.1000 MHz, 168.3500 MHz) 313
National Interagency Fire Tactical Frequencies (168.0500 MHz, 168.200 MHz, 168.6000 MHz, 168.2500 MHz, 166.7250 MHz, 166.7750 MHz) 313
Incident Radio Support 313
Military Communications on an Incident 314

Chapter 16 315
Aviation Operations and Resources 315
Purpose and Scope 315
Organizational Responsibilities 315
National Office – Department of Interior (DOI) 315
Office of Aviation Services (OAS) 315
Bureau of Land Management (BLM) 315
National Park Service (NPS) 316
Bureau of Indian Affairs (BIA) 316
National Office – U.S. Department of Agriculture 316
Forest Service (FS) 316
State/Regional Office 317
Local Office 318
Aviation Information Resources 320
Aviation Safety 320
Risk Assessment and Risk Management 321
How to Properly Refuse Risk (Aviation) 321
Aviation Safety Support 322
Aviation Safety and Technical Assistance Team (ASAT) 322
Aviation Safety Briefing 323

Aviation Hazard 323
Aerial Applications of Wildland Fire Chemical Safety 323
SAFECOM 323
Aircraft Incidents/Accidents 324
Low-level Flight Operations 324
Operational Procedures 324
Congested Area Flight Operations 325
Unmanned Aircraft Systems 325
Key Points 326
Airspace Coordination 326
Flight Request and Approval 327
Point-to-Point Flights 327
Mission Flights 327
Flight-Following All Aircraft 329
Sterile Cockpit All Aircraft 329
Interagency Interim Flight and Duty Limitations/Aviation Stand Downs 329
Interim Flight and Duty Limitations Implementation 330
Phase 1 – Standard Flight and Duty Limitations (Abbreviated Summary) 330
Phase 2 – Interim Duty Limitations 331
Phase 3 – Interim Duty Limitations 331
Aviation Assets 332
Helitack 332
Organization – Crew Size 332
Operational Procedures 333
Communication 333
Transportation 333
Training and Experience Requirements 333
Helicopter Rappel and Cargo Let-Down 334
Emergency Medical Short-Haul 335
Aerial Ignition 335
Fire Chemical Avoidance Areas 335
Aerial Supervision Principles for ATGS, HLCO, ASM, and Leadplane 335
Operational Procedures and Policy 336
Air Tactical Group Supervisor (ATGS) 336
Program Management 336
Training 336
Operational Considerations 337
Leadplane 337
Aerial Supervision Module (ASM) 337
Operational Considerations 337
Policy 338
Aerial Supervision Module Program Training and Qualifications 338
Reconnaissance or Patrol Flights 338
Airtankers 338
Airtanker Types 339
State of Alaska Airtankers 339
Canadian Airtankers 339
Airtanker Rotation 339
Exceptions 340
Rotation of State Airtankers 341
Additional Information 341
Airtanker Payloads 341

Airtanker Base Operations **341**
Loading Operations 342
Airtanker Base Personnel 342
Startup/Cutoff Time for Multi Engine Airtankers 342
Single Engine Airtankers **342**
Single Engine Airtanker (SEAT) Operations, Procedures, and Safety 342
Single Engine Airtanker Manager Position 342
Operational Procedures 342
Multi-Engine Water Scoopers **343**
Smokejumper Pilots **343**
Helicopters **343**
Helicopter Types 343
Military or National Guard Helicopters and Pilots **344**
Modular Airborne Fire Fighting System (MAFFS) **344**
Cooperator Aircraft **344**

Chapter 17 ..... **347**
Fuels Management **347**
Introduction **347**
Policy **347**
Reporting Fuels Management Accomplishments **348**
Reporting Fuels Treatment Effectiveness Monitoring (FTEM) **348**
Reporting Planned Fuels Treatments Burned in a Wildfire **349**
Reporting of Wildfire Acres That Meet Resource Management Objectives **349**
Prescribed Fire During Preparedness Levels 4 and 5 ..... **350**
Federal Agencies Assistance **351**
Hazard Pay/Environmental Differential for Prescribed Fire Implementation **351**
Non-NWCG Agency Personnel Use on Prescribed Fire **352**
Use of Contractors for Prescribed Fire Implementation **352**
Use of AD Pay Plan for Prescribed Fire **352**
Activation of Contingency Resources **352**
Non-fire Fuels Management Activities **352**

Chapter 18 ..... **353**
Reviews and Investigations **353**
Introduction **353**
Multiagency Cooperation **353**
Federal Interagency Investigations 353
Reviews **353**
Review Types and Requirements 354
Preparedness Reviews 355
After Action Reviews (AAR) 355
Fire and Aviation Safety Team (FAST) Reviews 355
Safety Assistance Team (SAT) Visits 356
Aviation Safety Assistance Team (ASAT) Reviews 356
Large Fire Cost Reviews (FS) 357
Individual Fire Reviews 357
Lessons Learned Reviews (LLRs) 358
Rapid Lesson Sharing (RLS) 359
Declared Wildfire Reviews 359
Investigations **359**
Wildland Fire Incident and Accident Types and Definitions 360
Investigation Types and Requirements 361

Investigation Processes....362
Processes Common to All Wildland Fire Accident Investigations....362
Wildland Fire Serious Accident Investigation (SAI) Process....362
Fire Director Responsibilities....365
Agency Administrator Responsibilities....365
Notification....365
Designating the Investigation Team Lead....366
Serious Accident Investigation Team (SAIT) Composition....366
SAI 24- and 72-Hour Reports....367
SAI Final Report....368
Accident Review Board/Board of Review....368
Wildland Fire Accident Investigation (AI) Process....369
Notification....369
Investigation Team Membership....369
Investigation Methodology....369
Accident Investigation 24- and 72-Hour Reports....369
Accident Investigation Final Report....370
Accident Investigation Report Standard Contents....370
Fire Cause Determination and Trespass Investigation....371
Introduction....371
Policy....372
Related Policy Documents....373

Chapter 19....375
Dispatch and Coordination System....375
Introduction....375
National Dispatch/Coordination System....376
National Interagency Coordination Center (NICC)....376
Geographic Area Coordination Centers (GACCs)....376
Local Dispatch Centers....377
Mobilization Guides....377
Local Mobilization Guide/Dispatch Operating Plan....377
Local and Geographic Area Drawdown....378
Establishing Drawdown Levels....378
National Ready Reserve (NRR)....378
Dispatch/Coordination Center Administration....379
Memorandum of Understanding (MOU)....379
Service and Supply Plans....380
Continuity of Operations Plan (COOP)....380
Dispatch/Coordination Center Manager Delegation of Authority....380
National Interagency Coordination Center (NICC) Functional Responsibilities....380
Geographic Area Coordination Center (GACC) Functional Responsibilities....383
Local Dispatch Center Functional Responsibilities....385
Accident Notification....387
Incident Emergency Management Planning....387
Dispatch/Coordination Center Reference Material....388
Training....388
Facilities and Equipment....388
Radio Systems....389

APPENDICES*

Appendix A – Sample Questions for Fire Site Visits by Agency Administrators
Appendix B – Manager's Supplement for Post Incident Review
Appendix C – Sample Delegation for Unit Fire Management Officers
Appendix D – Agency Administrator's Briefing to IMT
Appendix E – Wildland Fire Risk and Complexity Assessment
Appendix F – Indicators of Incident Complexity
Appendix G – Sample Delegations of Authority AA to IMT and Leader's Intent
Appendix H – Local Incident Commander Briefing to IMT
Appendix I – Incident Management Team Performance Evaluation
Appendix J – Sample Delegation – Lessons Learned Review (LLR)
Appendix K –Recommendations for Incident Emergency Medical Services
Appendix L – Sample Delegation of Authority – FAST
Appendix M – NUS Engines
Appendix N – Wildland Fire Decision Support System Information
Appendix O – Area Command (AC) Complexity Assessment
Appendix P – Dispatch Reference (internet only)
Appendix Q – Work Capacity Test Record (internet only)

**Some forms in PDF fillable or MSWord format are available online at https://www.nifc.gov/policies/pol_ref_redbook.html.*

(This page intentionally left blank.)

Chapter 1
Federal Wildland Fire Management Policy Overview

Scope

The *Interagency Standards for Fire and Fire Aviation Operations* states, references, or supplements policy for Bureau of Land Management, U.S. Forest Service, U.S. Fish and Wildlife Service, National Park Service, and Bureau of Indian Affairs fire and fire aviation program management. Original source policy is stated or referenced throughout this handbook. This handbook attempts to quote verbatim, rather than to paraphrase policy that is stated elsewhere. It also attempts to limit duplication of source policy when a reference will suffice. Interagency Standards for Fire and Fire Aviation Operations is intended to comply with and support the *Review and Update of the 1995 Federal Wildland Fire Management Policy (January 2001)* and the *Guidance for Implementation of Federal Wildland Fire Management Policy (February 13, 2009)* and other existing federal policy.

Purpose

The *Interagency Standards for Fire and Fire Aviation Operations* provides fire and fire aviation program management direction for Bureau of Land Management, U.S. Forest Service, U.S. Fish and Wildlife Service, National Park Service, and Bureau of Indian Affairs managers. Employees engaged in fire management activities will continue to comply with all agency-specific health and safety policy. Other references, such as the *National Wildfire Coordinating Group (NWCG) Incident Response Pocket Guide* (PMS 461, NFES 1077) and the *NWCG Wildland Fire Incident Management Field Guide* (PMS 210) provide operational guidance.

Review and Update of the 1995 Federal Wildland Fire Management Policy (January 2001)

The *Review and Update of the 1995 Federal Wildland Fire Management Policy (January 2001)* is comprised of the following guiding principles and discrete policies. As a whole these principles and policy statements guide the philosophy, direction, and implementation of fire management planning, activities, and projects on federal lands.

Guiding Principles of the Federal Wildland Fire Management Policy

1. Firefighter and public safety is the first priority in every fire management activity.
2. The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process. Federal agency land and resource management plans set the objectives for the use and desired future condition of the various public lands.

3. Fire Management Plans (FMPs), programs, and activities support Land and Resource Management Plans and their implementation.
4. Sound risk management is a foundation for all fire management activities. Risks and uncertainties relating to fire management activities must be understood, analyzed, communicated, and managed as they relate to the cost of either doing or not doing an activity. Net gains to the public benefit will be an important component of decisions.
5. Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives. Federal agency administrators are adjusting and re-organizing programs to reduce costs and increase efficiencies. As part of this process, investments in fire management activities must be evaluated against other agency programs in order to effectively accomplish the overall mission, set short and long term priorities, and clarify management accountability.
6. FMPs and activities are based upon the best available science. Knowledge and experience are developed among all wildland fire management agencies. An active fire research program combined with interagency collaboration provides the means to make these tools available to all fire managers.
7. FMPs and activities incorporate public health and environmental quality considerations.
8. Federal, state, tribal, local, interagency, and international coordination and cooperation are essential. Increasing costs and smaller work forces require that public agencies pool their human resources to successfully deal with the ever-increasing and more complex fire management tasks. Full collaboration among federal agencies and between the federal agencies, international, state, tribal, and local governments, and private entities results in a mobile fire management work force available for the full range of public needs.
9. Standardization of policies and procedures among federal agencies is an ongoing objective. Consistency of plans and operations provides the fundamental platform upon which federal agencies can cooperate, integrate fire activities across agency boundaries, and provide leadership for cooperation with state, tribal, and local fire management organizations.

– *Review and Update of the 1995 Federal Wildland Fire Management Policy (January 2001)*

Elements of the Federal Wildland Fire Management Policy

1. **Safety**
   Firefighter and public safety is the first priority. All FMPs and activities must reflect this commitment.
2. **Fire Management and Ecosystem Sustainability**
   The full range of fire management activities will be used to help achieve ecosystem sustainability, including interrelated ecological, economic, and social components.
3. **Response to Wildland Fire**
   Fire, as a critical natural process, will be integrated into land and resource management plans and activities on a landscape scale across agency boundaries. Response to wildland fires is based on ecological, social, and legal consequences of the fire. The circumstances under which a fire occurs, the likely consequences on firefighter and public safety and welfare, the natural and cultural resources, and the values to be protected dictate the appropriate response to fire.
4. **Use of Wildland Fire**
   Wildland fire will be used to protect, maintain, and enhance resources and, as nearly as possible, be allowed to function in its natural ecological role. Use of fire will be based on approved FMPs and will follow specific prescriptions contained in operational plans.
5. **Rehabilitation and Restoration**
   Rehabilitation and restoration efforts will be undertaken to protect and sustain ecosystems, public health, safety, and to help communities protect infrastructure.
6. **Protection Priorities**
   The protection of human life is the single overriding suppression priority. Setting priorities among protecting public communities and community infrastructure, other property and improvements, and natural and cultural resources will be done based on the values to be protected, public health and safety, and the costs of protection. Once people have been committed to an incident, these human resources become the highest value to be protected.
7. **Wildland Urban Interface**
   The operational roles of the federal agencies as partners in the wildland urban interface are wildland firefighting, hazard reduction, cooperative prevention, education, and technical assistance. Structural fire suppression is the responsibility of tribal, state, or local governments. Federal agencies may assist with exterior structural fire protection activities under formal fire protection agreements that specify the mutual responsibilities of the partners, including funding. (Some federal agencies have full structural protection authority for their facilities on lands they administer and may also enter into formal agreements to assist state and local governments with structural protection.)

8. **Planning**
   Every area with burnable vegetation must have an approved FMP. FMPs are strategic plans that define a program to manage wildland and prescribed fires based on the area's approved land management plan (LMP). FMPs must provide for firefighter and public safety; include fire management strategies, tactics, and alternatives; address values to be protected, and public health issues; and be consistent with resource management objectives, activities of the area, and environmental laws and regulations.
9. **Science**
   FMPs and fire programs will be based on a foundation of the best available science. Research will support ongoing efforts to increase our scientific knowledge of biological, physical, and sociological factors. Information needed to support fire management will be developed through an integrated interagency fire science program. Scientific results must be made available to managers in a timely manner and must be used in the development of LMPs, FMPs, and implementation plans.
10. **Preparedness**
    Agencies will ensure their capability to provide safe, cost-effective fire management programs in support of land and resource management plans through appropriate planning, staffing, training, equipment, and management oversight.
11. **Suppression**
    Fires are suppressed at minimum cost, considering firefighter and public safety, benefits and all values to be protected consistent with resource objectives.
12. **Prevention**
    Agencies will work together with their partners, other affected groups, and individuals to prevent unauthorized ignition of wildland fires.
13. **Standardization**
    Agencies will use compatible planning processes, funding mechanisms, training and qualification requirements, operational procedures, values-to-be protected methodologies, and public education programs for all fire management activities.
14. **Interagency Cooperation and Coordination**
    Fire management planning, preparedness, prevention, suppression, restoration and rehabilitation, monitoring, research, and education will be conducted on an interagency basis with the involvement of cooperators and partners.
15. **Communication and Education**
    Agencies will enhance knowledge and understanding of wildland fire management policies and practices through internal and external communication and education programs. These programs will be continuously improved through the timely and effective exchange of information among all affected agencies and organizations.

16. **Agency Administrator and Employee Roles**
    Agency Administrators will ensure their employees are trained, certified, and made available to participate in the wildland fire program locally, regionally, and nationally as the situation demands. Employees with operational, administrative, or other skills will support the wildland fire programs as necessary. Agency Administrators are responsible and will be held accountable for making employees available.
17. **Evaluation**
    Agencies will develop and implement a systematic method of evaluation to determine effectiveness of projects through implementation of the 2001 Federal Wildland Fire Management Policy. The evaluation will assure accountability, facilitate resolution in areas of conflict, and identify resource shortages and agency priorities.

– *Review and Update of the 1995 Federal Wildland Fire Management Policy (January 2001)*

Guidance for Implementation of Federal Wildland Fire Management Policy (February 13, 2009)

On February 13, 2009, the Fire Executive Council (FEC) approved guidance for the implementation of federal wildland fire management policy. This guidance provides for consistent implementation of the *Review and Update of the 1995 Federal Wildland Fire Management Policy (January 2001)*, as directed by the Wildland Fire Leadership Council.

– *Guidance for Implementation of Federal Wildland Fire Management Policy (February 13, 2009), page 3.*

The following guidelines should be used to provide consistent implementation of federal wildland fire policy:

1. Wildland fire management agencies will use common standards for all aspects of their fire management programs to facilitate effective collaboration among cooperating agencies.
2. Agencies and bureaus will review, update, and develop agreements that clarify the jurisdictional inter-relationships and define the roles and responsibilities among local, state, tribal, and federal fire protection entities.
3. Responses to wildland fire will be coordinated across levels of government regardless of the jurisdiction at the ignition source.
4. Fire Management Plans will be intergovernmental in scope and developed on a landscape scale.

5. Wildland fire is a general term describing any non-structure fire that occurs in the wildland. Wildland fires are categorized into two distinct types:
   a. Wildfires – Unplanned ignitions or prescribed fires that are declared wildfires.
   b. Prescribed Fires – Planned ignitions.
6. A wildland fire may be concurrently managed for one or more objectives and objectives can change as the fire spreads across the landscape. Objectives are affected by changes in fuels, weather, topography; varying social understanding and tolerance; and involvement of other governmental jurisdictions having different missions and objectives.
7. Management response to a wildland fire on federal land is based on objectives established in the applicable Land/Resource Management Plan, and/or the Fire Management Plan.
8. Initial action on human-caused wildfire will be to suppress the fire at the lowest cost with the fewest negative consequences with respect to firefighter and public safety.
9. Managers will use a decision support process to guide and document wildfire management decisions. The process will provide situational assessment, analyze hazards and risk, define implementation actions, and document decisions and rationale for those decisions.

– *Guidance for Implementation of Federal Wildland Fire Management Policy (February 13, 2009), page 7.*

Definitions

Wildland Fire

Any non-structure fire that occurs in vegetation or natural fuels. Wildland fire includes prescribed fire and wildfire.

Fire Type

Wildland fires are categorized into two distinct types:

- Wildfires – Unplanned ignitions or prescribed fires that are declared wildfires.
- Prescribed fires – Planned ignition.

Wildfire Management Objectives

A wildfire may be concurrently managed for one or more objectives as specified in the L/RMP and FMP. Objectives can change as the fire spreads across the landscape and are affected by changes in fuels, weather, and/or topography; varying social understanding and tolerance; and involvement of other governmental jurisdictions having different missions and objectives.

- ***FS*** *– All wildfires will have a protection objective.*

Response to Wildfire
Response to wildfire will be coordinated with all affected agencies/cooperators regardless of the jurisdiction at the ignition point.

Management response to a wildfire on federal land is based on objectives established in the applicable L/RMP and FMP. A wildfire may be concurrently managed for more than one objective. Unplanned natural ignitions may be managed to achieve L/RMP and FMP objectives when risk is within acceptable limits.

- ***BLM*** *– Initial action on human-caused wildfires will be to suppress the fire in the most cost effective manner with the fewest negative consequences with respect to firefighter and public safety. If the initial action is not successful, an updated decision will be made utilizing the fire management decision process, and will be documented as part of the official record. The updated decision will consider firefighter and public safety, values to be protected and costs.*
- ***NPS*** *– Refer to RM-18, Chapter 2 for further guidance.*
- ***FWS*** *– All escaped prescribed fires will be suppressed. When reporting in FMIS, the cause of the wildfire will be "Escaped RX" and the narrative will document the link between the prescribed fire and the wildfire.*
- ***FS*** *– Human caused fires and trespass fires must be suppressed safely and cost effectively and must not be managed for resource benefits.*

Response to wildfire is based on ecological, social, and legal consequences of the fire. The appropriate response to the fire is dictated by:

- The circumstances under which a fire occurs;
- The likely consequences to firefighter/public safety and welfare; and
- The natural/cultural resource values to be protected.

Initial Response
The initial decisions and actions taken in reaction to a reported incident.

Initial Attack (IA)
A preplanned response to a wildfire given the wildfire's potential. Initial Attack may include size up, patrolling, monitoring, holding action or suppression.

Extended Attack
Actions taken on a wildfire that has exceeded the initial response.

Extended Attack Incident
An incident that exceeds the capability of the initial attack resources and/or organization to successfully manage the incident to conclusion.

Suppression
Management action to extinguish a fire or confine fire spread beginning with its discovery.

Protection

The actions taken to mitigate the adverse effects of fire on environmental, social, political, economic, and community values at risk.

Prescribed Fire

Any fire intentionally ignited by management actions in accordance with applicable laws, policies, and regulations to meet specific objectives.

Fire Operations Doctrine

Purpose of Fire Operations Doctrine

Fire operations doctrine states the fundamental principles on the subject of fire operations. This doctrine establishes a particular way of thinking about fire operations. It provides a philosophy for leading firefighters in fire operations, a mandate for professionalism, and a common language. Fire operations doctrine does not consist of procedures to be applied to specific situations so much as it sets forth general guidance that requires judgment in application.

The Nature of Fire Operations

Fire is a complex, dynamic, and often unpredictable phenomenon. Fire operations require mobilizing a complex organization that includes management, command, support, and firefighting personnel, as well as aircraft, vehicles, machinery, and communications equipment. While the magnitude and complexity of the fire itself and of the human response to it will vary, the fact that fire operations are inherently dangerous will never change. A firefighter utilizing the best available science, equipment, training, and working within the scope of agency doctrine and policy, can still suffer serious injury or death.

Wildland Fire Operations Risk Management

The primary means by which we prevent accidents in wildland fire operations is through aggressive risk management. Our safety philosophy acknowledges that while the ideal level of risk may be zero, a hazard free work environment is not a reasonable or achievable goal in fire operations. Through organized, comprehensive, and systematic risk management, we will determine the acceptable level of risk that allows us to provide for safety yet still achieve fire operations objectives. Risk management is intended to minimize the number of injuries or fatalities experienced by wildland firefighters.

Fire Preparedness

Fire preparedness is the state of being ready to provide an appropriate response to wildland fires based on identified objectives. Preparedness is the result of activities that are planned and implemented prior to fire ignitions. Preparedness requires identifying necessary firefighting capabilities and implementing coordinated programs to develop those capabilities. Preparedness requires a continuous process of developing and maintaining firefighting infrastructure, predicting fire activity, implementing prevention activities, identifying values to

be protected, hiring, training, equipping, pre-positioning, and deploying firefighters and equipment, evaluating performance, correcting deficiencies, and improving operations. All preparedness activities should be focused on developing fire operations capabilities and on performing successful fire operations.

Fire Operations Command Philosophy

It is essential that our philosophy of command support the way we conduct fire operations. First and foremost, in order to generate effective decision making in fire operations, and to cope with the unpredictable nature of fire, commanders' intent must be lucid and unambiguous, and lines of authority must be clearly articulated and understood. Subordinate commanders must make decisions on their own initiative based on their understanding of their commander's intent. A competent subordinate commander who is at the point of decision may understand a situation more clearly than a senior commander some distance removed. In this case, the subordinate commander must have the freedom to take decisive action directed toward the accomplishment of operational objectives. However, this does not imply that unity of effort does not exist, or that actions are not coordinated. Unity of effort requires coordination and cooperation among all forces toward a commonly understood objective. Unified, coordinated action, whether between adjacent single resources on the fireline or between the highest command level and the most subordinate firefighter, is critical to successful fire operations.

Fire Leadership

Leadership is the art of influencing people in order to achieve a result. The most essential element for success in the wildland fire service is good leadership. Good leaders provide purpose, direction, and motivation for wildland firefighters working to accomplish difficult tasks under dangerous, stressful circumstances. Leaders often face difficult problems to which there are no simple, clear-cut, by-the-book solutions. In these situations, leaders must use their knowledge, skill, experience, education, values, and judgment to make decisions and to take or direct action - in short, to provide leadership. All firefighters, regardless of position, must provide leadership.

Fire Suppression

The purpose of fire suppression is to put the fire out in a safe, effective, and efficient manner. Fires are easier and less expensive to suppress when they are small. When the management goal is full suppression, aggressive initial attack is the single most important method to ensure the safety of firefighters and the public and to limit suppression costs. Aggressive initial attack provides the Incident Commander maximum flexibility in suppression operations. Successful initial attack relies on speed and appropriate force. All aspects of fire suppression benefit from this philosophy. Planning, organizing, and implementing fire suppression operations should always meet the objective of directly, quickly, and economically contributing to the suppression effort. Every

firefighter, whether in a management, command, support, or direct suppression role, should be committed to maximizing the speed and efficiency with which the most capable firefighters can engage in suppression action. When the management goal is other than full suppression, or when conditions dictate a limited suppression response, decisiveness is still essential and an aggressive approach toward accomplishment of objectives is still critical.

Principles of Suppression Operations

The primary means by which we implement command decisions and maintain unity of action is through the use of common principles of suppression operations. These principles guide our fundamental fire suppression practices, behaviors, and customs, and are mutually understood at every level of command. They include Risk Management, Standard Firefighting Orders and Watch Out Situations, LCES, and the Downhill Line Construction Checklist. These principles are fundamental to how we perform fire suppression operations and are intended to improve decision making and firefighter safety. They are not absolute rules. They require judgment in application.

Principles of Fire Suppression Action

The principles of fire suppression action provide a framework for developing fire suppression strategy and for conducting fire suppression operations. Again, these are not absolute or immutable rules. These five principles provide a consistent set of considerations with which to evaluate decisions, plans, and actions in different situations.

1. **Objective**
   The principle of the objective is to direct every fire suppression operation toward a clearly defined, decisive, and obtainable objective. The purpose of fire suppression operations is to achieve the suppression objectives that support the overall management goals for the fire.
2. **Speed and Focus**
   Speed is rapidity of action. Focus is the convergence of appropriate resources at the desired position to initiate action. The principle of speed and focus maintains that rapidly deploying and concentrating firefighting resources, in a calculated fashion, at the decisive time and place increases the likelihood of successful suppression actions.
3. **Positioning**
   The principle of positioning maintains that rapid, flexible, and opportunistic movement increases the effectiveness of fire suppression resources. Positioning ranges from single resource offensive or defensive reactions to dynamic fire conditions, to pre-positioning of multiple resources based on predicted activity and values at risk. Positioning should always be undertaken with speed and focus in mind and with sufficient time for positioning to occur before operations begin.

4. **Simplicity**
   The principle of simplicity is that clear, uncomplicated plans and concise orders maximize effectiveness and minimize confusion. Simplicity contributes to successful actions.
5. **Safety**
   The principle of safety maintains that ensuring the safety of firefighters and other persons affected by fire operations is fundamental to successful suppression action. Safety not only contributes to successful actions, it is indispensable to them.

Cost Effective Fire Operations

Maximizing the cost effectiveness of any fire operation is the responsibility of all involved, including those that authorize, direct, or implement those operations. Cost effectiveness is the most economical use of the suppression resources necessary to accomplish mission objectives. Accomplishing fire operations objectives safely and efficiently will not be sacrificed for the sole purpose of "cost savings." Care will be taken to ensure that suppression expenditures are commensurate with values to be protected, while understanding that other factors may influence spending decisions, including the social, political, economic, and biophysical environments.

(This page intentionally left blank.)

Chapter 2
BLM Wildland Fire and Aviation Program Organization and Responsibilities

Introduction

This chapter provides policy and guidance for Bureau of Land Management fire and aviation program management as referenced in *BLM Manual Section (MS) 9200 Fire Program Management*. These standards are based on Department of Interior (DOI) and Bureau policy. They are intended to ensure safe, consistent, efficient, and effective fire and aviation operations for a fire organization to manage state and/or local unit fire workload or meet approved national program resource allocations. BLM employees engaged in fire management activities (including fire program management, fire suppression, and fire program/incident support) will adhere to the standards in this document. This chapter will be reviewed and updated annually.

Sexual Harassment, Harassment Non-Sexual and Illegal Discrimination

All fire personnel will be provided with a workplace free of unlawful harassment and discrimination. Discrimination based on race, color, national origin, religion, sex, age (over 40), disability, sexual orientation, genetic information, and reprisal is prohibited. Discrimination, in any form, has no place in our organization and will not be tolerated. Discrimination includes sexual or non-sexual harassment; any discriminatory act, policy, practice or procedure that denies equal opportunity; or any conduct that demeans the dignity of another person.

All personnel have a responsibility to carry out this policy and create a work environment a reasonable person would not consider intimidating, hostile, or offensive.

Sexual Harassment is a form of discrimination that involves unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature.

Harassment that is not sexual in nature may also be a form of discrimination if it involves unwelcome verbal or physical conduct based on race, color, national origin, religion, sex, age (over 40), disability, sexual orientation, or genetic information. It is behavior that is hostile and/or intimidating, which creates an abusive or offensive work environment.

All allegations of harassment (sexual or non-sexual) will be taken seriously and dealt with fairly and promptly. It is critical that home unit HR and EEO Offices be contacted when harassment of any kind occurs while on fire assignment.

Reprisal against an individual who reports harassment of any kind is illegal. Reprisal is the wrongful threatening or taking of either unfavorable action or withholding favorable action from another solely in response for their opposing employment discrimination or participating in an EEO activity protected by employment discrimination statutes.

An employee who engages in harassment or discrimination faces consequences ranging from verbal warnings and letters of reprimand, up to termination from employment, depending on the seriousness of the misconduct. Managers and supervisors, who do not take action when they know or suspect that harassment or discrimination is occurring, also face discipline. Contractor staff may be subject to comparable penalties from their employers. A contractor, who fails to enforce this policy, may have its contract terminated. Visitors to fire camps who engage in harassment may be removed and prevented from returning.

Fire leaders at all levels have the responsibility to serve as role models of appropriate behavior, and should confront any form of discrimination, harassment, or other improper behavior when it is observed, or reported. Supervisors have a duty to act when they become aware of harassment of any kind, and will be held accountable for responding, and stopping harassment while on fire assignment.

All reports of alleged discrimination will be taken seriously, promptly investigated and handled with professionalism, dignity, and fairness. Incident personnel who believe they have been subjected to discrimination, harassment or reprisal, should be directed to their home unit EEO Manager or an EEO Counselor within 45 days of the alleged discriminatory matter.

All questions or concerns regarding harassment, sexual harassment or any form of illegal discrimination should be directed to the home unit EEO manager or the Fire and Aviation Directorate EEO Manager.

Employee Conduct

All employees, cooperators, contractors, and volunteers who participate in wildland fire operations have the duty to treat each other with respect and to maintain a work environment free of misconduct and harassment.

Misconduct includes but is not limited to alcohol misuse, driving while intoxicated, the use of illegal drugs, hazing, insubordination, disregard for policies and procedures, and the destruction or theft of government property.

Examples of Misconduct

- **Hazing –** Hazing is considered a form of harassment. “Hazing” is defined as “any action taken, or situation created intentionally, to produce mental or physical discomfort, embarrassment, or ridicule.”

- **Alcohol –** The use of alcohol during any work period is strictly prohibited. The performance of job duties while under the influence of alcohol is prohibited. Underage personnel alcohol use is prohibited at all times.

BLM Fire Operations Website

BLM Fire Operations maintains a website that hosts operational, informational, and policy-related documents. The website also contains information about the National Fire Equipment Program, the BLM Fire Training Unit, and the BLM Fire Operations Group and its subcommittees. This website is referenced throughout this document. The address of the BLM Fire Operations website is http://web.blm.gov/internal/fire/fire_ops/index.html.

National Wildfire Coordinating Group (NWCG) Relationship to BLM

The National Wildfire Coordinating Group (NWCG) provides national leadership to enable interoperable wildland fire operations among federal, state, local, tribal, and territorial partners. The NWCG establishes national interagency wildland fire operations standards, but the decision to adopt the standards is made independently by the members and communicated through their respective directives systems.

See Chapter 8 for NWCG members.

BLM provides a representative to the NWCG Executive Board and representatives to various NWCG committees and subcommittees. These individuals are responsible for representing the BLM during NWCG decision-making processes and ensuring that proposed NWCG standards are reviewed by pertinent BLM personnel prior to release by the NWCG.

Fire and Aviation Directorate

The BLM Fire and Aviation Directorate (FAD) consists of the Assistant Director (FA), Deputy Assistant Director (FA), Fire Operations Division Chief, Aviation Division Chief, Fire Planning and Fuels Management Division Chief, Support Services Division Chief, Budget and Evaluation Chief, External Affairs Division Chief, and the Equal Employment Opportunity Manager.

Program Manager Responsibilities

Assistant Director, Fire and Aviation (FA-100)
Deputy Assistant Director, Fire and Aviation (FA-100)

- Develops policies and standards for firefighting safety, training, prevention, suppression, and use of wildland fires on Bureau lands.
- Provides guidance to State Directors on the use of prescribed fire and fuels management to achieve management objectives.

- Integrates fire and aviation management programs with natural resource management programs.
- Establishes position competencies, standards, and minimum qualifications for Fire Management Officers, Fire Management Specialists, and leaders based on federal interagency standards.
- Reviews and evaluates state fire and aviation management programs.
- Represents the BLM in the coordination of overall fire and aviation management activities at the National Interagency Fire Center (NIFC) on intra- and interagency fire committees, groups, and working teams.
- In conjunction with federal fire directors, establishes priorities for assignment of critical resources during wildfire emergencies.
- Initiates or participates on Boards of Review concerning actions taken on selected wildland fires.
- Negotiates cooperative agreements and/or modifications of existing national level agreements to improve fire and aviation management activities on Bureau lands.
- Makes determinations on wildland fire management program funding to states, and recommends approval to the BLM Director.
- Serves as the Bureau's focal point for the Significant Wildland Fire Review (SWFR) process and initiates, facilitates, and provides oversight for the SWFR process. The AD coordinates with the appropriate state director, assembles a SWFR team, provides a Delegation of Authority, initiates the SWFR, and provides briefings to the Bureau Director, as appropriate.
- Serves as designated contact for the United States Department of the Treasury for the certification and revocation of Certifying Officers and Assistant Disbursing Officers (CO/ADO) and Designated Officials for emergency incident payments.
- Supervises the Senior Program Advisor position located at the Washington Headquarters Office. This position provides connectivity between the Director's Office, the other BLM Directorates, the BLM State Offices, the Department's other offices such as the Office of Wildland Fire, and the Forest Service National Office in D.C. and maintains a day-to-day physical presence with the rest of the Bureau's national level leadership to fully integrate programs and leverage capability. This position maintains frequent, routine contact with those organizations on a variety of topics ranging from current fire activity to strategic interdisciplinary, interagency, or intergovernmental policy and processes for the protection of lives, property, and the resources.
- Supervises the Safety and Occupational Health Specialist who develops and implements safety programs, accident investigation procedures, and safety trend analyses.
- Supervises the National Critical Incident Response Program Manager.

Equal Employment Opportunity Manager (EEO) (FA-120)

- Manages the Equal Employment Opportunity (EEO) program in accordance with legal, regulatory, and policy requirements.
- Manages and directs the Counseling Program, and Alternative Dispute Resolution (ADR) programs in accordance with Equal Employment Opportunity Commission (EEOC) regulations and BLM policy as well as for other agencies located at NIFC.
- Advises managers and aggrieved persons of employee rights and responsibilities, procedural options and timeframes in conflict situations and formulates proposed resolutions.
- Negotiates with managers, aggrieved persons and their representatives to informally resolve EEO matters, and executes final settlement agreements.
- Manages the Affirmative Employment Program (AEP).
- Develops and maintains the accessibility program for the disabled, required under Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disability Act (ADA of 1990).
- Conducts analyses to evaluate progress in meeting equal employment opportunity program goals.
- Administers training activities for the organization.
- Provides managers and supervisors with guidance and advice on issues related to EEO/civil rights program activities.
- Represents the organization in meetings with public and private groups, universities, minority and women's organizations, other DOI components, and other federal agencies.

Support Services Division Chief (FA-200)

- Manages all aspects of the business responsibilities and programs under the jurisdiction of NIFC for the benefit of the BLM and cooperating agencies.
- Directs the accomplishment of the approved operating budget, exercising appropriate control to assure program quality goals are met according to established standards.
- Interprets Departmental and Bureau policies and directives as they affect BLM-NIFC programs.
- Participates in the BLM-wide and interagency task force activities as a leader or member.
- Responsible for the NIFC Site and Facilities Management, NIFC Safety and Health program, Business Practices, Human Resources, Information Resource Management, Maintenance and Security, National Radio Cache, Remote Automated Weather Stations (RAWS) program, and Transportation.
- Is a focal point and frequent spokesperson for the Bureau and the national level management, assures a public awareness of Bureau programs and coordinates with key officials in affected federal agencies, states, and occasionally with other entities such as: foreign governments, private

individuals, private organizations, vendors, suppliers, transportation groups, airlines, and others.

- Supports the implementation of the BLM's Automation/Modernization/ Information Resource Management (IRM) initiatives as they apply to BLM/NIFC.

Fire Operations Division Chief (FA-300)

- Serves as the principal technical expert on fire operations to the Assistant Director (FA), Deputy Assistant Director (FA), and to the BLM state fire programs.
- Provides the Assistant Director (FA) and the Deputy Assistant Director (FA) technical advice, operational oversight, and leadership in all aspects of fire operations.
- Performs annual fire program preparedness reviews. Evaluates compliance with policies, objectives, and standards. Assesses operational readiness and provides technical assistance to solve identified problems. Performs other operations reviews as required/requested.
- Assists the Assistant Director (FA) and Deputy Assistant Director (FA), in the formulation and establishment of national policies and programs pertinent to wildland fire preparedness, suppression, shared national resources, safety, training, and equipment.
- Serves as the BLM technical expert on national interagency mobilization and utilization of fire suppression resources.
- Develops national plans, standards, and technical guides for the BLM and interagency fire management operations.
- Supervises the Fire Management Specialist (Veterans Initiatives) position.
- Supervises the Branch of Radio Operations (FA-350) which is responsible for policy, guidance, and governance, as well as tactical and operational national radio planning for the Bureau to meet the needs of all business users (law enforcement (LE), fire, cadastral survey, recreation, and natural resource programs). FA-350 is responsible for managing the BLM's nationwide radio frequency (RF) assignments; conducting management control reviews; user satisfaction surveys; Exhibit 300 Business Case; operational analysis; equipment test plans; testing resources for the DOI Technical Service Center (TSC); implementation of facilities standards, and management of equipment lifecycles.
- Serves as the BLM representative to the National Multi Agency Coordinating Group (NMAC).
- Certifies Area Command and Type 1 Command and General Staff task books and red cards for the national and Washington offices.
- Provide written daily National Multi-Agency Coordinating Group briefings to the Assistant Director and Deputy Assistant Director, Fire and Aviation; BLM state fire management officers; and geographic MAC members in FIAT states at National Preparedness Level (PL) 3 and above.

Budget and Evaluation Division Chief (FA-400)

- Serves as principal budget advisor of the wildland fire program to the Assistant Director (FA), Deputy Assistant Director (FA), BLM Fire Leadership Team, and to other BLM staffs.
- Serves as primary BLM representative in the DOI Wildland Fire Budget formulation and execution process.
- Represents BLM on the DOI Fire Budget Team and at other interagency meetings in regards to budget related policies, requirements, procedures, and reports.
- Coordinates all budget activities between Washington Office, Office of Wildland Fire, and Fire and Aviation.
- Provides national oversight for BLM Wildland Fire program budget formulation, justification, and execution. Responsible for the development and preparation of the budget justifications, Planning Target Allocation, Annual Work Plan, capability statements, effects statements, and congressional responses.
- Reviews NIFC offices at mid-year, third quarter, and end-of-year and distributes available funding in accordance with BLM policy.
- Provides oversight of Casual Payment Center. Ensures all DOI casual payments are processed in a timely and cost-effective manner adhering to procedures and practices set forth by the DOI agencies.

Aviation Division Chief (FA-500)

- Serves as principal aviation advisor to the Assistant Director (FA), Deputy Assistant Director (FA), other staffs, states, and to the DOI.
- Identifies and develops Bureau aviation policies, methods and procedures, as well as standardized technical specifications for a variety of specialized firefighting missions for incorporation into the directives system.
- Coordinates aviation-related activities and services between the Washington Office (WO) and states with other wildland firefighting, regulatory, investigative, and military agencies.
- Coordinates provision and use of aviation resources with business practices, aviation user staffs at the WO, and state office level.
- Represents the BLM at interagency meetings, in interagency committees developing government-wide aviation policies, requirements, procedures and reports, at aviation industry meetings and conventions.
- Develops and implements aviation safety programs, accident investigation procedures, and aviation safety trend analyses.
- Plans and conducts reviews and evaluations of state aviation programs.
- Plans and conducts technical and managerial analyses relating to the identification of aviation organization and resources appropriate for agency use, cost-effectiveness of aviation firefighting, other specialized missions, aircraft acquisition requirements, equipment developmental needs, and related areas.

Fire Planning and Fuels Management Division Chief (FA-600)

Serves as principal advisor to the Assistant Director (FA), Deputy Assistant Director (FA), Fire Leadership Team, and other BLM staffs for the following wildland fire programs:

- **Fire Planning -** Responsible for the development and implementation of the Bureau-wide fire planning program and policies. Provides guidance and assistance in administering the technical and operational aspects of BLM's fire planning program.
- **Fuels Management -** Responsible for the development and coordination of the BLM's fuels management program to restore and maintain healthy, resilient landscapes, reducing wildfire risks to communities and other values. Recommends the distribution of program funds to regions and tracks all fuels management fund distributions and prior year carryover funds. Develops and maintains a national database for fuels management accomplishments.
- **Community Assistance -** Responsible for the development and coordination of the BLM's community assistance program which includes fire prevention, education, mitigation efforts on adjacent non-federal lands and cooperator assistance.
- **Fire Investigation and Trespass -** Responsible for the development and coordination of the BLM's fire investigation and trespass programs.
- **Smoke Management -** Responsible for the development and coordination of the BLM's smoke management program.

External Affairs Division Chief (FA-700)

- Responsible for coordination of information between the Department of the Interior and Office of Wildland Fire to the BLM, BIA, USFWS, NPS, USFS, National Association State Foresters (NASF), and Federal Emergency Management Agency (FEMA) at NIFC.
- Responsible for coordination of the responses to: Office of Management and Budget (OMB), Government Accountability Office (GAO), congressional, other elected officials, and other external inquiries among agencies and departments, establishing and maintaining cooperative relationships resulting in quality work products.
- Serves as the primary manager of the External Affairs program for the NIFC.
- Serves as the primary point of contact to external audiences regarding BLM, and at times, DOI fire and aviation policy.
- Serves as the primary point of contact with the BLM Washington Office and DOI external affairs and communication offices.
- Develops recommendations pertaining to External Affairs aspects for BLM Fire and Aviation policies.
- Initiates External Affairs policies and procedures pertaining to Fire and Aviation for adoption at the department level in conjunction with other departments and agencies.

- Serves as personal and direct representative of the Assistant Director, Fire and Aviation at various meetings and functions with members of congress and staff, state governors and legislatures, officials of local, state and federal agencies, major private corporations, public and private interest groups, and foreign governments.
- Serves as external affairs expert and consultant to the Assistant Director, (FA) and the Deputy Assistant Director (FA) on a wide variety of issues and policies of controversial nature, providing analysis and advice on public reaction to major policy and program issues.
- Responsible for management and contact of all NIFC and BLM FA public expressions, including printed material, video productions, and social media products.
- Coordinates with BLM legislative affairs on proposed legislation regarding FA.

State Director (SD)

The SD is responsible for fire and aviation management programs and activities within the state. The SD will ensure that employees in their organization meet the requirements outlined in the *Interagency Fire Program Management Qualifications Standards and Guide* at https://www.ifpm.nifc.gov/ and will ensure training is completed to support delegations to line.

District Manager (DM)

The DM is responsible to the SD for the safe and efficient implementation of fire and aviation management activities within their District. This includes cooperative activities with other agencies or landowners.

Agency Administrator (AA)

An AA is a BLM line manager (District Manager, Field Manager, or National Conservation Lands Manager) or their designated Acting that has met specific training requirements (as outlined in Instruction Memorandum No. FA IM-2018-003) and has wildland fire decision authority for a defined area, as specified by delegation. All re-delegations must be consistent with BLM Manual 1203 and State supplements to that manual.

A BLM line manager must complete required AA training no later than two years after being appointed to a designated management position. Training that took place prior to a management appointment also meets the requirement.

State Fire Management Officer (SFMO)

The SFMO provides leadership for the BLM fire and aviation management program. The SFMO is responsible and accountable for providing planning, coordination, training, technical guidance, and oversight to the state fire and aviation management programs. The SFMO also represents the SD on interagency geographic area coordination groups and Multi-Agency Coordination (MAC) groups. The SFMO provides feedback to District offices

on performance requirements. The SFMO meets the SFMO Assigned Program Responsibilities.

District Fire Management Officer (DFMO)

The DFMO is responsible and accountable for providing leadership for fire and aviation management programs at the local level. The DFMO:

- Determines local fire program requirements to implement land use decisions through the Fire Management Plan (FMP) to meet land management objectives;
- Negotiates interagency agreements and represents the District Manager on local interagency fire and fire aviation working groups;
- Meets the DFMO Assigned Program Responsibilities; and
- Fulfills FMO Safety and Health Responsibilities for the Fire Program.

Experience requirements for positions in the Alaska Fire Service, Oregon and California (O&C) Districts, FA, national office, and other fire management positions in units and state/regional offices will be established as vacancies occur, but will be commensurate with the position's scope of responsibilities. The developmental training to fully achieve competencies should be addressed in an IDP within a defined time period.

State Directors and District Managers have both authority and responsibility within the wildland fire management program. The BLM Manual Section (MS)-1203 Delegation of Authority provides a single authoritative source of the organizational location of authority. The MS-1203 defines authority as the ability to make the final, binding decision or to take specific action, or both as an official representing the United States Government. Such authorities have a legal basis in statute or regulation. Authority to make a decision or take an action is different from having responsibility.

Following are tables that show many of the authorities as well as the assigned responsibilities for the wildland fire management program. In addition to the national level MS-1203, each state may have a supplemental manual that is consistent with the MS-1203. BLM offices should ensure adherence to the MS-1203 as well as the relevant state supplemental manual.

Management Performance Requirements for Fire Operations

AUTHORITY	SD	DM	May be re-delegated to: AA	SFMO	DFMO
1. Commit funds and personnel for management of wildfires and all hazard incidents.		X	X[1]	X[2]	
2. Coordinate decisions of the Geographic Multi-Agency Coordinating Group as they affect BLM lands to establish fire priorities, allocate and re-allocate fire suppression resources.	X			X[3]	
3. Authority to expend up to the State authorization limit for discretionary preposition and short-term fire severity needs.	X			X[4]	
4. Approve fire operating plans committing funds and/or resources in support of national level agreements for mutual assistance.	X	X			
5. Enter into agreements to provide for the housekeeping functions of combined agency-operated fire facilities.	X	X			
6. Approve Fire Management Plans (FMPs).	X	X[5]			
7. Approve Wildland Fire decisions.	X	X[6]			
8. Close areas under the administration of the BLM during periods of high hazard to prevent fires.	X				
9. Issue fire prevention orders that close entry to, or restrict use of, designated public lands.	X				
10. Approve Prescribed Fire Plans.	X	X	X[7]		
11. Approve Individual Fire Reports.		X			X[8]
12. Determine liability for unauthorized use on public lands. Accept payment in full. Dispose resources and recover funds.	X	X			

AUTHORITY	SD	DM	AA	SFMO	DFMO
13. Approve aircraft use for transportation of passengers and cargo.	**X**				

[1] During a wildfire or all-hazard incident, only qualified Incident Commanders can be delegated this authority. Cannot be re-delegated below either the Field Manager or NCL Manager, except for Alaska.
[2] Only the Alaska SFMO is re-delegated this Authority.
[3] Delegated to SFMOs.
[4] May only be re-delegated to SFMO.
[5] Cannot be re-delegated below the DM level.
[6] Cannot be re-delegated below Field or NCL Manager level.
[7] Cannot be re-delegated below the Field or NCL Manager.
[8] Can only be re-delegated to DFMO.

ASSIGNED PROGRAM RESPONSIBILITY	SD	DM	AA
1. Provide a written Delegation of Authority to FMOs that gives them an adequate level of operational authority. If fire management responsibilities are zoned, ensure that all appropriate Agency Administrators have signed the delegation.	**X**	**X**	
2. Ensure only trained and qualified personnel are available to support wildland fire operations at the local and national level.	**X**	**X**	
3. Annually convene and participate in pre- and post-season fire meetings.	**X**	**X**	
4. Review critical operations and safety policies and procedures with fire and fire aviation personnel.	**X**	**X**	
5. Ensure fire and fire aviation preparedness reviews are conducted annually in all unit offices. Participate in at least one review annually.	**X**	**X**	
6. Complete timely response and follow-up to fire preparedness and program reviews.	**X**	**X**	
7. Ensure proper level of investigations types are conducted per Chapter 18.	**X**	**X**	
8. Ensure Resource Advisors are identified, trained and available for incident assignment. Refer to the *Federal Wildland Fire Qualifications Supplement*.		**X**	

ASSIGNED PROGRAM RESPONSIBILITY	SD	DM	AA
9. Ensure trespass actions are initiated and documented to recover cost of suppression activities, land rehabilitation, and damages to the resource and improvements for all human-caused fires where liability can be determined, as per *Fire Trespass Handbook H-9238-1*.		**X**	
10. Approve the State Fire Trespass Operating Plan.	**X**		
11. Ensure prescribed fire activities are in compliance with National and State Office policy. Participate in periodic reviews of the prescribed fire program.	**X**	**X**	
12. Ensure Safety Program is in place, has a current plan, and has an active safety committee that includes the fire program.	**X**	**X**	
13. Annually update and review the *Agency Administrator's Guide to Critical Incident Management* (or equivalent).	**X**	**X**	
14. Ensure that a current emergency medical response plan is in place and accessible.		**X**	
15. Personally visit fires each year (see Appendix A).			**X**
16. Provide an Agency Administrator briefing to Incident Management Teams. See Appendix D.			**X**
17. Attend post fire closeout on Type 1 and Type 2 fires (attendance may be delegated).			**X**
18. Sign and date the *Agency Administrator Ignition Authorization* (PMS 485) with the time frame identified before the prescribed fire is ignited.			**X**

Post Incident Review

Appendix B (*Manager's Supplement for Post Incident Review)* emphasizes the factors that are critical for ensuring safe and efficient wildland fire suppression, and provides examples for managers to use in their review of incident operations and Incident Commanders.

Fire Staff Performance Requirements for Fire Operations

ASSIGNED PROGRAM RESPONSIBILITY	State FMO	District FMO
1. Establish and manage a safe, effective, and efficient fire program.	X	X
2. Ensure the Fire Management Plan (FMP) reflects the agency commitment to firefighter and public safety by establishing a fire organization to meet state/unit workload or national allocations, while utilizing the full range of fire management activities available for ecosystem sustainability.		X
3. Ensure Individual Fire Reports are completed, signed/approved, and entered into WFMI.		X
4. Ensure only trained and qualified personnel are assigned to fire and fire aviation duties.	X	X
5. Ensure only trained and qualified fire and non-fire personnel are available to support fire operations at the local and national level.	X	X
6. Organize, train, equip, and direct a qualified work force.	X	X
7. Ensure the fire safety program is implemented according to fire and non-fire safety regulations, training, and concerns.	X	X
8. Ensure compliance with work/rest guidelines during all fire and fire aviation activities.	X	X
9. Ensure completion of a Risk Assessment (RA) for fire and fire aviation activities, and non-fire activities so mitigation measures are taken to reduce risk.	X	X
10. Ensure fire and fire aviation management employees understand their role, responsibilities, scope of duty, and accountability.	X	X
11. Establish and implement a post incident assignment performance review process.	X	X
12. Develop, implement, evaluate, and document fire and fire aviation training to meet current and anticipated needs.	X	X
13. Ensure fire and fire aviation policies are understood, implemented, and coordinated with other agencies as appropriate.	X	X

ASSIGNED PROGRAM RESPONSIBILITY	State FMO	District FMO
14. Monitor fire suppression activities to recognize when complexity levels exceed program capabilities. Increase managerial and operational resources to meet the need.	X	X
15. Monitor fire season severity predictions, fire behavior, and fire activity levels. Ensure national fire severity funding and national preposition funding is requested in a timely manner, used, and documented in accordance with agency standards.	X	X
16. Monitor the expenditure of Short-Term Severity and State Discretionary Preposition funding.	X	X
17. Ensure agreements with cooperators are valid and in compliance with agency policy, and that attached Annual Operating Plans are current.	X	X
18. Develop annual review and implement current operational plans (e.g., dispatch, preparedness, prevention, draw-down). Ensure that initial response plans reflect agreements and annual operating plans, and are reviewed annually prior to fire season.		X
19. Ensure that initial response plans (e.g., run cards, preplanned response) are in place and provide for initial response commensurate with guidance provided in the Fire Management Plan and Land/Resource Management Plan.		X
20. Develop, maintain, and implement restrictions procedures in coordination with cooperators whenever possible.	X	X
21. Ensure that the use of fire funds complies with department and agency policies.	X	X
22. Ensure a process is established to communicate fire information to public, media, and cooperators.	X	X
23. Annually convene and participate in pre-and post-season fire meetings.	X	X
24. Oversee pre-season preparedness review of fire and fire aviation program.	X	X
25. Initiate, conduct, and/or participate in fire program management reviews and investigations as per Chapter 18.	X	X

ASSIGNED PROGRAM RESPONSIBILITY	State FMO	District FMO
26. Personally participate in periodic site visits to individual incidents and projects.	X	X
27. Utilize the Risk and Complexity Assessment (Appendix E and F) to ensure the proper level of management is assigned to all incidents.	X	X
28. Ensure transfer of command on incidents occurs as per Chapter 11.		X
29. Ensure incoming personnel and crews are briefed prior to fire and fire aviation assignments.		X
30. Ensure that an accurate and defensible decision is published in the Wildland Fire Decision Support System (WFDSS) for all fires identified as requiring a decision in Chapter 11.	X	X
31. Ensure IMT briefing packages are developed prior to fire season.		X
32. Work with cooperators, groups, and individuals to develop and implement processes and procedures for providing fire safe communities within the wildland urban interface.	X	X
33. Ensure trespass actions are initiated and documented to recover cost of suppression activities, land rehabilitation, and damages to the resource/improvements for all human-caused fires where liability can be determined.	X	X
34. Ensure required personnel are trained in fire cause determination and fire trespass.	X	X
35. Ensure compliance with National and State Office policy for prescribed fire activities. Provide periodic reviews of the prescribed fire program.	X	X
36. Annually update and review the *Agency Administrator's Guide to Critical Incident Management* (or equivalent).	X	X
37. Ensure that all fire employees review and update their emergency contact information annually, either in Employee Express or in hard copy format.	X	X
38. Ensure fire season severity predictions, weather forecasts, fire behavior predictors, and fire activity levels are monitored and communicated daily to all employees (hard copy, web page, email, radio, or fax).	X	X

ASSIGNED PROGRAM RESPONSIBILITY	State FMO	District FMO
39. Ensure standards in current National and Local Mobilization Guides are followed.	X	X
40. Comply with established property control/management procedures.	X	X
41. Certify Area Command and Type 1 Command and General Staff positions.	X	

Requirements for fire management positions are outlined in the *Interagency Fire Program Management Qualifications Standards and Guide* (IFPM) Standard. The supplemental Qualification Standard for professional GS-0401 Fire Management Specialist positions, approved by the Office of Personnel Management, is also included in the IFPM Standard. The *Interagency Fire Program Management Qualifications Standards and Guide* can be found in its entirety on the IFPM website at https://www.ifpm.nifc.gov/.

Delegation of Authority

Delegation for State Fire Management Officers (SFMO)

In order to effectively perform their duties, a SFMO must have certain authorities delegated from the State Director. This delegation is normally issued annually following re-delegation direction in the MS 1203. The Delegation of Authority should include what Authorities found in the Management Performance Requirements for Fire Operations table above are being re-delegated. The Delegation of Authority may also include items from the Assigned Program Responsibilities section of the Management Performance table, however there should be a clear delineation between Authority being delegated and assignment of responsibility. Appendix C provides a sample "Delegation of Authority."

Delegation for District Fire Management Officers (DFMO)

In order to effectively perform their duties, a DFMO must have certain authorities delegated from the District Manager. This delegation is normally issued annually following re-delegation direction in the MS 1203. The Delegation of Authority should include what Authorities found in the Management Performance Requirements for Fire Operations table above are being re-delegated. The Delegation of Authority may also include items from the Assigned Program Responsibilities section of the Management Performance table, however there should be a clear delineation between Authority being delegated and assignment of responsibility. Appendix C provides a sample "Delegation of Authority."

Preparedness Reviews

The *Review and Update of the 1995 Federal Wildland Fire Management Policy (January 2001)* states that, "*Agencies will ensure their capability to provide safe, cost-effective fire management programs in support of land and resource management plans through appropriate planning, staffing, training, equipment, and management oversight*." The Assistant Director, Fire and Aviation, accomplishes this in part through the fire preparedness review process. Fire preparedness reviews assess fire programs for compliance with established fire policies and procedures as outlined in the current *Interagency Standards for Fire and Fire Aviation Operations* and other pertinent policy documents. Reviews identify organizational, operational, procedural, personnel, or equipment deficiencies, and recommend specific corrective actions.

BLM review schedules

- BLM Districts conduct fire preparedness reviews annually.
- BLM State Offices conduct state-wide fire preparedness reviews every two years.
- The BLM National Office conducts national fire preparedness reviews of each BLM state fire program every four years.

BLM Operational Duty Officer (ODO)

Each BLM unit Fire Management Officer will perform the duties of an ODO or will provide a delegated ODO for their units during any period of predicted incident activities. ODO responsibilities may be performed by any individual with a signed Delegation of Authority from the local Agency Administrator. Qualifications for the ODO will be identified within the Unit Annual Operating Plan. The required duties for all BLM ODOs are:

- Monitor unit incident activities for compliance with BLM safety policies.
- Coordinate and set priorities for unit suppression actions and resource allocation.
- Keep unit Agency Administrators, suppression resources, and information officers informed of the current and expected situation.
- Plan for and implement actions required for future needs.
- Document all decisions and actions.

ODOs will provide operational oversight of these requirements as well as any unit specific duties assigned by the local fire managers through the local unit fire operating plan. ODOs will not fill any ICS incident command functions connected to any incident. In the event that the ODO is required to accept an incident assignment, the FMO will ensure that another qualified and authorized ODO is in place prior to the departure of the outgoing ODO.

State and National Duty Officers

Each state will maintain a state-level duty officer during fire season and dedicated telephone number. State duty officers are responsible for:

- Establishing a process to identify available assets or needs within their state;
- Communicating availability of or need for assets to other state duty officers;
- Maintaining information on the Asset Intelligence Spreadsheet;
- Approving asset assignments; and
- Facilitating movement of assets using established dispatch/coordination system protocols.

FA-320 will maintain a national duty officer and dedicated telephone number. The national duty officer is responsible for:

- Monitoring and supporting the Asset Intelligence Spreadsheet;
- Providing coordination and prioritization of prepositioned assets between states if the need arises;
- Resolving disagreements of asset priorities and/or mobilizations by elevating issues to the Division Chief, Fire Operations (FA DC) or delegate;
- Facilitating movement of assets using established dispatch/coordination system protocols; and
- Providing briefings and updates to the FA DC/BLM NMAC representative as requested.

All state and national duty officer telephone numbers are listed on the Asset Intelligence Spreadsheet.

Incident Business

A consolidated view of fire business practices, supporting policy, and regulation is contained in the *BLM Standards for Fire Business Management*, available at: http://web.blm.gov/internal/fire/budget/Reference_docs/Incident%20Business/IB-new/OrangeBk.html.

BLM Fire Management Position Titles and Fire Department Cooperator Equivalencies

Bureau of Land Management units that choose to use fire department cooperator nomenclature will utilize the following BLM position title equivalency standard.

BLM Fire Management Position Title	Fire Department Cooperator Equivalency
State FMO, District FMO	Chief
State AFMO, District AFMO	Deputy Chief
State Office Fire Staff	Assistant Chief

BLM Fire Management Position Title	Fire Department Cooperator Equivalency
Field Office FMO, Center Manager, District Fire Management Specialist, District Fuels Specialist	Division Chief
Fire Operations Specialist, Fuels Specialist, Assistant Center Manager, Prevention/Education Specialist	Battalion Chief
Prevention Technician, Prevention/Education Specialist	Prevention officer
Hotshot Superintendent, Helicopter Manager	Superintendent
Engine Captain, Hotshot Foreman, Assistant Helicopter Manager, Fuels Module Leader	Captain
Fire Engine Operator	Engineer
Communications Technician	Comm.
Mechanic	Repair

Agreements with Cooperators (Rangeland Fire Protection Association (RFPA) and Local Fire Department)

The BLM should have a cooperative fire response agreement with any RFPA and local fire department (i.e., rural, volunteer and city) that responds to wildfire incidents on lands under BLM protection. These cooperative fire response agreements can be directly with individual BLM units or administered through a statewide cooperative agreement where BLM is a party. When entering into cooperative fire response agreements, BLM will ensure the following minimum required elements are included in the agreement.

- RFPA/local fire department personnel responding to incidents on BLM lands must:
  - Be 18 years of age or older;
  - Have and use the required personal protective equipment (PPE) found in Chapter 7; and
  - Have a basic level of wildland fire training, identified as the National Wildfire Coordinating Group (NWCG) course S-190 and S-130, which can be modified to fit local needs. I-100 is not required, but ICS must be thoroughly covered within the applicable section of S-190 and S-130 (RFPA requirement); or
  - Have a basic level of wildland fire training. The National Wildfire Coordinating Group (NWCG) course S-190 and S-130 are recommended, both courses can be modified to fit local needs (local fire department requirement).

- Pre-identified incident communication protocols will be established and followed (e.g., frequencies plans, points of contact, and interoperable radio hardware).
- The Incident Command System (ICS) will be used to manage all incidents.

Safety and Occupational Health Program

Safety and occupational health program responsibilities are interwoven throughout Bureau program areas, including fire management. Safety of our employees lies within every level of the organization and program implementation can have a direct impact on firefighting personnel. To ensure that program requirements are met to support the fire and aviation management program, the following checklist shall be utilized.

Safety and Health Responsibilities for the Fire Program

PERFORMANCE REQUIRED	State Safety Manager	District/ Zone Safety Manager	Unit FMO	District/ Field Manager
1. An annual Unit Safety and Health Action Plan is developed, approved, and signed by unit Agency Administrator. This plan outlines courses of action to improve the unit's safety program and is based upon an assessment of what is needed to make the safety program fully functional.		**X**	**X**	**X**
2. Risk Assessments (RAs) are completed for suppression and non-suppression related activities and crews are briefed on RAs prior to beginning work.			**X**	**X**
3. An individual has been designated as the Unit Safety Officer.	**X**			**X**
4. Maintains a working relationship with all facets of the fire organization including outstations.		**X**	**X**	**X**

PERFORMANCE REQUIRED	State Safety Manager	District/ Zone Safety Manager	Unit FMO	District/ Field Manager
5. A safety committee or group, which includes fire representation, is organized to monitor safety and health concerns and activities.		**X**	**X**	**X**
6. Written safety and health programs required by OSHA are in place and being implemented to include fire personnel.	**X**	**X**		
7. Employees are provided mandatory safety and health training, including the BLM Fire and Aviation Employee Orientation Checklist.		**X**	**X**	**X**
8. Fire safety programs (e.g., SAFENET, Six Minutes for Safety, Safety Alerts) are known and being utilized.			**X**	
9. Safety publications are available to all fire employees (e.g., *Incident Response Pocket Guide, DOI Occupational Safety and Health Program – Field Manual*).			**X**	
10. Assures that risk management process is integrated into all major policies, management decisions, and the planning and performance of every job. (*BLM Manual 1112)*			**X**	
11. Procedures are in place to monitor Work Capacity Test (WCT) results and ensure medical examination policies are followed.			**X**	

PERFORMANCE REQUIRED	State Safety Manager	District/ Zone Safety Manager	Unit FMO	District/ Field Manager
12. Safety Data Sheets (SDS) are present, accessible, and available for all hazardous materials used and stored in the work area.		**X**	**X**	
13. Procedures are in place to purchase non-standard equipment as identified in the Risk Assessment process, and to ensure compliance with consensus standards (e.g., ANSI, NIOSH) for PPE.	**X**	**X**		**X**
14. Personal Protective Equipment (PPE) supplied, is serviceable, and being utilized.		**X**	**X**	
15. Ensures tailgate safety meetings are held and documented.			**X**	
16. Monitors and inspects operations and work sites for unsafe acts and conditions and promptly takes appropriate preventative and corrective measures. *(BLM Manual 1112)*		**X**		
17. Procedures are in place for reporting unsafe and unhealthful working conditions.		**X**		**X**

PERFORMANCE REQUIRED	State Safety Manager	District/ Zone Safety Manager	Unit FMO	District/ Field Manager
18. Promptly reports and investigates all job-related accidents/incidents that result in or have the potential to cause fatalities, injuries, illnesses, property, or environmental damage. All such reports are electronically submitted to the Safety Management Information System (SMIS). *(BLM Manual 1112)*			**X**	**X**
19. Injury data is monitored and reviewed to determine trends affecting the health and welfare of employees.		**X**		**X**
20. Ensures facility and work area inspections are conducted to ensure requirements are met. *29 CFR 1960* and *485 DM, Chapter 5 requirements*.	**X**	**X**		**X**

Employee Safety and Health Program Responsibility

All employees have personal responsibility to ensure safe and healthful work practices and the following elements specifically outline these responsibilities:

- Complying with applicable work rules, practices, and procedures.
- Using safety devices, personal protective equipment, clothing, and other means provided or directed by recognized authority at all times when necessary for their protection.
- Reporting unsafe and unhealthful working conditions to management.
- Reporting every job-related accident/incident to their supervisor that results in, or has the potential to harm people, property, or the environment.
- Reporting personal conditions that could adversely affect their ability to perform in a safe and healthful manner on the job.
- Completing the BLM Fire and Aviation Employee Orientation Checklist, available on the BLM Fire Operations website.

Emergency Notification and Contact Information

After emergency response actions deliver an injured employee to the immediate medical care facility, prompt notification through the chain of command is essential to ensure proper management support to the employee. For BLM fire operations, notification criteria are as follows:

- **Injury on a BLM Fire**
  The responsible unit Fire Management Officer (FMO)/Operational Duty Officer will notify their State Duty Officer (or Fire Operations Group (FOG) representative) immediately. The State Duty Officer (or FOG representative) will then ensure the appropriate local agency GACC operational representative is notified.
- **BLM Employee Injury**
  Injured employee's home unit FMO is notified. The FMO will then notify their State Duty Officer (or FOG representative) immediately. If the employee injury occurs in another state, the State Duty Officer (or FOG representative) will ensure that the hosting State Duty Officer (or FOG representative) is notified of the injury.
- **Great Basin Smokejumpers**
  - From the Scene:
    - The accident is reported to the smokejumper spotter, Great Basin Smokejumper Liaison Officer (LO), and local dispatch.
    - When the accident involves a jump injury, the spotter and/or ground contact will convey the medical needs and nature of the injury to the local dispatch.
    - If cellular phone or satellite phone coverage is available, a ground contact will call the Great Basin Smokejumper LO or DO with details about the accident.
  - From the Great Basin Smokejumper Duty Officer:
    - The Great Basin Smokejumper Duty Officer will notify the base manager.
    - The smokejumper base manager will notify the National Interagency Fire Center (NIFC) Fire Operations Chief of Preparedness and Suppression Standards (or acting).
    - BLM Operations Chief of Preparedness and Suppression Standards will inform necessary parties up the chain of command and notify the NIFC External Affairs Office.
    - The Great Basin Smokejumper Duty Officer or Base Manager will notify the BLM State Duty Officer (or FOG Representative).
    - The Great Basin Smokejumper Duty Officer will confirm an agency representative will accompany the injured party to the hospital.
  - From the BLM Great Basin Smokejumper Base Manager:
    - The smokejumper base manager will contact their base manager counterpart if a visiting jumper in injured.

- The smokejumper base manager will notify the emergency contact of the injured smokejumper if the injured smokejumper is unable to do so.

All fire and aviation employees are required to review and update their emergency contact information annually, either in Employee Express or in hard copy format. This information will only be used for emergency purposes and only by those authorized to make contact with the employee and/or their personal contact(s) and will be maintained in accordance with the provisions of the Privacy Act of 1974.

Employee Advocacy

Fire operations doctrine acknowledges the inherent danger of fire operations and the potential for serious injury or death to firefighters. When these occur, it is important that Bureau employees are provided the best and most appropriate care and support possible. Managers should consult their human resources experts to ensure that applicable Departmental and Bureau human resources policies and guidelines are followed. In addition, the *Bureau of Land Management Line of Duty Death (LODD) Response Guide* provides information to assist managers in dealing with the many complexities of these occurrences.

The *LODD Response Guide* is available in the Toolbox section of the BLM Fire Operations Website.

BLM Fire and Aviation Honor Guard

The BLM Fire and Aviation Honor Guard represents the highest ideals of honor, dignity, professionalism and respect in serving the agency, the fire community, and the families, friends and co-workers of those who have lost their lives in the line of duty.

The Honor Guard was established to appropriately pay tribute to and honor the memory of employees who perish in the line of duty. The Honor Guard also responds to requests for their participation at events of state and national significance.

The Honor Guard is comprised of a cross-section of the BLM workforce from within the fire and aviation program. A commitment to the program directly impacts fellow members and the ability of the team to function at the highest level possible. Members will be expected to commit for no less than a two-year period, and may remain an Honor Guard member until they can no longer fulfill the commitment or wish to retire from the Honor Guard. Members must stay in good standing in the Bureau.

For more information, refer to http://web.blm.gov/internal/fire/honorGuard.htm.

BLM Mobile Fire Equipment Policy

Introduction

The following section represents a general overview of the BLM Mobile Fire Equipment Policy. The policy can be found in its entirety on the BLM National Fire Equipment Program (NFEP) Website, located within the BLM Fire Operations website.

Policy and Guidance

The BLM fire equipment program is responsible for the design, development, and acquisition of specialized wildland fire equipment to meet the full range of fire management requirements. The design and development is accomplished through the analysis of performance needs required by BLM field units and working with industry to produce prototypes for testing and eventually production units. Acquisition of equipment is accomplished primarily through contracting. The BLM fire equipment program balances advanced technology with overall cost efficiency to provide maximum safety for personnel while effectively meeting fire management needs.

It is agency policy to maintain each piece of fire equipment at a high level of performance and in a condition consistent with the work it has been designed to perform. This shall be accomplished through application of a uniform preventive maintenance program, timely repair of components damaged while on assignment, and in accordance with all agency fiscal requirements. Repairs shall be made as they are identified to keep the equipment functional and in peak operating condition.

Fire Equipment Committees

There are three levels of fire equipment committees: National, State, and Interagency. Fire equipment committees address the broad spectrum of equipment subjects and make recommendations. State committees will report to the respective State Fire Management Officer. The BLM Fire Equipment Group, BLM Dozer/Heavy Equipment Committee, and the BLM Engine Committee report to the Fire Operations Group (FOG). Equipment committees should invite other agency equipment leads to share ideas, transfer technology, and coordinate efforts.

BLM National Fire Equipment Program (NFEP)

The BLM National Fire Equipment Program (NFEP) is located at NIFC. This unit is responsible for the development, ordering, inspection, receiving, and distribution of new fire equipment that will meet or exceed the minimum performance standards established by the BLM Fire Equipment Group and the BLM Engine Committee. The NFEP website is located within the BLM Fire Operations website.

BLM Fire Equipment Status Report (FES)
Each state will submit an FES report to the NFEP annually by April 15. The FES is required to gather baseline data including the license number, type, make/model and location on mobile asset types (i.e., engines, off-highway vehicles and support vehicles). The Division of Fire Operations will issue an annual reminder notification to the Fire Operations Group (FOG) requesting this information. The FES is available at the NFEP section of the BLM Fire Operations website.

BLM Engine Use Report (EUR)
All BLM engines will utilize the Engine Use Report. The EUR should be printed and completed daily as part of the Fire Equipment Maintenance and Procedure Record (FEMPR) and entered into the BLM EUR Share Point on a monthly basis. Access will be granted by the respective state Fire Operations Group (FOG) representative. The EUR is available at the Engine section of the BLM Fire Operations website.

Equipment Development
The BLM NFEP has established a fire equipment development process to ensure that new fire equipment or technologies meet or exceed established performance standards. All new fire equipment will follow this development process and will be tested and evaluated under actual field conditions prior to being made available for general ordering.

Fire Equipment Standardization
Standardization of fire equipment aids in the ability to produce equipment that effectively meets the Bureau's mission by providing cost effective equipment with the least impact on fire programs. Standardization also contributes to the ability to provide effective, consistent, and quality training to the BLM fire program workforce. The BLM Fire Equipment Group and the BLM Engine Committee have the responsibility to establish and approve minimum performance standards for all BLM-specific fire equipment.

Fire Engine and Command Vehicle Identifier Standards
Bureau of Land Management fire engine and command vehicle identifier standards have been established by the national Fire Operations Group and can be found at the BLM Fire Operations website.

Improvement and Deficiency Reporting
The BLM Fire Equipment Improvement and Deficiency Reporting System is used to collect improvement recommendations and deficiency reports for all BLM fire equipment. The reporting system enables the BLM NFEP to build a comprehensive database to document problems, identify trends, and establish priorities for development and modification of new and existing equipment.

District/Field Offices are required to submit timely and detailed deficiency reports for problems encountered with BLM fire equipment. Reports will also be submitted for suggestions for improvement. Submitted reports will receive immediate attention. The NFEP will immediately verify receipt of the deficiency report and will follow-up with the submitting District/Field Office to correct the deficiency or work to incorporate the improvement suggestion. The Improvement and Deficiency Reporting System can be found on the BLM National Fire Equipment Program website, located within the BLM Fire Operations website.

Acquisition of Working Capital Fund Equipment

The National Operations Center (NOC) located in Denver manages the Working Capital Fund (WCF). Each class of vehicle has an established replacement cycle based on miles or hours, vehicle replacement costs, and residual value. The WCF acquires funds through Fixed Ownership and Use Rates determined by the replacement cycle. At the end of the replacement cycle, adequate funds to replace the vehicle are available. For new vehicle purchases, funds are acquired/secured by the receiving unit and the new purchase is added to the WCF. The NOC monitors vehicle usage and replacement cycles, and notifies the NFEP when vehicles need to be replaced. The NFEP then coordinates with the receiving unit to order the replacement vehicle. When the order is placed, the NFEP works with the BLM Fleet Manager, the receiving unit, contracting, and the vendor to fill the order.

Funding

Procurement of nonstandard equipment with fire management funds when standard equipment is available must have written approval by the Fire Operations Division Chief (FA-300) and the State Fire Management Officer. Most fire vehicles are funded through the WCF. Other types of fire equipment are funded through the normal budget process at the state and local level. Specialized equipment may be funded in a variety of ways including through the Fire and Aviation Directorate, special project allocations, available mid or year end funds, state or local funding, interagency agreement, or through the WCF.

BLM Mobile Fire Equipment Ordering

Ordering of BLM mobile fire equipment is completed through the NFEP at NIFC. Available equipment is listed in the BLM Fire Equipment Ordering System (FEOS) web page. Contact the National Fire Equipment Program for additional information.

States have the authority to order their own equipment using WCF funds. However, the BLM has established required equipment and performance standards for new equipment. These standards have been established to reduce excessive procurement costs, maintain common operational functions, and provide a Bureau wide standard fire fleet.

All WCF 600 class vehicles must be ordered through FEOS. If states order their own equipment using WCF funds, they must have approval from the WCF Fleet Manager, State Fire Management Officer, and the Fire Operations Division Chief (FA-300) prior to ordering.

Equipment Modification/Retrofitting

Modification proposals must be submitted through the Improvement and Deficiency reporting system or applicable FOG subcommittee for consideration and approved through the NFEP. Unauthorized modifications and retrofits have the potential to negatively impact equipment quality and safety and void manufacturer warranties. In such cases, the financial burden of corrective action will be borne by the home state/unit preparedness funding.

600 Class Command Vehicle Procurement Standards

The 600-class vehicles below have been developed and configured specifically for the roles/asset types listed. New, replacement, or upgraded procurements outside of the listed roles/asset types requires State Fire Management Officer and Division Chief, Fire Operations (FA-300) approval utilizing the New Fire Fleet Request form located at web.blm.gov/internal/fire/fire_ops/nfep_policy.htm. An electronic copy of all approvals will be provided to the National Fire Equipment Program (NFEP) manager prior to order.

- 644 Crew Carrier: FPDSS funded hand crew.
- 651/653 Command Truck: District/Unit AFMO, Fire Operations Specialist/Supervisor, FPDSS funded hand crew, FPDSS funded wildland fire module, FPDSS funded helitack crew.
- 652 Superintendent Truck: FPDSS funded hand crew, FPDSS funded wildland fire module, FPDSS funded helitack crew.
- 661 Helitack Support: FPDSS funded helitack crew.

All 600-class vehicles will be ordered by NFEP through the BLM Fire Equipment Ordering System (FEOS). NFEP will route all FEOS orders through the individual State Fire Operations Group representative.

Property Transfer/Replacement

Surplus and early turn-in fire vehicles may be transferred to another unit for continued service with the approval of the State Fire Management Officer and the WCF Manager. In these instances, the vehicle remains in the same class, and the FOR and use rates will continue to be charged to the unit acquiring the vehicle. Units may dispose of fire vehicles prior to the normal replacement date. In these instances, no future replacement is automatically provided and there is no accrued credit for the FOR collected on that unit prior to disposal. Units acquiring this type of equipment continue payment of the FOR and use rates. Mobile fire equipment transfers to other agencies or organizations must be approved by the NFEP and FA-300 prior to initiating any transfer actions.

Conversions

Offices requesting to convert replacement fire equipment to a different class of equipment must follow and provide the following criteria and documentation:

- Proposed changes meet current and future preparedness requirements identified in Resource/Land Management Plans and Fire Management Plans.
- Proposed changes result in an overall cost savings to the government.

If any proposed changes in equipment result in additional overall costs to the government, documentation must include:

- Increased production rates which may offset additional costs.
- The requesting states availability of sufficient funds to cover additional costs.

BLM units will use the standard form available on the BLM Fire Operations website to provide required documentation for approval for conversions, transfers, and excess vehicles.

BLM Engine Equipment Inventory

BLM engines will be stocked as per the BLM National Engine Equipment Inventory found at the BLM Fire Operations Website.

Fire Equipment Maintenance and Care Standards

BLM fire equipment will be maintained to reflect the highest standards in performance and appearance, and will meet the following standards:

- Equipment exterior:
  - Clean and waxed
  - Free of debris
  - Items secured
  - Windows and mirrors cleaned
  - All mechanical systems in good working order
- Equipment interior:
  - Cab and compartments free of dirt and debris
  - Cab free of loose items
  - Equipment stored in appropriate compartments and organized
  - Windows and mirrors cleaned
  - Mechanical systems in good working order

Equipment will be stored in sheltered areas away from environmental elements whenever possible to prevent damage to critical seals, mechanical components, and the high-visibility finish.

Fire Equipment Maintenance Procedure and Record (FEMPR)

The Fire Equipment Maintenance Procedure and Record (FEMPR) will be used to document daily inspections and all maintenance for all WCF Class 600 fire equipment and any other vehicles used for fire suppression operations. The

FEMPR shall be maintained and archived to record historic maintenance for the duration of the vehicle's service life. This historical data is beneficial in determining trends, repair frequency, and repair costs. The FEMPR can be found at the BLM Fire Operations website.

Apparatus safety and operational inspections will be performed at the intervals recommended by the manufacturer and on a daily and post-fire basis as required. For engines and water tenders, all annual inspections will include a pump gpm test to ensure the pump/plumbing system is operating at or above the manufacturer's minimum rating for the pump.

Equipment Bulletins and Equipment Alerts

The purpose of an Equipment Bulletin (EB) or an Equipment Alert (EA) is to share accurate and timely information regarding potential equipment problems and/or needed repairs. The EB is primarily intended to inform the equipment users of recommendations for repairs, potential hazards, or general information related to the overall maintenance, awareness, and safe operation of fire equipment. The EA is time sensitive and addresses potentially serious hazards or risks. The alert includes a specific action that the user must act upon.

Unexpected issues involving wildland fire vehicles which do not fall under other types of wildland fire reviews and investigations and/or other applicable federal, state or specific agency requirements must be reported. If an unexpected vehicle issue warrants an EB or EA it is issued by the National Fire Equipment Program Manager through the Operations Advisory Team and the Capital Equipment Committee. Members of these groups must ensure the information reaches all levels of the organization.

BLM Implementation of the Department of the Interior (DOI) Authorization for Use of Government Passenger Carrier(s) for Home-to-Work Transportation

The BLM recognizes the need for domiciling fire vehicles for specific positions during fire season in order to provide for more immediate response to wildfires during off-duty hours, and has been granted this authority by DOI.

- Only those positions authorized and pre-identified within the DOI memorandum will have the authority to domicile designated government vehicles.
- This authority is intended only for individuals in first response fire leadership roles who may be responding to initial attack fires directly from their home after hours.
- Government vehicles are used solely for official business and domiciled only during core fire season months when there is a heightened level of current or expected fire activity.
- Authorized positions will be recertified every two years and may be revised at that time.

- Units are responsible for maintaining documentation of home-to-work use of government vehicles. This documentation will be reviewed during annual fire and aviation preparedness reviews. A BLM standard tracking form has been developed and may be used for this purpose. It can be found on the BLM Fire Operations website at http://web.blm.gov/internal/fire/fire_ops/toolbox.htm.

Lights and Siren Response

Responding to BLM wildfire incidents normally does not warrant the use of emergency lights and siren to safely and effectively perform the BLM mission. However, there may be rare or extenuating circumstances when limited use of lights and sirens are appropriate and necessary due to an immediate threat to life.

Those BLM state organizations that determine a lights and sirens response is necessary to meet mission requirements must develop an operating plan that is signed and approved by the State Director and forwarded to the Chief, Division of Fire Operations, BLM FA. The operating plan must ensure the following:

1. All vehicles (command, engines, etc.) will be properly marked, equipped, and operated in accordance with state statutes, codes, permits, and BLM unit requirements.
2. Drivers will complete training in the proper use of lights and sirens response in accordance with National Fire Protection Association (NFPA) 1451 and 1002 standards, as well as any state requirements.
3. Engine drivers responding with lights and sirens will be minimally qualified as engine operator with a qualified engine boss in the engine; otherwise, driver must be engine boss qualified. Command vehicle drivers will be minimally qualified as single resource boss.
4. Lights and sirens will meet NFPA and state code requirements.
5. Posted speed limits will be followed at all times, regardless of response type.
6. Operators will stop or reduce speed as circumstances dictate prior to proceeding through all intersections.
7. Traffic light changing mechanisms (e.g., Opticons) will only be used under formal written agreement with state and local governments. They will be used only when they are necessary to create safe right-of-way through urban high-traffic areas. All pertinent state and local statutes and procedures will be adhered to.
8. Authorization to respond with lights and sirens does not cross state lines. No driver will be authorized by one state to operate with lights and sirens in another state.

BLM Firefighters

Introduction

Firefighters operate within the Incident Command System (ICS), which is a component of the National Incident Management System (NIMS).

In the ICS, firefighters are either assigned as single resource overhead (individuals assigned to specific supervisory or functional positions) or as members of an organized unit. The individuals within these units are trained to provide different levels and types of tactical, logistical, and managerial capability.

These units include:

- **Hand Crews –** Vehicle mobile firefighters that specialize in the use of hand tools, chainsaws, portable pumps, and ignition devices for tactical operations. Hand crew types include Interagency Hotshot Crews (IHC)s, Type 2 Initial Attack Crews, Type 2 Crews, and Fire Suppression Modules.
- **Engine Crews –** Engine mobile firefighters that specialize in the use of engines for tactical operations.
- **Helitack –** Helicopter mobile firefighters that specialize in the use of helicopters for tactical and logistical operations.
- **Smokejumpers –** Fixed wing aircraft and parachute mobile firefighters that specialize in the use hand tools, chainsaws, and ignition devices for tactical operations.

BLM Firefighter Priority for Use

- Initial attack on lands for which the BLM has suppression responsibility.
- Other fire suppression/management assignments on BLM lands.
- Other fire suppression/management assignments on other agency lands.
- All Hazard – ESF#4 reference: http://web.blm.gov/internal/fire/budget/Reference_docs/esf4/ESF4_page.htm.

BLM Fire Operations Group National Preposition Strategy

The Fire Operations Group (FOG) has established an Asset Intelligence Spreadsheet for priority placement and prepositioning of suppression resources. Information can be found on the FOG website at http://web.blm.gov/internal/fire/fire_ops/fog.htm.

Mobilization of BLM Firefighters

BLM firefighters are mobilized to perform the following functions:

- Suppress fires and manage wildland fire incidents;
- Improve BLM initial attack capability;
- Maximize the utilization of limited BLM fire operational assets;
- Provide additional fire management capability in high tempo periods;
- Provide experience and developmental opportunities to BLM firefighters;

- Perform fire management project work or assignments; or
- Perform other project work or assignments.

There are six funding mechanisms for mobilizing BLM firefighters:

- Preparedness funding
- Suppression funding
- Short-term severity (State-level/Regional-level Severity) funding
- National-level severity funding
- National preposition funding
- State discretionary preposition funding

Preparedness Funding

Preparedness funding may be used to mobilize resources for normal preparedness activities such as:

- Movement of resources within a unit not associated with fire activity;
- Detailing firefighters to fill vacant positions;
- Project work or normal preparedness activities; and/or
- Training.

Fire managers have the authority to expend preparedness funding for preparedness activities. Mobilization of non-BLM federal resources with BLM preparedness funding requires a reimbursable agreement.

Suppression Funding

Suppression funding is used to mobilize resources to wildland fire incidents. BLM firefighters are mobilized directly to incidents using established methods (resource orders, initial attack agreements, dispatch plans, response plans, etc.).

Short-Term Severity (State-Level Severity)

Short-term severity funding may be used to mobilize resources for state/regional short-term severity needs that are expected to last less than one week, such as:

- Wind events;
- Cold dry front passage;
- Lightning events; and/or
- Unexpected events such as off-road rallies or recreational gatherings.

Each state director and the Fire and Aviation division chiefs for Operations and Aviation have been delegated the authority to expend “short-term” severity funds per fiscal year. This discretionary severity authorization can be expended for appropriate severity activities without approval from Fire and Aviation. States will establish a process for requesting, approving, and tracking short-term severity funds.

National-Level Severity Funding

National-level severity funding is used to mobilize resources to areas where:

- Preparedness plans indicate the need for additional preparedness/ suppression resources;
- Anticipated fire activity will exceed the capabilities of local resources;
- Fire season has either started earlier or lasted longer than identified in the Fire Danger Operating Plan;
- An abnormal increase in fire potential or fire danger (e.g., high fine fuel loading, fuel dryness) not planned for in existing preparedness plans; and/or
- There is a need to mitigate threats to values identified in Land and Resource Management Plans with AD, Fire and Aviation concurrence.

In addition to the above criteria, the AD, Fire and Aviation may consider other factors when approving requests for national severity.

Guidance for requesting and utilizing national-level severity funding is found in Chapter 10 and on the BLM Fire Operations website. Requests should be consolidated by state, coordinated with Fire and Aviation, and then submitted to Fire and Aviation by the State Director. The official memo requesting funds should be mailed to the Assistant Director, Fire and Aviation. An electronic copy should also be e-mailed to "BLM_FA_Severity@blm.gov."

Severity funding requests will be accepted and approved for a maximum of 30 days, regardless of the length of the authorization. Use of severity funding must be terminated when abnormal conditions no longer exist. If the fire severity situation extends beyond the 30-day authorization, the state must prepare a new severity request.

An approval memo from Fire and Aviation will list authorized resources along with a cost string code for each state and field office to use for all resources. All resources authorized through this process will be counted in the state's severity authorization limit, including extension of exclusive use aircraft contracts.

In order to support the BLM national aviation strategy, which includes prioritized allocation based on need, air resource mobility, and cost containment, a state may be directed to release an air resource to another state. All charges related to releasing an air resource will be covered by Fire and Aviation or the receiving state.

National Preposition Funding

National preposition funding is used to mobilize resources to areas with anticipated fire activity when other funding is not available. Units may request national preposition funding from FA to acquire supplemental fire operations assets to increase initial attack capability. National preposition funding may be used to mobilize resources when BLM units:

- Do not have available preparedness funding;
- Do not have available short-term severity funding; or
- Do not meet the criteria for use of national severity funding.

Approved national preposition funding may be used only for travel and per diem costs for the duration of the assignment, and overtime labor costs associated with the original preposition move.

Each State Director has been delegated the authority to expend national preposition funding within an allocation limit established annually through issuance of an Instruction Memorandum. The criteria stated above apply to this allocation.

- National Preposition Request Process
  - Unit FMO identifies need and notifies State FOG representative. FOG representative informs SFMO.
  - FOG representative coordinates with unit FMO to verify need and determine asset types, numbers, and projected preposition location.
  - Requesting FOG representative queries FOG group and identifies available assets.
  - Requesting and sending FOG representatives jointly complete the BLM Preposition Request Form found on the BLM Fire Operations website.
  - Requesting FOG representative will submit the request electronically via e-mail to "BLM_FA_Prepositioning@blm.gov" to acquire Division of Fire Operations (FA-300) approval. If aviation assets are requested, FA-300 will coordinate with the National Aviation Office (FA-500) and secure FA-500 approval.
  - FA-300 will notify the requesting and sending FOG representatives via e-mail when the request is approved.
  - After securing FA-300/500 approval, the requesting FOG representative places name request order(s) for specified assets through normal coordination system channels.
  - Responding BLM assets will be assigned to a temporary host unit by the receiving FOG representative.
  - Responding assets, sending/receiving FOG representatives, and the temporary host unit will negotiate length of assignment and crew rotation, and ensure that prepositioned personnel meet work/rest requirements.

BLM preposition funding request information can be found at the BLM Fire Operations website.

State Discretionary Preposition Funding

Each State Director has been delegated the authority to expend preposition funding for prepositioning activities in amounts determined by the BLM Fire Leadership Team. This discretionary preposition funding authorization can be

expended for appropriate preposition activities (according to the criteria established for National Preposition Funding) without approval from the AD, FA.

Each state will establish a process to document requests and approvals, and maintain information in a file.

BLM Fire Training and Workforce Development

BLM Fire Training and Workforce Development Program

The BLM National Fire Training and Workforce Development Program is located at NIFC and works for the BLM Chief, Preparedness/Suppression Standards. The program develops the wildland firefighting workforce through qualification standards, training standards, and workforce development programs in support of BLM fire management.

BLM Standards for Fire Training and Workforce Development

The BLM Fire Training and Workforce Development Program, in coordination with the BLM Fire Operations Group and the BLM Fire Training Committee, is responsible for publishing the *BLM Standards for Fire Training and Workforce Development.* The *BLM Standards for Fire Training and Workforce Development* provides fire and aviation training, qualifications, and workforce development program management direction. This document is available at https://www.nifc.gov/training/trainingBLM_main.html.

Personnel hired by the BLM must meet requirements established in the position description. If the position description requires Incident Command System qualifications, only qualifications and minimum requirements specified in the NWCG *NIMS: Wildland Fire Qualification System Guide* (PMS 310-1) will be applied as selective factors and/or screen-out questions. To avoid reducing candidate pools, BLM-specific requirements that are supplemental to the PMS 310-1 may not be used as selective placement factors/screen-out questions. Supplemental BLM-specific training or qualification requirements may only be used as selective factors and/or screen-out questions when requested and justified by the selecting official, and approved by human resources. Impacts to the candidate pool must be addressed in the justification. As with all other BLM or DOI-specific training/experience requirements (e.g., Do What's Right training, purchase card training) that newly hired employees from other agencies may not have, the supervisor and IQCS certifying official are responsible for reconciling that employee's training and IQCS record after the employee has entered on duty. This may be accomplished by providing additional training/experience or by manually awarding competencies as per established IQCS protocol.

BLM Firefighters General Non-Fire Training Requirements

Administratively Determined (AD) and Emergency Firefighters (EFF)

Training Required	Initial Requirement/ Frequency	Delivery Method/ Responsible Party
Defensive Driving (If operating GOV, including rental or leased, vehicle for official purposes.)	- Prior to operating motor vehicle for official purposes. - Once every three years.	- DOI Learn or Instructor-led - Unit Safety Manager
First Aid/ Cardiopulmonary Resuscitation (CPR)	- Upon initial employment. - Every 3 years or per certifying authority. At least two persons per crew (GS or AD) shall be current and certified.	- Instructor-led - Unit Safety Manager

Agency Permanent, Career Seasonal, and Temporary Firefighters

Training Required	Initial Requirement/ Frequency	Delivery Method/ Responsible Party
Safety Orientation	- Once	- Instructor-led - Supervisor
Bloodborne Pathogens	- Once: Awareness level. For employees not at increased risk (e.g., non-fireline support personnel) - Annually: For employees at increased risk due to assigned duties (e.g., IHC, Helitack, SMKJ, Engine Crew)	- Instructor-led - Unit Safety Manager
Defensive Driving	- Prior to operating motor vehicle for official purposes - Once every three years	- DOI Learn or Instructor-led - Unit Safety Manager
First Aid/ Cardiopulmonary Resuscitation (CPR)	- Upon initial employment - Every 3 years or per certifying authority	- Instructor-led - Unit Safety Manager
HAZMAT - First Responder Awareness Level	- Upon initial employment - Annually	- Instructor-led - Unit Safety Manager

Training Required	Initial Requirement/ Frequency	Delivery Method/ Responsible Party
USGS Hazard Communications – GHS	- Upon initial employment	- Instructor-led, DOI Learn - Unit Safety Manager, Unit Hazardous Materials Coordinator
Do What's Right/EEO/ Diversity	- Annually	- Instructor-led, DOI Learn, or as determined by EEO Manager - FMO (Do What's Right) - EEO Manager

Driver Training for Regular Drivers of Fire Equipment

All regular drivers of specialized vehicles (e.g., engines, water tenders, crew carriers, fuel tenders, helicopter support vehicles) must complete BL-300 *Fire Vehicle Driver Orientation* (initially) and RT-301 *Fire Vehicle Driver Refresher Training* (annually). Course materials are available at the BLM Fire Training website at https://www.nifc.gov/training/trainingFireVehicle.html.

For the purposes of this policy, a regular driver is defined as an employee whose duties include driving fire equipment on a regular basis. This may include highway, off-road, city, mobile attack, and extreme terrain driving.

BLM Firefighter Mandatory Physical Fitness Standards

The *NIMS: Wildland Fire Qualification System Guide* (PMS 310-1) establishes physical fitness standards for NWCG sanctioned firefighters. These standards are assessed using the Work Capacity Tests (WCT). Prior to attempting the WCT, all permanent, career-seasonal, temporary, Student Career Experience Program (SCEP), and AD/EFF employees who participate in wildland fire activities requiring a fitness level of arduous must participate in the DOI Medical Qualification Standards Program (DOI MSP).

Employees serving in wildland fire positions that require a fitness rating of arduous as a condition of employment are *required* to perform physical fitness conditioning for one hour of duty time each work day. Special exceptions such as being assigned to an incident, travel status, injuries, details, etc., may be granted. BLM employees wholly funded by fire preparedness and/or fuels who maintain a fitness rating of arduous may be *authorized* one hour of daily duty time for physical fitness conditioning. Participation will be negotiated with the employee's supervisor. Employees serving in positions that require a fitness rating of moderate or light may be authorized up to three hours per week.

Units will maintain a fitness program that ensures BLM firefighters will possess the physical ability to perform the duties of their positions safely and effectively while ensuring compliance with the requirements of the Work Capacity Test (WCT).

Information on the WCT and the DOI MSP is located in Chapter 13 of this publication. Fitness and conditioning information may be found at https://www.nifc.gov/FireFit/index.htm.

BLM National Fire Operations Fitness Challenge

The BLM national fire operations fitness challenge encourages and recognizes achievement in physical fitness by BLM firefighters. The fitness challenge provides a common system by which BLM firefighters can measure current fitness, establish fitness goals, and track fitness improvement. The fitness challenge is voluntary, but BLM firefighters are encouraged to participate and, at a minimum, meet the level 1 achievement. The fitness challenge tests participants in four basic exercises: push-ups, pull-ups, sit-ups and a timed run of either 1.5 or 3.0 miles. Test results are compiled into a final overall score. Unit and state offices are encouraged to support and recognize achievement in firefighter fitness. The BLM FA Division of Fire Operations will recognize high achievers annually. Specific information on the fitness challenge, the points chart, and the score sheet are located in the Toolbox section of the BLM Fire Operations Website.

Achievement levels:

- Level 1: 100 points, minimum 20 points per event
- Level 2: 100 points, minimum 25 points per event
- Level 3: 200 points, minimum 25 points per event
- Level 4: 300 points, minimum 25 points per event
- Level 5: 400 points (maximum score)

Scoring:

Points	3-mile Run	1.5-mile Run	Pull-ups (3 minutes)	Push-ups (3 minutes)	Sit-ups (3 minutes)
20	26:43	11:40	6	23	36
25	25:20	11:00	7	25	40
50	22:30	9:30	10	35	60

Interagency Fire Program Management Standards

The BLM follows the *Interagency Fire Program Management Qualifications Standards and Guide (IFPM Standard), January 2000*. The IFPM Standard does the following:

- Establishes minimum qualifications standards for 12 key fire management positions. These standards include 1) basic requirements, 2) specialized experience requirements, 3) NWCG incident management qualifications, 4) additional required training.
- Provides a "complexity rating for program management" table, which is used to determine overall complexity of the unit-level fire program. This is

used because qualification standards for some of the 12 identified positions are tied to fire program complexity.

State- and unit-level fire managers should consult human resources officials and apply the IFPM Standard as appropriate. IFPM information is located at: https://www.ifpm.nifc.gov.

BLM Hand Crews

BLM Hand Crew Standards (all crew types)

- **Language –** CRWB and FFT1: must be able to read and interpret the language of the crew as well as English.
- **Flight Weight –** 5,300 pounds.
- **Personal gear –** Sufficient for 14-day assignments.
- **Physical fitness –** Arduous, all positions.
- **Required Equipment and PPE –** Fully equipped as specified in the *Interagency Standards for Fire and Fire Aviation Operations.*

BLM Hand Crew Standards by Type

Crew Type	Type 1 IHC	Type 2 IA	Type 2	Fire Suppression Module
Crew Size	Minimum 20 Maximum 25	Minimum 18 Maximum 20	Minimum 18 Maximum 20	Minimum 5 Maximum 10
Leadership Qualifications	1 Supt. 1 Asst. Supt. 3 Squad Leaders 2 Senior Firefighters (FFT1) **or** 1 Supt. 2 Asst. Supt. 2 Squad Leaders 2 Senior Firefighters (FFT1)	1 CRWB 3 ICT5	1 CRWB 3 FFT1	1 SRB/ICT5 2 FFT1
Fireline Capability	Initial Attack – Can be broken up into squads, fireline construction, complex firing operations (backfire)	Initial Attack – Can be broken up into squads, fireline construction, firing to include burnout	Initial Attack – Fireline construction, firing as directed	Operates as a single module w/T5 command capability

Crew Type	Type 1 IHC	Type 2 IA	Type 2	Fire Suppression Module
Language Requirement	All senior leadership including Squad Leaders and higher must be able to read and interpret the language of the crew as well as English.	Same as Type 1	Same as Type 1	Same as Type 1
Crew Experience	80% of the crewmembers must have at least 1 season experience in fire suppression	60% of the crewmembers must have at least 1 season experience in fire suppression	20% of the crewmembers must have at least 1 season experience in fire suppression	Agency only
Full-Time Organized Crew	Yes (work and train as a unit 40 hours per week)	No	No	No
Crew Utilization	National Shared Resource	Local unit control	Local unit control	Local unit control
Communication	8 programmable handheld radios 1programmable mobile radio in each truck	4 programmable handheld radios	4 programmable handheld radios	2 programmable handheld radios
Sawyers	4 FAL2, 50% of crew FAL3	1 FAL2, 2 FAL3	None	2 FAL3
Training	As required by the *Standards for Interagency Hotshot Crew Operations* or agency policy prior to assignment.	Basic firefighter training **or** once red carded, 4 hours annual fireline refresher training prior to assignment.	Basic firefighter training **or** once red carded, 4 hours annual fireline refresher training prior to assignment.	Basic firefighter training **or** once red carded, 4 hours annual fireline refresher training prior to assignment.
Logistics	Squad-level agency purchasing authority	Crew-level agency purchasing authority recommended	No purchasing authority	Self-sufficient for 48 hours; purchasing authority recommended

Crew Type	Type 1 IHC	Type 2 IA	Type 2	Fire Suppression Module
Maximum Weight	5,300 lbs	5,300 lbs	5,300 lbs	N/A
Dispatch Availability	Available Nationally	Available Nationally	Variable	Variable
Production Factor	1.0	.8	.8	Variable
Transportation	Own transportation	Need transportation	Need transportation	Own transportation
Tools and Equipment	Fully equipped	Not equipped	Not equipped	Variable
Personal Gear	Arrives with crew first aid kit, personal first aid kit, headlamp, 1-qt canteen, web gear, sleeping bag.	Same as Type 1	Same as Type 1	Same as Type 1
PPE	All standard designated fireline PPE	Same as Type 1	Same as Type 1	Same as Type 1
Certification	Must be annually certified by the local host unit Agency Administrator or designee prior to being made available for assignment	N/A	N/A	N/A

BLM Interagency Hotshot Crews (IHCs)

BLM IHCs will meet all requirements found in the *Standards for Interagency Hotshot Crew Operations (SIHCO)* and the *Interagency Standards for Fire and Fire Aviation Operations* while providing a safe, professional, mobile, and highly skilled hand crew for all phases of fire management and incident operations.

BLM IHC Locations

State	Crew	Location
AK	Chena	Fairbanks
	Midnight Sun	

State	Crew	Location
CA	Diamond Mountain	Susanville
	Kern Valley	Bakersfield
CO	Craig	Craig
ID	Snake River	Pocatello
MS	Jackson	Jackson
NV	Silver State	Carson City
	Ruby Mountain	Elko
OR	Vale	Vale
UT	Bonneville	Salt Lake City

BLM IHC Annual Crew Mobilization

Prior to becoming available for mobilization, each BLM IHC will complete the BLM Hotshot Crew Preparedness Review Checklist (#18) and the Annual IHC Mobilization Checklist (SIHCO, Appendix C). The IHC Superintendent, supervising fire management officer, and supervising agency administrator will complete both checklists. Completed and signed checklists will be sent to the State Fire Management Officer for concurrence. Upon concurrence, the State Fire Management Officer will notify the appropriate Geographic Area Coordination Center and the Branch Chief, Preparedness and Suppression Standards (FA-320) of crew status, and provide copies of the BLM Hotshot Crew Preparedness Review Checklist (#18) and the Annual IHC Mobilization Checklist (SIHCO, Appendix C) to each.

Establishing or Converting BLM IHC

BLM state directors must request approval from the AD FA prior to beginning the process to establish a new BLM IHC or to convert a current Type 2 or Type 2 IA crew to an IHC. Upon approval from AD FA, BLM states will follow the Crew Certification Process as outlined in the SIHCO, Chapter 5. The IHC certification process will be coordinated with FA-300.

BLM IHC Decertification and Recertification

Changes to crew qualifications and capabilities should be closely examined by the superintendent to ensure that all requirements contained in the SIHCO are met. Any BLM IHC that is unable to meet the minimum requirements will be placed in Type 2 IA status until the requirements can be met. Exceptions to the requirements must be requested by the State Fire Management Officer (for IHCs based in the Eastern and Southern Geographic Areas, the request must be made by the State Director, Eastern States), and may be granted on a case-by-case basis by the Chief, Division of Fire Operations (FA-300).

Short-term inability to meet the requirements may not necessarily require recertification, but will require completion of the Annual IHC Mobilization Checklist (SIHCO, Appendix C) and concurrence from the Branch Chief, Preparedness and Suppression Standards before regaining IHC status. Longer-term or more significant failures to meet the requirements may require the full recertification process as stated in the SIHCO, with oversight from the Division of Fire Operations.

BLM IHC Size

Standard crew size is 20-22 with a maximum of 25. For national mobilization, BLM IHCs will have a minimum of 18 personnel. BLM IHC superintendents will obtain prior approval from the respective GACC when the assignment requires fixed wing transport of an IHC with more than 20 personnel.

BLM IHC Status Reporting System

BLM IHCs will utilize the National IHC Status Reporting System to report availability, assignment status, and unavailability periods. Refer to Chapter 13 for instructions on how to report.

BLM IHC Training and Qualification Requirements

Position	NWCG Qualification	Fire Training
Firefighter	FFT2	IS-700 *NIMS: An Introduction* ICS-100 *Intro to ICS* S-130 *Firefighter Training* S-190 *Intro to Wildland Fire Behavior* L-180 *Human Factors in the Wildland Fire Service*
Senior Firefighter	FFT1	All the above plus: S-211 *Portable Pumps and Water Use* S-212 *Wildland Fire Chain Saws* S-131 *Firefighter Type 1* S-270 *Basic Air Operations*
Squad Leader	ICT5 CRWB[1]	All the above plus: IS-800 *NRF: An Introduction* ICS-200 *Basic ICS* S-215 *Fire Operations in the WUI* S-230 *Crew Boss (Single Resource)* S-234 *Ignition Operations* S-260 *Interagency Incident Business Management* S-290 *Intermediate Wildland Fire Behavior* L-280 *Followership to Leadership*
Assistant Superintendent or Captain	STCR or TFLD CRWB ICT4	All the above plus: ICS-300 *Intermediate ICS* S-200 *Initial Attack IC* S-330 *Task Force/Strike Team Leader* S-390 *Introduction to Wildland Fire Behavior Calculations* L-380 *Fireline Leadership* M-410 *Facilitative Instructor* or equivalent
Superintendent	TFLD ICT4 FIRB	All the above

[1]CRWB will be required for BLM IHC Squad Leaders on January 21, 2018.

BLM Fire Suppression Modules

BLM Fire Suppression Modules are comprised of 5-10 firefighters and are used primarily for wildfire suppression, fuels reduction, and other fire management duties. They are capable of performing self-contained initial attack suppression operations, and can generally provide incident management capability at the Type 5 level.

BLM Fire Suppression Module Mobilization
BLM Fire Suppression Modules will be statused, tracked, and mobilized in the ROSS system using the resource identifier "Module, Suppression."

BLM Wildland Fire Modules
Refer to Chapter 13.

BLM Engines

BLM engines carry 2-6 firefighters and are used primarily for wildfire suppression, fuels reduction, and other fire management duties. They are capable of performing self-contained initial attack suppression operations, and can generally provide single resource incident management capability up to the Type 4 level.

BLM Engine Ordering
- BLM engines will status themselves with their local dispatch center in accordance with local policy and procedure.
- Availability of BLM engines for off unit assignments rests with local unit fire management.
- BLM units needing engines from another state for support will contact their state operations lead with a request.
- The state operations lead will contact the FA Division of Operations or other BLM state office operations leads with the request.

BLM Engine Typing
BLM engines are typed according to interagency standards as established by NWCG. See Chapter 14 for engine typing standards.

BLM Engine Minimum Staffing Requirements
All BLM engines will meet these staffing standards on every fire response:
- BLM engines operating with five or more personnel will always have a fully qualified ENOP (other than the Engine Boss). The Engine Boss must be qualified as ICT4;
- BLM engines operating with four personnel will always have an FFT1 (other than the Engine Boss). The Engine Boss must be qualified as ICT5;
- BLM Engines operating with three or fewer personnel must have an Engine Boss qualified as ICT5 or higher; and
- Chase vehicles are considered part of the engine staffing.

BLM utilizes the term "Engine Captain" to describe an individual whose position description reflects primary responsibility as a supervisory wildland firefighter of a wildland fire engine in a BLM fire management organization. "Engine Captain" is not a fireline qualification.

BLM WCF Vehicle Class	NWCG Type Class	Engine Boss	Engine Operator	Engine Crewmember
650 Hummer	6	1		1
662 Light	6	1		1
663 Light	6	1		1
664 Enhanced Light	6	1		1
665 Interface	3	1		2
667 Heavy Engine	3, 4	1		2
668 Super-heavy Engine[1]	3, 4	1	1	1
668 Super-heavy Tactical Tender[1]	2 (Tender)	1		1
669 Tactical Water Tender	1, 2 (Tender)		1	1
669 Non-Tactical Water Tender[2]	1, 2, 3 (Tender)	See footnote 2 below	See footnote 2 below	See footnote 2 below

[1]All WCF class 668 super-heavy engines will be minimally staffed as Type 3 or 4 engines with an Engine Boss, Engine Operator, and Engine Crewmember. All WCF class 668 super-heavy tactical water tenders (2 seats, Tatra chassis, volume pump rated at 250 GPM and 150 PSI or better) will be minimally staffed with an Engine Boss and an Engine Crewmember.

[2]A WCF class 669 non-tactical water tender may be staffed with a crew of one driver/operator when it is used in a support role as a fire engine refill unit or for dust abatement. These operators will pass the moderate Work Capacity Test (WCT), take BL-300/RT-301 and annual refresher training, and possess a CDL with tank endorsement and air brake endorsement (if applicable).

When staffing a BLM engine with an employee from another agency on a short-term basis (detail, severity assignment, etc.), the qualification standards of that agency will be accepted. These qualifications must meet PMS 310-1 requirements for the position that the detailed employee is serving in. Fire Management Officers should consider requiring these employees to attain BLM required training and qualifications for long-term details/assignments.

BLM Engine Training and Qualification Requirements

BLM has established additional training and qualification requirements for Engine Operator (ENOP) and Engine Boss (ENGB). These additional requirements are as follows:

Fireline Position	Required Qualifications and Training
Engine Crewmember	IS-700 *NIMS: An Introduction* ICS-100 *Introduction to ICS* L-180 *Human Factors in the Wildland Fire Service* S-130 *Firefighter Training* S-190 *Introduction to Wildland Fire Behavior*
Engine Operator	Qualified as FFT1 PMS-419 *BLM Engine Operator Course* L-280 *Followership to Leadership* S-131 *Firefighter Type 1* S-211 *Portable Pumps and Water Use* S-212 *Wildland Fire Chain Saws* S-260 *Interagency Incident Business Management* S-290 *Intermediate Wildland Fire Behavior* RT-301 *BLM Fire Vehicle Driver Refresher - Annually*
Engine Boss	Qualified as ENOP and ICT5 ICS-200 *Basic ICS* S-215 *Fire Operations in the Wildland/Urban Interface* S-230 *Crew Boss (Single Resource)* S-290 *Intermediate Wildland Fire Behavior*

BLM Engine Driver Requirements

For engines greater than 26,000 GVWR, the driver of the engine is required to possess a commercial driver's license. Refer to Chapter 7 for more information.

WCF class 650 and 668 vehicle drivers are required to complete *WCF Class 650 and 668 Driver and Maintenance Training* (once). *WCF Class 650 and 668 Driver and Maintenance Training* may be conducted at the unit/zone/state level utilizing qualified and experienced 650 and 668 operators, with prior approval and oversight by the NFEP. The NFEP maintains a list of qualified cadre members to assist as needed. NFEP staff are available as unit instructors; the hosting unit is responsible for course coordination.

All hands-on components of engine driver training courses will be conducted on the specific vehicle or vehicle type that the driver will be using.

Equivalent courses that satisfy driver training requirements, such as the National Safety Council sanctioned *Emergency Vehicle Operator Course* (EVOC), will be approved in writing by the Division Chief, Fire Operations, FA on a case-by-case basis.

BLM engine driver training satisfies the Bureau requirement for 4X4 driver training stated in H-1112-1, Chapter 15.

BLM Smokejumpers

BLM Smokejumpers operate in teams of 2-8 firefighters and are used primarily for wildfire suppression, fuels reduction, and other fire management duties. They are capable of performing self-contained initial attack suppression operations, and commonly provide incident management capability at the Type 3 level. BLM Smokejumpers provide personnel to Type 1 and Type 2 incidents as command and general staff or other miscellaneous single resource. The primary locations of the BLM smokejumper bases are Boise, Idaho and Fairbanks, Alaska.

BLM Smokejumper (SMKJ) Operations

BLM smokejumper operational and administrative procedures are located in the *Interagency Smokejumper Operations Guide (ISMOG), the BLM Ram-Air Training Manual (RATM), the Great Basin Smokejumpers User Guide, Alaska Geographic Area Coordination Center Mob Guide,* and other pertinent agreements and operating plans.

BLM Smokejumper Mission

BLM smokejumper aircraft are dispatched with a standard load of 8 smokejumpers and equipment to be self-sufficient for 48 hours. A typical smokejumper mission takes 30 minutes over a fire. A spotter (senior smokejumper in charge of smokejumper missions) serves as the mission coordinator on smokejumper missions. This may include coordinating smokejumper operation with on-scene aircraft over a fire until a qualified ATGS arrives.

BLM Smokejumper Coordination and Dispatch

Smokejumpers are a national shared resource and are ordered according to geographic area or national mobilization guides. The operational unit for Smokejumpers is “one load” (8 smokejumpers). Specific information on the coordination, dispatch, ordering, and use of BLM smokejumpers can be found in the *BLM Great Basin Smokejumpers User Guide*, and in the *Alaska Geographic Area Coordination Center Mob Guide.* Contact BLM smokejumpers in Boise at (208) 387-5426 or in Alaska at (907) 356-5540 for these publications.

BLM Ram-Air Parachute System Management

The BLM has exclusive authority for all aspects of BLM Ram-Air parachute system management and operations. This includes:

- System Changes and Modifications – All BLM Ram-Air parachute system modifications, research, and development will be documented and approved using the BLM Smokejumper Modification Document (MODOC) System.
- Ram-Air Training – All smokejumpers utilizing the BLM Ram-Air Parachute system will adhere to the training processes and procedures in the *BLM Ram-Air Training Manual*.

- Malfunction Abnormality and Reporting System (MARS) – The MARS is a BLM smokejumper system used to report and document malfunctions and abnormalities associated with BLM smokejumper parachute jumping, parachute equipment, and parachute related aircraft operations. The MARS database is used by BLM smokejumper management to analyze malfunctions and abnormalities, identify trends, and initiate corrective actions. BLM retains exclusive authority to apply corrective actions to all MARS.
- BLM Approved Smokejumper Equipment List – All smokejumpers using the BLM Ram-Air parachute system will only utilize equipment listed in the BLM Approved Smokejumper Equipment List unless specific approval is authorized through a *BLM Smokejumper Modification Document* (MODOC).
- Incidents, Reviews, and Accident Investigations – BLM smokejumpers will follow all procedures for accident review and investigation as outlined in the *Interagency Standards for Fire and Fire Aviation Operations* Chapters 2 and 18. The BLM smokejumpers will report incidents/accidents as appropriate, on the *MTDC Injury Reporting Form.* A BLM Smokejumper subject matter expert will participate in any investigation or review involving the BLM Ram-Air Parachute System.
- Adherence to Agency Policies and Manuals – BLM will adhere to its own policies, guidelines, manuals, handbooks and other operational documents as they pertain to smokejumper parachuting operations. The Smokejumper Base Managers will work through established command channels to change BLM Ram-Air Parachute System policies, guidelines, manuals, handbooks and other operational documents, and/or to request research and development of new products.

BLM Smokejumper Aircraft

BLM Smokejumpers use aircraft approved by the Interagency Smokejumper Aircraft Screening and Evaluation Subcommittee (SASES). All aviation operations will be performed according to agency policies and procedures. BLM Smokejumper-specific aviation standards are identified in the *BLM Smokejumper Air Operations Manual*.

BLM Smokejumper Training

To ensure proficiency and safety, smokejumpers complete annual training in aviation, parachuting, fire suppression, administration, and safety. Experienced jumpers receive annual refresher training in these areas. First-year smokejumpers undergo a rigorous 4-5 weeks long smokejumper training program.

Candidates are evaluated to determine:

- Level of physical fitness
- Ability to learn and perform smokejumper skills

- Ability to work as a team member
- Attitude
- Ability to think clearly and remain productive in a stressful environment

BLM Smokejumper Training and Qualification Targets

Position	IQCS Target	Smokejumper Training Target
Department Managers	T1 and T2 C&G	
Spotter	ICT3, DIVS, ATGS RXB2, SOFR	
Senior Smokejumper	STLD, TFLD	Senior Rigger, FOBS
Smokejumper	ICT4, CRWB, FIRB	FEMO
Rookie Smokejumper	ICT5	

BLM Smokejumper Jump Proficiency Guideline

To ensure proficiency and safety, it is the goal of BLM smokejumpers to perform a training or operational jump every 14 days. A longer duration time period between jumps can occur due to fire assignments or other duties. Guidelines for managing gaps between jumps beyond 14 days are included in the BLM Ram-Air Training Manual. Funding for currency and/or training jumps are included in the home unit's normal preparedness budgets. Units hosting contingents or spike bases will not be charged for any proficiency jump or related activities.

BLM Smokejumper Physical Fitness Standards

The BLM smokejumper physical fitness standards are mandatory. All BLM smokejumpers must pass the BLM smokejumper physical fitness standards in order to participate in smokejumper parachute training.

BLM Smokejumper Physical Fitness Standards
(Two options)*: A. 1.5-mile run in 10:47 minutes or less, or B. 3-mile backpacking with a 110-pound load within 65 minutes.
30 push-ups
6 pull-ups
Arduous Work Capacity Test

* Both options of this element are tested during smokejumper rookie training.

Retesting

Retesting criteria include:

- Returning BLM smokejumpers will be provided up to three opportunities to pass the BLM smokejumper physical fitness standards. Each retest will occur no sooner than 24 hours after failing the previous test, and will consist of **all** elements of the smokejumper physical fitness test.
- BLM smokejumper candidates will be provided one opportunity to pass the BLM smokejumper physical fitness standards.
- If an employee sustains an injury (verified by a licensed medical provider) during a test, the test will not count as an attempt. Once an injured employee has been released for full duty, the employee will be given time to prepare for the test (not to exceed 4 weeks).

BLM Exclusive Use Helitack Crews

The BLM contracts for the exclusive use of vendor supplied and supported helicopters. These aviation resources are Type 2 (medium) or Type 3 (light) helicopters and are located at BLM Districts throughout the western United States. Helitack Crews are assigned to manage each contracted helicopter and perform suppression and support operations to accomplish fire and resource management objectives.

Each contract specifies a Mandatory Availability Period (MAP) that the aircraft will be assigned for the exclusive use of the BLM. The National Aviation Office provides the funding to pay for the aircraft's availability costs.

The BLM host unit is responsible for providing a Helitack Crew that meets the minimum experience and qualification requirements specified in the Exclusive Use Fire Helicopter Position Prerequisites table in Chapter 16. Each functional or supervisory level must have met the experience and qualification requirements of the next lower functional level. The minimum daily staffing level (7 day staffing) must meet the level indicated in the *Interagency Helicopter Operations Guide (IHOG)* Chapter 2 (BLM helicopters operated in Alaska need only be staffed with a qualified Helicopter Manager).

The host unit is also responsible for providing administrative support, and *Interagency Helicopter Operations Guide (IHOG)* specified equipment, vehicles, and facilities for their Helitack Crews and any other associated specialized equipment.

BLM Exclusive Use Helicopter Locations

State	Location	NWCG Type
AK	Fairbanks	2 (4 ea.), 3 (3 ea.)
AZ	Wickenburg	3 (shared with MT)
CA	Apple Valley	2
	Ravendale	3
CO	Rifle	3
ID	Boise	1
	Twin Falls	2
MT	Lewistown	3 (shared with AZ)
	Miles City	3
NV	Elko	3
	Ely	3
	Las Vegas	3
OR	Burns	2
	Lakeview	2
	Vale	3
UT	Moab	3
	Salt Lake City	3
	St. George	3
WY	Rawlins	3

Target (Desired) Exclusive Use Helitack Crew Qualifications and Composition

The following chart indicates **target** IQCS qualifications for BLM exclusive use helitack crews. These targets are NOT required, but provide direction for increased program capabilities. This chart does not replace the minimum requirements specified in Chapter 16.

Role	Target IQCS Qualifications	Target Training
Fire Helicopter Crew Supervisor	ICT3 or DIVS, HEB1, PLDO, HLCO, ASGS	S-300 or S-339, S-378, L-381, S-375
Assistant Fire Helicopter Crew Supervisor	TFLD, HEB2, PLDO	S-215, S-330, S-390, S-371, L-380
Fire Helicopter Squad Boss	ICT4, HMGB	S-200, S-230, S-290, M-410, S-230

Role	Target IQCS Qualifications	Target Training
Helicopter Senior Crew Member	ICT5, HMGB(T)	S-372, L-280
Helicopter Crew Member	FFT1, HECM	S-131

Management Actions for Noncompliant Remote Automatic Weather Stations (RAWS)

Fire managers must be cognizant that all RAWS will not be 100% compliant with standards established in the *Interagency Wildland Fire Weather Station Standards and Guidelines* (NWCG PMS 426-3) at all times. Furthermore, even when RAWS are fully compliant and operational, RAWS data should be used only in conjunction with other predictive services and fireline data sources in fire management decision making, particularly at the tactical level.

Fire managers must monitor RAWS status and recognize when a station is noncompliant. Noncompliant stations are broadly categorized as follows:

- *Inoperative station.* This station is noncompliant but poses no danger of providing inaccurate weather data because it is not transmitting data.
- *Operating station that has exceeded the required maintenance cycle.* These stations are identified in the weekly "Wildland Fire Management Information (WFMI) weather Noncompliance Report," which is widely distributed by email and available at https://raws.fam.nwcg.gov/nfdrs.html. Although transmitted data may be accurate, noncompliance means the data should not be trusted.
- *Operating station that transmits data outside of NWCG PMS 426-3 standards due to faulty sensors or components.* These stations are most easily identified by local users who are familiar with environmental trends and conditions and can recognize data that seems abnormal or clearly unrepresentative of current conditions. This usually indicates faulty sensors or components.

When noncompliant RAWS are identified or suspected, fire managers should implement the following hazard mitigation actions to expedite RAWS repair and to reduce risk to fire personnel:

- Contact the RAWS Help Desk (208-387-5475 or rawshelp@blm.gov). Identify the station and discuss troubleshooting steps or schedule the necessary repairs. If there are trained personnel in the local area, the Help Desk may be able to ship the required parts and coordinate the repairs via phone. If a professional technician needs to make a site visit, provide a local individual to assist, and use this opportunity to provide training for local personnel.

- Ensure that appropriate personnel and organizations know which stations are out of compliance, and which sensors are affected, if possible. Direct them to alternative weather data sources if possible.
- Use nearby compliant RAWS if available.
- Based on local knowledge of specific RAWS problems (e.g., which sensor is out of compliance), separate reliable data from unreliable data.
- Consider using data from belt weather kit readings, other portable device observations, Predictive Services or National Weather Service offices, or non-fire weather sources such as airports.

Fire managers should ensure that locally held portable RAWS are compliant prior to use; noncompliant portable RAWS will not be activated for data processing via WFMI-weather.

Sagebrush Rangeland and Sage-Grouse Conservation Related to Wildland Fire

Firefighter and public safety has been, and continues to be, the BLM's highest fire management priority. Protecting, conserving, and restoring the sagebrush rangelands and sage-grouse habitat are among BLM fire management's highest natural resource objectives.

The BLM's management responsibilities include taking actions on public lands to control and manage wildfire and invasive plants in order to protect, conserve, and restore the sagebrush rangelands and sage-grouse habitat. The BLM's goal is to limit acres burned and damaged within and adjacent to sage-grouse habitat. The BLM will meet this goal through the certain management actions, including fuels management, fire operations and post fire recovery. The following provides guidance to convey leader's intent while recognizing that not all of these actions and activities apply to all affected offices and successful implementation may look different throughout the BLM.

Prior to, during, and following wildfires, BLM field offices will:

- Protect, conserve, and restore sagebrush rangelands and sage-grouse habitat.
- Strive to maintain and enhance resilience of the sagebrush rangelands, including through fuels and vegetation treatments.
- Foster existing relationships with partners and develop new cooperative relationships that will help bolster BLM capacity to protect sagebrush rangelands and sage-grouse habitat.

With regard to fire operations in sagebrush rangelands and sage-grouse habitat, BLM field offices will:

- Prioritize firefighter and public safety including following our "Standard Firefighting Orders," mitigate any "Watch-Out Situations," and apply the principles of Lookouts, Communications, Escape Routes, and Safety Zones on all fire assignments.

- Maintain a strong and proactive preparedness capability when conditions indicate potential for multiple ignitions and large fire growth.
- Maintain situational awareness during suppression resource drawdown levels under multiple ignition and large fire growth conditions.
- Boost suppression capability in critical sage grouse habitat when severe fire weather conditions are predicted.
- Generate interest in local residents and public land users becoming a trained and equipped fire response force to work in concert with existing partners.
- Expand the use of Rangeland Fire Protection Association (RFPA) or Rural Fire Department (RFD) suppression resources.
- Continue and expand efforts to train and use local, non-federal agency individuals as liaisons in wildland fire detection and suppression operations.

The Fire and Aviation Directorate conducts large fire assessments for wildfires occurring in sage grouse habitat. Large fire assessments evaluate preparedness actions taken prior to large fire occurrence and response actions taken when large fires occur. These assessments will:

- Provide proactive feedback to State Directors, District Managers, and Fire Management Officers by identifying areas for improvement, successes, and best management practices;
- Confirm compliance with the *Integrated Rangeland Fire Management Strategy*;
- Minimally impact local units; and
- Provide baseline data to inform state and national post-season reviews.

These assessments are NOT a review of fireline operations.

Reference FA IM-2017-016 for guidelines for determining when an assessment should be considered.

When sage-grouse habitat is burned or threatened by wildland fires burning on or originating on Bureau managed lands, reporting requirements and documentation in the Incident Status Summary (ICS-209) regarding the impact to sage-grouse habitat should be in accordance with National Multi-Agency Coordinating Group (NMAC) Correspondence #2015-7 dated June 23, 2015 and the Office of Wildland Fire (OWF) Policy Memorandum #2015-007. For additional guidance on sage-grouse inputs to the ICS-209, see the *National Interagency Mobilization Guide*.

Current habitat designations geospatial data layers provided to the WFDSS system and for calculating acres burned are available at https://www.nifc.gov/fireandsagegrouse/mapsData.html.

BLM Use of the Wildland Fire Decision Support System (WFDSS)

BLM follows interagency policy regarding use of WFDSS. Standards for when WFDSS will be used are found in Chapter 11.

BLM Global Positioning System (GPS) Datum and Coordinate Format Standard

To ensure safe and efficient suppression operations, all BLM fire resources will use a standard GPS datum and latitude/longitude (coordinate) format when communicating GPS references. The standard datum is WGS84, and the standard coordinate format is Degrees Decimal Minutes (DDM). For other activities (e.g., mapping, fire reporting, planning) agency standards will apply.

(This page intentionally left blank.)

Chapter 3
National Park Service Program Organization and Responsibilities

Introduction

This chapter summarizes specific requirements for NPS fire management programs. Fire managers should consult DO-18 Wildland Fire and RM-18 Wildland Fire for full guidance and descriptions of requirements summarized in this chapter. If there is a discrepancy between guidance found in this document and DO or RM-18, information contained herein will be considered authoritative as updates occur on a more frequent cycle than either the DO or RM.

Employee Conduct

All employees, cooperators, contractors, and volunteers who participate in wildland fire activities have the duty to treat each other with respect and to maintain a work environment free of harassment and misconduct. This includes conduct broader than the legal definitions of harassment and sexual harassment. Harassment becomes illegal when enduring the offensive conduct becomes a condition of continued employment or the conduct is sufficiently severe or pervasive as to create a work environment that a reasonable person would consider intimidating, hostile, or abusive. Employees are subject to disciplinary action, up to and including removal, for engaging in harassing conduct while in the workplace or in any work-related situation, including while on official travel. Off-duty misconduct may subject the employee to potential discipline if the misconduct is likely to have an adverse effect on the NPS (e.g., harassing a co-worker, visitor, contractor, or volunteer during off-duty hours). More extensive information, including how to report misconduct or harassment, is found in Director's Order 16E.

Agency Administrator Roles

Director

The Director of the National Park Service is responsible to the Secretary of the Interior for fire management programs on public lands administered by the National Park Service. The Division of Fire and Fire Aviation Management is responsible to the Director for policy formulation and program oversight.

The Chief, Division of Fire and Aviation Management will meet the required elements outlined in the *Management Performance Requirements for Fire Operations.*

Regional Director
The Regional Director is responsible to the Director for fire management programs and activities within their region.

The Regional Director will meet the required elements outlined in the *Management Performance Requirements for Fire Operations* and ensure training is completed to support delegations to line managers and principal actings.

Park Superintendent
The Park Superintendent is responsible to the Regional Director for the safe and efficient implementation of fire management activities within their unit, including cooperative activities with other agencies or landowners in accordance with delegations of authorities. The Park Superintendent or principal acting will meet the required elements outlined in the *Management Performance Requirements for Fire Operations*.

Agency Administrator Management Performance Requirements for Fire Operations

PERFORMANCE REQUIRED	NPS Director	Regional Director	Park Supt
1. Take necessary and prudent actions to ensure firefighter and public safety.	X	X	X
2. Ensures sufficient qualified fire and non-fire personnel are available each year to support fire operations at a level commensurate with the local and national fire situation. Ensures that all training and certification of fire and non-fire personnel is completed as required to support fire operations at the local and national level.	X	X	X
3. Ensure Fire Management Officers (FMOs) are fully qualified as identified in the *Interagency Fire Program Management Qualification Standards.*	X	X	X

PERFORMANCE REQUIRED	NPS Director	Regional Director	Park Supt
4. Provide a written Delegation of Authority on an annual basis to individual(s) responsible for wildland fire management activities to ensure an adequate level of operational authority. Depending on park organizational structure, written delegations may be provided to the Chief Ranger, Natural Resource Specialist, FMO, designated Fire Coordinator, Park Group FMO, or to individuals from neighboring fire management organizations, provided a written agreement or memorandum of understanding is in-place. Where applicable, an Inter-park Agreement that specifies the reciprocal responsibilities of the Superintendent and Park Group FMO assigned Duty Officer, will be prepared. This Inter-park Agreement will be accompanied by an annual Delegation of Authority. Both the Delegation of Authority and Inter-Park Agreement will remain valid until rescinded by either party, updates are needed, or personnel changes necessitate a revision and update. As appropriate, the Delegation of Authority will specify multi-agency coordination (MAC) group authorities.	**X**	**X**	**X**

PERFORMANCE REQUIRED	NPS Director	Regional Director	Park Supt
5. Fire Management Plans do not expire. They are considered valid until superseded by a new or revised Superintendent approved plan. Ensure applicable park unit resource management objectives are included in the Fire Management Plan (FMP). The comprehensive 7-year review of the FMP is no longer required. Annual updates are required. Then newly established FMP Update Checklist must be completed, signed by the Superintendent and uploaded in the Integrated Resource Management Application (IRMA) under the established park unit name. The new checklist can be found at https://irma.nps.gov/DataStore/Collection/Profile/3868. Ensure the FMP annual update is completed in advance of the fire season. The regions will determine specific deadlines. If the annual review is not completed by your regional deadline, an interdisciplinary team may need to be assembled to determine if the FMP is still adequate to support the park unit fire management program.			**X**
6. Reviews and approves wildfire preparedness and fuels management funding based on an accurate and defensible readiness analysis. Ensure use of fire funds is in compliance with Department and Agency policies.	**X**	**X**	**X**
7. Develop fire management standards and constraints that are in compliance with agency fire policies.		**X**	**X**
8. Ensure compliance with the collection, storing, and aggregation of Wildland Fire Program Core geospatial data (http://share.nps.gov/firegis).			**X**

PERFORMANCE REQUIRED	NPS Director	Regional Director	Park Supt
9. Management teams will meet once a year to review fire and aviation policies, roles, responsibilities, and delegations of authority. Specifically address oversight and management controls, critical safety issues and high-risk situations such as team transfers of command, periods of multiple fire activity and Red Flag Warnings.	**X**	**X**	**X**
10. Review safety policies, procedures, and concerns with field fire and fire aviation personnel. Discussions should include issues that could compromise safety and effectiveness during the upcoming season.			**X**
11. Ensure timely follow-up actions to program reviews, fire preparedness reviews, fire and fire aviation safety reviews, fire critiques and post-season reviews.	**X**	**X**	**X**
12. Ensure fire and fire aviation preparedness reviews are conducted in all units each year. Parks must complete checklists applicable to their specific program scope and complexity and include appropriate program elements, such as prescribed fire. A summary of the preparedness review findings including standards exceeded or needing improvement will be submitted to the Regional FMO before the fire season.		**X**	**X**
13. Ensure an approved burn plan is followed for each prescribed fire project; technical review, *Prescribed Fire Go/No-Go Checklist* (PMS 486), and *Agency Administrator Ignition Authorization* (PMS 485) are completed; follow-up monitoring and documentation to ensure management objectives are met.		**X**	**X**
14. Meet annually with major cooperators and review interagency agreements to ensure their continued effectiveness and efficiency (may be delegated).		**X**	**X**

PERFORMANCE REQUIRED	NPS Director	Regional Director	Park Supt
15. Ensure post fire reviews are conducted on all fires that escape initial attack or are managed as long term incidents. Participate in all reviews that require management by any type of Incident Management Team (Regional Director may delegate).		**X**	**X**
16. Provide management oversight by personally visiting wildland and prescribed fires each year.			**X**
17. Provide incident management objectives, written delegations of authority and Agency Administrator briefings to Incident Management Teams. See Chapter 11, Agency Administrator Responsibilities.			**X**
18. Monitor wildfire potential and provide oversight during periods of critical fire activity/situations.	**X**	**X**	**X**
19. Ensures that resource advisors are identified, trained, available, and appropriately assigned to wildland fire incidents. Refer to *Resource Advisor's Guide for Wildland Fire* PMS 313, NFES 1831, Aug 2017.			**X**
20. Convene and participate in annual pre- and post-season fire meetings.	**X**	**X**	**X**
21. Ensure Park superintendents who have potential wildland fire response in their park, their designated acting superintendents, and supervisors of fire management officers (FMOs) attain and maintain the Agency Administrator (AADM) qualification in the Incident Qualifications and Certification System (IQCS). The qualification must be attained within two years of appointment to the positions listed above.		**X**	**X**
22. Ensure appropriate investigations are conducted for accidents (as defined in Chapter 18), entrapments, shelter deployments, and related events.	**X**	**X**	**X**

PERFORMANCE REQUIRED	NPS Director	Regional Director	Park Supt
23. For all unplanned human-caused fires where liability can be determined, ensure actions are initiated to recover cost of suppression activities, land rehabilitation, and damages to the resource and improvements.		**X**	**X**
24. For all fires identified as requiring a WFDSS decision in Chapter 11, ensure local unit staff specialists are involved in the development and that all decisions are consistent with the objectives and requirements contained in the Park's Fire Management Plan.			**X**
25. Ensure there is adequate direction in fire management plans to identify fire danger awareness with escalating fire potential.			**X**
26. NPS Superintendents or other designated approving officials will maintain WFDSS user profiles (as appropriate), allowing them to approve wildfire decisions in WFDSS.			**X**
27. Ensure compliance with Departmental and agency policy, as well as Regional Office direction for prescribed fire activities and ensure that periodic reviews and inspections of the prescribed fire program are completed.	**X**	**X**	**X**
28. Review prescribed fire plans and recommend or approve the plans depending upon the delegated authority. Ensure that the prescribed fire plan has been reviewed and recommended by a qualified technical reviewer who was not involved in the plan preparation.			**X**
29. At National Preparedness Level 4 and 5, approve the initiation or continuation of prescribed fire applications based on an assessment of risk, impacts of the proposed actions on area resources and activities and include feedback from the Geographic Area Multi-Agency Coordinating Group.		**X**	

PERFORMANCE REQUIRED	NPS Director	Regional Director	Park Supt
30. Serves as the Management Official (MO) within the DOI Wildland Firefighter Medical Standards Program.		X	X

Fire Management Staff Roles

National Office

The Chief, Division of Fire and Aviation (FAM Chief), NPS-NIFC, is responsible and accountable for developing policy, program direction and international coordination. The FAM Chief, along with the Branch Chiefs for Wildland Fire and Aviation, work with interagency cooperators to coordinate, reduce duplication, increase efficiencies in wildland fire management and aviation, and provide feedback to regional offices on performance requirements.

Regional Office

The Regional Fire Management Officer (RFMO) provides leadership for their fire and fire aviation management program. The RFMO is responsible and accountable for providing planning, coordination, training, technical guidance and oversight to the park fire management programs. The RFMO also represents the Regional Director on interagency geographic coordination groups and Multi-Agency Coordination (MAC) Groups. The RFMO provides feedback to units on performance requirements.

Park

The Fire Management Officer (FMO) is responsible and accountable for providing leadership for fire and fire aviation management programs at the local level. The FMO determines program requirements to implement land use decisions through the Fire Management Plan (FMP) to meet land management objectives. The FMO negotiates interagency agreements (contracting/agreements officer must review and process agreement) and represents the Agency Administrator on local interagency fire and fire aviation groups.

The Superintendent annually shall provide and update the expectations of wildland fire program leaders by means of two instruments. One is a limited Delegation of Authority that encompasses the scope of duties outlined above. The other is an Inter-park Agreement for those cases where a Park Group FMO (or designee) handles defined duties on behalf of another NPS unit within the defined Park Group.

Fire Management Staff Performance Requirements for Fire Operations

PERFORMANCE REQUIRED	FAM CHIEF	RFMO	FMO
1. Maintain safety first as the foundation for all aspects of fire and fire aviation management.	**X**	**X**	**X**
2. Ensure completion of a job hazard analysis (JHA) for fire and fire aviation activities so mitigation measures are taken to reduce risk.			**X**
3. Ensure work/rest and length of assignment guidelines are followed during all fire and fire aviation activities. Deviations must be approved and documented.	**X**	**X**	**X**
4. Ensure that only trained and qualified personnel are assigned to fire and fire aviation duties.	**X**	**X**	**X**
5. Develop, implement, evaluate and document fire and fire aviation training programs to meet current and anticipated needs.	**X**	**X**	**X**
6. Establish an effective process to gather, evaluate, and communicate information to managers, supervisors, and employees. Ensure clear and concise communications are maintained at all levels.	**X**	**X**	**X**
7. Develop and maintain an open line of communication with the public and cooperators.	**X**	**X**	**X**
8. Ensure that the fire and fire aviation management staff understand their role, responsibilities, authority, and accountability.	**X**	**X**	**X**
9. Organize, train, equip, and direct a qualified work force. Establish “red card” certification/qualification process at the local level. Individual Development Plans (IDP) should be developed for all employees, but special emphasis must be on employees that do not meet standards.	**X**	**X**	**X**

PERFORMANCE REQUIRED	FAM CHIEF	RFMO	FMO
10. Ensure fire and fire aviation policies are understood, followed, and coordinated with other agencies as appropriate.	X	X	X
11. Recognize when complexity levels exceed program capabilities. Increase administrative, managerial, and operational resources to meet the need.	X	X	X
12. Initiate, conduct, and participate in fire management related reviews and investigations, including prescribed fires declared wildfires.	X	X	X
13. Provide for and personally participate in periodic site visits to individual incidents and projects.	X	X	X
14. Utilize the incident complexity analysis to ensure the proper level of management is assigned to all incidents.		X	X
15. Review and evaluate performance of the fire management organization and take appropriate actions.	X	X	X
16. Ensure incoming personnel and crews are briefed prior to fire and fire aviation assignments.		X	X
17. For all fires identified as requiring a WFDSS decision in Chapter 11, ensure local unit staff specialists are involved in the development and that all decisions are consistent with the objectives and requirements contained in the Park's Fire Management Plan.		X	X
18. Monitor fire season severity predictions, fire behavior, and fire activity levels. Take actions to ensure safe, efficient, and effective operations.	X	X	X
19. Provide fire personnel with adequate guidance and decision-making authority to ensure timely decisions.		X	X

PERFORMANCE REQUIRED	FAM CHIEF	RFMO	FMO
20. Ensure a written/approved plan based on current land use and/or fire management plans and/or project-level NEPA document exists for each prescribed fire or non-fire treatment. Plans shall be integrated with related vegetation management actions such as invasive species management.			**X**
21. Ensure effective transfer of command of incident management occurs and oversight is in place.	**X**	**X**	**X**
22. Develop and maintain agreements, annual operating plans, and contracts on an interagency basis to increase effectiveness and efficiencies.	**X**	**X**	**X**
23. Provide the expertise and skills to fully integrate fire and fire aviation management into interdisciplinary planning efforts.	**X**	**X**	**X**
24. Work with cooperators to identify processes and procedures for providing fire safe communities.	**X**	**X**	**X**
25. Develop, maintain, and annually evaluate the FMP to ensure accuracy and validity by completing a review. Ensure applicable park resource management objectives are included in the Fire Management Plan (FMP).		**X**	**X**
26. Ensure budget requests and allocations reflect analyzed anticipated workload.	**X**	**X**	**X**
27. Develop and maintain current operational plans; e.g., dispatch, pre-attack, prevention.	**X**	**X**	**X**
28. Ensure that reports and records are properly completed and maintained.	**X**	**X**	**X**
29. Ensure Wildland Fire Program Core spatial data is collected, stored, and aggregated based on NPS standards (http://share.nps.gov/firegis).		**X**	**X**

PERFORMANCE REQUIRED	FAM CHIEF	RFMO	FMO
30. Ensure fiscal responsibility and accountability in planning and expenditures.	X	X	X
31. Assess, identify, and implement program actions that effectively reduce unwanted wildland fire ignitions and mitigate risks to life, property, and resources. Utilize safe, effective, and efficient management.		X	X
32. Effectively communicate the role of wildland fire to internal and external agency audiences.	X	X	X
33. Complete trespass actions when unplanned human-caused ignitions occur.		X	X
34. Ensure compliance with National and Regional policy and direction for prescribed fire activities and ensure that periodic reviews and inspections of the prescribed fire program are completed.	X	X	X
35. Ensure all fire management actions and activities are consistent with those contained in the current Fire Management Plan and associated environmental compliance documentation.			X
36. Ensures compliance with DOI Wildland Firefighter Medical Standards processes to include Risk Mitigation/Waiver processes.	X	X	X

Fire Management Leadership Board

The Fire Management Leadership Board (FMLB) is established under the authority of the Chief, Division of Fire and Aviation Management. The purpose of FMLB is to provide leadership for the National Park Service (NPS) Wildland Fire Management Program through strategic planning and coordination to implement a safe and effective fire management program within the NPS. The FMLB will:

- Develop and implement a Wildland Fire Management Strategic Plan and Wildland Fire Policy;
- Facilitate integrating park, regional and national perspectives in support of the Wildland Fire Strategic Plan and Wildland Fire Policy;

- Develop and recommend strategic direction for long-term NPS Wildland Fire Management Program issues, policies, programs and systems, including the role of the interagency community, to meet the NPS mission;
- Develop and recommend budget priorities to the Branch Chief, Wildland Fire;
- Develop budget and financial management guidance and business rules for the NPS Wildland Fire Management Program;
- Communicate with management and leadership regarding wildland fire management program issues and needs;
- Promote/advocate integrating fire programs with other NPS programs; and
- Address recruitment/retention, succession planning and organizational efficiency.

Requirements for Fire Management Positions

All NPS employees assigned dedicated fire management program responsibilities at the park, regional or national level shall meet established interagency and NPS competencies (knowledge, skills, and abilities) and associated qualifications.

All NPS employees assigned to wildland fire management incidents will meet the training and qualification standards set by the National Wildfire Coordinating Group.

Refer to Chapter 13 of the *Interagency Standards for Fire and Fire Aviation Operations* for specific requirements.

All wildland fires will be managed by an individual qualified and certified at the command level appropriate to the complexity level of the incident.

The qualification standards identified in the *Interagency Fire Program Management Qualifications Standards* will be required, in conjunction with specific agency requirements, when filling vacant fire program positions and as an aid in developing Individual Development Plans (IDPs) for employees.

Training

Training for Fire Management Officers

The following training is required for fire management officers:

- *Fire Program Management – An Overview* (M-581).

NPS Firefighters General Training Requirements

The following training is required for agency permanent, career seasonal and temporary firefighters:

Required Training	Initial Requirement/ Frequency	Completion Tracking Method	Reference
First Aid/ Cardiopulmonary Resuscitation (CPR)	• Upon initial employment. • Every 3 years or per certifying authority	• Instructor-led • Unit Safety Manager	RM-50B, Section 4
HAZMAT - First Responder Awareness Level	• Upon initial employment • Annually • Minimum of one hour online course initially and annually	• Instructor-led • Unit Safety Manager • DOI Learn	https://www.osha.gov/Publications/osha2254.pdf Pg. 27
Annual Fireline Safety Refresher (RT-130)	• No minimum hourly requirement • Annually	• IQCS	RM-18 Ch. 10
Bloodborne Pathogens	• Annual for employees at increased risk due to assigned duties (i.e., IHC, helitack, WFM, engine crews) • Locally taught or DOI Learn	• Instructor • DOI Learn	RM-51 Ch. 5

Structural Fire and Hazardous Materials Response

Structural Fire Response Requirements (Including Vehicle, Trash, and Dumpster Fires)

In order to protect the health and safety of National Park Service personnel, no employee shall be directed, or dispatched (including self-dispatching) to the suppression of structural fires, including vehicle fires, unless they are provided with the required personnel protective equipment, firefighting equipment and training. All employees must meet or exceed the standards and regulations identified in Director's Order and Reference Manual #58, Structural Fire.

Vehicle, trash, and dumpster fires contain a high level of toxic emissions and must be treated with the same caution that structural fires are treated. Firefighters must be outfitted with NFPA compliant structural fire personal protective clothing, including self-contained breathing apparatus. Situations exist during the incipient phase of a vehicle fire where the fire can be quickly suppressed with the discharge of a handheld fire extinguisher. Discharging a handheld fire extinguisher during this phase of the fire will normally be considered an appropriate action for any employee who has received annual fire

extinguisher training. If the fire has gone beyond the incipient stage, employees are to protect the scene and request the appropriate suppression resources.

Delegation of Authority

Delegation for Regional Fire Management Officers

In order to effectively perform their duties, the RFMO must have certain authorities delegated from the Regional Director. The Delegation of Authority should include the following roles and responsibilities:

- Serves as the Regional Director's authorized representative on Geographic Area Coordination Groups, including MAC groups.
- Coordinate and establish priorities on uncommitted fire suppression resources during periods of shortages.
- Coordinate wildland fire planning, response, and evaluation region-wide.
- Relocate agency pre-suppression/suppression resources within the region based on fire potential/activity.
- Correct unsafe fire suppression activities.
- Direct accelerated, aggressive initial attack when appropriate.
- Develop and maintain agreements to provide for the management, fiscal and operational functions of combined agency operated facilities.
- Suspend prescribed fire activities when warranted.
- Give authorization to hire Emergency Firefighters in accordance with the DOI Pay Plan for Emergency Workers.
- Approve emergency fire severity funding expenditures not to exceed the Regional annual authority.

NPS Duty Officer (DO)

All Fire Management Officers are responsible to provide DO coverage during any period of predicted incident activities. DO's responsibilities may be performed by any individual with a signed Delegation of Authority from the local Agency Administrator. The Duty Officer may be in a location remote from the park, but will be familiar with local incident response procedures, agreements and resources. The required duties for all DOs are:

- Monitor unit incident activities for compliance with NPS safety policies.
- Coordinate and set priorities for unit suppression actions and resource allocation.
- Keep Agency Administrators, suppression resources and Information Officers informed of the current and expected situation.
- Plan for and implement actions required for future needs.
- Document all decisions and actions.

DOs will provide operational oversight of these requirements as well as any specific duties assigned by fire managers through the fire operating plan. DOs will not fill any ICS incident command functions connected to any incident. In

the event that the DO is required to accept an incident assignment, the FMO will ensure that another authorized DO is in place prior to the departure of the outgoing DO.

Engine Operating Standards

Current direction on the NPS Fire and Aviation vehicle program is at the NPS Fire Operations Sharepoint site http://famshare.inside.nps.gov/wildlandfire/operations/fleetandfacilities/default.aspx.

Vehicle Color and Marking

Vehicles dedicated to wildland fire activities shall be white in color and have a single four-inch wide red reflective stripe placed according to NFPA 1906 (NFPA 1906 8.8.3, 2006 edition). The word "FIRE" red with white background color will be clearly visible on all four sides of the vehicle. The NPS Arrowhead will be placed on the front doors. The size and placement of the Arrowhead will be as specified in RM-9. An identifier will be placed on the vehicle according to local zone or GACC directions. Roof numbers will be placed according to local zone procedures.

Engine Module Standards

If no ENGB is assigned, then the apparatus is designated as a Patrol or Prevention vehicle, not as an Engine.

Type	Minimum Personnel	ENGB	FFT2 (Minimum Qualification)
3	3	1	2
4	3	1	2
5	2	1	1
6	2	1	1
7	2*	**	1
Tactical Tender	2	1***	1

* At least one of which is FFT1 and ICT5 qualified.
** An ENGB is required for mobilization.
*** If the Water Tender is operated without an ENGB then it may only fill Non-Tactical missions as described in Chapter 14.

- Engines with four or more personnel assigned will always have a qualified engine operator (ENOP) in addition to an ENGB.
- Additional personnel may be requested by the ordering unit and/or added by the filling unit for mobilization.

Lights and Siren Response

Responding to wildland fire incidents normally does not warrant the use of emergency lights and siren on public roads by calling for or blocking the right-of-way from other traffic in order to safely and effectively perform the NPS mission. However, there may be rare and extenuating circumstances when limited use of emergency lights and siren is appropriate and necessary due to an immediate threat to life.

Those units that determine an emergency lights-and-siren response on public roads is necessary to meet mission requirements must develop an operating plan that ensures the following:

1. All vehicles (command, engines, etc.) will be properly marked, equipped, and operated in accordance with state statutes, codes, permits and NPS requirements.
2. Drivers will complete training in the proper use of lights and siren response in accordance with National Fire Protection Association (NFPA) 1451Standard for a Fire Service Operations Training Program and 1002 Standard for Fire Apparatus Operator/Driver Professional Qualifications, as well as any state requirements.
3. Instructors of lights and siren training must have successfully completed lights and siren training as part of a federal engine academy, and Emergency Vehicle Operators Course (EVOC) and a facilitative instructor course.
4. Drivers responding with emergency lights and sirens will be minimally qualified as engine operator.
5. Lights and sirens will meet NFPA and state code requirements.
6. Posted speed limits will be followed at all times, regardless of response type.
7. Drivers will stop at all controlled intersections (sign, light, traffic officer) before proceeding; drivers will stop or reduce speed as circumstances dictate prior to proceeding through any uncontrolled intersections.
8. Traffic light changing mechanisms (e.g., Opticons) will only be used under formal written agreement with state and local governments. They will be used only when they are necessary to create safe right-of-way through urban high-traffic areas. All pertinent state and local statutes and procedures will be adhered to.

Vehicle Maintenance, Repairs and Replacement

Daily preventative maintenance checks, regular servicing, and prompt repairs, and lifecycle replacement are critical to providing mission readiness, performance, and safe operation.

Annual Safety Inspections, Scheduled Maintenance, and Daily Inspections
It is required to complete and document annual safety inspections, regularly scheduled preventative maintenance and daily (or pre-trip) inspections for all NPS wildland fire vehicles. Annual safety inspections must be documented on Form 1520-35. Regularly scheduled preventative maintenance, unscheduled maintenance and repairs for interior owned (I-plate) vehicles is recorded in FBMS. Daily inspections must be recorded in the FEMPR (Fire Engine Maintenance Procedure and Record).

The cost of all vehicle repairs and maintenance is the responsibility of the individual parks unless the damage is directly attributable to operations on a wildfire. In that case, with approval from the IC, the damages may be paid for under the fire's suppression account.

Wildland fire vehicles that are not operationally sound or have safety deficiencies must not be put into service. In addition, vehicles that suffer from mechanical or safety issues while en route or on assignment must be taken out of service at the earliest opportunity in which it is safe to do so and must not be put back into service until corrective action can be completed.

Fixed Ownership Rates (FORs)
FORs are fees that are paid into the WCF annually for each vehicle in the program. These fees continue to accumulate over the life of a vehicle and are used to replace the vehicle at the end of its life cycle. The FOR is adjusted annually by the WCF manager to reflect changes in input parameters.

Equipment Bulletins and Equipment Alerts

The NPS mirrors the Bureau of Land Management (BLM) two-level Equipment Bulletin (EB) and Equipment Alert (EA) System. The purpose of the system is to share accurate and timely information regarding potential equipment problems and/or needed repairs. The EB is primarily intended to inform the equipment users of recommendations for repairs, potential hazards, or general information related to the overall maintenance, awareness, and safe operation of fire equipment. The EA is time sensitive and addresses potentially serious hazards or risks. The alert includes a specific action that the user must act upon.

Unexpected issues involving wildland fire vehicles which do not fall under other types of wildland fire reviews and investigations and/or other applicable federal, state or specific agency requirements must be reported. If an unexpected vehicle issue warrants an EB or EA it is issued by the National Fire Equipment Program Manager through the Operations Advisory Team and the Capital Equipment Committee. Members of these groups must ensure the information reaches all levels of the organization.

NPS Firefighter Target Physical Fitness Standards

These are voluntary targets. They are not mandatory. These targets are established to provide NPS firefighters a common standard against which to gauge their physical fitness level. NPS firefighters are encouraged to meet or exceed these standards.

Fitness Activity	Age 18-29	Age 30-39	Age 40-49	Age 50 and Up
1.5-mile run	11:58	12:25	13:05	14:43
Sit-ups (1 minute)	40	36	31	26
Push-ups (1 minute)	33	27	21	15

The guide below may be used to adjust the 1.5-mile run times to compensate for altitude differences:

Altitude in Feet	1.5-mile Run Time Adjustment
0 - 5,000	No adjustment
5,000 - 6,000	Add 30 seconds
6,000 - 7,000	Add 40 seconds
7,000 - 8,000	Add 50 seconds

National Fire Operations Fitness Challenge

The national fire operations fitness challenge encourages and recognizes achievement in physical fitness by NPS firefighters. The fitness challenge provides a common system by which NPS firefighters can measure current fitness, establish fitness goals, and track fitness improvement. The fitness challenge is voluntary, but NPS firefighters are encouraged to participate. The fitness challenge tests participants in four basic exercises - push-ups, pull-ups, sit-ups and a timed run of 1.5 miles. Test results are compiled into a final overall score. Unit and Regional offices are encouraged to support and recognize achievement in firefighter fitness. Specific information on the fitness challenge is located at https://www.nifc.gov/training/trainingFitness.html.

Wildland Fire Uniform Standards

The Service-wide Uniform Program Guideline (DO-43) sets forth the service-wide policies and associated legal mandates for wearing the NPS uniform and for authorizing allowances to employees.

The guideline states that superintendents administer the uniform program within their areas and are responsible for developing and communicating local uniform and appearance standards in accordance with DO-43, determining who will wear the uniform and what uniform will be worn and enforcing uniform and

appearance standards. Three options exist for uniforms for wildland fire personnel:

- Within the context of the uniform standards, if the conventional NPS uniform is identified at the local level as required for specified fire management staff, fire program management funds may be used to support uniform purchases in accordance with allowance limits identified in DO-43.
- While Nomex outerwear (i.e., shirts, trousers, brush-coats) routinely issued as personal protective equipment has become recognized as the uniform of the wildland firefighter as a matter of necessity, these apparel also have justifiable utility as a uniform standard at the park level for certain fire and/or ONPS base-funded wildland fire staff.
- When the conventional NPS uniform or the full Nomex outerwear is not appropriate or justified, local management with park superintendent approval may establish a predetermined dress code for fire staff. The goals of the NPS uniform program can appropriately be applied (with common sense) to this departure from the norm.
- The DOI Boot Policy is referenced in Chapter 7.
- The fire management officer is responsible for establishing a reasonable allotment schedule for new or returning employees, commensurate with supplies provided in previous seasons. A suggested per person issuance is three to four tee shirts, one ball cap, and one sweatshirt (where appropriate). $100 would normally be adequate to cover costs of this issuance.

Where appropriate and justified, fire funds may be applied to the purchase of 100 percent cotton tee shirts, sweatshirts, and ball caps, with appropriate logo and color scheme, to augment the Nomex outerwear worn in conjunction with project or wildland fire management incidents. Nomex outerwear will usually be returned to the park's fire cache based on the tour of duty (end of season, transfer to another park, etc.).

Just as with uniform allowance discussed in DO-43, the intent of fire-funded purchases is to defray the cost of the appropriate apparel, not necessarily to cover the cost of all items. This will not only be factored into the quantities deemed necessary for the individual, but would also preclude fire-funded purchases of fleece jackets, rain gear and other personal items generally considered the responsibility of those employees not covered by the NPS uniform program. Exceptions to this should be well-justified and documented.

Fire Management Credentials

The NPS Fire and Aviation Management Credential Program is currently suspended and undergoing a review.

NPS Use of WFDSS

The internet-based WFDSS will be the primary decision support documentation platform for all NPS wildfires. Refer to Chapter 11 of the *Interagency Standards for Fire and Fire Aviation Operations* for further guidance.

National Park Service Specific Qualifications and Qualifications Exceptions

Park superintendents who have potential wildland fire response in their park, their designated acting superintendents, and supervisors of fire management officers (FMOs) must attain and maintain the Agency Administrator (AADM) qualification in the Incident Qualifications and Certification System (IQCS). The qualification must be attained within two years of appointment to the positions listed above. Requirements for the AADM qualification may be found in the *Federal Wildland Fire Qualifications Supplement* hosted at https://www.nwcg.gov/publications/310-1.

(This page intentionally left blank.)

Chapter 4
U.S. Fish and Wildlife Service Program Organization and Responsibilities

Introduction

This document states, references, or supplements policy for the U.S. Fish and Wildlife Service (Service or FWS) Wildland Fire Management Program. The standards provided in this document are based on current U.S. Department of the Interior (DOI) and Bureau policy, and are intended to provide fire program guidance. If there is a discrepancy between guidance found in this document and the Service Manual, information contained within this document will be considered authoritative as updates occur on a more frequent cycle than the Service Manual. The intent is to ensure safe, consistent, efficient, and effective fire and aviation operations. This document will be reviewed and updated annually.

Agency Administrator Roles

Director

The Director of the Fish and Wildlife Service has overall responsibility for the Service's Wildland Fire Management Program. The Director will ensure regional fire management activities are formally evaluated.

Chief, National Wildlife Refuge System

The National Wildlife Refuge System under the Chief provides leadership for the Wildland Fire Management Program. The National Wildlife Refuge System also formally evaluates all regional fire activities as needed. The Assistant Director of the National Wildlife Refuge System has delegated the authority to approve the Service *Fire Management Handbook* and other fire related handbooks as needed to provide guidance to the Chief, Branch of Fire Management.

Regional Director

The Regional Director is responsible to the Director for fire management programs and activities within their region. The Regional Director will meet the required elements outlined in the *Management Performance Requirements for Fire Operations* and ensure training is completed to support delegations to line managers and principal acting's. The Regional Director ensures that Refuge Managers/Project Leaders, and or Field Supervisors are qualified to approve prescribed fire plans. Any prescribed fire that: 1) is converted to a wildfire; 2) is issued a Notice of Violation for air quality; or 3) damages values off of Service lands, must be reviewed. The appropriate level and scope of the review will be determined by agency policy. The final review results shall be provided to the Regional Director within 45 days of the incident out date. Regional Directors will provide a written Delegation of Authority to the Regional Fire Management

Coordinator (RFMC) to represent the region on the Geographic Multi-Agency Coordinating Group (GMAC) and other duties as described in this chapter under the heading "Delegation of Authority."

Regional Chief and Refuge Supervisors

Regional Chiefs and Refuge Supervisors are delegated specific leadership responsibilities by the Regional Director. They provide oversight and direction, in coordination with, the Wildland Fire Management Program for the National Wildlife Refuge System. These responsibilities occur through established lines of authority as assigned by the Regional Director.

Project Leader/Refuge Manager

The Project Leader is responsible for the safe and efficient implementation of fire management activities within their unit, including cooperative activities with other agencies or landowners, in accordance with delegations of authorities. The Project Leader, or principal acting, will meet required elements outlined in the *Management Performance Requirements for Fire Operations* table below.

- If an Agency Administrator is absent during an incident, the Refuge Supervisor and RFMC will make an assessment of the Acting Agency Administrator's capabilities and provide appropriate additional support. The Refuge Supervisor and RFMC will provide additional fire management support for the affected refuge as needed.

Management Performance Requirements for Fire Operations

PERFORMANCE REQUIRED	FWS Director	Regional Director	Regional Chief/ Refuge Supervisor	Project Leader/ Refuge Manager
Policy				
1. Ensure any standards developed are compliant with agency wildland fire policies.	**X**	**X**	**X**	**X**
2. Ensure use of fire funds is in compliance with department and agency policies.	**X**	**X**	**X**	**X**

PERFORMANCE REQUIRED	FWS Director	Regional Director	Regional Chief/ Refuge Supervisor	Project Leader/ Refuge Manager
3. Attends the *Fire Management Leadership* course (geographic or national) or the Agency Administrator Training Workshop hosted by the Prescribed Fire Training Center (see agency policy) within two years of appointment to Refuge Manager/Project Leader, unless there have been no wildfire or prescribed fires recorded in the last 10 years within the complex/refuge. Ensures that personnel assigned oversight responsibilities for the fire program have completed the *Fire Management Leadership* course.	**X**	**X**	**X**	**X**
4. Review critical operations and safety policies and procedures, including *Interagency Fire Program Management Qualifications Guide* and *Interagency Standards for Fire and Fire Aviation Operations* (Redbook) with fire and fire aviation personnel.		**X**	**X**	**X**

PERFORMANCE REQUIRED	FWS Director	Regional Director	Regional Chief/ Refuge Supervisor	Project Leader/ Refuge Manager
Program Management				
5. Provide a written Delegation of Authority to Zone Fire Management Officer (ZFMOs) giving an adequate level of operational authority. For zoned/area units, ensure all appropriate Agency Administrators have signed the delegation. When applicable, develop an Inter-refuge Agreement specifying reciprocal responsibilities of the Project Leader/Refuge Manager and the Zone FMO.				**X**
6. Ensure all fire management activities are supported by a current Fire Management Plan (FMP) with documented annual updates and are integrated with an approved Comprehensive Conservation Plan.	**X**	**X**	**X**	**X**
7. Ensure investigations and reviews are conducted for incidents, accidents, escaped prescribed fires, and near misses as described in Chapter 17 of *Fire Management Handbook* and Chapter 18 of *Interagency Standards for Fire and Fire Aviation Operations*.	**X**	**X**	**X**	**X**
8. Annually update and review the *FWS Line of Duty Death Response Handbook* and the *Agency Administrator's Guide to Critical Incident Management*.		**X**	**X**	**X**

PERFORMANCE REQUIRED	FWS Director	Regional Director	Regional Chief/ Refuge Supervisor	Project Leader/ Refuge Manager
9. Ensure master agreements with cooperators are valid and in compliance with agency policies, and Annual Operating Plans are current.		**X**	**X**	**X**
10. Ensure trespass actions are initiated and documented to recover cost of suppression activities, land rehabilitation, and damages to resources and improvements for all human-caused fires where liability can be determined, as per Service *Fire Management Handbook*.		**X**	**X**	**X**
11. Ensure Wildland Fire Decision Support System (WFDSS) is used to publish timely decisions and to provide decision support documentation for all fires that escape initial attack or initial response.		**X**	**X**	**X**
12. Convene and participate in annual fire meetings.			**X**	**X**
13. Participate as part of in-briefings and post fire closeouts on Type 1 and Type 2 fires and provide a written Delegation of Authority, WFDSS analysis, Agency Administrator briefings to Incident Management Teams.				**X**

PERFORMANCE REQUIRED	FWS Director	Regional Director	Regional Chief/ Refuge Supervisor	Project Leader/ Refuge Manager
14. Ensure fire and fire aviation preparedness reviews are conducted annually in all unit offices. Ensure timely follow-up to fire management program reviews.			**X**	**X**
15. Ensure resource advisors are identified, trained, and available for incident assignment. Refer to the *Resource Advisor's Guide for Wildland Fire* (NWCG PMS 313, NFES 1831).				**X**
16. Personally visit at least one wildland fire each year.				**X**
17. Ensure appropriate management of Social/Political/Media resources and relationships affecting wildland fire.		**X**	**X**	**X**
18. Provide oversight to Emergency Stabilization (ES) and Burned Area Rehabilitation (BAR) processes and procedures.				**X**
Training/Certification				
19. Ensure only trained and certified fire and non-fire personnel are available to support fire operations at the local, geographic, and national levels.	**X**	**X**	**X**	**X**

PERFORMANCE REQUIRED	FWS Director	Regional Director	Regional Chief/ Refuge Supervisor	Project Leader/ Refuge Manager
20. Fire Management Leadership, Local Fire Management Leadership training and Prescribed Fire Training Center training will be tracked in the Incident Qualifications and Certification System (IQCS).			**X**	**X**
Prescribed Fire/Fuels Management				
21. Ensure compliance with National and Regional policies for prescribed fire activities. Conduct periodic reviews of the prescribed fire program.		**X**	**X**	**X**
22. Ensure all wildfires resulting from prescribed fire actions are reported to Regional Director within 24 hours of the wildfire declaration.			**X**	**X**
23. In the event of a declared wildfire from an escaped prescribed fire, conduct and submit Declared Wildfire Review to National Office within 45 days of wildfire out date.		**X**	**X**	**X**
24. Ensure Prescribed Fire Plans have been reviewed and recommended by a qualified technical reviewer other than the plan author.				**X**
25. Review and approve the Agency Administrator Ignition Authorization.				**X**

Fire Management Staff Roles

National Office

Fire Director

The Fire Director is the Chief of the Fire Management Branch (FMB) in the National Wildlife Refuge System (NWRS), and is the Service representative at the National Interagency Fire Center (NIFC). The Fire Director, through *Service Manual 621 FW 1*, is delegated authority by the Director to represent the Service on the National Multi-Agency Coordinating Group (NMAC Group). The Fire Director is responsible for implementing the decisions of the NMAC as they affect U.S. Fish and Wildlife Service areas. The decisions of the NMAC include the prioritizing of incidents nationally and the allocation or reallocation of firefighting resources to meet national priorities.

The Fire Management Branch is responsible for providing technical direction and coordination of fire management planning, policy development, and procedures Service wide.

Regional Office

Regional Fire Management Coordinator (RFMC)

The Regional Fire Management Coordinator provides leadership, direction, coordination, training, planning, evaluation, and technical guidance for the region and is available to provide assistance for intra-agency and interagency wildland fire management needs. The RFMC will meet qualification requirements established by IFPM for the position. The RFMC, through written delegation by the Regional Director, is delegated authority to represent the region on the GMAC. The RFMC is responsible for implementing the decisions of the GMAC Group as they affect U.S. Fish and Wildlife Service areas. The decisions of the GMAC include the prioritizing of incidents, Interagency Master/statewide agreements and the allocation or reallocation of firefighting resources to meet wildland fire management priorities.

Refuge

Zone Fire Management Officer (ZFMO)

The ZFMO is responsible and accountable for providing leadership for the fire management program. The ZFMO determines program requirements to implement land use decisions through the FMP to meet land management objectives. The ZFMO negotiates interagency agreements and as delegated, represents the Agency Administrator on local interagency fire and fire aviation groups. The ZFMO is responsible for coordinating with Agency Administrators to annually review and update (as required) their respective Fire Management Plans to comply with agency policy.

Fire Management Staff Performance Requirements for Fire Operations

PERFORMANCE REQUIRED	Fire Director	RFMC	Zone FMO
Policy			
1. Establishes and manages a safe, effective, and efficient fire program.	**X**	**X**	**X**
2. Ensures that FMPs reflect the agency's commitment to firefighter and public safety, while utilizing the full range of fire management activities available for ecosystem sustainability.		**X**	**X**
3. Provides the expertise and skills to fully integrate fire and fire aviation management into interdisciplinary planning efforts.	**X**	**X**	**X**
4. Ensures fire and fire aviation policies are understood, implemented, and coordinated with other agencies as appropriate including work/rest guidelines.	**X**	**X**	**X**
Program Management			
5. Ensure appropriate risk management, administration, management and oversight of wildland incidents. Ensure Incident Business Analysts, Strategic Operational Planners, Resource Advisors, and Agency Representative positions are utilized as needed.	**X**	**X**	**X**
6. Ensures completion of a Job Hazard Analysis (JHA)/Risk Assessment for fire and fire aviation activities to mitigate risk.		**X**	**X**
7. Develop, negotiate, and implement cost share, Service First, and reimbursable protection agreements with cooperators.	**X**	**X**	**X**
8. Monitors fire suppression activities to recognize when complexity levels exceed current management capabilities. Increases managerial and operational resources to meet the need.	**X**	**X**	**X**
9. Ensures that agreements with cooperators and operational plans (e.g., Annual Operating Plans, dispatch, preparedness, prevention) are valid and in compliance with agency policy.	**X**	**X**	**X**

PERFORMANCE REQUIRED	Fire Director	RFMC	Zone FMO
10. Ensures use of fire funds is in compliance with department and agency policies.	X	X	X
11. Ensures that fire severity funding is requested, used, and documented in accordance with agency standards.	X	X	X
12. Ensures a process is established to communicate fire information to public, media, and cooperators.	X	X	X
13. Participates in annual fire meetings.	X	X	X
14. Oversees pre-season preparedness review of fire and fire aviation program.		X	X
15. Initiates, conducts, and/or participates in fire program management reviews and investigations.	X	X	X
16. Personally participates in periodic site visits to individual incidents and projects.		X	X
17. Ensures that transfer of command occurs as per *Interagency Standards for Fire and Fire Aviation Operations*, Appendix G on incidents.		X	X
18. Ensure the proper level of management complexity is assigned to all incidents.		X	X
19. Ensures that incoming personnel and crews are briefed prior to fire and fire aviation assignments.		X	X
20. Ensures a WFDSS analysis is initiated, updated, approved, and published as necessary.		X	X
21. Works with cooperators, groups, and individuals to develop and implement processes and procedures for providing fire safe communities within the wildland urban interface.	X	X	X
22. Ensures unit is capable of wildfire cause determination.	X	X	X

PERFORMANCE REQUIRED	Fire Director	RFMC	Zone FMO
23. Annually updates and reviews the FWS *Line of Duty Death Response Handbook* and the *Agency Administrator's Guide to Critical Incident Management.*	**X**	**X**	**X**
24. Ensures that fire season severity predictions, weather forecasts, fire behavior predictors, and fire activity levels are monitored and communicated daily to all employees (hard copy, web page, email, radio, or fax).	**X**	**X**	**X**
25. Uses current National, Geographic, and Local Mobilization Guides and ensures standards are followed.	**X**	**X**	**X**
26. Ensures that reports and records are properly maintained according to FWS policies.	**X**	**X**	**X**
27. Ensures all job related accidents/incidents resulting in, or having the potential to cause fatalities, injuries, illnesses, property or environmental damage are reported and/or investigated. All such reports are electronically submitted through the Safety Management Information System (SMIS), SAFENET or SAFECOM as appropriate.		**X**	**X**
28. Ensures that current emergency medical response plan is in place and accessible.		**X**	**X**
Planning			
29. Develops and/or updates fire management plans and associated operational plans for approval by project leaders and regional fire and refuge staff (as determined by the region). Annually review FMPs per Service policy.			**X**
30. Responsible for the coordination of Remote Automated Weather Station (RAWS) maintenance, sensor calibration, and oversight of daily inputs.			**X**
Training			
31. Ensures IQCS accounts are established and training records maintained for Agency Administrators.		**X**	**X**

PERFORMANCE REQUIRED	Fire Director	RFMC	Zone FMO
32. Organizes trains, equips, and directs a qualified work force. Ensures that only trained and qualified personnel are assigned to fire and fire aviation duties. Establishes and implements performance review process(es).		X	X
Prescribed Fire and Fuels			
33. Ensures compliance with Service, Regional, and/or local policies for prescribed fire activities. Provides periodic reviews of the prescribed fire program.	X	X	X
34. Reports all wildfires resulting from prescribed fires to the Regional Fire Management Coordinator within 12 hours of the wildfire declaration.			X

National Fire Leadership Team

The National Fire Leadership Team (NFLT) is established under the guidance and support of the NWRS Leadership Team. The team is established to provide regional input on issues of National importance, to advise the Chief, FMB, and provide leadership, coordination, and guidance in the development and implementation of a safe and effective fire management program within the Service. The team serves as a national clearing house, provides discussion of wildland fire management issues, and recommends actions to improve coordination and integration of regional fire management activities into national direction. The team will be responsible for the following:

- Provide leadership, coordination, and guidance for the Service's fire management program.
- Identify potential fire management issues, and recommend strategies that will enhance the Service's ability to safely and effectively manage fire on Service lands.
- Develop and recommend common guidance and business rules as needed to manage fire management activities while recognizing individual regional needs.
- Provide a forum for the exchange of ideas, best management practices, and lessons learned relating to Service fire management activities.
- Provide a forum to discuss budget methodology applications that are consistent with appropriation language authority as well as providing for the collaboration and coordination within FWS and with our interagency partners.

- Form task groups, working teams, or other collections of subject matter experts as needed to deal with specific tasks or long-term issues. These groups or teams will each have a Leader who usually works in the subject matter area with members assigned who may have the subject area as a collateral duty. They will have representation from across the Service, and will provide guidance or operational recommendations to the NFLT.

Line Officer Team (LOT)

The Line Officer Team (LOT) consists of representatives from each Region and each level of the National Wildlife Refuge System (NWRS). Their primary responsibility is to advise and promote a safe, effective and integrated fire management program in the NWRS.

Delegation of Authority

Regional Fire Management Coordinator

In order to effectively perform their duties, a RFMC must have certain authorities delegated from the Regional Director. This delegation is normally placed in the regional office supplement to agency manuals. This Delegation of Authority should include:

- Serve as the Regional Director's authorized representative on geographic area coordination groups, including MAC groups.
- Coordinate and establish priorities on uncommitted fire suppression resources during periods of shortages.
- Coordinate logistics and suppression operations region-wide.
- Relocate agency wildland fire resources within the region based on relative fire potential/activity.
- Correct unsafe wildland fire activities.
- Enter into agreements to provide for the management, fiscal, and operational functions of combined agency operated facilities.
- Suspend prescribed fire activities when warranted.
- Give authorization to hire Emergency Firefighters (EFF) in accordance with the DOI Pay Plan for Emergency Workers.
- Approve short-term fire severity funding expenditures not to exceed the region's annual authority.

Zone Fire Management Officer (ZFMO)

In order to effectively perform their duties, the ZFMO will receive a Delegation of Authority outlining the operational and administrative fire management duties. All Unit Agency Administrators within a Zone will sign a Zone and/or Refuge Fire Management delegation. A sample Delegation of Authority can be found on the FWS Fire Operations Policy and Guidance SharePoint site.

Inter-refuge Agreements

Inter-Refuge Agreements may be used when ZFMOs provide fire management oversight to multiple refuges. This is in addition to the Delegation of Authority from the Project Leaders/Refuge Managers to the ZFMO, and further defines the roles and expectations between the ZFMO and Refuges. An example can be found on the FWS Fire Operations Policy and Guidance SharePoint site.

Fire Duty Officer

Fire Management Officers are responsible to provide Fire Duty Officer (FDO) coverage during periods of predicted incident activities. FDO responsibilities may be performed by any individual delegated the authority, either written or verbal, from the ZFMO. The duties for FDOs include:

- Monitor unit incident activities for compliance with FWS safety policies.
- Coordinate and set priorities for unit preparedness activities, incident response and resource allocation.
- Keep Agency Administrators and resources informed of the current and expected situation.
- Plan for and implement actions required for future needs.
- Document decisions and actions.
- FDOs will not fill Incident Command System (ICS) functions. If the FDO needs to fulfil an ICS function, they must re-assign the FDO duties.

Wildland Fire Field Attire

Wildland fire field attire will be worn by primary preparedness funded personnel on all duty days during the predetermined “fire season” for the home unit in accordance with their approved step-up plan.

Fire Severity Funding

Service specific fire severity funding guidance can be found in Chapter 10 of the *Interagency Standards for Fire and Fire Aviation Operations* (NFES 2724), Chapter 10 of the Service *Fire Management Handbook*, and the *Fire Business Guide*, Severity Subactivity.

Fire Reporting

Field units will report wildland fire occurrence and fire status to their local dispatch office and Regional Office.

Individual Fire Report

An Individual Fire Report must be completed in the Fire Management Information System (FMIS) for the following types of fires or treatments within 15 days after the fire is declared out or treatment is complete:

- All wildland fires on Service lands;
- Support actions;
- Fires suppressed on other lands under an agreement;
- All false alarms;
- Natural outs (by natural out definition); and
- Non-fire treatments completed with fuels funding.

Detailed information about a support action is only required from an initial entry into FMIS to establish a work breakdown structure (WBS). Once the WBS has been established, users are not required to establish additional fire reporting information for the same fire.

Reports are required regardless of who takes action, e.g., force account, cooperator, or contractor. When actions are taken on a cooperative fire, the agency having jurisdiction over the land on which the wildfire occurs will file a complete report to record and bill for assistance when necessary.

Fish and Wildlife Service Use of WFDSS

FWS follows interagency policy regarding use of WFDSS. Standards for when WFDSS will be used are found in Chapter 11 of the *Interagency Standards for Fire and Fire Aviation Operations*.

Documentation of all other wildfires in WFDSS is at the discretion of the Regional Office or local unit. All fires in Alaska will have WFDSS initiated by the Protection Agency.

Final Wildland Fire Record

The final wildland fire or project record may include the following:

- FMIS data entry (required)
- Narrative
- WFDSS
- Incident Action Plan(s)
- Daily weather forecasts and spot weather forecasts
- Cumulative fire map showing acreage increase by day
- Total cost summary
- Monitoring data (Wildland Fire Observation Records)
- Critique of fire projections on Incident Action Plan

Physical Fitness and Conditioning

Employees serving in wildland fire positions that require a fitness rating of arduous as a condition of employment are authorized one hour of duty time each work day for physical fitness conditioning. Employees not having a fitness rating of arduous as a condition of employment, but who are required by a Critical Performance element or other written agreement to maintain an arduous level, will be authorized three hours per week of duty time for physical fitness condition. All other wildland firefighting personnel holding qualifications requiring ratings of moderate or arduous may be authorized, by their supervisor, up to three hours per week of duty time for fitness conditioning. Prior to any duty time being allowed for physical fitness conditioning, employees and supervisors must agree, in writing, what physical conditioning activities the employee will engage in, and when and where they will occur. Activities outside of the agreement will not be authorized or allowed. A combination of activities designed to increase both physical strength and aerobic fitness, while minimizing the possibility of physical injury, should be utilized.

Training

Agency Administrator Training

The qualification standards identified in the *Interagency Fire Program Management Qualification Standards* are required, in conjunction with specific agency requirements, when filling vacant fire program positions, and as an aid in developing Individual Development Plans (IDPs) for employees.

- Refuge Managers/Project Leaders with Service lands under their jurisdiction which require the development and maintenance of a Fire Management Plan must attend *Fire Program Management – An Overview* (*M-581*), or may upon concurrence of the RFMC, attend the *Prescribed Fire Workshop for Agency Administrators* offered by the National Interagency Prescribed Fire Training Center.
- Projects leaders/refuge managers who oversee or have the potential to oversee complex fire management programs should consult with their RFMC about attending *Fire Program Management – Leading Complex Programs* (M-582).
- Field supervisors who may approve prescribed fire plans must attend *Fire Program Management – An Overview* (M-581), or may upon concurrence of the RFMC, attend the *Prescribed Fire Workshop for Agency Administrators* offered by the National Interagency Prescribed Fire Training Center.
- Regional Chiefs, Regional Refuge Supervisors, and Refuge Managers/Project Leaders must complete periodic refresher training as determined by their supervisor in consultation with the RFMC. Refresher training options may include attending fire management training/workshops, trainee experiences, or mentoring.

- Guidance for use of the agency qualification for Agency Administrators (AADM) can be found in the *Federal Wildland Fire Qualifications Supplement*.

Zone Fire Management Officer Training

All ZFMOs are required to attend the M-581, *Fire Program Management – An Overview* course, either as a student or as a member of the instructor cadre. If attending as an instructor, the ZFMO must be present for the entire course. See IFPM requirements.

FWS Firefighter General Training Requirements

Agency Permanent, Career Seasonal, and Temporary Firefighters

One-Time Training	Annual Training	Recurring Training
Hazardous Materials-First Responder Awareness Level		First Aid /CPR (every 2 years)
A-100 Basic Aviation Safety (Classroom/Online)	RT-130 Annual Fireline Safety Training	A-100 Basic Aviation Safety (every 2 years)
Hazardous Materials (see 242 FW 6 Table 6-4)	Hazardous Materials (see 242 FW 6 Table 6-4)	Defensive Driving (every 3 years)

Administratively Determined (AD) and EFF Required Training

- First Aid/CPR (every 2 years)
- Defensive driving (every 3 years)

Fish and Wildlife Service Specific Qualifications

Guidance regarding agency-specific qualifications that are not contained in the *National Incident Management System (NIMS) Wildland Fire Qualifications Guide* (NWCG PMS 310-1) can be found in the *Federal Wildland Fire Qualifications Supplement.* For qualifications with agency standards which exceed minimums established in the PMS 310-1, refer to the Service Fire Management Handbook.

FWS Global Positioning System (GPS) Datum and Coordinate Format Standard

To ensure safe and efficient suppression operations, all FWS fire resources will use a standard GPS datum and latitude/longitude (coordinate) format when communicating GPS references. The standard datum is WGS84, and the standard coordinate format is Degrees Decimal Minutes (DDM). For other activities (e.g., mapping, fire reporting, planning), agency standards will apply.

(This page intentionally left blank.)

Chapter 5
USDA Forest Service Wildland Fire and Aviation Program Organization and Responsibilities

Introduction

This document is intended to be a program reference guide that documents the standards for operational procedures and practices for the USDA Forest Service Fire and Aviation Management program. The standards provided in this handbook are based on current agency and interagency wildland fire management policy, and are intended to provide fire and aviation program guidance, and to ensure safe, consistent, efficient, and effective fire and aviation operations. This document will be reviewed and updated annually.

Vision and Objectives for Fire Management

The vision of the Forest Service's Fire and Aviation Management program is to safely and effectively extinguish fire, when needed; use fire where allowable; manage our natural resources; and as a Nation, live with wildland fire. The following objectives support this vision:

- Risk Management and Risk Reduction – Assure management of risk to people, communities and natural and cultural resources is the fundamental principle used to make informed decisions in all fire management programs. Minimize the risk to people, communities and natural and cultural resources by assessing the potential benefits of actions, severity of concerns, and probabilities of occurrences to reduce risk.
- Ecological – Meet the Forest Service mission through the use of fire management programs to protect people and communities, conserve natural and cultural resources, and maintain and restore ecological health.
- Collaboration – Implement the wildland fire management program through collaboration and partnerships.
- Learning – Learn from science, and ours and our partners' experiences, to improve fire management programs.
- Empowerment – Employees are expected and empowered to be creative and decisive, to exercise initiative and accept responsibility and use their training, experience, and judgement to implement the agency's mission.

Foundational Doctrine

The vision of the Forest Service's Fire and Aviation Management program is to use a doctrinal approach based on leadership, operations and risk management. To support this vision, Forest Service policy is to:

- Take all response actions to ensure the safety of firefighters, other personnel, and the public regardless of cost or resource loss; no resource or facility is worth the loss of human life.

- The intent of wildfire response is to protect human life, property, and achieve protection and natural resource management objectives established in Land and Resource Management Plans.
- Leadership principles are the foundational doctrine on which fire and aviation management operations will be based.

A doctrinal approach goes beyond strict compliance with procedural rules, and promotes risk-based application of wildland fire management principles to improve decision making and firefighter safety. Foundational doctrine has been codified in Forest Service Manual 5100 direction and will guide fundamental wildland fire management policy, practices, behaviors, and customs to be mutually understood at every level of command.

Under this doctrinal approach:

- Employees are expected and empowered to be creative and decisive, to exercise initiative and accept responsibility, and to use their training, experience, and judgment in decision-making to carry out their leader's intent.
- Employees are expected and empowered to make reasonable and prudent decisions to accomplish the agency mission while minimizing unnecessary risk.

Mission

- The Forest Service is prepared and organized to support national and international emergencies with trained personnel and other assets when requested.
- Agency employees respond when they come across situations where human life is immediately at risk or there is a clear emergency, and they are capable of assisting without undue risk to themselves or others.
- Support for local fire emergencies takes priority over accomplishment of local resource targets. Support of non-local fire emergencies will be at the discretion of the local line officer, as bounded by agency agreements and Regional or National direction.
- A cooperative relationship between the Forest Service and other agencies is essential. The Forest Service is committed to honor its part of the joint responsibility to develop and maintain effective working relationships with its intergovernmental cooperators.

Wildland Fire Response Principles

- Response to wildland fire is based on the ecological, social, and legal consequences of fire. The circumstances under which a fire occurs, and the likely consequences to firefighter and public safety and welfare, natural and cultural resources, and values to be protected dictate the appropriate management response to fire.

- Response to wildfire in the Wilderness focuses on the natural ecological role of fire and activities are conducted in a manner compatible with overall wilderness management objectives.
- Success is achieving reasonable objectives with the least firefighter risk necessary while enhancing stakeholder support for our management efforts.

Leadership and Accountability

- All levels of leadership must communicate a clear vision of Agency goals and management principles, ensuring they are shared and understood by all levels of the organization.
- All levels of leadership must express clear intent concerning roles and responsibilities to ensure wildfire response assignments are appropriate, risk-based and effective.
- Leaders regularly monitor operations for safety, efficiency and effectiveness, and take action when there is recognition of exceptional or problematic employee performance.

The Operational Environment

Risk Management

The wildfire response environment is complex and possesses inherent hazards. It should be recognized that even with reasonable risk mitigations responses can result in harm to firefighters.

- The Forest Service is committed to the aggressive management of risk.
- Apply a risk management process to minimize unnecessary risk in wildfire response while maximizing the opportunities to achieve management objectives.
- Maintaining state of the art decision support systems based on the best available science is essential for making sound decisions on how to manage all wildland fire to achieve Land and Resource Management Plan objectives, including public and Agency personnel safety.

Operations

Every wildfire response operation is directed toward clearly-defined, decisive, and obtainable objectives.

Wildfire Response

- When it is time to engage a wildfire, do so in a manner that is appropriate, risk-based, and effective.
- Command and control will be decentralized to cope with the unpredictable nature of wildfire. To achieve leader's intent and accomplish operational objectives, subordinate commanders must make decisions on their own initiative, and coordinate their efforts to maintain unity of effort.
- Judgement in combination with principles and rules will guide wildfire response practices and actions.

- Rapid deployment and appropriate concentration of wildfire response resources at the decisive time and place are essential to successful wildfire response actions.
- Maintaining a high capability to ensure effective initial attack is essential to public and firefighter safety, accomplishment of management objectives, and cost containment.
- The interdependence of wildland fire jurisdictions requires the collaborative, proactive engagement of cooperators, partners, and the public in response activities.

Risk Management Protocol

Sound decision making relies on identifying reasonable objectives for protection of critical values at risk, while considering the amount and quality of exposure to firefighters and the likelihood of success. The Forest Service is committed to using a risk management protocol that is comprised of three (3) key elements:

Pre-season preparedness work is critical to success when a fire starts.

- Build capacity of our decision makers and their key stakeholders to manage the uncertainty and inherent risks of fires.
- Complete landscape level risk assessments by developing a common understanding of what are the values to be protected and can be summed up best by answering these questions; 'What is important?', 'Why is it important?', 'How important is it?', and 'What are the consequences?'
- Complete a risk analysis, in concert with key stakeholders and partner agencies, to predetermine the range of acceptable response strategies for protecting the identified values at risk while balancing firefighter and public exposure.

During incident phase focuses on a Seven (7) Step Risk Management Process:

1. Complete an incident risk assessment.
    - Develop an assessment of what is at risk (from preseason work or input from key stakeholders), and the associated probabilities and potential consequences.
2. Complete a risk analysis.
    - Consider alternatives (objectives, strategies and tactics) against desired outcomes, exposure to responders, probability of success and values to be protected.
3. Complete two-way risk communications.
    - Engage community leaders, local government officials, partners, and other key stakeholders of the incident to share the risk picture and enlist input.

4. Conduct risk-sharing dialogue.
    - Engage appropriate senior line officers and political appointees (as necessary) regarding the potential decision aimed at obtaining understanding, acceptance, and support for the alternatives and likely decision.
5. Make the risk-informed decision.
6. Document the risk: assessment, analysis, communication, sharing and decision in WFDSS.
7. Continue monitoring and adjusting as necessary or as conditions change. After the incident: As a learning organization we should always strive to improve how we conduct our business. We should endeavor to learn from each incident and apply those lessons.
    - Complete an incident after action review.
        - Engage key stakeholders of the incident to be involved.
        - Review what worked, what did not work and suggestions for improvement.
    - Conduct a peer review after action process.
        - Engage others who have had similar incidents to learn strategies for improvement.
    - Implement plans for improvement.
        - Make use of lessons learned in real-time if possible.

The following Risk Assessment and Risk Decision questions are designed to inform fire management decisions by stimulating thinking and prompting dialogue, analyzing and assessing risk, and recognizing shared risks and communicating those risks within the Agency and with partners and stakeholders.

- Risk Assessment:
    1. What are the critical values at risk?
    2. What is the chance the critical values will be impacted, and if so what are the consequences?
    3. What are the opportunities to manage fire to meet land management objectives?
    4. What are the possible low probability/high consequence events?
    5. Who are the stakeholders that should be consulted prior to making a decision?
- Risk Decision:
    1. What alternatives (objectives, strategies, and tactics) are being considered?
    2. What is the exposure of responders for the alternatives being considered?
    3. What is the relative probability of success associated with the alternatives being considered?

4. What alternative provides for the best balance between the desired outcome and exposure to responders?
5. What are the critical thresholds that will trigger reconsideration of the proposed alternative and how will they be monitored?

Specific Line Officer Responsibilities for Fire and Aviation at the Field Level

The Forest Service has developed core fire management competencies. They are presented here for reference:

- Knowledge of fire program management including ability to integrate fire and fuels management across all program areas and functions;
- Ability to implement fire management strategies and integrate natural resource concerns into collaborative community protection and ecosystem restoration strategies;
- Knowledge to oversee a fire management program including budget, preparedness, prevention, suppression, and hazardous fuels reduction;
- Ability to serve as an Agency Administrator during an incident on an assigned unit; and
- Ability to provide a fully staffed, highly qualified, and diversified firefighting workforce that exists in a “safety first” and “readiness” environment.

Responsibilities

- Integrate fire and fuels management across all functional areas.
- Implement fire management strategies and integrate natural resource concerns into collaborative community protection and ecosystem restoration strategies on the unit.
- Manage a budget that includes fire preparedness, prevention, suppression, and hazardous fuels in an annual program of work for the unit.
- Ensure the DLA Wildland Fire Equipment Catalog is used as the primary and mandatory source of supply for wildland fire suppression equipment, supplies and protective clothing. Any deviation must follow the requirements listed in FSH 6309.32 - Required Sources of Supplies and Services and FAR 8.002 - Priorities for Use of Government Supply Sources. The deviation must be supported by a Job Hazard Analysis (JHA) that documents the specific reason the stock item does not meet the job requirements and is signed by the applicable line officer. The purchasing official must confirm that the JHA supports the alternate purchase. The DLA Wildland Fire Equipment Catalog is at https://www.fedmall.mil/index.html.
- Perform duties of Agency Administrator and maintain those qualifications.
- Provide a fully staffed, highly qualified, and diverse workforce in a "safety first" environment.
- Support and participate in wildfire prevention.

These responsibilities are based on current policy and provide program guidance to ensure safe, consistent, efficient, and effective fire and aviation operations.

Preparedness

Preparedness is a continuous process that includes all fire management activities conducted in advance of wildland fire ignitions to ensure an appropriate, risk informed and effective wildland fire response to meet National and Agency goals.

- Take all necessary and prudent actions to ensure firefighter and public safety.
- Ensure sufficient qualified fire and non-fire personnel are available to support fire operations at a level commensurate with the local and national fire situation.
- Ensure accurate position descriptions are developed and reflect the complexity of the unit. Individual Development Plans promote and enhance FMO currency and development.
- Provide a written Delegation of Authority to FMOs that provides an adequate level of operational authority at the unit level. Include Multi-Agency Coordinating (MAC) Group authority, as appropriate.
- Ensure the plans contained in the Fire Management Reference System (FMRS) are based on resource objectives found in the LRMP.
- Ensure budget requests and allocations reflect preparedness requirements from the program of work and support objectives from the LRMP.
- Develop preparedness standards that are in compliance with agency fire policies.
- Management teams meet once a year to review fire and aviation policies, roles, responsibilities, and delegations of authority. Specifically address oversight and management controls, critical safety issues, and high-risk situations such as transfers of incident command, periods of multiple fire activity, and Red Flag Warnings.
- Ensure fire and aviation preparedness reviews are conducted each year and include the key components of the record of decision for the nationwide aerial application of fire retardant on National Forest System land.
- Meet annually with cooperators and review interagency agreements to ensure their continued effectiveness and efficiency.
- Meet annually with local US Fish and Wildlife Service and NOAA Fisheries specialists to ensure the avoidance maps reflect changes during the year on additional species or changes made for designated critical habitat, and reporting and monitoring guidelines are still valid and being applied.

Wildfire Response

- Ensure use of fire funds is in compliance with Agency policies.
- WFDSS will be used to approve and publish decisions on all fires. See Chapter 11 for the fire criteria that require a published decision.

- Personally attend reviews on Type 1 and Type 2 fires. Ensure Agency Administrator representatives are assigned when appropriate.
- Provide incident management objectives (all wildfires must have a protection objective), written delegations of authority, and a complete Agency Administrator briefing to Incident Management Teams.
- Ensure briefings include any applicable information for avoidance areas and waterways per the nationwide aerial application of fire retardant direction, mapping, and cultural resources. Include the reporting requirements in the briefing if a misapplication of fire chemical occurs. Provide resource advisors if the use of aerially applied fire retardant is expected and the unit has mapped avoidance areas (which include waterways and 300' or larger buffers) and otherwise evaluate the need for resource advisors for all other fires, and assign as appropriate.
- For all unplanned human-caused fires where responsibility can be determined, ensure actions are initiated to recover cost of suppression activities, land rehabilitation, damages to the resource, and improvements.
- Ensure structure exposure protection principles are followed.
- Ensure that a sufficient number of incident after action reviews are conducted for Type 3, 4, and 5 wildfires to adequately assess the unit's wildland fire response capability, performance, procedures and to enhance learning.

Responsibilities and Oversight

- Line Officers are responsible for all aspects of fire management.
- Agency Administrators will ensure that all Forest Service employees and employees of interagency partners working on Forest Service jurisdiction wildfires clearly understand direction.
- Agency Administrators must approve and publish decisions in WFDSS and issue delegations of authority to the Incident Commander. The Agency Administrator authority is based on incident type.

Incident Type	USFS Approval[1]
Type 1	Regional Forester level with National oversight
Type 2	Forest Supervisor level with oversight by the Regional Forester
Type 3, 4, 5	District Ranger level with oversight by the Forest Supervisor
	This authority may be delegated to an Agency Administrator who meets wildfire response certification requirements.

[1]Authority may be retained at the Regional Forester level.

- Critical long duration wildfire oversight roles include ensuring that:
  - Up-to-date Published Decisions are completed and documented in WFDSS.
  - Hazards are identified and risk assessments are incorporated into Published Decisions.
  - Coordination with partners and potentially affected parties is conducted (including smoke impacts). Unified command is implemented early if necessary.
  - Resource capacity and availability are adequately assessed to meet expectations.
- This oversight role should address concerns of the states, cooperators, and the public including air quality impacts from multiple wildfires.

Safety

- Review safety policies, procedures, and concerns with field fire and aviation personnel.
- Ensure timely follow-up actions to program reviews, fire preparedness reviews, fire and aviation safety reviews, and management reviews.
- Monitor the fire situation and provide oversight during periods of critical fire activity and situations of high risk.
- Ensure there is adequate direction in fire management plans to maintain fire danger awareness.
- Take appropriate actions with escalating fire potential.
- Ensure appropriate investigation or Lessons Learned analyses are conducted for incidents, entrapments, and serious accidents.

Fuels

- Plan and implement a hazardous fuels management and prescribed fire program applying principles and policy elements described in FSM 5100 and 5140 and guided by the goals described in the National Cohesive Wildland Fire Strategy.
- Complete a fuels treatment effectiveness assessment on all wildfires which start in or burn into a fuel treatment area.
- Enter results of the assessment in the Fuels Treatment Effectiveness Monitoring (FTEM) database found at www.nwportal.fs.usda.gov within 90 days of control of the fire. Reference FSM 5140.

Prescribed Fire

- Provide program leadership by visiting prescribed fire treatment projects and providing leader's intent to prescribed fire personnel.
- Ensure compliance with National and Regional Office policy and direction for prescribed fire activities and ensure that periodic reviews and inspections of the prescribed fire program are completed.
- Ensure a Prescribed Fire Plan is written and approved for each project prior to implementation in accordance with the *Interagency Prescribed Fire*

Planning and Implementation Procedures Guide (PMS 484) available at https://www.nwcg.gov/publications/484.

- Review and approve Prescribed Fire Plans:
  - Ensure that the prescribed fire plan has been reviewed and recommended by a qualified technical reviewer.
  - Ensure that prescribed fire plans are designed to achieve desired conditions as described in Land and Resource Management Plans and project-specific NEPA decision document.
- Approve Prescribed Fire Plans:
  - Minimum qualifications for Forest Supervisors, District Rangers, other Line Officers and formally delegated "Acting" Line Officers to approve prescribed fire plans are:
    - Completing a National or Regional Fire Management Leadership course, or
    - Completing an Agency Administrator Workshop at the National Prescribed Fire Training Center, or
    - Qualifying in a Type 1 or 2 Command and General Staff position (currency not required), or
    - Qualifying as a Prescribed Fire Burn Boss (RXB1 or RXB2) or Prescribed Fire Manager (RXM1 or RXM2) (currency not required).
  - Attending an agency administrator session at the National Prescribed Fire Training Center (PFTC) may be substituted for the minimum training requirement for approving prescribed fire plans only.
  - Authority to approve prescribed fire plans is held at the Forest Supervisor level but may be delegated in writing to other qualified line officers or staff. Delegations should be based on meeting the minimum training or experience described above and demonstrated ability. Documentation that supports the delegated authorities should be included in the individuals training records.
  - Approve prescribed fire plan amendments and determine the need for additional technical review of proposed plan amendments prior to approval.
- If more than one year has elapsed since a prescribed fire plan was last approved, the plan will be reviewed, updated as necessary, and re-approved before implementation.
- Authorize ignition of prescribed fire as delegated and adhere to procedures as described in 5140 for Regional and/or National level approvals for initiation of new and continued prescribed fire activities at National Preparedness levels 4 and 5 or when forecast National Fire Danger Rating System adjective ratings are at "Extreme" category. Report all instances of prescribed fires resulting in a wildfire declaration and/or air quality Notice-of-Violation as required in FSM 5140.

Agency Administrator Roles and Responsibilities for Incident Management

Agency Administrator Core Competencies

Core competencies include:

- Risk management
- Incident management processes
- WFDSS and other decision support tools
- Social, political economic impacts
- Collaboration with partners and stakeholders

For access to the Learning Action Plan, Pathways Chart and additional information, a copy of the *Line Officer Desk Reference for Fire Program Management* can be downloaded at https://wfmrda.nwcg.gov.

Agency Administrator Certification Program

The following principles will guide certification of Agency Administrators in wildfire management:

- Regional Foresters are accountable for certification of Agency Administrators;
- Agency Administrator evaluation includes standards for training, background and experience, demonstrated ability, and utilizing the Learning Action Plan and Pathways Chart which will result in a qualitative evaluation of readiness by the Regional Forester;
- When the complexity level of a fire exceeds an Agency Administrator's certification, a coach will be assigned to advise (but not replace);
- This certification program will be periodically evaluated and updated as needed;
- Assistance with decision documentation and analysis can be requested through the Wildland Fire Management RD&A – National Fire Decision Support Center (NFDSC); and
- The Coaching/Shadowing program, to be administered by each region, is an integral part of this certification program.

Agency Administrators will be evaluated in three basic areas:

- Training;
- Background and experience; and
- Demonstrated understanding of concepts and principles as outlined in the Learning Action Plan.

This certification program is a multi-level process where Agency Administrators demonstrate competence in one of three levels of managing fires. Those levels would be Working, Journey, and Advanced.

Guidelines

In consideration of the appropriate level (Working, Journey, Advanced) to assign an Agency Administrator, the Regional Forester should consider the following guidelines:

- For individuals that do not meet at least the Working Level, a coach will be assigned to support that Agency Administrator in managing Type 3 or higher wildfire incidents.

Working Level – The Agency Administrator could manage a low to moderate complexity fire. The Agency Administrator should meet the following:

- **Training:** M-581 *Fire Program Management – An Overview*; or M-582 *Fire Program Management – Leading Complex Programs*; and WFDSS training.
- **Background and Experience:**
  - Successful management of a minimum of one Type 3 or higher fire. Consider duration, complexity and size of the fire.
  - Management oversight of a low-complexity fire program and/or experience as an Agency Administrator or representative.
  - Applicable experience in all-hazard or other incident oversight may be considered in lieu of this experience.
  - Consider career fire experience.
- **Demonstrated Ability:** Successful evaluation by a coach (including feedback from ICs or ACs) that the candidate has demonstrated understanding and application of the responsibilities of an Agency Administrator on smaller low-complexity fires with a basic understanding of the elements of the core competencies.

Journey Level – The Agency Administrator could manage a moderate to high complexity fire. The Agency Administrator needs to be certified at the Working Level and should meet the following:

- **Training:** M-581 *Fire Program Management – An Overview*; or M-582 *Fire Program Management – Leading Complex Programs*; and WFDSS training.
- **Background and Experience:**
  - Successful management of a minimum of one Type 2 or higher fire, or one successful higher complexity fire (Type 1). Duration, complexity and size of the fire should be considered.
  - Management oversight of a moderate-complexity fire program, or experience as an Agency Administrator or Representative on Type 2 or higher fires.
  - Applicable experience in all-hazard or other incident oversight may also be considered in lieu of other guidelines.

- **Demonstrated Ability:** Successful evaluation by a coach (including feedback from ICs or ACs) that the candidate has demonstrated understanding and application of the responsibilities of an Agency Administrator/Representative on moderate to large complex fires in the core competencies, and other elements that may be relevant.

Advanced Level – The Agency Administrator could manage a high complexity fire. The Agency Administrator needs to be certified at the Journey Level, and should meet the following:

- **Training:** M-582 *Fire Program Management – Leading Complex Programs*; and WFDSS training.
- **Background and Experience:**
  - Successful management of several Type 1 or 2 fires (at least one is a Type 1 fire), depending on fire experience. Duration, complexity, and size of the fires should be considered.
  - Management oversight of a moderate to high-complexity fire program.
  - Applicable experience in all-hazard or other incident oversight may also be considered in lieu of other guidelines.
- **Demonstrated Ability:** Successful evaluation by a coach (including feedback from ICs or ACs) that the candidate has demonstrated understanding and application of the responsibilities of an Agency Administrator on large complex fires in the core competencies, and other elements that may be relevant.

Evaluation Process

- Every trainee will receive an evaluation from a certified Agency Administrator/Agency Administrator Representative or coach using the Learning Action Plan identified in the *Line Officer Desk Reference for Fire Program Management.*
- Individuals involved in a shadow assignment should receive creditable experience through documentation.
- The purpose of the Learning Action Plan is to provide consistency for the Agency Administrator Coach/Evaluator to evaluate trainees and document their demonstrated abilities to achieve the core competencies, which will be used as a component to achieve the next level certification.
- Every trainee will complete a Learning Action Plan for evaluation from an Agency Administrator/Agency Administrator Representative or coach using the Learning Action Plan form as identified in the *Line Officer Desk Reference for Fire Program Management*.

Creditable work experiences to achieve and maintain certification levels:

- Coaching
- Regional Forester Representative (RFR)
- Acting Agency Administrator/Representative assignments
- Shadow assignments

Training opportunities to achieve and maintain core competencies:

- Upper levels of fire leadership and fire management courses;
- Function as the Line Officer in sand table exercises and training simulations in S-420, S-520, and other fire courses;
- Participate in advanced risk management training;
- Get assigned to a Type 1 or Type 2 team as a training assignment (e.g., shadow plans) and see the world from their viewpoint;
- WFDSS training (see the WFDSS homepage https://wfdss.usgs.gov for training materials and the WFM RD&A Line Officer Resources page for Agency Administrator specific refresher training materials https://wfmrda.nwcg.gov/);
- Include risk management and fire management topics during annual line officer meetings;
- Attend staff rides (staff rides need to include a stand that portrays the line officer perspective);
- Participate in prescribed fires and/or attend prescribed fire training;
- Participate in other leadership and/or decision-making training;
- Attend L-580 *Leadership is Action*.

Currency

Currency is reviewed annually by the Certifying Official for frequency of demonstrated exercise of Core Competencies. It is recommended an Agency Administrator/Representative engage in a Type 1 or Type 2 incident within a five-year period. An assignment may include coaching or shadowing.

Guidance on the Selection of Coaches

Coaches can be a current or former Agency Administrator/Representative. The Regional Forester determines the level of certification for which a coach is qualified.

Criteria for individuals serving as Coaches are as follows:

- Must be a "Journey" level Agency Administrator/Representative in dealing with large fire incident, or rated at an experience level commensurate with incident being managed; Present and past Agency Administrators can serve as coaches, including retirees that were qualified/experienced; and
- Must be willing and able to serve as a Coach.

Definitions

Agency Administrator: An individual with the delegated authority for an incident.

Coach: A fully qualified Agency Administrator/Representative at journey or advanced level.

Shadow: An individual that does not perform the duty of Agency Administrator/Representative, but observes a qualified, designated Agency Administrator/Representative.

Agency Administrator Trainee: An Agency Administrator working on certification by performing the role under the supervision and authority of the Agency Administrator and/or Representative.

Coach/Shadow Team: A team comprised of a qualified Coach and group of Shadows who may travel to multiple incidents and support sites to increase their level of understanding.

Acting Agency Administrator: An individual acting in an Agency Administrator roll certified at the level required by the incident complexity and delegated authorities to provide relief and support.

Regional Forester Agency Administrator Representative: A representative that carries out roles and responsibilities as delegated.

Specific Fire Management Staff Responsibilities for Fire Operations at the Field Level

Preparedness

- Use sound risk management practices as the foundation for all aspects of fire and aviation management.
- Ensure that only trained and qualified personnel are assigned to fire and aviation duties.
- Develop, implement, evaluate, and document fire and aviation training program to meet current and anticipated needs.
- Establish an effective process to gather, evaluate, and communicate information to managers, supervisors, and employees. Ensure clear concise communications are maintained at all levels.
- Ensure fire and aviation management staffs understand their roles, responsibilities, authority, and accountability.
- Develop and maintain effective communication with the public and cooperators.
- Regardless of funding level, provide a safe, effective, and efficient fire management program.
- Organize, train, equip, and direct a qualified work force. An Individual Development Plan (IDP) must be provided for incumbents who do not meet new standards. Establish qualification review process.
- Take appropriate action when performance is exceptional or deficient.
- Ensure fire and aviation policies are understood, followed, and coordinated with other agencies as appropriate.
- Ensure that adequate resources are available to implement fire management operations.

- Provide fire personnel with adequate guidance, training, and decision-making authority to ensure timely decisions.
- Develop and maintain agreements, annual operating plans, and contracts on an interagency basis to increase effectiveness and efficiencies.
- Develop, maintain, and annually evaluate both the FMRS and Spatial Fire Planning in WFDSS to ensure accuracy and validity.
- Ensure budget requests and allocations reflect preparedness requirements from the program of work and support objectives from the LRMP.
- Develop and maintain current operational plans (e.g., dispatch, pre-attack, prevention).
- Ensure that reports and records are properly completed and maintained.
- Ensure fiscal responsibility and accountability in planning and expenditures.
- Assess, identify, and implement program actions that effectively reduce unwanted wildland fire ignitions and mitigate risks to life, property, and resources.
- Work with cooperators to identify processes and procedures for providing fire adapted communities within the wildland urban interface.

Wildfire Response

- Provide for and personally participate in periodic site visits to individual incidents and projects.
- Utilize the Risk Complexity Assessment to ensure the proper level of management is assigned to all incidents.
- Ensure incoming personnel and crews are briefed prior to fire and aviation assignments.
- Coordinate the development of Published Decisions within WFDSS with local unit staff specialists for all fires that escape initial attack.
- Ensure effective transfer of command of incident management occurs and safety is considered in all functional areas.
- Monitor fire activity to anticipate and recognize when complexity levels exceed program capabilities. Increase managerial and operational resources to meet needs.
- Complete cost recovery actions when unplanned human-caused fires occur.
- Ensure structure exposure protection principles are followed.
- Ensure all misapplications of wildland fire chemicals are reported and appropriate consultation conducted as needed (see Chapter 12).
- Ensure 5% assessment of fires less than 300 acres that had aerial fire retardant used and have avoidance areas as a result of the record of decision for the nationwide aerial application of fire retardant on National Forest System land is completed and documented for misapplication reporting.
- Ensure all assessments of impacts to threatened and endangered species or cultural resources are conducted by trained and qualified resource personnel.

Safety

- Ensure completion of a Job Hazard Analysis (JHA) for fire and fire aviation activities, and implement applicable risk mitigation measures.
- Ensure work/rest and Length of Assignment guidelines are followed during all fire and aviation activities. Deviations are approved and documented.
- Initiate, conduct, and/or participate in fire management related reviews and investigations.
- Monitor fire season severity predictions, fire behavior, and fire activity levels. Take appropriate actions to ensure safe, efficient, and effective operations.

Prescribed Fire

- Ensure a written, approved burn plan exists for each prescribed fire project.
- Prepare and implement all prescribed fire plans in accordance with the *Interagency Prescribed Fire Planning and Implementation Procedures Guide* (PMS 484) available at https://www.nwcg.gov/publications/484.
- Ensure that the Prescribed Fire Burn Boss assigned to each project is qualified at the appropriate level as determined by project complexity (see the *Interagency Prescribed Fire Planning and Implementation Procedures Guide* at https://www.nwcg.gov/publications/484 for specific guidance).
- Review and update all prescribed fire plans as necessary to comply with policy or procedures and submit to agency administrator for review and approval.
- Submit amendments to prescribed fire plans to the agency administrator for approval.
- If more than one year has elapsed since approval, a prescribed fire plan will be reviewed to ensure assumptions are still valid and conditions have not changed, updated as necessary, and resubmitted to the agency administrator for approval.

Fire and Aviation Management (FAM) Duty Officer

Each Forest or Grassland Fire Management Officer or Assistant Fire Management Officer will perform the duties of a FAM Duty Officer (DO) for their unit, or will provide a delegated DO, during any periods of predicted or actual incident activity. Individuals performing as DO must have the approval of the unit's Agency Administrator and meet the minimum NWCG qualifications as identified in the FS-FAQG Chapter 4.
https://www.fs.fed.us/fire/publications/FSFAQG_Chapter4_Dec2016.pdf

The required duties for all DOs are:

- Serve as the unit's primary contact with Dispatch for both on and off-unit assignments.
- Monitor unit incident activity for compliance with Forest Service risk management practices.

- Coordinate and set priorities for unit suppression actions and resource allocation.
- Keep Agency Administrators, suppression resources, and information officers informed of the current and expected situation.
- Plan for and implement actions required for future needs.
- Document key decisions and actions.

DOs will perform the above duties in addition to any unit specific duties assigned by the unit's Agency Administrators or fire managers through a delegation of authority or unit operating plan.

In the event that the DO is required to accept an incident assignment, the outgoing DO must transition with another qualified and approved DO.

Use of District/Zone DOs is intended to manage span of control. When assigned to the DO role, DOs will not concurrently perform any ICS command or operational functions directly connected to an incident.

DO staffing levels may vary based on locally determined metrics such as fire danger, local area Planning Level, predicted incident activity, prescribed fire implementation, and/or span of control.

Fire Management Position Requirements

The *Interagency Fire Program Management Qualifications Standard* (*IFPM*) and *Forest Service Fire Program Management Standard* (*FS-FPM*) will be used in conjunction with specific agency requirements when filling vacant fire program positions, and as an aid in developing Individual Development Plans (IDPs) for employees.

Structure Exposure Protection Principles

Mission and Role

A significant role of the Forest Service is to manage natural resources on public land, and management of unwanted wildland fire is a primary mission in that role. Wildland firefighter training, tools, and personal protective equipment are based on the wildland environment. This does not prevent using wildland tactics in the Wildland Urban Interface (WUI) when risks are mitigated. Wildland firefighter training for the WUI, however, is centered on the concepts of preventing wildland fire from reaching areas of structures and/or reducing the intensity of fire that does reach structures. Fire suppression actions on structures that are outside federal jurisdiction, outside the scope of wildland firefighting training, or beyond the capability of wildland firefighting resources are not appropriate roles for the Forest Service.

Forest Service leadership will express clear and concise "leader's intent" to ensure structure protection assignments are managed safely, effectively, and

efficiently. Leaders are expected to operate under existing policies and doctrine under normal conditions. Where conflicts occur, employees will be expected to weigh the risk versus gain, and operate within the intent of Agency policy and doctrine.

Strategic Principles

- The Forest Service actively supports creation of Firewise and Fire Adapted Communities and structures that can survive wildland fire without intervention. We support the concept that property owners have primary responsibility for reducing wildfire risks to their lands and assets.
- The Forest Service will actively work toward applying Firewise concepts to all Forest Service owned structures, facilities, and permitted use to serve as a model to publics and communities.
- The Forest Service will apply strategy and tactics to keep wildland fires from reaching structures, as prudent to do so, considering risk to firefighters and publics, fire behavior, values at risk including natural resources, availability of firefighting resources, and jurisdictional authorities.
- The use of wildland tactics in the WUI, when risks are mitigated, will be based on the objectives of preventing wildfire from reaching areas of structures and/or reducing the intensity of fire that does reach structures.
- Structure protection will be limited to the use of standard wildfire response tactics including the use of standard equipment, fire control lines, and the extinguishment of spot fires near or on the structure when safe and practical.
- The Forest Service will be proactive in developing agreements with interagency partners to clarify its structure protection policy.
- The Forest Service structure protection role is based on the assumption that other Departments and agencies will fulfill their primary roles and responsibilities. The Forest Service will not usurp individual, local, or state responsibility for structure protection.
- Prior to task implementation, a specific structure protection role briefing will be accomplished.

Tactical Applications

Structure Protection Definition

Actions taken in advance of a fire reaching structures or other improvements are intended to safely prevent the fire from damaging or destroying these values at risk. For the Forest Service, structure protection involves the use of standard wildland fire suppression tactics and control methods; including the use of standard equipment, fire control lines, and the extinguishing of spot fires near or on the structure when safe and practical.

USFS Role

As documented in a Forest Service doctrinal principle, “Agency employees respond when they come across situations where human life is immediately at

risk or there is a clear emergency, and they are capable of assisting without undue risk to themselves or others." This principle serves as a foundational basis for the roles employees play in structure protection.

Pursuant to this "structure protection" policy provided above, Forest Service personnel may engage support from other cooperators in structure protection activities when 1) requested by local government under terms of an approved cooperative agreement or 2) when operating within a unified command. The agency is permitted, without agreement, to render emergency assistance to a local government in suppressing wildland fires, and in preserving life and property from the threat of fire, when properly trained and equipped agency resources are the closest to the need, and there is adequate leadership to do so safely. The agency will NOT routinely provide primary emergency response (medical aids, fire suppression, HAZMAT, etc., as identified on "run cards" or preplanned dispatch scenarios) nor will the agency supplant the local government responsibility to do so.

The contents of a cooperative agreement will clearly define the responsibilities of partners. Regarding structural fire protection, typical Forest Service responsibilities in the case of mutual aid, initial attack, extended attack, or large fire support include:

- To provide initial attack through extended attack actions consistent with application of wildland fire strategy and tactics.
- To supply water in support of tribal, state or local agencies having jurisdictional responsibility for the fire. This would include the use of water tenders, portable pumps, hose, tanks, and supporting draft sites.
- To assist or supply foam or chemical suppressant capability with engines or aerial application.
- To assist local authorities in the event of evacuations.
- To assist local authorities by assessing (triaging) structures for defensibility from wildfire.
- To coordinate with local authorities on actions taken by Private Structure Protection Companies.

As such, there should not be an expectation that the Forest Service will:

- "Wrap" or set up and administer sprinklers around privately owned structures.
- Remove fuels immediately surrounding a structure such as brush, landscaping, or firewood.

As addressed above, the Forest Service will apply strategy and tactics to keep wildland fires from reaching structures, as prudent to do so, considering risk management for firefighters and publics, fire behavior, values at risk including natural resources, availability of firefighting resources, and jurisdictional authorities.

The Forest Service shall not:

- Take direct suppression actions on structures other than those that tactically reduce the threat of fire spread to them.
- Enter structures or work on roofs of structures for the purpose of direct suppression actions.

In consideration of Forest Service owned or leased structures outside of structure fire protection areas these same policies apply. The use of Firewise principles and aggressive fire prevention measures will be employed for Forest Service structures at every opportunity.

If a Forest Service structure is determined to be at risk, "wrapping" or other indirect protection methods for the structure can be authorized by the Agency Administrator. Documentation of these decisions needs to be placed in the fire documentation package and the unit files. Any employee engaged in "wrapping" or other indirect methods of protection operations will be thoroughly briefed and trained in correct safety and personal protection equipment procedures, especially if the use of ladders or climbing on the structure is necessary. In any case, the Forest Service holds that no structure is worth the risk of serious injury to an employee in an attempt to protect that structure or facility from fire.

Local Government Role

Local government has the responsibility for emergency response, including structure protection, within their jurisdiction. This responsibility is usually found within the fire agencies' charter and is substantiated by tax dollar revenue (sales and/or property tax).

Cost

Local governments assume the financial responsibility for emergency response activities, including structure protection, within their jurisdictions. Local government will order resources deemed necessary to protect structures within their jurisdiction. Local agencies will not be reimbursed for performing their responsibilities within their jurisdiction.

Tactical Operating Principles

When engaging in structure protection activities, as defined above, Forest Service personnel will apply the following principles:

- The first priority for all risk-decisions is human survival, both of firefighters and the public.
- Incident containment strategies specifically address and integrate protection of defendable improved property and wildland values.
- Direct protection of improved property is undertaken when it is safe to do so, when there are sufficient time and appropriate resources available, and when the action directly contributes to achieving overall incident objectives.
- Firefighter decision to accept direction to engage in structure protection actions is based on the determination that the property is defendable and the

risk to firefighters can be safely mitigated under the current or potential fire conditions.

- A decision to delay or withdraw from structure protection operations is the appropriate course of action when made in consideration of firefighter safety, current or potential fire behavior, or defensibility of the structure or groups of structures.
- Firefighters at all levels are responsible to make risk-decisions appropriate to their individual knowledge, experience, training, and situational awareness.
- Every firefighter is responsible to be aware of the factors that affect their judgment and the decision-making process, including: a realistic perception of their own knowledge, skills, and abilities, the presence of life threat or structures, fire behavior, availability of resources, social/political pressures, mission focus, and personal distractions such as home, work, health, and fatigue.
- An individual's ability to assimilate all available factors affecting situational awareness is limited in a dynamic wildland urban interface fire environment. Every firefighter is responsible to understand and recognize these limitations, and to apply experience, training and personal judgment to observe, orient, decide, and act in preparation for the "worst case."
- It is the responsibility of every firefighter to participate in the flow of information with supervisors, subordinates, and peers. Clear and concise communication is essential to overcome limitations in situational awareness.

Chapter 6
BIA Program Organization and Responsibilities

Bureau of Indian Affairs Fire Management Policy

Policy and responsibility for the Bureau of Indian Affairs (BIA) WFM program is documented in the Indian Affairs Manual (IAM), Part 90, Chapter 1. This part identifies the authorities, standards, and procedures that have general and continuing applicability to wildland fire activities under the jurisdiction of the Assistant Secretary – Indian Affairs.

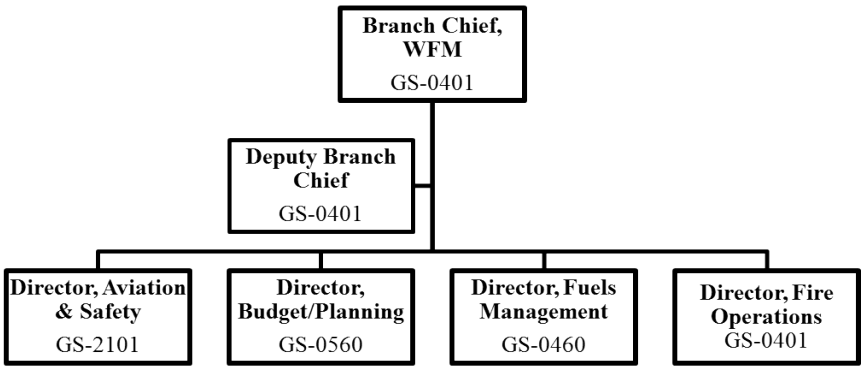
BIA Mission

The Bureau of Indian Affairs Mission is to enhance the quality of life, to promote economic opportunity and to carry out responsibility to protect and improve the trust assets of American Indians, Indian Tribes, and Alaska Natives.

BIA Fire Operations Website

BIA Fire Operations maintains a website that hosts operational, informational, and policy-related documents. The website also contains information about the following programs: Job Recruitment, BIA Training, Pathways Internship Program, Fuels Management, Aviation Safety and Wildland Fire Prevention. The address to the BIA Fire Management website is https://www.bia.gov/bia/ots/dfwfm/bwfm.

Branch of Wildland Fire Management Organization



Agency Administrator's Roles

The following positions are responsible for WFM activities of the Bureau (including such activities when contracted for, in whole or in part, with other Agencies or Tribes) under the statutes cited in 620 DM 1.1.

Director, Bureau of Indian Affairs

Responsible for the implementation of an effective WFM program:

- Responsible for implementation of policies and recommendations in the Federal Wildland Fire Management Policy;
- Adopts and establishes wildfire prevention policies to protect Indian Lands and Indian natural resources from human-caused wildfires;
- Ensures compliance and capacity to comply with statutes, regulations, IA policy, and Department of the Interior (DOI) policy applicable to the prevention of human-caused wildfires on Indian Lands;
- Represents Indian Affairs on the Federal Fire Policy Council; and
- Approves national level cooperative wildland fire management agreements with other Federal agencies and interagency wildland fire coordinating groups.

Director, Office of Trust Services

- Implements the policies and recommendations in the Federal Wildland Fire Management Policy and Program Review Report;
- Reviews and recommends national wildfire prevention policy for Indian Country;
- Coordinates wildfire prevention activities among and between Office of Trust Services programs;
- Coordinates with Division Directors to ensure consistent implementation of wildfire prevention policies;
- Provides for the coordination of wildland fire management activities with other Federal, state, and non-government fire protection agencies; and
- Represents Indian Affairs in Interior Fire Executive Council and Fire Executive council.

Division Chief, Forestry and Wildland Fire Management

- Provides overall direction to the wildland fire management program.

Branch Chief, Wildland Fire Management

Responsible to recommend policies and standards for firefighter safety, training, prevention, suppression and use of wildland fires on Indian Trust lands.

- Recommends policies, standards and guidance to the Bureau Director on the use of prescribed fire and fuels management to achieve fuels management and resource management objectives;
- Integrates wildland fire management into natural resource management;
- Establishes wildland fire management position competencies, standards and minimum qualifications for fire management officers, wildland fire specialists and leaders based on federal interagency standards;

- Implements national fire programs and activities including: current planning model, preparedness, fuels management, community assistance, prevention, emergency wildland fire operations, post fire activities, medical standards, and Interagency Fire Program Management Qualifications (IFPM);
- Reviews and evaluates regional wildland fire management programs;
- Represents or delegates representation for Indian Affairs in the coordination of overall wildland fire management activities at the National Interagency Fire Center (NIFC) and coordinates Indian Affairs representation on intra- and interagency wildland fire committees, groups and working teams, which include but are not limited to:

  a. National Wildfire Coordinating Group (NWCG)
  b. Fire Management Board
  c. Executive Aviation Committee (EAC)
  d. National Interagency Aviation Council (NIAC)
  e. Interior Fire Executive Council
  f. National Multi-Agency Coordinating Group (NMAC)
  g. Information Technology Management Advisory Board (ITAB)

- In conjunction with other Federal Fire Directors, establishes priorities for assignment of critical resources during wildland fire emergencies;
- Initiates or participates in boards of review concerning actions taken on selected wildland fires;
- Oversees prevention policy development and evaluates impacts on other wildland fire programs;
- Provides policy and procedural guidance to Regional Directors to achieve wildland fire prevention and education objectives;
- Negotiates cooperative agreements and/or modification of existing national level agreements to improve wildland fire management activities on Indian trust and restricted lands;
- Develops policies and standards for firefighter safety, equipment and training for the prevention, investigation, suppression and use of wildland fires on Indian trust and restricted lands;
- Reviews funding requests for fuels management, prevention, community assistance, facility construction, subsidiary and rehabilitation requests; makes determinations on funding levels and recommends approval to the Director, Office of Trust Services, based on guiding principles in the Federal Fire Policy, National Fire Plan (NFP), supporting documents and Secretarial directives;
- Approves and makes determination of funding levels for severity and post fire activity requests; and
- Oversees the national casual and vendor payment programs for emergency incident payments.

BIA Fire Leadership Team

The BIA, Branch of Wildland Fire Leadership Team (FLT) provides national level direction and guidance to the Bureau's Wildland Fire Management program. The team is accountable to the Chief, Division of Forestry and Wildland Fire Management. The FLT provides guidance on the development of national level policy related to the Wildland Fire management program and oversees budget formulation activities and execution of the annual Bureau Wildland Fire budget.

- The FLT membership is comprised of senior leadership within the Branch of Wildland Fire Management.
- The Chief, Division of Forestry and Wildland Fire management, and the Branch Chief of Forest Resources Planning are ad-hoc members.
- The team includes a Regional Fire Management Officer to provide regional context on field-level topics having national implication.
- A Tribal representative facilitates Tribal engagement and supports consultation requirements when necessary.

Regional Directors

Responsible for ensuring activities and/or plans reflect a commitment to safety and a state of readiness commensurate with values at risk to minimize wildland fire loss.

- Oversees allocation model implementation, preparedness, fuels management, community assistance, prevention, emergency wildland fire operations, post fire activities, medical standards, and IFPM standards;
- Develops regional level cooperative fire protection agreements;
- Ensures that wildfire prevention needs are met;
- Ensures that activities and/or plans reflect a commitment to firefighter and public safety and the reduction of property loss;
- Integrates wildland fire prevention program evaluations into fire readiness reviews conducted at Tribal and agency locations;
- Submits funding requests to Director of Operations, Branch of Fire Management for severity, fuels management, prevention, community assistance, facility construction, subsidiary and post fire activities;
- Ensures prevention needs are included in national long-term severity requests;
- Directs regional movement of fire management personnel and equipment to meet emergency needs;
- Oversees wildland fire prevention management programs within the region;
- Develops regional directives for standards and additional procedural policy, as needed, for wildland fire prevention planning, operational implementation, evaluation and fiscal accountability;
- Determines when a critical fire situation has exceeded agency capability and ensures that qualified personnel take immediate charge of fire suppression

activities; requests assistance when the wildfire situation exceeds the capability of the region's resources;

- Certifies funding authorizations submitted by agency offices for estimated costs exceeding $5,000,000, and approves all decisions in WFDSS for fires exceeding $5 million dollars;
- Approves decisions over $10 million dollars as delegated by the Bureau Director. Notifies the Bureau Director when individual fires are anticipated to exceed $10 million dollars in cost;
- Approves all initiation or continuance of prescribed fire burn and wildland fire use plans at National Fire Preparedness Planning Level 4 and 5;
- Assigns boards of review on selected individual wildland fires which presented unusual problems or situations;
- Provides direction for cooperative agreements, self-determination contracts, and self-governance compacts with tribes for wildland fire management programs as needed;
- Coordinates and implements regional fire preparedness planning activities;
- Approves and certifies that agency and Tribal WFPP's meet or exceed the IA policy requirements for wildfire prevention;
- Oversees the region-wide casual and vendor payment programs for emergency incident payments;
- Represents Indian landowners interests and Indian Affairs on Geographic Area Coordination Groups and on Multi-Agency Coordinating (MAC) groups;
- Coordinates with the Office of Justice Services (OJS) Special Agent in Charge when criminal activity associated with wildfires occurs on Indian Lands; and
- Develops region-wide wildfire investigation policies and procedures.

Agency Superintendent (unless excepted in regional directives)
Ensures that every wildland firefighter, fireline supervisor and fire manager takes positive action to obtain compliance with established standards and safe firefighting practices.

- Protects Indian trust and restricted lands from wildfire by taking appropriate action as specified in the approved fire management plan to meet Indian landowner objectives or in the absence of an approved plan, takes immediate suppression action, consistent with other standards;
- Develops plans, prepares agreements and implement activities for prescribed fires, wildland fire use, community assistance and/or other fuel management activities in accordance with approved implementation plans and established standards and guidelines;
- Ensures agency fire management personnel develop and maintain fire management job qualifications and meet physical fitness standards in accordance with policy and assign personnel to fire suppression, prescribed

fire, wildland fire use activities according to qualifications and demonstrated ability;

- Manages personnel to ensure that prevention goals and objectives are being achieved;
- Develops, updates, and maintains the local fire preparedness planning activities, wildland fire prevention plan, annual mobilization plans, and ensures initial attack capability and management personnel availability to provide for an adequate level of protection from wildfire;
- Initiates, develops, and implements approved post fire activities to prevent unacceptable resource degradation and to minimize threats to life or property resulting from wildfire;
- Initiates, develops, and implements approved rehabilitation activities to protect and sustain ecosystems, public health, safety, and to help communities protect infrastructure;
- Develops, updates and maintains agency Fire Management Plan's;
- Negotiates cooperative agreements with adjacent protection organizations as needed;
- Negotiates reimbursable agreements with Tribal, local, state, and other federal agencies for wildland fire management activities as needed;
- Recommends a board of review be established to review actions taken on selected individual fires;
- Ensures that all escaped prescribed fire or any prescribed fire that results in resource or property damage are reviewed or investigated;
- Requests assistance through appropriate interagency channels when the fire situation exceeds the capabilities of the agency's resources;
- Initiates investigation of trespass from wildfires to determine cause and origin and if fire trespass has occurred;
- Ensures established wildfire investigation procedures and guidance are followed;
- Coordinates with appropriate law enforcement agency when wildfire crimes are suspected and/or detected;
- Enters and maintains employee fire qualifications in the Incident Qualification Certification System (IQCS) and enters and maintains fire occurrence in the Bureau fire reporting system;
- Coordinate the development of Published Decisions within WFDSS for all fires identified as requiring a decision and consistent with authority identified in Chapter 11.
- Maintains fiscal integrity in the use of the casual pay and vendor programs;
- Has responsibility for the adhering to the Administratively Determined (AD) Pay Plan for Emergency Workers (Casuals) hiring authority in accordance with the pay plan policy;
- Using prevention funding to implement the wildfire prevention actions in the agency or Tribal WFPP; ensuring that carryover is held to below the one-half of one percent; and

- Has responsibility for financial and accountability oversight for all wildland fire management programs.

Tribal Contracts/Compacts

The tribes have three options to manage fire protection services. Tribes may use direct services, self-determination contracts or self-governance compacts to manage either a portion, or all of a Bureau program.

Public Law 93-638 [The Indian Self-Determination and Education Assistance Act of 1975, as amended; Title I and V]: provides maximum Indian participation in the governance and education of the Indian people; to provide for the full participation of Indian tribes in programs and services conducted by the Federal Government for Indians and to encourage the development of human resources of the Indian people; to establish a program of assistance to upgrade Indian education; to support the right of Indian citizens to control their own educational activities; and for other purposes.

Fire Management Administration

These guidelines are intended to be used by the Bureau and Indian Tribes when negotiating annual funding agreements, whether P.L. 93-638 contracts (Title I) or Self-Governance Compacts (Title V).

Guiding Principles

- Indian Tribal fire management programs are held to the same standards as Bureau fire management programs. Both Bureau and Indian Tribal programs will strive to achieve excellence.
- Indian Tribal and Bureau WFM programs receive equal consideration for available budget and resources.
- The Bureau is committed to working with Indian tribes to ensure the success of their WFM programs.
- Indian tribes who desire to compact or contract national, regional or agency fire program functions or services provided by the Bureau, to benefit more than one Indian tribe, must have a plan to provide comparable functionality or services and agreement of other affected Indian tribes.

Inherently Federal Activities

- Hiring, termination and paying Federal employees including Administratively Determined (AD) Emergency Workers (Casuals).
- The AD hiring authority is an inherently Federal activity and requires Federal Government supervision. The AD hiring authority is granted through the DOI to the BIA, and cannot be delegated to a Tribally contracted or compacted program. However, Tribal programs can gather documentation to assist in meeting the requirements of the AD Pay Plan for Casuals and specific national guidance.
- Approval, consolidation and submission of budget requests.
- Obligating federal funds.

- Approval of resource management or land use plans, fire management plans (FMP's), NEPA documents, wildland fire decision support system (WFDSS) documents, post wildland fire activity (ES/BAER) plans, and Delegations of Authority to incident management and post fire activity teams. The Bureau must approve the documents in the preceding sentence to fulfill its trust responsibility in resource protection.

Program Operational Standards

- Unless waivers to the following standards are explicitly approved and identified in Tribal annual funding agreements, the following standards will apply to Tribal fire management programs (Personnel Qualifications (90 IAM Chapter 3, 3.1, C.) (1) and (2)):
- Adherence to the NWCG Wildland and Prescribed Fire Qualification System Guide is mandatory for all firefighters fighting wildfires on and off their respective jurisdictions.
- Adherence to the IFPM Guide standards are mandatory for fire program management officers, fire specialists and fire project leaders.
- Self-governance compact standards for qualification, physical fitness and safety will be those established by the parties to the agreement, but will not be less than NWCG and IFPM standards when mobilized off their Tribal lands.
- Tribal fire management officers are responsible for certifying Tribal program employee qualifications and maintaining records of their employee qualifications. They may use the firefighter qualifications/ certification component of the Incident Qualification and Certification System (IQCS). They may choose to do so, but are not required to use that system.
- Fire occurrence reports will be encoded to the Wildland Fire Management Information (WFMI) System within two weeks after a wildfire is declared out. Obligating government funds is an inherently federal function and fire reports are an essential element in accounting for the obligation of Federal funds.
- Placing resource orders for Incident Management Teams (IMT) to manage extended, large fire operations or for post wildland fire activity teams requires the involvement of the Bureau. All actions require that the Bureau approve delegations of authority to teams.

Program Planning

There are various types and levels of planning required to conduct a fire management program, and are described below;

Fire Program Workload Shares

The Fire Program Workload Shares Assessment (WSA) supports preparedness budget distribution from the Regional Offices to their field-level units. It is intended to supplant the Most Effective Level (MEL) budget values that were generated by the former Fire Management Program Analysis (FMPA) process.

The WSA uses the Graphical Network Interface (GeNIe) computer application to define program workload elements and assign breakpoints (to classify and normalize empirical data) and weights. Unlike purely subjective processes, GeNIe ensures that the decision criteria are documented, the math is performed without error, and the outputs can be readily reproduced.

Upon completion of the assessment, the WSA yields the percentage workload share for each unit evaluated, in reference to their combined workload. These share percentages then can be used to support a variety of decisions, such as the allocation of preparedness budgets from the Regional Office to its field-level units.

The WSA is a Regional-level tool. Its use is strictly voluntary and is intended to assess workload shares for the units within a given Region (not between Regions). Use of the WSA outputs is left to the discretion of the Regional Office.

Fire Occurrence Data and Reporting

Consistent with the *Guidance for Implementation of Federal Wildland Fire Management Policy* (*February 13, 2009*), the Bureau recognizes two types of wildland fires when collecting and recording fire occurrence data. Those two types are: planned ignitions (i.e., prescribed fires) and unplanned ignitions (i.e., including escaped prescribed fires).

Specific guidance regarding prescribed fire data and reporting is provided in the *BIA Fuels Management Program Planning and Implementation Guide*. Reports for wildfires should be prepared in accordance with the detailed guidance provided in the *BIA Fire Occurrence Reporting System Users Guide*, which includes instructions for preparing Individual Final Fire Reports.

Records Management for Fire Reports

The BIA Individual Final Fire Reports and final ICS-209 reports are official records. Accordingly, the local unit is responsible for adhering to *Indian Affairs Records Management Manual* and the local *Fire Maintenance and Disposition Plan* concerning management and archiving these hard-copy records.

Additional guidance regarding wildland fire incident records can be found on the National Wildland Fire Coordinating Group's Incident Records Management website https://www.nwcg.gov/committees/incident-planning-subcommmittee.

Fire Weather/RAWS

The fire weather program is managed and coordinated by the WFM Fuels Management Section, which has one staff member designated as the BIA National RAWS Coordinator (405-206-1854). This program provides funding and technical support for the maintenance/emergency repairs of station sensors and the accuracy of station data for the wildland fire program.

All field-level units will identify at least one permanent, NFDRS fire weather station for fire planning purposes. A listing of these designated weather stations is maintained by the WFM Fuels Management staff and is updated annually.

Each Region must identify a Regional Point of Contact (RPOC), and each Agency/Tribe must identify a Local Point of Contact (LPOC) for fire weather and weather stations. These contacts must be updated immediately upon reassignment to a new POC and provided to the BIA National RAWS Coordinator.

Bureau and Tribal NFDRS Weather Stations

The BIA Central Office, Branch of Wildland Fire Management (BOWFM) maintains a national contract with Forest Technology Systems, Ltd., (FTS) to provide annual maintenance, factory exchange service, and emergency repair to 81 permanent NFDRS weather stations. When noncompliant or malfunctioning RAWS are identified or suspected, fire managers should implement the following hazard mitigation actions to expedite RAWS repair and to reduce risk to fire personnel: Contact a Technical Support Specialist at FTS and the BIA National RAWS Coordinator to resolve the noncompliance or emergency repair issue.

Non-NFDRS Weather Stations

In the Bureau's managed inventory, there are 19 non-NFDRS weather stations, which are mostly portables and are mainly used for large wildfires and prescribed fires. These stations are also covered under the BIA's national contract with Forest Technology Systems, Ltd., (FTS) to provide annual maintenance, factory exchange service and emergency repair.

- Non-NFDRS stations do not have to have a NWS station number or a station catalog in WIMS, but units may establish them as needed.
- Non-NFDRS weather stations, such as portable or research stations that support fire operations are required to receive annual calibration and certification. The equipment will meet the requirements of the Annual Rehabilitation Maintenance Section of the NWCG Interagency Wildland Fire Weather Station Standards and Guidelines (PMS 426-3) publication.
- The maintenance will be documented in the WFMI Weather module.

Weather Station Naming Conventions

To ensure the continuity with historic records, the names of existing stations should not be changed without a good justification. Proposed name changes must have the concurrence of the BIA national fire weather program manager.

- New weather stations should be named after the nearest local geographic feature.
- Portable RAWS stations will use the following naming conventions: The Unit ID and the word "Port" followed by a sequential number. For example the portable RAWS at Crow Agency is named MTCRA_Port1, where "MTCRA" represents Crow Agency in Montana and "Port1" represents a

unique number to identify the station. If another portable RAWS was deployed at Crow Agency, the name of that station would then be MTCRA_Port2. Portable stations should not be renamed when relocated on the unit or temporarily assigned to another unit.

- For weather data collection and archiving standards for NFDRS, refer to the NWCG *Interagency Wildland Fire Weather Station Standards and Guidelines* (PMS 426-3) publication and the WIMS Web Application User Guide.

When any station (i.e., including portable stations) is desired to be moved to a different location, specific processes identified in the NWCG Interagency Wildland Fire Weather Station Standards and Guidelines (PMS 426-3) must be adhered to. The LPOC must first notify the BIA National RAWS Coordinator before notifying the BLM RAWS Depot Help Desk (208-387-5475) to make notification that the station is to be shutdown. Following the relocation, the LPOC must again first notify the BIA National RAWS Coordinator before informing the RAWS Depot Help Desk with the new location information and the time of reactivation.

Station Identifiers

- When a station identifier is needed, contact the contact the BIA National RAWS Coordinator (405-206-1854), who will coordinate the request with the appropriate entities, including the GACC Predictive Services staff.

Weather Module in Wildland Fire Management Information (WFMI)

Weather Module Access

- The WFMI Weather Module provides access to the weather data that is transmitted from the more than 2,500 Remote Automatic Weather Stations (RAWS) located throughout the U.S.
- Individuals who desire access to the WFMI Weather Module must complete and submit only sections I and II of the "Weather Module – User Access Request" form to the BIA National RAWS Coordinator. Due to the terms of the BIA's national RAWS contract, individuals may only request "view-only" access to the weather module. Edit access is restricted to prevent possible contractual issues.

Program Preparedness

The wildland fire management program should reference the following agreements, contracts, and operating plans as identified in the Program Planning section above.

Preseason Agreements, Contracts and Operating Plans

The authority to enter into Interagency Agreements, Cooperative Agreements, Memorandum of Understanding, Mutual-Aid Agreements and Contracts is cited in *Departmental Manual, Part 620* and respective statues; *Indian Affairs Manual (IAM) 90; the Reciprocal Fire Protection Act 42 U.S.C. 1856*; and is

referenced in the *Federal Wildland Fire Management Policy and Program Review*. See Chapter 8 for additional guidance.

Tribal Disaster Assistance

On January 29, 2013, the president signed the Sandy Recovery Improvement Act of 2013, which amended the Stafford Act. The Act included a provision to provide federally recognized Indian Tribal governments the option to request a Presidential emergency or major disaster declaration independent of a state. Tribal governments may still choose to seek assistance under a state declaration request.

FEMA established Tribal liaisons in each FEMA region to assist Tribes with emergency assistance as it relates to providing disaster assistance. Contacts within each Region are identified at https://www.training.fema.gov/tribal/liaisons.aspx.

More information about Tribal Declaration and Disaster Assistance resources, is on the FEMA Tribal Affairs web page at https://www.fema.gov/fema-tribal-affairs.

Tribal Support for Emergency Support Function (ESF)

BIA is an Emergency Support Function (ESF) support agency under the USDA-FS and USFA ESF #4 and #5 Annexes. Tribes may provide support through this mechanism; however, they must follow their designated reimbursement process to participate under an ESF.

National Program Preparedness/Readiness Reviews

Branch of Wildland Fire Management will conduct regularly scheduled fire preparedness review of regional offices. Each review will include fiscal and budget reviews of standard operating procedures (SOP) and administrative activities. A schedule will be developed by BIA-NIFC, with input from the Regions, to coordinate review scheduling. At least one review every five (5) years will be conducted at each region, though more frequent reviews would be preferable. BIA-NIFC's implementation intentions are to administer one preparedness review and one fiscal accountability review in two separate regions every year. Additionally, local unit pre-season fire preparedness/readiness reviews will be conducted.

Standards for preparedness reviews are documented in the *Interagency Fire Preparedness Review Guide*. The guide is currently available at https://www.nifc.gov/policies/pol_ref_intgncy_prepcheck_BIA.html.

FireCode Business Rules

The BIA developed business rules and procedures to implement the FireCode System. The FireCode System User Guide and Business Procedures can be accessed through the BIA-NIFC office.

Wildfires on BIA Trust land (BIA/Tribal unit is the host unit) will have an assigned FireCode.

- BIA/Tribe host unit dispatcher will access the FireCode website and enter the incident information and generate a FireCode for every wildfire. This FireCode will be used for all financial obligations charged to an incident and by all resources assigned to an incident. The FireCode is not the fire number for BIA. The fire number will continue to be the fire reporting number in WFMI. However, the FireCode will be a required entry on the fire report.
- The FireCode will be used by the BIA in place of the Fire Number when entering an obligation to FBMS. Contract/Compact Tribes will use this code to identify all costs associated with an incident.
- Compact/Contract Tribes will use the FireCode to identify costs for wildfires when reporting to the BIA Regional office.
- A fire report must be created for each wildfire in WFMI. The fire report form will require the entry of a FireCode.
- If the wildfire is a false alarm you must create a fire report in WFMI. BIA-NIFC will generate one false alarm FireCode for each region. The regional false alarm FireCode will be used for each false alarm fire report in WFMI.

Wildfires on BIA Trust lands when BIA/Tribal resources are ordered from another BIA/Tribal unit(s).

- All BIA/Tribal resources responding will use the hosting BIA/Tribal unit's FireCode to charge all financial obligations related to that wildfire.
- BIA/Tribal units will create a support action fire report in WFMI when responding to another unit's wildfire.
- Compact/Contract Tribes will use the FireCode to identify their respective costs for assistance to other BIA/Tribal units when reporting to the Regional office.

Wildfires on other federal lands when the BIA/Tribe is ordered (another federal agency is the host unit).

- All BIA/Tribal resources responding to other federal agency fires will use a FireCode created by the host federal agency.
- BIA/Tribal units will create a support action fire report in WFMI when responding to another unit's wildfire.
- Compact/ Contract Tribes will use the FireCode to identify their respective costs for assistance to other federal agencies when reporting to the Regional office.

Wildfires on state lands when the BIA/Tribe is ordered (state agency is the host unit).

- All BIA/Tribal resources responding to state agency wildfires will create a FireCode for each fire if a FireCode has not already been created by another federal agency. If a FireCode has been created, the BIA/Tribal unit(s) will

use that FireCode as the charge code (project code) for all financial obligations related to that wildfire.

- BIA/Tribal units will create a support action fire report in WFMI when responding to another unit's wildfire.
- Compact/Contract Tribes will use the FireCode to identify their respective costs for assistance to state agencies when reporting to the Regional office.

Short-term Severity actions where additional local resources are employed under operations to supplement readiness capability as a direct result of short duration high fire danger on BIA Trust lands.

- BWFM will generate one short-term severity FireCode for each region.
- Each region will use the short-term severity FireCode to cover local short-term severity needs relating to employing additional personnel.
- Request to use the short-term severity FireCode must be made to the Regional FMO, or their acting, and approval given before the FireCode is to be used.
- A support action fire report must be entered in WFMI and the respective FireCode entered in that fire report. The remarks section of the fire report must identify the purpose of the support action. For each short-term severity use through the fire season, a support action fire report must be entered in WFMI.

Long-term Severity FireCodes will be used by BIA resources to identify all costs related to approve BIA wildfire severity actions.

- All severity requests will be submitted to the BWFM for approval. Upon approval, the BWFM will generate a FireCode and notify the Region of the FireCode and authorized funding level.
- The FireCode will be used to charge all authorized financial obligations for readiness under the severity request
- If a BIA Agency/Tribe responds to another BIA Agency/Tribe's severity request, the responding BIA Agency/Tribe will use the hosting Agency/Tribal unit's FireCode to charge all financial obligations.
- Compact/Contract Tribes will use the FireCode to identify their respective severity costs when reporting to the Regional office.
- A support action fire report needs to be completed in WFMI for each severity action.

Casual Training – A FireCode established by the BWFM will be used by all BIA units to charge obligations related to Administratively Determined (AD) or casual workers during field exercises. BIA units must use the FireCode with their organizational code to charge obligations for casual field exercises.

USDA Forest Service Wildland Fire Severity Support – A FireCode will be used by DOI to identify all costs related to support of USDA Forest Service severity actions.

- The FireCode will be used to charge all authorized financial obligations for readiness under the severity request.

- A fire report needs to be completed for severity support of USDA Forest Service severity actions.

Wildland Fire Management Funding

Preparedness Activity

This activity consists of all the actions needed to prepare for the response to wildland fire ignitions. Preparedness funds provide support to the overall management and planning of the Bureau's and Indian Tribal fire management programs. Preparedness includes, but is not limited to, readiness and capability to provide safe, cost-effective fire management programs in support of land and resource management plans. This activity includes the hiring and training of fire personnel, purchasing/contracting of equipment and supplies, support, planning and coordination, policy development, oversight, and research. Interagency coordination and direction includes establishment and funding of interagency agreements and interagency fair share contributions.

- Indian tribes are eligible for indirect costs from the wildland fire appropriation for preparedness.
- Wildland Fire Management funding and indirect costs may be included in the Indian Tribal annual funding agreements (AFAs). For compact wildland fire preparedness, wildland fire prevention and interagency hotshot programs, funding shall be transferred to the Office of Self-Governance (OSG) by the BWFM Budget.
- One-time funding or one-time project funding will be applied for annually and distributed to the region for distribution to agencies/tribes. Funding shall be transferred to the OSG by the BWFM. These are project-based one-time transfers of funds. Indirect costs on non-recurring or one-time wildland fire preparedness funds are not authorized. Indian Tribal and Bureau programs will be given equal consideration for non- recurring preparedness funding and will be coordinated at the Regional Office level.

Fire Facility Construction and Maintenance Activity

This activity provides for the maintenance and construction of fire facilities for line item funded in the DOI wildland fire appropriation only. All projects are approved through a consolidated DOI process and entered into the Departments five year plan. The five-year plan is a fiscal year based plan and is part of the overall budget process. The plan requires annual updating so that the budget request continues to reflect a five-year picture of the actual need. As a result, the schedule of activities is based on the fiscal year, not the calendar year. The annual update presents the opportunity for the fire bureaus' to adjust project priorities based on newly identified needs or previously identified needs that have become more critical during the past year. Projects in the out-years may also be removed become more critical during the past year. Projects in the out-year may also be removed because they were addressed through other means.

The Bureau's five-year plan submissions are completed at least a year before Congress enacts the annual appropriation.

Consists of the following:

- Projects for construction of fire facilities must be included in the five-year DOI Facilities Construction Plan and identified as part of the Wildland Fire Annual Budget Appropriation.
- Funding is obtained by Indian tribes through Bureau regional offices via cooperative agreements, contracts or through agreements with other Federal agencies to reimburse Indian tribes for fire facilities construction costs on a project-by-project basis.
- Indirect costs for fire facilities and deferred maintenance construction projects are not authorized. Administrative fees are authorized when requests have them built into the total cost of the construction project as a direct cost.

Suppression Activity

This activity provides for the development and implementation of three operation components: Suppression, Post Wildland Fire Activities and Severity.

- Funding is obtained by Indian tribes through agreements established by Bureau regional offices or other Federal agencies to reimburse Indian tribes for fire costs on a fire-by-fire basis (per FireCode). Indirect costs for fire suppression are not authorized.
- Severity (short- and long-term) authority and funding for activities necessary to augment initial attack capability when abnormal fire conditions occur throughout a region resulting in the fire season starting earlier than normal, or exceeding average high fire danger ratings for periods. Funding is obtained by Tribes through agreements established by Bureau regional offices or other Federal agencies to reimburse Indian tribes for severity costs incurred under an approved fire severity cost request. Indirect costs for severity funds are not authorized.
- Post Wildland Fire Activities includes all post fire burned area activities covered by approved plans. Funding is obtained by Indian tribes through agreements established by the Bureau regional offices or other Federal agencies to reimburse Indian tribes for costs on a project by project basis (per FireCode). Indirect costs for emergency stabilization projects are not authorized, however reasonable administrative and overhead costs incurred by Indian tribes in such projects may be authorized within stabilization plans and should be built into the project and treated as a direct cost.

Interagency Severity Funding Request Procedures

Qualification of Need

To adequately quantify the need for severity funding, at least one of the criteria listed below should demonstrate that abnormal conditions exist. Severity funds and project approval will be identified by a severity FireCode generated by BIA-NIFC. Requests for special projects must be evaluated and approved by the

respective Regional Office and forwarded to BIA-NIFC for approval and execution. All costs associated with a severity request must include the severity FireCode when procuring and/or encoding to the Financial Business and Management System (FBMS).

- Fire danger models or analysis software (FireFamily Plus) graphically contrasts the current seasonal trend for ERC and/or BI, with all-time worst and historical average ERC and/or BI, based on an analysis of year-round data.
- Palmer Index or standardized precipitation indices that specify the departure from normal.
- Fuel Loading Quantitative information comparing current to the average.
- Current local fuel moisture compared to average trend and all-time worst provided by Normalized Differences Vegetative Index (NDVI) and/or Live Fuel Moisture Project reports. Note: Data from NDVI and Live Fuel Moisture Project may be a week old or older.
- NWS 30-day weather outlook.
- Weather station NFDRS number and name.

Narrative Statement

Provide a brief statement of the interagency situation (local and geographic). Each agency should request funds only for their respective needs, not for needs of another agency. Sharing resources when all parties have needs is desirable.

When requesting prevention or investigation resources, the following information must be included:

- Human Caused Fire Activity; number of human-caused fires to date as compared to previous years, include fire cause category;
- Description of how the team will be utilized; shared resource covering multiple areas, etc.;
- Any significant upcoming events or activities; and
- Justification for additional funds for prevention materials or supplies.

Severity requests for prevention/investigation resources are to be reviewed by the Regional WUI/Prevention Specialist.

Requested Resources

Requested resources should be identified by type, quantity, and cost using the severity cost estimation worksheet. Utilize the Prevention tab for requesting prevention/investigation resources.

Budget Management

This section governs use of the Bureau's Wildland Fire Management (WFM) appropriation account structure, procedures, cost accounting and one-time funding procedures. Personnel at all levels within the Bureau need to be aware of the responsibilities and limitations on the use of these funds, which this chapter and other financial and budget handbooks address.

Program Budget Annual Appropriations

Annual appropriations are made available for the WFM, pursuant to the passage of the annual appropriation act for the DOI and related agencies. The WFM appropriation is a no-year appropriation.

Funded Program Procedures

WFM funds, excluding emergency suppression funding (unless under a Continuing Resolution), will be distributed to the BWFM Budget Management office, which distributes funds to WFM Regional Office programs. The exception to the allocation is compacted programs which will be disbursed directly from WFM-NIFC to OSG. Instructions documented on a financial allocation forms (e.g., Funding Entry Document or FED) detail how distributions are to be made from regions to Agencies/Tribes for preparedness programs.

One-Time Funding

The one-time Funding program provides mechanisms to request funding for special projects or needs that exceed an agency's regular budgeted funds. Funds used in this program are non-recurring in nature, and are based on either available prior year un-obligated balances, or unused Indirect costs.

Individual plans should be submitted to Regional offices for review, changes or rejection. Once approved at the regional level, the requests will be forwarded to WFM. Critical needs projects are high priority or an activity ready for implementation, and require immediate funding at the start of the FY, before appropriations bills are signed. Critical needs should only cover three (3) months of project needs, but will continue under Continuing Resolutions (CR) until an appropriations bill is passed.

One-time funding for Preparedness (signed by appropriate Regional Director) will be submitted to WFM by May 15 for the upcoming Fiscal Year for current year needs. Requests received after deadlines will be given lower priority. WFM-NIFC will evaluate all requests based on the region's prioritization and the availability of funds.

Procedures for One-Time Funding Submission

One-time funding requests must be submitted using the following process:

- Requests are submitted to the Regional Office for approval. The process verifies the request meets the intent and fire policy of Interior appropriation act language.
- The Regional Office then submits prioritized funding requests to the Branch of Wildland Fire Management Budget office.
- WBS to be assigned by WFM-NIFC Budget or the DC Central Office.

National Model 52 Wildland Engine Program

The Model 52 Wildland Engine program was created by the BIA in 1996. The objective of the program is to provide a centralized process for replacement parts refurbishing, training and fabrication of Model 52 pumping systems. Detailed information on the program can be found in the BIA National Model 52 Wildland Engine Program Operations Guide.

Mission/Policy

- Provide a standardized Model 52 engine for the participating Agency or Tribal organization.
- Provide an opportunity to supply trucks for Model 52 pumping systems.
- Provide refurbishment and repair services for Fire Management Planning Analysis (FMPA) approved number of engines.
- Provide training in the use and maintenance of the Model 52 pumping systems.
- Evaluate new equipment and Model 52 improvements to meet the wildland fire program needs.
- Provide emergency repair or replacement for Model 52 pumping systems.
- No aftermarket parts of any kind are to be place on any Model 52 equipment without prior approval from the Deputy, Fire Operations and concurrence from the Program Center Managers.

Replacement Guidelines

BIA Model 52 replacement schedule (funding pending) is set as follows:

Model 52 Type 6	8 Years	100,000 Miles
Model 52 Type 4	12 Years	100,000 Miles

Organization

The program is organized into three geographical areas:

- Northwest Center (Missoula, MT) services the Northwest, Rocky Mountain and north half of the Pacific Region.
- Northern Center (Eagle Butte, SD) services the Great Plains and Midwest Regions.
- Southwest Center (Dulce, NM) services the Southwest, Western, Navajo, Eastern Oklahoma, Southern Plains, Eastern and south half of the Pacific Region.

Administration

The program is administered through the BWFM Fire Operations Section. A Model 52 Oversight Group has been established to plan, develop and budget for the annual operations of the program. The Group is comprised of the Model 52 Program Leads at each center and the Deputy, Fire Operations. Trucks and fabrication orders for the Model 52 are procured nationally through the BIA-NIFC office.

Emergency Repairs

Emergency fire related repairs to a BIA Model 52 pumping package will be requested through the assigned user area Model 52 Center. The request will be reviewed and approved by the Center Manager before a Service Truck is dispatched or replacement parts are sent to the requesting agency.

Non-Emergency/Non-Suppression Repairs

Non-emergency repairs shall be charged to the identified agency account. The account will be approved by an agency official (e.g., FMO, Forest Manager, Superintendent) before requested action is taken.

Authorization of account will be sent by email or signed fax identifying account, name and title of authorizing official. Initial request for all non-emergency repairs will be requested through the assigned user area Model 52 Center. The request will be reviewed and approved by the Center Manager before a Service Truck is dispatched or replacement part is mailed to the requesting agency.

All Emergency and Non-Emergency repair expenditures shall be charged to an appropriate account.

National Aviation Program

The BIA, Wildland Fire and Aviation Management program recommends Bureau policy, procedures, and standards; and maintains functional oversight and interagency coordination for all aviation activities. The BIA-BWFM established two Inter-Regional Aviation Management Offices to provide technical aviation expertise support for Regional, Agency, and field offices. Each of these offices supports Bureau Regions across geographic boundaries. Each of the Inter-Regional offices is staffed by an IRAM and an AOS, both of which are available to provide support for any Region.

Aviation Program Goals

The primary goals of each of these positions are to promote aviation safety and cost-effectiveness. The Branch of Wildland Fire Management Director, Aviation and Safety supports Bureau aviation activities and missions, which includes fire suppression, through strategic program guidance, managing aviation programs of national scope, coordination with Office of Aviation Services (OAS) and interagency partners.

The Director, Aviation and Safety has the responsibility and authority, after consultation with Regional FMOs, for funding and acquisition of all fire aircraft, prioritizing the allocation of BIA aircraft on a Bureau wide basis, and approving Regional Office requests to acquire supplemental aircraft resources.

Refer to *Indian Affairs Manual; Part 57* for information on BIA aviation policy and procedures. Refer to *112 DM 12* for a list of responsibilities.

Regional Office Level

Regional FMOs are responsible for providing oversight for aircraft hosted in their region and have the authority and responsibility to approve, with the WFM Branch Chief concurrence, acquisition of supplemental aircraft resources within their region.

- Regional FMOs have the authority to prioritize the allocation, pre-positioning and movement of all aircraft assigned to the BIA within their region.
- Regional Offices will coordinate with the National Office on movement of their aircraft outside of their region.

Regional Aviation Managers (RAM) are associated with every BIA Region. They implement aviation program objectives and directives to support the BIA mission and each Region's goals. Some Regions may have additional support staff assigned to support aircraft operations and to provide technical expertise. A Regional Aviation Management Plan is required to outline goals of the Region's aviation program and to identify policy and procedures specific to that Region.

Important Note: A Region is not generally authorized to supplement this policy with more restrictive policy or procedures than the national policy, unless the policy or procedure is approved by the Director, Aviation and Safety.

Agency/Field Office Level

Agency, Field Managers and staff manage their programs as necessary to conduct their aviation operations safely. Agency Aviation Managers (AAMs) serve as the focal point for the Agency Aviation Program by providing technical expertise and management of aviation resources to support agency programs.

While many agencies have aviation management as a collateral duty, during periods of intense aviation activity (e.g., wildland fire support) it is still absolutely critical that aviation oversight be maintained.

When other duties interfere or compete with effective aviation management, request assistance from the Regional Office. Agencies are responsible for hosting, supporting, providing daily management, and dispatching all aircraft assigned to their unit. Agencies have the authority to request additional resources, establish priorities, and make assignments for all aircraft assigned to the BIA within their agency.

- AAMs have the responsibility for aviation activities at the local level, including aviation mission planning, risk management and safety, supervision, and evaluation. AAMs assist Line Officers with risk assessment/management and cost analysis.

All Tribal and agency offices utilizing aircraft should have a current and approved aviation management plan on file.

Aviation Safety

The BIA and the interagency partners have adopted Safety Management Systems (SMS) as the foundation to our aviation safety program. For further information, reference Chapter 16.

Flight Request and Approval

Bureau flights will be requested and documented using the process defined in the Regional or Agency Aviation Plans. As a minimum, flight management procedures will follow the *National Interagency Mobilization Guide*, Chapter 80, Flight Management Procedures. The BLM Aircraft Flight Request/Schedule (9400- 1a) form is one example which may be used.

Safety and Risk Management

Motor Vehicle Operation Policy

All individuals operating a motor vehicle in performance of duties in support of the BIA must comply with the requirement of the BIA Motor Vehicle policy requirements 5 CFR 930, and 485 DM 16. Regional Directors, Agency Superintendents, and FMO's will be responsible for ensuring full compliance, including safe operation of motor vehicles as well as immediate response to issues of non-compliance. Non-standard vehicle training will be provided to fire personnel required to drive Model 52 engines, Helitack and Crew vehicles.

Business Management and Administration

The BIA follows the uniform application (IAM Part 90, 1.2, (18)) of the interagency policies and guidelines as developed in the Interagency Incident Business Management Handbook (IIBMH). BIA will follow the direction set forth in the IIBMH in all incident business management functions except where specific to agency legal mandates, policies, rules or regulations.

Casuals Hired as Drivers When Employed by BIA

In accordance with the BIA Motor Vehicle Policy, casuals hired as drivers are required to possess a valid driver's license in order to operate a motor vehicle and have a safe driving record.

Agencies should recruit a pool of drivers prior to fire season. They must submit GSA Form 3607, Government Motor Vehicle Operator's License and Driving Record, in advance to verify they have a favorable driving record.

- Form 3607 will be processed through Regional channels to retrieve the driving record of the application with the State, or National Driver Registry and applicable Tribe.
- Regional Directors can contact the Division of Safety and Risk Management for information on completing and submitting Form 3607.
- Meeting the qualification requirements for a motor vehicle license is a condition of employment within BIA for those individuals whose duties require the operation of a motor vehicle for official wildland fire operations

business. Failure to adhere to the policy will result in automatic termination of the casual.

Request for Funding Authorization

The authorization and procedure for use of the operations "suppression" (AF2001010) program account, for emergency workers field activities is as follows.

- A regional funding request plan must be completed that identifies the program need for casual funding for field activities only;
- The request must be submitted through the Regional FMO by January 1st of each year; and
- The requests will be reviewed and authorized in writing to the respective agency.

Acquisitions

Per 90 IAM, the WFM program requires adherence to the *Interagency Incident Business Management Handbook (IIBMH)* in conducting wildland fire business.

The BIA Branch of Fire Management's waiver for fire/emergency personnel purchases are cited in Memoranda Expanded Government Charge Card Purchase Authority During Emergency Wildland Fire Operations, dated 6/12/03 at https://www.bia.gov/nifc/library/Memos/index.htm. The exceptions are:

Meals, Beverages and Lodging: This exception will be used to lodge and feed employees without credit cards or to support mixed charge card/non-charge card crews.

- Personal Gear – This exception will be used to purchase personal items if destroyed, lost or stolen while serving on the fire crew/emergency incident, (e.g., clothing, footwear and/or toiletries).
- Payment of medical treatment for casuals and overhead when authorized for Incident Agency Provided Medical Care (APMC).

Emergency Equipment Rental Agreements (EERA)

The Emergency Equipment Payment Operating Guidelines provides procedure, guidance and instructions to the BIA WFM Programs, Regional fire management offices and agency offices, Office of Financial Management, Office of Acquisition and Property for implementation of the EERAs payment process. Refer to the IIBMH, Chapter 20, for EERA Administration.

Wildland Fire Decision Support System (WFDSS)

BIA follows interagency policy regarding use of WFDSS found in Chapter 11.

Fuels Management, Planning & Implementation

The national and interagency policy guides for Fuels Management programs are contained in the following guides and handbooks:

- *Interagency Prescribed Fire Planning and Implementation Procedures Reference Guide* (PMS 484) July 2017. (https://www.nwcg.gov/publications/484);
- BIA Fuels Management Program Supplement to the Interagency Prescribed Fire Planning and Implementation Procedures Reference Guide 2008; and
- BIA Fuels Program Business Management Handbook, February 2008
- Chapter 17 – NFES 2724, *Interagency Standards for Fire and Fire Aviation Operations* (Red Book).

Exclusive use of these handbooks and guides enhances intra- and inter-agency program continuity, avoids duplication, reduces the chances to misinterpret policy and provides one stop shopping for the fuels programs policy in a fire management and political environment where changes occur frequently. Please call the Director of Fuels Management for more information.

Prescribed Fire Review

The goal of a Prescribed Fire Review is to provide recommendations, identify deficiencies and specific corrective actions. Reviews do not have to be associated with a specific incident.

Any Prescribed Fire related incident that has resource or property damage that may result in a claim for compensation shall initiate a review.

The review team and their expertise should be commensurate with the scope, and focus of the review. Interagency participation is encouraged with team selection.

Chapter 7
Safety and Risk Management

Introduction

The primary means by which we prevent accidents in wildland fire operations is through aggressive risk management. Our safety philosophy acknowledges that while the ideal level of risk may be zero, a hazard free work environment is not a reasonable or achievable goal in fire operations. Through organized, comprehensive, and systematic risk management, we will determine the acceptable level of risk that allows us to provide for safety yet still achieve fire operations objectives. Risk management is intended to minimize the number of injuries or fatalities experienced by wildland firefighters.

Policy

Firefighter and public safety is our first priority. All Fire Management Plans and activities must reflect this commitment. The commitment to and accountability for safety is a joint responsibility of all firefighters, managers, and administrators. Every supervisor, employee, and volunteer is responsible for following safe work practices and procedures, as well as identifying and reporting unsafe conditions.

Agency-specific Safety Policy Documents:

- ***BLM –*** *BLM Handbook 1112-1, DOI Occupational Safety and Health Program – Field Manual*
- ***NPS –*** *DO-50 and RM-50 Loss Control Management Guideline*
- ***FWS –*** *Service Manual 240 FW 1 Safety Program Management, 241 FW7, Firefighting, 241 FW 4, Risk Management*
- ***FS –*** *FSM 5100 and chapters, FSH-6709.11 Health and Safety Code Handbook*

For additional safety guidance, refer to:

- *Wildland Fire Incident Management Field Guide* (PMS 210)
- *Incident Response Pocket Guide (IRPG)* (PMS 461, NFES 1077)

Guiding Principles

The primary means by which we implement command decisions and maintain unity of action is through the use of common principles of operations. These principles guide our fundamental wildland fire management practices, behaviors, and customs, and are mutually understood at every level of command. They include Risk Management, Standard Firefighting Orders and Watch Out Situations, LCES and the Downhill Line Construction Checklist. These principles are fundamental to how we perform fire operations, and are

intended to improve decision making and firefighter safety. They are not absolute rules. They require judgment in application.

Goal

The goal of the fire safety program is to provide direction and guidance for safe and effective management in all activities. Safety is the responsibility of everyone assigned to wildland fire, and must be practiced at all operational levels from the national fire director, state/regional director, and unit manager to employees in the field. Agency Administrators need to stress that firefighter and public safety always takes precedence over property and resource loss. Coordination between the fire management staff and unit safety officer(s) is essential in achieving this objective.

Definitions

Safety: A measure of the degree of freedom from risk or conditions that can cause death, physical harm, or equipment or property damage.

Hazard: A condition or situation that exists within the working environment capable of causing physical harm, injury, or damage.

Risk: The likelihood or possibility of hazardous consequences in terms of severity or probability.

Risk Management: The process whereby management decisions are made and actions taken concerning control of hazards and acceptance of remaining risk.

Risk Management Process

Fire operations risk management is outlined in the *NWCG Incident Response Pocket Guide (IRPG)*. The five step process provides firefighters and fire managers a simple, universal, and consistent way to practice risk management by:

- Establishing situation awareness by identifying hazards.
- Assessing hazard potential.
- Developing hazard controls and making risk management decisions.
- Implementing hazard controls.
- Supervising implementation and evaluating effectiveness.

Job Hazard Analysis (JHA)/Risk Assessment (RA)

A completed JHA/RA is required for:

- Jobs or work practices that have potential hazards.
- New, non-routine, or hazardous tasks to be performed where potential hazards exist.

- Jobs that may require the employee to use non-standard personal protective equipment (PPE).
- Changes in equipment, work environment, conditions, policies, or materials.
- Supervisors and appropriate line managers must ensure that established JHAs are reviewed and signed prior to any non-routine task or at the beginning of the fire season.
    - ***BLM –*** *Additional RA information can be obtained at: https://blmspace.blm.doi.net/wo/700/safetyhealthandemergency/SitePages/Risk%20Management.aspx.*
    - ***FWS –*** *See also 240 FW 1, Exhibit 1, Job Hazard Assessment*
    - ***FS –*** *JHAs must include a description of the emergency medical procedures, identification of key individuals, and actions that will be taken to ensure prompt and effective medical care and evacuation. See FSH 6709.11, section 21.1 for more information.*

Work/Rest

To mitigate fatigue, Agency Administrators, fire managers, supervisors, Incident Commanders, and individual firefighters should plan for and ensure that all personnel are provided a minimum 2:1 work/rest ratio (for every 2 hours of work or travel, provide 1 hour of sleep and/or rest). Work shifts that exceed 16 hours and/or consecutive days that do not meet the 2:1 work/rest ratio should be the exception. When this occurs, the following actions are required:

- Personnel will resume 2:1 work/rest ratio as quickly as possible.
- The Incident Commander or Agency Administrator will justify work shifts that exceed 16 hours and/or consecutive days that do not meet 2:1 work to rest ratio. Justification will be documented in the daily incident records, and must include mitigation measures used to reduce fatigue.
- The Time Officer's/Unit Leader's approval of the Emergency Firefighter Time Report (OF-288), or other agency pay document, certifies that the required documentation is on file and no further documentation is required for pay purposes.

The work/rest guidelines do not apply to aircraft pilots assigned to an incident. Pilots must abide by applicable Federal Aviation Administration (FAA) guidelines, or agency policy if more restrictive.

Length of Assignment

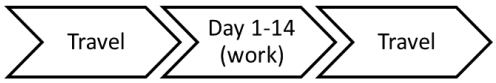
Assignment Definition

An assignment is defined as the time period (days) between the first full operational period at the first incident or reporting location on the original resource order and the last day worked prior to commencement of return travel to the home unit.

Length of Assignment

Standard assignment length is 14 days, exclusive of travel from and to home unit, with possible extensions identified below. Time spent in staging and preposition status counts toward the 14-day limit, regardless of pay status, for all personnel, including Incident Management Teams.

14-Day Scenario



Days Off

To assist in mitigating fatigue, days off are allowed during and after assignments. Agency Administrators (incident host or home unit) may authorize time off supplementary to mandatory days off requirements.

The authority to grant a day off with pay lies within 5 U.S.C. 6104, 5 CFR 610.301-306, and 56 Comp. Gen. Decision 393 (1977).

After completion of a 14-day assignment and return to the home unit, two mandatory days off will be provided (2 after 14). Days off must occur on the calendar days immediately following the return travel in order to be charged to the incident (See Section 12.1-2) (5 U.S.C. 6104, 5 CFR 610.301-306, and 56 Comp. Gen. Decision 393 (1977). If the next day(s) upon return from an incident is/are a regular work day(s), a paid day(s) off will be authorized. Regulations may preclude authorizing this for non-NWCG and state/local employees.

Pay entitlement, including administrative leave, for a paid day(s) off cannot be authorized on the individual's regular day(s) off at their home unit. Agencies will apply holiday pay regulations, as appropriate. A paid day off is recorded on home unit time records according to agency requirements. Casuals (AD) are not entitled to paid day(s) off upon release from the incident or at their point of hire.

Contract resources are not entitled to paid day(s) off upon release from the incident or at their point of hire.

- ***BLM/FWS –*** *After completion of a 14-day assignment and return travel, the mandatory days off will be charged to Administrative Leave if they fall on a regularly-scheduled work day.*

Home unit Agency Administrators may authorize additional day(s) off with compensation to further mitigate fatigue. If authorized, home unit program funds will be used. All length of assignment rules apply to aviation resources, including aircraft pilots, notwithstanding the FAA and agency day off regulations.

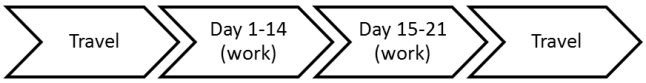
Assignment Extension

Prior to assigning incident personnel to back-to-back assignments, their health, readiness, and capability must be considered. The health and safety of incident personnel and resources will not be compromised under any circumstance.

- Assignments may be extended when:
  - Life and property are imminently threatened.
  - Suppression objectives are close to being met.
  - A military battalion is assigned.
  - Replacement resources are unavailable, or have not yet arrived.

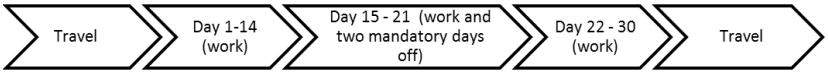
Upon completion of the standard 14-day assignment, an extension of up to an additional 14 days may be allowed (for a total of up to 30 days, inclusive of mandatory days off, and exclusive of travel).

21-Day Scenario



A 21-day assignment is exclusive of travel from and to home unit. Time spent in staging and preposition status counts toward the 21-day assignment, regardless of pay status, for all personnel, including Incident Management Teams.

30-Day Scenario



An assignment longer than 22 days is exclusive of travel from and to home unit. Time spent in staging and preposition status counts toward the assignment, regardless of pay status, for all personnel, including Incident Management Teams. For an assignment exceeding 21 days, two mandatory days off will be provided prior to the 22nd day of the assignment.

Contracts, Incident Blanket Purchase Agreements (I-BPA), and Emergency Equipment Rental Agreements (EERA) should be reviewed for appropriate pay requirements and length of assignment. If the contract, I-BPA, or EERA do not address this, the incident Finance/Administration Section Chief or the procurement official should be consulted as to whether compensation for a day off is appropriate.

Single Resource/Kind Extensions
The section chief or Incident Commander will identify the need for assignment extension and will obtain the affected resource's concurrence. The section chief and affected resource will acquire and document the home unit supervisor's approval.

The Incident Commander approves the extension. If a convened Geographic or National Multi-Agency Coordinating Group (GMAC/NMAC) directs, the Incident Commander approves only after GMAC/NMAC concurrence.

If the potential exists for reassignment to another incident during the extension, the home unit supervisor and the affected resource will be advised and must concur prior to reassignment.

Incident Management Team Extensions
Incident Management Team extensions are to be negotiated between the incident Agency Administrator, the Incident Commander, and the GMAC/NMAC (if directed).

Maximum Consecutive Days Worked – Home Unit
During extended periods of activity at the home unit, personnel will have a minimum of 1 day off in any 21-day period.

Driving Standard

All employees driving motor vehicles are responsible for the proper care, operation, maintenance, and protection of the vehicle, and to obey all federal and state laws.

The use of government-owned, rented, or leased motor vehicles is for official business only. Unauthorized use is prohibited.

General Driving Policy
- Employees must have a valid state driver's license in their possession for the appropriate vehicle class before operating the vehicle. Operating a government-owned or rental vehicle without a valid state driver's license is prohibited.
- All drivers whose job duties require the use of a motor vehicle will receive initial defensive driver training within three months of entering on duty and refresher driver training every three years thereafter.
  - ***BLM/FS –*** *Driver training is required prior to operating a vehicle for official purposes.*
- All traffic violations or parking tickets will be the operator's responsibility.
- All driving requiring a CDL will be performed in accordance with applicable Department of Transportation regulations.

- Drivers and all passengers are required to use provided seat belts at all times when the motor vehicle is in motion.

Employees operating a motor vehicle that meets any of the following criteria must possess a valid Commercial Driver's License (CDL) with all of the applicable endorsements:

- Has a gross combination weight rating or gross combination weight of 26,001 pounds or more, whichever is greater, inclusive of a towed unit(s) with a gross vehicle weight rating or gross vehicle weight of more than 10,000 pounds, whichever is greater; or
- Has a gross vehicle weight rating or gross vehicle weight of 26,001 pounds or more, whichever is greater; or
- Is designed to transport 16 or more passengers, including the driver; or
- Is of any size and is used in the transportation of hazardous materials. Hazardous materials means any material that has been designated as hazardous under *49 U.S.C. 5103* and is required to be placarded under subpart F of *49 CFR part 172* or any quantity of a material listed as a select agent or toxin in *42 CFR part 73*.
    - ***BLM –*** *BLM Form 1112-11 will be used to document every fire and aviation employee's authorization to drive government vehicles or to drive private or rental vehicles for government business. BLM Form 1112-11 replaces form OF-345, form DI-131, and any equivalent form that has been created for local or state level use. Employees are required to self-certify their physical ability to operate vehicles which they are authorized to use. Drivers of vehicles that require a Commercial Driver's License may be required to have additional driver, medical, and fitness testing as required by local and/or state laws. Employees will immediately inform their supervisor and update BLM Form 1112-11 if a change in medical condition impedes their driving ability or if a state driving privilege is restricted for any reason. Supervisors will review the updated form and take appropriate action as necessary. BLM Form 1112-11 is available at: https://blmspace.blm.doi.net/oc/intra/dbs/eForms%20Library/Forms/Safety.aspx.*
    - ***BLM/NPS/FWS/BIA –*** *Employees under the age of 21 that possess a CDL may operate wildland fire vehicles under the following conditions:*
        - *Drivers under the age of 21 with a CDL may only drive within the state that issued the CDL and must comply with that state's special requirements and endorsement; and*
        - *Supervisors must annually establish and document that those drivers have a valid driver's license (i.e., that the license has not been suspended, revoked, canceled, or that he/she has not been otherwise disqualified from holding a license (485 DM 16.3D (1)), have the ability to operate the vehicle(s) safely in the operational*

environment assigned (485 DM 16.3B (2)), and review and validate the employee's driving record (485 DM 16.3D (4)).

- ***BLM/NPS/FWS –*** *Employees, volunteers, and contractors (for BLM, this includes cooperators) are prohibited from using any mobile voice/data communication or electronic data retrieval device while operating a government owned, leased, or rented vehicle or while operating a personally-owned vehicle for official government business, and are further prohibited from using any government-owned mobile communication or data retrieval device while operating a personally-owned vehicle. Government purchased two-way radios are exempt from this requirement. The use of any of these devices during an emergency situation (immediate threat to life) is limited to the extent necessary to convey vital information. When there is a passenger in the vehicle and the vehicle is in motion, the passenger shall manage communications to prevent driver distraction.*
- ***NPS –*** *For NPS employees engaged in activities other than wildfire or prescribed fire, refer to the current NPS Official Travel Driving Policy for restrictions.*
- ***FS –*** *Policy requires all operators of government owned, or leased vehicles to have a Forest Service issued Operator's Identification Card (OF-346) indicating the type of vehicles or equipment the holder is authorized and qualified to operate.*
- ***FS –*** *Drivers shall not engage in cellular phone or mobile radio communications while the vehicle is in motion unless actively engaged in an emergency such as wildland firefighting. During non-emergency situations, the driver shall identify a safe location to stop the vehicle and then engage in cellular phone or mobile radio communications. These restrictions apply whether or not hands-free technology is available.*

Non-Incident Operations Driving

Refer to the current driving standards for each individual agency.

Mobilization and Demobilization

To manage fatigue, every effort should be made to avoid off unit (excluding IA response) mobilization and demobilization travel between 2200 hours and 0500 hours.

Incident Operations Driving

This policy addresses driving by personnel actively engaged in wildland fire or all-hazard activities; this includes driving while in support, mobilization, and demobilization to an assigned incident, or during initial attack fire response (includes time required to control the fire and travel to a rest location).

- Agency resources assigned to an incident or engaged in initial attack fire response will adhere to the current agency work/rest policy for determining length of duty day.

- No driver will drive more than 10 hours (behind the wheel) within any duty-day.
- Multiple drivers in a single vehicle may drive up to the duty-day limitation provided no driver exceeds the individual driving (behind the wheel) time limitation of 10 hours.
- A driver shall drive only if they have had at least 8 consecutive hours off duty before beginning a shift. Exception to the minimum off-duty hour requirement is allowed when essential to:
  - Accomplish immediate and critical suppression objectives.
  - Address immediate and critical firefighter or public safety issues.
- As stated in the current agency work/rest policy, documentation of mitigation measures used to reduce fatigue is required for drivers who exceed 16 hour work shifts. This is required regardless of whether the driver was still compliant with the 10 hour individual (behind the wheel) driving time limitations.

Fire Vehicle Operation Standards

Operators of all vehicles must abide by state traffic regulations. Operation of all vehicles will be conducted within the limits specified by the manufacturer. Limitations based on tire maximum speed ratings and GVWR restrictions must be followed. It is the vehicle operator's responsibility to ensure vehicles abide by these and any other limitations specified by agency or state regulations.

Management Controls to Mitigate Exposure

Management controls, engineering controls, equipment guards, and administrative procedures are the first line of defense against exposing an employee to a hazard. Personal Protective Equipment (PPE) will be used to protect employees against hazards that exist after all management controls are exhausted.

Wildland Fire Field Attire

Polyester, polypropylene, and nylon materials are not to be worn, because most synthetic fibers melt when exposed to flame or extreme radiant heat. Personnel should wear only undergarments made of 100 percent or the highest possible content of natural fibers, aramid, or other flame-resistant materials.

Personal Protective Equipment (PPE)

All personnel are required to use Personal Protective Equipment (PPE) appropriate for their duties and/or as identified in JHAs/RAs. Employees must be trained to use safety equipment effectively.

Flame resistant clothing should be cleaned or replaced whenever soiled, especially when soiled with petroleum products. Flame resistant clothing will be

replaced when the fabric is so worn as to reduce the protection capability of the garment or is so faded as to significantly reduce the desired visibility qualities.

Any modification to Personal Protective Equipment that reduces its protection capability such as iron-on logos, and stagging of pants, is an unacceptable practice and will not be allowed on fires.

Required Fireline PPE

- Wildland fire boots
- Fire shelter (M-2002)
- Helmet with chinstrap
- Goggles/safety glasses (as identified by JHAs/RAs)
- Ear plugs/hearing protection
- National Fire Protection Association (NFPA) 1977 compliant long-sleeved flame resistant shirt (yellow recommended)
- NFPA 1977 compliant flame resistant trousers
- Leather or leather/flame resistant combination gloves. Flame resistant flight gloves or NFPA 1977 compliant Driving Gloves can be used by heavy equipment operators, drivers and fireline supervisors when not using fireline hand tools.
- Additional PPE as identified by local conditions, Safety Data Sheet (SDS), or JHA/RA
    - ***FS –*** *Shirt, trousers, and gloves used by USFS personnel must meet Forest Service specification 5100-91 (shirt), 5100-92 (trousers), 6170-5 (gloves), or be NFPA 1977 compliant.*

Wildland Fire Boot Standard

Personnel assigned to wildland fires must wear a minimum of 8-inch high, lace-type exterior leather work boots with lug melt-resistant soles. The 8-inch height requirement is measured from the bottom of the boot's heel to the top of the boot. Alaska is exempt from the lug sole requirement.

All boots that meet the wildland fire boot standard as described above are required for firefighting and fireline visits, considered non-specialized PPE, and will be purchased by the employee (including AD/EFF) prior to employment.

The agencies have authorized payment of a boot stipend. See agency specific guidance for implementation.

Fire Shelters

New Generation Fire Shelters (M-2002, Forest Service Specification 5100-606) are required for all wildland firefighters. For more information, refer to https://www.nifc.gov/fireShelt/fshelt_main.html.

Training in inspection and deployment of New Generation Fire Shelters will be provided prior to issuance. Firefighters will inspect their fire shelters at the

beginning of each fire season and periodically throughout the year, to ensure they are serviceable.

Training shelters will be deployed at required Annual Fireline Safety Refresher Training. No live fire exercises for the purpose of fire shelter deployment training will be conducted.

Fire shelters will be carried in a readily accessible manner by all line personnel. The deployment of shelters will not be used as a tactical tool. Supervisors and firefighters must never rely on fire shelters instead of using well-defined escape routes and safety zones. When deployed on a fire, fire shelters will be left in place if it is safe to do so and not be removed pending approval of authorized investigators. Firefighters must report the shelter deployment incident to their supervisor as soon as possible.

Head Protection

Personnel must be equipped with helmets and wear them at all times while in the fire area. Helmets must be equipped with a chinstrap, which must be fastened while riding in, or in the vicinity of, helicopters. Acceptable helmets for fireline use must meet *NFPA 1977 Standard on Protective Clothing and Equipment for Wildland Fire Fighting* requirements.

- ***BLM –*** *Helmets and hats used for protection from impact of falling and flying objects and from limited electric shock and burn must meet the specifications of American National Standards Institute Z89.1-2009. Equivalent hardhat meeting ANSI Z89.1-2009 Type 1, Class G or NFPA 1977.*

Helmets consist of the shell and the suspension, which work together as a system. Both components require frequent inspection and maintenance. Detailed helmet inspection procedures can be found at https://www.nwcg.gov/committees/equipment-technology-committee/resources.

Eye and Face Protection

The following positions require the wearing of eye protection (meets *ANSI Z87.1* Standards):

- Nozzle operator
- Chainsaw operator/faller
  - The *ANSI Z87.1* eye and face protection will be worn during all chainsaw operations involving cleaning and fueling. Steel mesh safety goggles are allowed only during falling and bucking chainsaw/crosscut saw operations.
  - Steel mesh glasses are not allowed for any chainsaw operations.
- Helibase and ramp personnel
- Wildland fire chemical mixing personnel
- Other duties may require eye protection as identified in a specific JHA/RA

Full face protection in the form of a face shield in compliance with *ANSI Z87.1* shall be worn when working in any position where face protection has been identified as required in the job-specific JHA/RA: Batch Mixing for Terra-Torch®, power sharpener operators, etc.

Hearing Protection

Personnel who are exposed to a noise level in excess of 85db must be provided with, and wear, hearing protection. This includes, but is not limited to:

- Chainsaw operators/fallers
- Pump operators
- Helibase and aircraft ramp personnel
- Wildland fire chemical mixing personnel

Other duties may require hearing protection as identified in a specific JHA/RA.

Employees may be required to be placed under a hearing conservation program as required by *29 CFR 1910.95*. Consult with local safety and health personnel for specifics regarding unit hearing conservation programs.

Neck Protection

Face and neck shrouds are not required PPE. The use of shrouds is not required and should be as a result of onsite risk analysis. If used, face and neck shrouds shall meet the requirements of FS specification 5100-601 or *NFPA 1977 Standard on Protective Clothing and Equipment for Wildland Fire Fighting.*

Shrouds should be positioned in a manner that allows for immediate use. For additional information see MTDC Tech Tip *Improved Face and Neck Shroud for Wildland Firefighters, 2004* (0451-2323-MTDC) at https://www.fs.fed.us/t-d/pubs/htmlpubs/htm04512323/index.htm.

Leg Protection

All chainsaw operators will wear chainsaw chaps meeting the United States Forest Service Specification 6170-4F or 4G. Swampers should wear chaps when the need is demonstrated by a risk analysis considering proximity to the sawyer, slope, fuel type, etc. All previous Forest Service specification chainsaw chaps must be removed from service. Chainsaw chaps shall be maintained in accordance with MTDC Publication, *Inspecting and Repairing Your Chainsaw Chaps – User Instructions* (0567-2816-MTDC) available at https://www.fs.fed.us/t-d/pubs/htmlpubs/htm05672816/page01.htm.

Respiratory Protection

Respiratory protection should only be implemented once engineering and administrative controls are exhausted. The need for respiratory protection during wildland fire operations must be determined by each agency. The requirements for respirator use are found in *29 CFR Part 1910.134*.

Only NIOSH-approved respirators shall be used. Several respiratory-type products are marketed to wildland firefighters but are not NIOSH-approved (e.g., shrouds with filtration devices).

Managers and supervisors will not knowingly place wildland firefighters in positions where exposure to toxic gases or chemicals that cannot be mitigated and would require the use of self-contained breathing apparatus.

Managers will not sign cooperative fire protection agreements that would commit wildland firefighters to situations where exposure to toxic gases or chemicals would require the use of self-contained breathing apparatus.

- ***FS –*** *FSM 5130, Self-Contained Breathing Apparatus – Wildland firefighters may use only SCBA which are compliant with NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services. SCBA may only be used when contaminants from vehicle, dump, structure, or other non-wildland fuel fire cannot be avoided while meeting wildland fire suppression objectives (29 CFR 1910.134, Respiratory Protection). If such an apparatus is not available, avoid exposure to smoke from these sources. The acquisition, training, proper use, employee health surveillance programs, inspection, storage, and maintenance of respiratory protection equipment must comply with applicable National Fire Protection Association standards and 29 CFR 1910.134, and be justified by a Job Hazard Analysis. Where the acquisition and use of an SCBA is approved, it may be carried only on a fire engine and its use must be consistent with FSM 5130.*

Specialized or Non-Standard Personal Protective Equipment (PPE)

Specialized PPE not routinely supplied by the agency (e.g., prescription safety glasses, static-resistant clothing, cold weather flame resistant outerwear, etc.) required to perform a task safely must be procured in accordance with agency direction, and supported by a JHA/Risk Assessment.

A JHA/Risk Assessment must be completed and reviewed by the Unit Safety Officer and the supervisor's approval is required. Items must meet agency and industry standards for specific intended use. Cold weather flame resistant outerwear shall be in compliance with NFPA 1977, *Standard on Protective Clothing and Equipment for Wildland Fire Fighting*. All cold weather inner wear should be composed of 100% or the highest possible content of natural fibers (cotton, wool or silk) or other flame resistant material such as aramid.

High Visibility Vests

In order to meet *23 CFR 634*, high visibility apparel should be worn whenever a firefighter is working on or in the right of way of a public roadway.

Employees must wear high visibility safety apparel that meets ANSI/ISEA 107-2004, Class 2 or 3, or ANSI/ISEA 207-2006.

Exceptions
The high visibility safety apparel should not be worn if:

- There is a reasonable chance that the employee may be exposed to flames, high heat, or hazardous materials.
- The high visibility garment hinders an employee's ability to do their job because it prevents necessary motion or because it limits access to necessary equipment such as radios or fire shelters.

Additional information is available in the Missoula Technology and Development Center (MTDC) report, *High-Visibility Garments and Worker Safety on Roadways* (1251-2818P-MTDC) at https://www.fs.fed.us/t-d/pubs/htmlpubs/htm12512818/.

Fireline Safety

Incident Briefings

Fire managers must ensure that safety briefings are occurring throughout the fire organization, and that safety factors are addressed through the IC or their designee and communicated to all incident personnel at operational briefings. The identification and location of escape routes and safety zones must be stressed. A briefing checklist can be found in the *Incident Response Pocket Guide (IRPG).*

LCES – A System for Operational Safety

LCES will be used in all operational briefings and tactical operations as per the *Incident Response Pocket Guide (IRPG).*

- L – Lookout(s)
- C – Communication(s)
- E – Escape Route(s)
- S – Safety Zone(s)

Right to Refuse Risk

Every individual has the right to turn down unsafe assignments. When an individual feels an assignment is unsafe, they also have the obligation to identify, to the degree possible, safety alternatives for completing that assignment. The IRPG contains a process for properly refusing risk.

Smoke and Carbon Monoxide

It is important to note that smoke is just one of the potential risks faced by wildland firefighters. Site-specific hazards and mitigations need to be identified (using JHA/RA) to reduce firefighter exposure to smoke and potential carbon monoxide which includes evaluating and balancing all the risks associated with the operational objectives.

From an incident management perspective, smoke impacts need to be analyzed and a risk assessment completed using the ICS-215A, Incident Action Plan

Safety Analysis worksheet. For additional information, reference NWCG memorandum EB-M-12-006, *Monitoring and Mitigating Exposure to Carbon Monoxide and Particulates at Incident Base Camps* at https://www.nwcg.gov/executive-board/correspondence.

Location of Fire Camps and Plans to Remain in Place

Fire camps should be located in areas that will service the incident for the long term without having to relocate. Due to such factors as extreme fire behavior, fire camp locations might be compromised. Incident Commanders are to be especially vigilant to quickly identify situations that may put their fire camp(s) or any other adjacent fire camps in jeopardy. As such, planning for evacuation and/ or remain in place actions should be considered. Evacuation plans at a minimum shall include:

- Documented risk assessment
- Trigger points
- Egress routes
- Transportation for all personnel
- Accountability for all personnel
- Those individuals not meeting 310-1 qualifications will be considered escorted visitors as addressed elsewhere in this chapter.
    - ***FS –*** *At a minimum, plans shall also include:*
        - *ICP protection strategy referenced in the IAP.*
        - *Live-ability considerations including air quality, functionality of location and facilities, and safety factors for post burn conditions.*

Standard Safety Flagging

The NWCG recommends the following Safety Zone/Escape Route flagging for wildland fire activities:

- Hot-pink flagging marked "Escape Route" (NFES 0566). Crews with colorblind members may wish to carry and utilize fluorescent chartreuse flagging (NFES 2396).
- Hazards. Yellow with black diagonal stripes, 1 inch wide (NFES 0267). If the above recommendation is not utilized on an incident, the incident will need to identify the selected color and make it known to all firefighters.

Emergency Medical Planning and Services

To provide for quick and effective response, all units (including dispatch centers) will develop and implement plans that specify emergency procedures, actions, and roles/responsibilities to ensure injured personnel are provided prompt and effective medical care and evacuation.

Incident Medical Emergency Management Planning

In 2010, NWCG approved the standardized incident emergency protocol developed by the Dutch Creek Serious Accident Task Team, and issued

direction that these emergency medical procedures be adopted by all IMTs during daily operations.

- Although some of the procedures are specific to larger Type 1 and Type 2 incidents when key unit leader positions are filled, these same procedures and protocols can be adapted for local unit use when managing Type 5, 4, and 3 incidents as well as during normal field operations. Local unit emergency medical plans must take into account all types and management levels of incidents.
- All IMTs will use the standard Medical Incident Report in their Medical Plan and Communication protocols. It is found in the *IRPG* under Emergency Medical Care Guidelines (red pages) and with the Medical Plan (ICS-206-WF) form available at https://www.nwcg.gov/publications/ics-forms.

To achieve successful medical response, Agency Administrators will ensure that their units have completed the following items prior to each field season:

- A Medical Emergency Plan that identifies medical evacuation options, local/county/state/federal resource capabilities, capacities, ordering procedures, cooperative agreements, role of dispatch centers, and key contacts or liaisons.
- Standardized incident and communication center protocols identified in the Medical Incident Report section of the *IRPG*.
- For incidents that require the preparation of an IAP, Form ICS-206-WF will be used. This form is available at https://www.nwcg.gov/publications/ics-forms.

Air Ambulance Coordination

Unit and state/regional-level fire program managers should ensure that procedures, processes, and/or agreements for use of local and regional air ambulance services are stated in writing and effectively coordinated between the fire programs, the dispatch/logistics centers, and the service providers. These procedures, processes, and/or agreements should address contact frequencies, coordinate format requirements, and capabilities/limitations of the air ambulance (e.g., night flying, unimproved helispots, weather restrictions).

Incident Emergency Medical Services

Incident medical information can be found on the NWCG Incident Emergency Medical Subcommittee website at https://www.nwcg.gov/committees/incident-emergency-medical-subcommittee/resources.

NWCG has published *Clinical Treatment Guidelines for Wildland Fire Medical Units* (PMS 551). These guidelines establish a national approach for medical care during large incidents that expand the typical emergency management services (EMS) scope of practice to include the mission of managing and maintaining the health and wellness of wildland fire personnel. These guidelines

are available at https://www.nwcg.gov/committees/incident-emergency-medical-subcommittee/resources under Guides & Policies.

Home units that choose to utilize and support higher level medical responders to provide medical support for internal agency medical emergencies (beyond basic first aid/CPR) may do so; however, certification and credentialing must follow respective state laws and protocols unless there is other agency direction.

Required Treatment for Burn Injuries

The following standards will be used when any firefighter sustains burn injuries, regardless of agency jurisdiction.

After on-site medical response, initial medical stabilization, and evaluation are completed, the Agency Administrator or designee having jurisdiction for the incident and/or firefighter representative (e.g., Crew Boss, Medical Unit Leader, Compensations for Injury Specialist, etc.) should discuss and coordinate with the attending physician to ensure that a firefighter whose burn injuries meet any of the following burn injury criteria is appropriately referred to the nearest regional burn center. Burn injuries are often difficult to evaluate and may take 72 hours to manifest themselves. When there is any doubt as to the severity of or if criteria are met for a burn injury, the recommended action is to work closely with the treating physician to facilitate either a digital picture or telemedicine consult with a burn center or the referral and transport of the burned employee to the nearest burn center. It should be kept in mind, however, that not all burns require referral to a burn center. Special consideration should be given to referring a burned firefighter to a burn center if there is poor pain control during care at the medical facility. The following criteria from the American Burn Association (ABA) are meant to help guide the patient referral decision process.

The decision to refer a firefighter not meeting the following criteria to a regional burn center is made directly by the attending physician or may be requested of the physician by the Agency Administrator or designee having jurisdiction and/or firefighter representative after discussing medical follow-up beyond the ER. A possible solution is a referral to a burn center out-patient clinic for follow-up care after the ER visit.

After initial medical stabilization and evaluation are completed in a medical facility, the decision to refer the employee to a specialty care physician/facility is made only by the attending physician. Workers Compensation benefits may be denied in the event the employee is transported to a specialty care physician/facility without a referral from the attending physician after already being seen by a medical provider. A report prepared by a Physicians' Assistant must be countersigned by a physician to be accepted as medical evidence. A definition of "physician" can be found at

https://www.dol.gov/owcp/dfec/regs/compliance/DFECfolio/FECA-PT3/#30100.

The Agency Administrator or designee for the incident will coordinate with the employee's home unit to identify a workers compensation liaison to assist the injured employee with workers compensation claims and procedures.

During these rare events, close consultation must occur between the attending physician, the firefighter, the Agency Administrator or designee and/or firefighter representative, the firefighter's physician (if they have one), and the burn center to assure that the best possible care for the burn injuries is provided.

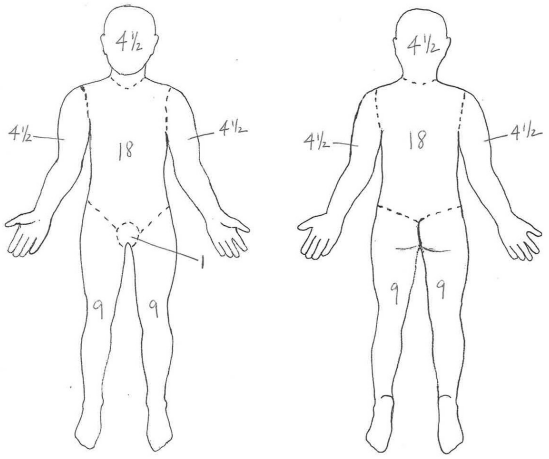
ABA Burn Injury Criteria

- Partial thickness burns (second degree) involving greater than 10% Total Body Surface Area (TBSA).
- Burns (second degree) involving the face, hands, foot, genitalia, perineum, or major joints.
- Third-degree burns of any size are present.
- Electrical burns, including lightning injury, or chemical burns are present.
- Inhalation injury is suspected.
- Burn injury in someone with preexisting medical disorders that could complicate management, prolong recovery or affect mortality (e.g., diabetes).
- Any patient with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, the patient may be initially stabilized in a trauma center before being transferred to a burn unit. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols.
- Burn injury in someone who will require special social, emotional or rehabilitative intervention (PTSD, severe anxiety, etc.).

Severity Determination

- **First Degree** (Superficial) Red, sometimes painful.
- **Second Degree** (Partial Thickness) Skin may be red, blistered, swollen, painful to very painful.
- **Third Degree** (Full Thickness) Whitish, charred, or translucent, no pin prick sensation in burned area.

Percentage Total Body Surface Area (TBSA) – Rule of 9s or Rule of Palms



Rule of 9s (pictures above): The body is divided into sections of 9 percent, or multiples of 9 percent, each as per the drawing.

Rule of Palms: Patient's palm equals 1% of their body surface. Estimate how many times the patient's palm could be placed over the burned areas to estimate the percentage of body that has been burned.

A map as well as a search engine of burn care facilities can be found at http://ameriburn.org/public-resources/find-a-burn-center/.

For additional NWCG incident emergency medical information see https://www.nwcg.gov/committees/incident-emergency-medical-subcommittee/resources under Guides & Policies.

Explosives, Munitions, and Unexploded Ordinance

When encountering explosives, munitions, unexploded ordinance (UXO), or suspected UXO, never pick up, handle, uncover, or touch suspected explosives or military munitions. Retreat and secure the area from entry. Immediately notify the local dispatch office, and gather as much information as possible from a safe distance.

Gather the following information and provide it to the dispatch center:

- Location of the explosive/munitions using a map, GPS coordinates, or landmarks (use of a GPS receiver is acceptable because it is a receive-only device).
- Picture of the explosive if it can be obtained from a safe distance.
- Who discovered the explosive/munitions and how they can be contacted.

- Condition of the explosive/munitions (e.g., buried, partially exposed, fully exposed, deteriorated, or punctured).
- Number and type of explosive/munitions visible (e.g., blasting caps, dynamite, bomb, grenade, etc.).
- Estimated size of explosive/munitions (e.g., length and diameter).
- Distinctive features of explosive/munitions (e.g., shape, color, markings).
- Nearby structures, if any (so inhabitants can be contacted and evacuated if necessary).
- Public access to the vicinity (i.e., open or closed to motor vehicles).

Never spend more time near munitions, suspected explosives, or UXO than is absolutely necessary. Only collect the above information as long as it is safe to do so from a distance. Never compromise safety to collect information.

Notifications

Local dispatch centers are responsible for notifying:

- Agency law enforcement;
- Unit safety officer;
- Agency Administrator; and
- Local law enforcement.

Discovery of Explosives/Munitions/UXO Associated with Former Defense Sites

The military retains liability and responsibility for munitions removal and for remedial actions on all lands transferred (or transferring) from the military to the land management agencies, and is responsible for explosives safety at former defense sites. The military must be notified for all UXO on these lands.

Local law enforcement is responsible for contacting the appropriate military authority. If the responsible military unit is unknown, then local law enforcement should contact the U.S. Army Forces Command (FORSCOM), 52nd Ordnance Group (EOD), at its 24-hour emergency response number, (931) 431-3824.

For additional UXO safety information, see the current *IRPG*.

Industrial and Naturally Occurring Hazardous Materials Exposure

Firefighters can potentially be exposed to hazards in the wildland fire environment. Encountered hazards can be both human and environmentally borne.

This section provides information and mitigations for most commonly encountered industrial and naturally occurring potential exposures. Recognizing there may be unique/area specific hazardous exposures (e.g., fungus causing valley fever, erionite, coal seams), the following standards apply to all hazards:

- Identifying unit-specific environmental hazards;
- Develop Risk Assessments/Job Hazard Analyses (RA/JHAs) for those hazards;
- Develop and provide specific training and standard operating procedures (SOPs);
- Provide briefings/training for those who may be exposed;
- If exposure is suspected, immediately disengage and leave the area; and
- Seek immediate medical attention if exposure symptoms occur.

Hazardous Materials Response

Hazardous materials response or control is not a functional responsibility of wildland fire suppression resources. These incidents have tremendous potential to cause significant health and life safety issues. In order to protect the health and safety of agency personnel, no employee shall be directed, or dispatched (including self-dispatching) to an incident involving hazardous materials unless they are provided with the required personal protective equipment and the appropriate certification level. Agency personnel on incidents involving hazardous material will limit their actions to those emergency services necessary for the immediate protection of themselves and the public and the prompt notification of appropriate public safety agencies. All wildland firefighters who are likely to witness or discover hazardous substances are required to complete their agency's First Responder Awareness (Level I) program.

Dump and Spill Sites

Employees that discover any unauthorized waste dump or spill site that contains indicators of potential hazardous substances (e.g., containers of unknown substances, pools of unidentifiable liquids, piles of unknown solid materials, unusual odors, or any materials out of place or not associated with an authorized activity) should take the following precautions:

- Follow the procedures in the *IRPG*;
- Treat each site as if it contains harmful materials;
- Do not handle, move, or open any container, breathe vapors, or make contact with the material;
- Move a safe distance upwind from the site;
- Contact appropriate personnel. Generally, this is the Hazardous Materials Coordinator for the local office; and
- Firefighters need to immediately report hydrogen sulfide (H_2S) or potential exposure and seek immediate medical care.
    - ***BLM/NPS/FWS –*** *Agencies require that all field personnel complete First Responder Awareness training. Firefighters are required to take an annual refresher for Hazardous Material protocol.*

The following general safety rules shall be observed when working with chemicals:

- Read and understand the Safety Data Sheets.
- Keep the work area clean and orderly.
- Use the necessary safety equipment.
- Label every container with the identity of its contents and appropriate hazard warnings.
- Store incompatible chemicals in separate areas.
- Substitute less toxic materials whenever possible.
- Limit the volume of volatile or flammable material to the minimum needed for short operation periods.
- Provide means of containing the material if equipment or containers should break or spill their contents.

Wildland Fires In or Near Oil/Gas Operations

For units with oil and gas operations within their jurisdiction, the following are the minimum standard operating procedures to help ensure the health and safety of wildland firefighters:

- Firefighters shall receive annual oil and gas hazard recognition and mitigation training;
- Local unit shall complete a JHA/RA for wildland fire activities in oil and gas areas and provide a copy with a briefing to all local and incoming resources;
- Establish Response Protocols and proper decontamination procedures to minimize exposure to additional employees, equipment, and facilities. Protocols will include notification procedures to respective oil and gas company(s);
- Ensure oil and gas resource advisors are consulted;
- Ensure that at least one member of each squad or engine crew is knowledgeable in the use and data interpretation of the H_2S gas monitor. Training on the device will include at a minimum:
  - Equipment charging and maintenance of sensors;
  - Startup, zeroing, calibration, and bump testing procedures as recommended by the manufacturer; and
  - How the monitor elicits a warning alarm (visual, auditory, vibration).
- Understand Peak Reading, Short Term Exposure Limits (STEL), and Time Weighted Averages;
  - Understand how to set the monitors alarm threshold.
- The monitor's alarm shall be set at the current American Conference on Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (10 PPM 2008) and STEL (15 PPM 2008);
- If H_2S gas is encountered, immediately disengage and leave area; and
- Do not establish incident base camps or staging areas in or near oil and gas operations.

The following websites provide additional information and training resources:

- https://www.nifc.gov/video/HazMat.wmv
- http://www.wildfirelessons.net/irdb
- www.nfpa.org
- A template for briefing Incident Management Teams is available in the "Additional Resources" section of the NIFC Safety website at https://www.nifc.gov.

Wildland Fires In or Near Radioactive Locations

Abandoned uranium mines and other potential radioactive sites exist in many areas of public lands. When these areas are identified, local management should provide information and direction on operations to be used. General knowledge and understanding of potential radiation exposure is necessary for wildland fire program management to make valid risk management decisions in these areas.

The following websites provide this information and general guidelines:

- https://www.nifc.gov/policies/red_book/doc/RadiationDocument.pdf
- https://www.nifc.gov/policies/red_book/doc/RadiationGuidance.pdf

Wildland Fires In or Near Coal Seams

Coal is naturally occurring black or brownish rock usually located in rock strata in layers or veins, coal beds or coal seams. Exposed coal seams are abundant through southeast and central Montana, western North Dakota, South Dakota, and Alaska. A coal seam fire is the smoldering of an exposed or underground coal deposit.

Risks: Coal seam fires pose a serious problem that can be a hazard to firefighter's health and safety. Coal seam fires can emit toxic gases, including carbon monoxide, sulfur dioxide and other potentially hazardous gases.

Carbon Monoxide is a colorless, odorless and tasteless gas that can be highly toxic. Sulfur Dioxide is a colorless gas with a characteristic of an irritating, pungent odor and is also highly toxic. Some symptoms of exposure to these gases may include headaches, nausea, dizziness, fatigue, shortness of breath, coughing and eye irritation.

Because of the variances in symptoms and exposure levels, seek medical attention for a complete diagnosis if firefighters have been exposed to toxic gases from coal seam fires and symptoms persist. Additionally firefighters exposed to coal ash, smoke or vapor should trade in their PPE for fresh PPE. Individually bag PPE that has been contaminated.

Required Actions/Precautions: Firefighters are typically not equipped or trained for coal seam fires and should not attempt to extinguish such fires with hand tools and engines.

Putting water on coal seam fires is normally useless. Mitigation crews will need to excavate the burning coal seam and mix the hot material with soil and water to cool. The area can be reclaimed by backfilling the seam and re-vegetating the disturbed area.

Signs of a coal seam fire may include a rotten egg smell, smoking white ash and continuous or non-continuous lines of what appears to be smoldering black rock (coal) where the flame may or may not be visible. Avoid low lying terrain in known coal seam fire areas especially early morning when air temps are cool. Gas tends to sink when air is cool and will accumulate in low lying areas.

Do not depend on sense of smell to detect coal seam fires. At high concentrations the sense of smell will be almost immediately overwhelmed or become numb. At lower levels, the sense of smell will slowly deteriorate as levels build in the blood stream. Do not stand downwind of coal smoke under any conditions especially during suppression operations.

Report the location of all coal seam fires to the incident commander or supervisor. ICs should notify agency representatives of locations of coal seam fires. Agencies should have resource advisors notify incoming incident command teams and firefighting resources of known locations of exposed coal seams, coal mines or abandoned coal mines adjacent to ongoing incidents and the risks and precautions to take when working around coal seam fires.

Hazardous Water Sources

Many water sources used during wildland fire operations may appear harmless, but contain hazardous materials (e.g., hydraulic fracturing fluid, cyanide, sewage, corrosives). These hazardous water sources may pose threats to personnel health and firefighting equipment. Indicators that a water source may be hazardous include proximity to active or inactive mining operations, gas/oil wells, water treatment facilities, or other industrial operations. In many cases, these hazardous water sources may not be fenced and no warning signs may be present.

Fire personnel should evaluate water sources to ensure they do not contain potentially hazardous materials. If unsure of the contents of a water source, personnel should not utilize the water source until its contents can be verified. Dispatch centers, Resource Advisors, or on-scene personnel can assist with verification of safe water sources. Information about known hazardous water sources should be included in operational briefings.

Hydrogen Cyanide (HCN) Exposure

Synthetic materials such as plastics, nylon, Styrofoam®, and polyurethane can produce HCN. HCN exposure can disrupt the body's ability to use oxygen, cause asphyxia, and cause carbon monoxide poisoning. Common items such as

sofas, carpeting, vehicles, and other products routinely found in the wildland can produce smoke with HCN.

Symptoms of HCN poisoning include bitter almond odor on breath, burning taste in mouth, stiffness of lower jaw, feeling of numbness or constriction in throat, weakness, and headache.

Follow hazardous materials protocols contained in the IRPG to mitigate exposure to HCN. If personnel may have been exposed to HCN, immediate referral to a health care facility capable of toxicology testing and treatment of HCN exposure is required.

Safety for Personnel Visiting Fires

A wide variety of personnel such as Agency Administrators, other agency personnel, dignitaries, members of the news media, etc., may visit incidents. The following standards apply to all visitors.

Visits to Incident Base Camps or Non-Fireline Field Locations

Recommended field attire includes:

- Lace-up, closed toe shoes/boots with traction soles and ankle support.
- Trousers.
- Long-sleeve shirt.
- For agency personnel, the field uniform is appropriate.

Fireline Logistical Support

Personnel performing fireline logistical support duties (e.g., bus drivers, supply delivery/retrieval, incident drivers, non-tactical water delivery, etc.) must meet the following requirements:

- Complete fire shelter training.
- Required Fireline PPE as referenced in the Personal Protective Equipment section of this chapter.
- Receive an incident briefing.
- Ensure adequate communications are established.
- Other requirements (if any) established by the Incident Commander.
- A Work Capacity Test (WCT) is not required unless required for a specific position defined in the PMS 310-1.

Minimum Requirements for Visits to the Fireline/RX Burns

Visits (such as media visits or political/administrative tours) to hazardous areas of the fire or areas that pose a fire behavior threat will be managed by meeting the requirements below:

- Visits to the fireline must have the approval of the IC/Burn Boss.
- Visitors must maintain communications with the DIVS or appropriate fireline supervisor of the area they are visiting.

- Required Fireline PPE as referenced in the Personal Protective Equipment section of this chapter.
- Required field attire:
  - Undergarments made of 100 percent or the highest possible content of natural fibers or flame-resistant materials.
- Required equipment/supplies:
  - Hand tool.
  - Water canteen.

Visitors to the Fireline/RX Burns may be "Non-Escorted" or "Escorted" depending on the following requirements:

Non-Escorted Visits

Visitors must have an incident qualification with a minimum physical fitness level of "light" to visit the fireline unescorted.

- Must have adequate communications and radio training.
- Completed the following training:
  - Introduction to Fire Behavior (S-190).
  - Firefighter Training (S-130).
  - Annual Fireline Safety Refresher Training, including fire shelter training.
- Deviation from these requirements must be approved by the IC or Burn Boss.

The law enforcement physical fitness standard is accepted as equivalent to a "light" WCT work category.

Escorted Visits

All visitors lacking the above training and physical requirements must be escorted while on the fireline.

- Visitors must receive training in the proper use of Fireline PPE.
- Requirement for hand tool and water to be determined by escort.
- Visitors must be able to walk in mountainous terrain and be in good physical condition with no known limiting conditions.
- Escorts must be minimally qualified as Single Resource Boss.
- Deviation from these requirements must be approved by the IC or Burn Boss.

Helicopter Observation Flights

Visitors who take helicopter flights to observe fires must receive approval from the Incident Commander, a passenger briefing, and meet the following requirements:

- Required PPE:
  - Flight helmet
  - Leather boots

- Flame-resistant clothing
- All leather or leather and aramid gloves

Occasional passengers/visitors have no training requirement, but a qualified flight manager must supervise loading and unloading of passengers.

Fixed-Wing Observation Flights

No PPE is required for visitors and agency personnel who take fixed-wing flights to observe fires. However, a passenger briefing is required, and the flight level must not drop below 500 feet AGL.

Six Minutes for Safety Training

It is recommended that daily Six Minutes for Safety training be conducted that focuses on high-risk, low frequency activities that fire personnel may encounter during a fire season. A daily national Six Minutes for Safety briefing can be found at http://www.wildfirelessons.net/6minutesforsafety or within the National Incident Management Situation Report.

SAFENET

SAFENET is a form, process, and method for reporting and resolving safety concerns encountered in any aspect (e.g., preparedness, training, etc.) of wildland fire or all hazard incident management. The information provided on the form will provide important, safety-related data to the National Interagency Fire Center, and determine long-term trends and problem areas.

The objectives of the form and process are:

- To provide immediate reporting and correction of unsafe situations or close calls in wildland fire.
- To provide a means of sharing safety information throughout the fire community.
- To provide long-term data that will assist in identifying trends.
- Primarily intended for wildfire and prescribed fire situations, however, SAFENET can be used for training and all hazard events.

Individuals who observe or who are involved in an unsafe situation shall initiate corrective actions if possible, and then report the occurrence using SAFENET. You are encouraged, but not required, to put your name on the report.

Prompt replies to the originator (if name provided), timely action to correct the problem, and discussion of filed SAFENETs at local level meetings encourage program participation and active reporting.

SAFENET is not the only way to correct a safety-related concern and it does not replace accident reporting or any other valid agency reporting method. It is an

efficient way to report a safety concern. It is also a way for front line firefighters to be involved in the daily job of being safe and keeping others safe, by documenting and helping to resolve safety issues. SAFENETs may be filed:

- Electronically at https://safenet.nifc.gov;
- Verbally by telephone at 1-888-670-3938; or
- By SAFENET Field Card.

The SAFENET Field Card can be used by wildland fire personnel to immediately identify and report unsafe situations or close calls that should receive immediate resolution/mitigation. If the situation cannot be resolved at the local/incident level, the reporting individual is encouraged to follow the formal SAFENET submission process stated above. SAFENET Field Cards are available at https://safenet.nifc.gov.

Safety Alert System

The Safety Alert system is intended as another mechanism to provide safety related information to the field. The expectation is that the messages will continue to be forwarded within the fire community, and that they will receive a wide distribution in a relatively short period of time. There are three levels of Safety Alert:

- Safety Warning – A warning of a safety hazard that poses an imminent threat to life or property.
- Safety Advisory – An advisory on safety information that isn't related to imminent or potential threats of injury.
- Safety Bulletin – A factual confirmation of a serious accident, incident or fatality within the fire community.

A database of all bulletins can be found at https://www.nifc.gov/safetyAlerts/index.html.

Accident/Injury Reporting

The Occupational Safety and Health Administration (OSHA) mandates that all accidents and injuries be reported in a timely manner. This is important for the following reasons:

- To protect and compensate employees for incidents that occur on-the-job.
- To assist supervisors and safety managers in taking corrective actions and establish safer work procedures.
- To determine if administrative controls or Personal Protective Equipment are needed to prevent a future incident of the same or similar type.
- To provide a means for trend analysis.

Agency Reporting Requirements

Employees are required to immediately report to their supervisor every job-related accident. Managers and supervisors shall ensure that an appropriate level of investigation is conducted for each accident and record all personal injuries and property damage. Coordinate with your human resources office or administrative personnel to complete appropriate Office of Worker's Compensation (OWCP) forms. Reporting is the responsibility of the injured employee's home unit regardless of where the accident or injury occurred.

- ***BLM/NPS/FWS –*** *Employees will report accidents using the Safety Management Information System (SMIS) at https://www.smis.doi.gov/. Supervisors shall complete SMIS report within six working days after the accident/injury.*
- ***FS –*** *Employees will use the eSafety system through the Forest Service Dashboard at http://fsweb.asc.fs.fed.us/HRM/owcp/WorkersComp_index.php//.*
- ***BIA –*** *In addition to reporting accidents using the Safety Management Information System (SMIS), Fire Management Officers will complete the Early Alert at https://www.bia.gov/bia/ots/dfwfm/bwfm/safety, and submit to Regional Fire Management Officers within 24 hours after the accident/injury.*

OSHA Reporting Requirements

For accidents/injuries meeting the Serious Accident criteria (found in Chapter 18), OSHA must be notified within 8 hours.

For other work-related accidents/injuries requiring in-patient hospitalizations, amputations, or loss of an eye, OSHA must be notified within 24 hours. In-patient hospitalization is defined as formal admission to the in-patient service of a hospital or clinic for care or treatment (does not include admission for observation or diagnostic testing only).

Supervisors will coordinate with the unit safety manager where the accident/injury occurred to ensure notifications are made to the appropriate OSHA regional office.

OSHA reporting information is available at https://www.osha.gov/recordkeeping2014/index.html.

Critical Incident Management

The NWCG has published the *Agency Administrator's Guide to Critical Incident Management* (PMS 926). This guide is designed as a working tool to assist Agency Administrators with the chronological steps in managing a critical incident. This document includes a series of checklists, which outline Agency Administrator's and other functional area's oversight and responsibilities. The guide is not intended to replace local emergency plans or other specific guidance

that may be available, but should be used in conjunction with existing agency policy, line of duty death (LODD) handbooks, or other critical incident guidance. Local units should complete the guide or equivalent, and review and update at least annually.

Critical Incident Stress Management (CISM)

CISM is a comprehensive, integrated, systematic, and multicomponent crisis intervention program that was developed to manage traumatic experiences. It is a package of tactics that are designed to mitigate the impact of a traumatic event, facilitate normal recovery processes, restore adaptive function, and identify people who would benefit from additional support services. CISM interventions services can be applied to wildland fire, law enforcement, or other emergency responses. CISM interventions should never be used for grief counseling, mediation or a replacement for mental health care professionals. The Agency Administrator is responsible for identifying an event as a critical incident.

Critical Incident Peer Support (CIPS)

Critical Incident Peer Support (CIPS) is an intervention tactic designed for colleagues or people of "mutual respect" to help each other through difficult situations. It is the foundation of the interagency wildland fire CISM program since peers understand the unique traumas, fears, job related stresses, and offer instant trust, respect, credibility, and empathy. Camaraderie among peers has credibility that academic training cannot create.

Critical Incident Peer Support Groups

CIPS Groups are assembled at the time of request and can be ordered through the dispatch/coordination system. For more information go to https://gacc.nifc.gov/cism/.

Chapter 8
Interagency Coordination and Cooperation

Introduction

Fire management planning, preparedness, prevention, suppression, restoration and rehabilitation, monitoring, research, and education will be conducted on an interagency basis with the involvement of cooperators and partners. The same capabilities used in wildland fire management will also be used, when appropriate and authorized, on non-fire incidents in the United States, and on both wildland fires and non-fire incidents internationally.

National Wildland Fire Cooperative Agreements

USDOI and USDA Interagency Agreement for Fire Management

The objectives of the *Interagency Agreement for Fire Management Between the Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA), National Park Service (NPS), Fish and Wildlife Service (FWS) of the United States Department of the Interior (DOI) and the Forest Service (FS) of the United States Department of Agriculture* are:

- To provide a basis for cooperation among the agencies on all aspects of wildland fire management and as authorized in non-fire emergencies.
- To facilitate the exchange of personnel, equipment (including aircraft), supplies, services, and funds among the agencies.

DOI, USDA, and DOD Interagency Agreement

The purpose of the *Interagency Agreement for the Provision of Temporary Support During Wildland Firefighting Operations among the United States Department of the Interior, the United States Department of Agriculture, and the United States Department of Defense* is:

- To establish the general guidelines, terms and conditions under which the National Interagency Fire Center (NIFC) will request, and DOD will provide, temporary support to NIFC in wildfire emergencies occurring within all 50 States, the District of Columbia, and all U.S. Territories and Possessions, including fires on State and private lands. It is also intended to provide the basis for reimbursement of DOD under the Economy Act.

These and other agreements pertinent to interagency wildland fire management can be found in their entirety at https://www.nifc.gov/nicc/logistics/references.htm.

National Wildland Fire Management Structure

Wildland Fire Leadership Council (WFLC)

The WFLC is a cooperative, interagency body dedicated to achieving consistent implementation of the goals, actions, and policies in the National Fire Plan and the Federal Wildland Fire Management Policy. The WFLC provides a forum for high-level dialogues between federal and non-federal entities to set strategic direction for national fire management.

The Council consists of the Department of Agriculture's Undersecretary for Natural Resources and Environment, the Deputy Undersecretary for Natural Resources and Environment, and the Chief of the U.S. Forest Service; the Department of the Interior's (DOI) Assistant Secretary for Policy, Management and Budget, the Directors of the National Park Service, Bureau of Indian Affairs, Bureau of Land Management, Fish and Wildlife Service, and U.S. Geological Survey; the Department of Homeland Security's U.S. Fire Administration Administrator; the President of the Intertribal Timber Council; two state governors selected from the National Governors Association; a county commissioner serving as a member of the National Association of Counties; a mayor serving as a member of the National League of Cities; a State Forester serving at the request of a senior state elected official; and a fire chief serving at the request of a senior local government elected official.

The Council is coordinated by the Department of Agriculture's Deputy Undersecretary for Natural Resources and Environment and DOI's Assistant Secretary for Policy, Management and Budget.

Wildland Fire Executive Council (WFEC)

The WFEC is an advisory council that provides recommendations on national wildland fire management to the secretaries of Agriculture and Interior through WFLC. Members include the Director, USDA FS Fire and Aviation Management; the Director, DOI Office of Wildland Fire; the Deputy Administrator, DHS U. S. Fire Administration; an NWCG Executive Board representative; a National League of Cities representative; an Intertribal Timber Council representative; a Fire Committee representative from the National Association of State Foresters; a National Association of Counties representative; an International Association of Fire Chiefs representative, and a National Governors Association representative.

Federal Fire Policy Council (FFPC)

The FFPC provides a common national federal agency approach to wildland fire management. FFPC ensures that wildland fire management policies, programs, activities, and budgets are coordinated and consistent among and between the member agencies and strives for coordinated and consistent policies and programs with non-federal partner and cooperator agencies. FFPC sets strategic policy and program direction, provides coordinated recommendations to the

Secretaries of Agriculture, the Interior, and Homeland Security and resolves inconsistencies among and between federal wildland fire programs.

The FFPC is accountable and has the authority to:

- Set the vision and provide leadership for the federal wildland fire program.
- Set national federal strategic wildland fire program goals and priorities.
- Establish the Fire Executive Council.

The FFPC is responsible to:

- Provide coordinated federal wildland fire management policy direction.
- Resolve policy and program management inconsistencies.
- Set strategic budget priorities for wildland fire management.
- Coordinate and communicate with non-federal entities.

The FFPC is composed of the USDA Deputy Under Secretary for National Resources and Environment; the Chief of the Forest Service and the Deputy Chief of State and Private Forestry; and for DOI the Assistant Secretaries for Policy, Management and Budget, Fish and Wildlife and Parks, Indian Affairs, Land and Minerals Management, and Water and Science; the Bureau Directors of the Bureau of Land Management, the Fish and Wildlife Service, the National Park Service, the Bureau of Indian Affairs, and the US Geological Survey; the Deputy Assistant Secretary – Law Enforcement, Security and Emergency Management; the Assistant Administrator of DHS-US Fire Administration; and the Environmental Protection Agency representative.

Fire Executive Council (FEC)

The FEC provides a common, integrated, and coordinated federal agency approach to wildland fire policy, leadership, budget, and program oversight. Within the broad strategic direction and vision set by the FFPC, the FEC ensures that the wildland fire management policies, programs, activities, and budgets are coordinated and consistent among and between the member agencies. FEC sets policy and program direction for federal wildland fire program implementation, provides coordinated recommendations to the FFPC, and resolves inconsistencies among and between federal wildland fire programs. FEC ensures policy and program coordination and integration with non-fire management programs and activities as well as non-federal partners and cooperators.

The FEC is accountable and has the authority to:

- Establish strategic federal fire program budget direction and priorities.
- Ensure coordinated federal policy development.
- Develop federal business requirements and priorities.

The FEC is responsible and has the authority to:

- Provide coordinated federal interagency executive level wildland fire policy leadership, direction, and program oversight.
- Provide coordinated recommendations and advice to the FFPC.

- Provide wildland fire policy and program direction to the Fire Management Board (FMB).
- Provide strategic policy and program integration with resource management, aviation, and other related program areas.
- Coordinate and communicate with other non-federal entities.
- Set strategic budget direction and recommendations.
- Establish strategic direction and requirements for wildland fire information and technology, wildland fire administrative/business support, scientific and research support, and other program areas.
- Approve wildland fire policy, as appropriate.
- Resolve policy and program management inconsistencies and differences.
- Oversee compliance with policy, budget, and program direction.
- Charter the Fire Management Board.
- Charter the National Wildfire Coordinating Group (NWCG) along with the Intertribal Timber Council and the National Association of State Foresters.

The FEC is composed of the Director and Deputy Directors, USFS Fire and Aviation Management (USDA); the Director, Office of Wildland Fire, Director, Office of Aviation Services, Fire Executives from BLM, NPS, BIA, and USFWS (DOI); and the US Fire Administration Chief, Emergency Support Branch, National Fire Programs (USDHS-FEMA).

Fire Management Board (FMB)

The FMB provides a mechanism for coordinated and integrated federal wildland fire program management and implementation. The FMB, taking strategic policy and program direction from the FEC, directs, coordinates and oversees the development and implementation of federal wildland fire policy and programs to provide consistent and cost-effective program management.

The FMB is accountable and has the authority to:

- Coordinate federal program management and oversight.

The FMB is responsible for and has the authority to:

- Provide common, integrated implementation strategies, approaches, programs, and oversight for implementing federal wildland fire policies.
- Provide federal wildland fire program strategy, policy, budget and program recommendations to the FEC.
- Provide recommendations on information and technology requirements, priorities, and investments to the Wildland Fire Information and Technology Executive Board.
- Provide recommendations on science and research requirements and priorities necessary to support wildland fire program management activities.
- Identify requirements and recommend priorities for standards necessary to ensure interoperability of intergovernmental wildland fire activities and operations.

- Consult with our non-federal partners.
- Develop recommendations for interagency wildland fire administrative/business support needs.

The FMB is composed of the USFS Fire and Aviation Management Assistant Directors (USDA); the Deputy Director, Office of Wildland Fire, the Deputy Director, Office of Aviation Services, the Fire Directors for BIA, BLM, USFWS, and NPS (DOI); and the Wildfire Program Manager, US Fire Administration (USDHS-FEMA).

National Wildfire Coordinating Group (NWCG)

The NWCG is made up of the USFS, BIA, BLM, FWS, and NPS; Intertribal Timber Council; U.S. Fire Administration (USFA); state forestry agencies through the National Association of State Foresters (NASF); and the International Association of Fire Chiefs. The mission of the NWCG is to provide leadership in establishing, maintaining, and communicating consistent interagency standards, guidelines, and qualifications for wildland fire management. Its goal is to provide more effective execution of each agency's fire management program. The group provides a formalized system to agree upon standards of training, equipment, qualifications, and other operational functions.

Interior Fire Executive Council (IFEC)

The Interior Fire Executive Council (IFEC) provides interagency coordination and interagency executive-level wildland fire policy leadership, direction, and program oversight. IFEC is the focal point for discussing wildland fire policy issues that affect the DOI and provides a forum for gathering the interests of the DOI bureaus to formulate a DOI recommendation and/or position to be taken forward to the Wildland Fire Executive Council (WFEC).

The IFEC is composed of the Director, Office of Wildland Fire (OWF) and the four DOI fire directors and their respective senior executives, as well as the Director, Aviation Management Directorate and a representative from USGS.

Office of Wildland Fire (OWF)

The OWF is a Department of the Interior organization responsible for managing and overseeing all wildland fire management activities executed by the bureaus. OWF coordinates the Department's wildland fire programs within the Department and with other federal and non-federal partners, to establish legally and scientifically based Department-wide policies and budgets, and to provide strategic leadership and oversight, that result in safe, comprehensive, cohesive, efficient, and effective wildland fire programs for the nation consistent with the bureaus' statutory authorities and constraints.

For more information about the Office of Wildland Fire and the Federal wildland fire management organization, follow the links under "About OWF" at https://www.doi.gov/wildlandfire.

Multi-Agency Management and Coordination

National Multi-Agency Coordinating (NMAC) Group

National multi-agency coordination is overseen by the NMAC Group, which consists of one representative each from the following agencies: BLM, FWS, NPS, BIA, FS, NASF, and the USFA, who have been delegated authority by their respective agency directors to manage wildland fire operations on a national scale when fire management resource shortages are probable. The delegated authorities include:

- Provide oversight of general business practices between the NMAC group and the Geographic Area Multi-Agency Coordination groups.
- Establish priorities among geographic areas.
- Activate and maintain a ready reserve of national resources for assignment directly by NMAC as needed.
- Implement decisions of the NMAC.

The NMAC Operating Plan, NMAC Correspondence, and other resources and references are at https://www.nifc.gov/nicc/administrative/nmac/index.html.

Geographic Area Multi-Agency Coordinating (GMAC) Groups

Geographic area multi-agency coordination is overseen by GMAC Groups, which are comprised of geographic area (State, Region) lead administrators or fire managers from agencies that have jurisdictional or support responsibilities, or that may be significantly impacted by resource commitments. GMAC responsibilities include:

- Establish priorities for the geographic area.
- Acquire, allocate, and reallocate resources.
- Provide NMAC with National Ready Reserve (NRR) resources as required.
- Issue coordinated and collective situation status reports.

National Dispatch/Coordination System

See Chapter 19.

Local and Geographic Area Drawdown

See Chapter 19.

National Ready Reserve (NRR)

See Chapter 19.

Interagency Incident Business Management Handbook

All federal agencies have adopted the NWCG *Interagency Incident Business Management Handbook* (IIBMH) as the official guide to provide execution of each agency's incident business management program. Unit offices, geographic areas, or NWCG may issue supplements, as long as policy or conceptual data is not changed.

Since consistent application of interagency policies and guidelines is essential, procedures in the IIBMH will be followed. Agency manuals provide a bridge between manual sections and the IIBMH so that continuity of agency manual systems is maintained and all additions, changes, and supplements are filed in a uniform manner.

- ***DOI –*** *The Department of the Interior All Hazards-Supplement to the Interagency Incident Business Management Handbook establishes business management guidelines for the Department of the Interior's (DOI's) all-hazards incidents. The DOI Supplement is available at https://www.doi.gov/emergency/emergency-policy.cfm.*
- ***BLM –*** *The IIBMH replaces BLM Manual Section 1111.*
- ***NPS –*** *Refer to RM-18.*
- ***FWS –*** *Refer to Service Manual 621 FW 1Wildland Fire Management.*
- ***FS –*** *Refer to FSH 5109.34.*

Standards for Cooperative Agreements

Agreement Policy

Agreements will be comprised of two components: the actual agreement and an operations plan. The agreement will outline the authority and general responsibilities of each party and the operations plan will define the specific operating procedures.

Any agreement which obligates federal funds or commits anything of value must be signed by the appropriate warranted contracting officer. Specifications for funding responsibilities should include billing procedures and schedules for payment.

Any agreement that extends beyond a fiscal year must be made subject to the availability of funds. Any transfer of federal property must be in accordance with federal property management regulations.

All agreements must undergo periodic joint review; and, as appropriate, revision. Assistance in preparing agreements can be obtained from local or state office fire and/or procurement staff.

All appropriate agreements and operating plans will be provided to the servicing dispatch center. The authority to enter into interagency agreements is extensive.

- ***BLM –*** *BLM Manual 9200, Departmental Manual 620 DM, the Reciprocal Fire Protection Act, 42 U.S.C. 1856, and the Federal Wildland Fire Management Policy and Program Review.*
- ***NPS –*** *Chapter 2, Federal Assistance and Interagency Agreements Guideline (DO-20), and the Departmental Manual 620 (DM-620). NPS-RM-18, Interagency Agreements, Release Number 1, 02/22/99.*
- ***FWS –*** *Service Manual, Departmental Manual 620 DM, and Reciprocal Fire Protection Act, 42U.S.C. 1856.*
- ***FS –*** *FSM 1580, 5106.2 and FSH 1509.11.*

Types of Agreements

National Interagency Agreements

The national agreement, which serves as an umbrella for interagency assistance among federal agencies is the interagency agreement between the Bureau of Land Management, Bureau of Indian Affairs, National Park Service, Fish and Wildlife Service of the United States Department of the Interior, and the Forest Service of the United States Department of Agriculture. This and other national agreements give substantial latitude while providing a framework for the development of state and local agreements and operating plans.

Regional/State Interagency Agreements

Regional and state cooperative agreements shall be developed for mutual assistance. These agreements are essential to the fire management program. Concerns for area-wide scope should be addressed through these agreements.

Local Interagency Agreements

Local units are responsible for developing agreements with local agencies and fire departments to meet mutual needs for suppression and/or prescribed fire services.

Emergency Assistance

Approved, established reimbursable agreements are the appropriate and recommended way to provide emergency assistance. If no agreements are established, refer to your Agency Administrator to determine the authorities delegated to your agency to provide emergency assistance.

Contracts

Contracts may be used where they are the most cost-effective means of providing for protection commensurate with established standards. A contract, however, does not absolve an Agency Administrator of the responsibility for managing a fire program.

Contracts should be developed and administered in accordance with Federal Acquisition Regulations. In particular, a contract should specify conditions for abandonment of a fire in order to respond to a new call elsewhere.

Elements of an Agreement

The following elements should be addressed in each agreement:

- The authorities appropriate for each party to enter in an agreement.
- The roles and responsibilities of each agency signing the agreement.
- An element addressing the cooperative roles of each participant in prevention, pre-suppression, suppression, fuels, and prescribed fire management operations.
- Reimbursements/Compensation – All mutually approved operations that require reimbursement and/or compensation will be identified and agreed to by all participating parties through a cost-share agreement. The mechanism and timing of the funding exchanges will be identified and agreed upon.
- Appropriation Limitations – Parties to this agreement are not obligated to make expenditures of funds or reimbursements of expenditures under terms of this agreement unless the Congress of the United States of America appropriates such funds for that purpose by the Counties of _____, by the Cities of _____, and/or the Governing Board of Fire Commissioners of_____.
- Liabilities/Waivers – Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement unless gross negligence on any part of any party is determined.
- Termination Procedure – The agreement shall identify the duration of the agreement and cancellation procedures.
- A signature page identifying the names of the responsible officials shall be included in the agreement.
    - ***BLM –*** *Refer to Chapter 2, Agreements with Cooperators (Rangeland Fire Protection Association (RFPA) and Local Fire Department).*
    - ***NPS –*** *Refer to DO-20 for detailed instructions and format for developing agreements.*
    - ***BIA –*** *Refer to Notification of Required Use of Cooperative Agreement Template in response to Office of Inspector General's Independent Report on the "Bureau of Indian Affairs Wildland Fire Suppression" (memo dated September 06, 2013) and Clarification of Authorities on Implementation of the Wildland Fire Cooperative Agreement Template (memo dated May 28, 2014).*

Annual Operating Plans (AOPs)

Annual Operating Plans shall be reviewed, updated, and approved prior to the fire season. The plan may be amended after a major incident as part of a joint debriefing and review. The plan shall contain detailed, specific procedures which will provide for safe, efficient, and effective operations.

General Elements of an Annual Operating Plan

The following items should be addressed in the AOP:

- **Mutual Aid**
  The AOP should address that there may be times when cooperators are involved in emergency operations and unable to provide mutual aid. In this case, other cooperators may be contacted for assistance.
- **Command Structure**
  The Incident Command System (ICS) will be used to manage all fires under federal jurisdiction. Unified command should be used, as appropriate, whenever multiple jurisdictions are involved, unless one or more parties request a single agency IC. If there is a question about jurisdiction, fire managers should mutually decide and agree on the command structure as soon as they arrive on the fire; Agency Administrators should confirm this decision as soon as possible. Once this decision has been made, the incident organization in use should be relayed to all units on the incident as well as dispatch centers. In all cases, the identity of the IC must be made known to all fireline and support personnel.
- **Communications**
  In mutual aid situations, a common designated radio frequency identified in the AOP should be used for incident communications. All incident resources should utilize and monitor this frequency for incident information, tactical use, and changes in weather conditions or other emergency situations. In some cases, because of equipment availability/ capabilities, departments/agencies may have to use their own frequencies for tactical operations, allowing the "common" frequency to be the link between departments. It is important that all department/agencies change to a single frequency or establish a common communications link as soon as practical. Clear text should be used. Avoid personal identifiers, such as names. This paragraph in the AOP shall meet Federal Communications Commission (FCC) requirements for documenting shared use of radio frequencies.
- **Distance/Boundaries**
  Responding and requesting parties should identify any mileage limitations from mutual boundaries where "mutual aid" is either pay or non-pay status. Also, for some fire departments, the mileage issue may not be one of initial attack "mutual aid," but of mutual assistance. In this situation, you may have the option to make it part of this agreement or identify it as a situation where the request would be made to the agency having jurisdiction, which would then dispatch the fire department.
  - ***BLM –*** *Agreements/AOPs with Department of Defense, best practices (including UXO protocols) are located on the BLM Fire Operations website http://web.blm.gov/internal/fire/fire_ops/toolbox.htm.*
- **Time/Duration**
  Responding and requesting parties should identify time limitations (usually 24 hours) for resources in a non-reimbursable status, and "reimbursable rates" when the resources are in a reimbursable status.

- **Qualifications/Minimum Requirements**
  The National Wildfire Coordinating Group publication, *National Incident Management System: Wildland Fire Qualification System Guide* (PMS 310-1), outlines the minimum requirements for training, experience, physical fitness level, and currency standards for wildland fire positions, which all participating agencies have agreed to meet for national mobilization.
  - During initial action, all agencies (federal, state, local and Tribal) accept each other's standards. Once jurisdiction is clearly established, then the standards of the agency(s) with jurisdiction prevail.
    - ***BLM –*** *BLM may accept the standards of any local cooperator through the duration of an incident when the cooperator has a current cooperative fire response agreement with BLM, and the cooperator is in compliance with the agreement. Personnel from agencies that do not subscribe to the NWCG qualification standards may be used on agency managed fires, and must only be assigned to duties commensurate with their competencies, qualifications, and equipment capabilities.*
  - Prior to the fire season, federal agencies should meet with their state, local, and Tribal agency partners and communicate the qualification/ certification standards that will apply to the use of local, non-federal firefighters during initial action on fires on lands under the jurisdiction of a federal agency.
  - The Geographic Area Coordinating Group should determine the application of 310-1 qualification/certification standards for mobilization within the geographic area.
  - On a fire where a non-federal agency is also an agency with legal jurisdiction, the standards of that agency apply.
  - The AOP should address qualification and certification standards applicable to the involved parties.
- **Reimbursement/Compensation**
  Compensation shall be as close to actual expenditures as possible. This should be clearly identified in the AOP. Vehicles and equipment operated under the federal excess property system will only be reimbursed for maintenance and operating costs.
- **Cooperation**
  The annual operating plan will be used to identify how the cooperators will share expertise, training, and information on items such as prevention, investigation, communication plans, safety, training, ICS, and the integration of resources.
- **Agency Reviews and Investigations**
  Annual operating plans should describe processes for conducting agency specific reviews and investigations. AOPs should also describe processes for accident notifications to the appropriate fire managers, line officers, and dispatch/coordination centers.

- **Dispatch Centers**
  Dispatch centers will ensure all resources know the name of the assigned IC and announce all changes in incident command. Geographic Area Mobilization Guides, Zone Mobilization Guides, and Local Mobilization Guides should include this procedure as they are revised for each fire season.

Fiscal Responsibility Elements of an Annual Operating Plan

Annual Operating Plans should address the following:

- The level of communication required with neighboring jurisdictions regarding the management of all wildland fires, especially those with multiple objectives.
- The level of communication required with neighboring jurisdictions regarding suppression resource availability and allocation, especially for wildland fires with objectives that include benefit.
- Identify how to involve all parties in developing the strategy and tactics to be used in preventing wildland fire from crossing the jurisdictional boundary, and how all parties will be involved in developing mitigations which would be used if a wildland fire does cross jurisdictional boundaries.
- Jurisdictions, which may include state and private lands, should identify the conditions under which wildland fire may be managed to achieve benefit, and the information or criteria that will be used to make that determination (e.g., critical habitat, hazardous fuels, and land management planning documents).
- Jurisdictions will identify conditions under which cost efficiency may dictate where suppression strategies and tactical actions are taken (i.e., it may be more cost effective to put the containment line along an open grassland than along a mid-slope in timber). Points to consider include loss and benefit to land, resource, social and political values, and existing legal statutes.
- The cost-sharing methodologies that will be utilized should wildfire spread to a neighboring jurisdiction in a location where fire is not wanted.
- The cost-share methodologies that will be used should a jurisdiction accept or receive a wildland fire and manage it to create benefit.
- Any distinctions in what cost-share methodology will be used if the reason the fire spreads to another jurisdiction is attributed to a strategic decision, versus environmental conditions (weather, fuels, and fire behavior), or tactical considerations (firefighter safety, resource availability) that preclude stopping the fire at jurisdictional boundaries. Examples of cost-sharing methodologies may include, but are not limited to, the following:
  - When a wildland fire that is being managed for benefit spreads to a neighboring jurisdiction because of strategic decisions, and in a location where fire is not wanted, the managing jurisdiction shall be responsible for wildfire suppression costs.

- In those situations where weather, fuels, or fire behavior of the wildland fire precludes stopping at jurisdiction boundaries cost-share methodologies may include, but are not limited to:
  a) Each jurisdiction pays for its own resources – fire suppression efforts are primarily on jurisdictional responsibility lands.
  b) Each jurisdiction pays for its own resources – services rendered approximate the percentage of jurisdictional responsibility, but not necessarily performed on those lands.
  c) Cost share by percentage of ownership.
  d) Cost is apportioned by geographic division. Examples of geographic divisions are: Divisions A and B (using a map as an attachment); privately owned property with structures; or specific locations such as campgrounds.
  e) Reconciliation of daily estimates (for larger, multi-day incidents). This method relies upon daily agreed to cost estimates, using Incident Action Plans or other means to determine multi-Agency contributions. Reimbursements can be made upon estimates instead of actual bill receipts.

For further information, refer to NWCG Memorandum EB-M-09-009*, Revisions to the Annual Operating Plans for Master Cooperative Fire and Stafford Act Agreements due to Implementation of Revised Guidance for the Implementation of Federal Wildland Fire Management Policy,* April 13, 2009.

All-Hazards Coordination and Cooperation

All-hazards is defined by NWCG as an incident, natural or manmade, that warrants action to protect life, property, environment, and public health or safety, and to minimize disruptions of government, social, or economic activities. Wildland fire is one type of all-hazard incident. All-hazards incidents are managed using a standardized national incident management system and response framework.

Stafford Act Disaster Relief and Emergency Assistance

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288, as amended) establishes the programs and processes for the Federal Government to provide disaster and emergency assistance to states, local governments, Tribal nations, individuals, and qualified private non-profit organizations. The provisions of the Stafford Act cover all hazards including natural disasters and terrorist events. In response to, or in anticipation of, a major disaster or emergency as defined by the act, the President "may direct any federal agency, with or without reimbursement, to utilize its authorities and the resources granted to it under federal law (including personnel, equipment, supplies, facilities, managerial, technical, and advisory services) in support of state and local assistance efforts."

- ***BIA –*** *Refer to Chapter 6 for the Stafford Act Amendment Tribal Disaster Assistance.*

Homeland Security Act

The *Homeland Security Act of 2002 (Public Law 107-296)* established the Department of Homeland Security (DHS) with the mandate and legal authority to protect the American people from the continuing threat of terrorism. In the act, Congress also assigned DHS as the primary focal point regarding natural and manmade crises and emergency planning.

Homeland Security Presidential Directive-5

Homeland Security Presidential Directive (HSPD-5), Management of Domestic Incidents, February 28, 2003, is intended to enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system. HSPD-5 designates the Secretary of Homeland Security as the Principal Federal Official (PFO) for domestic incident management and empowers the Secretary to coordinate Federal resources used in response to or recovery from terrorist attacks, major disasters, or other emergencies in specific cases.

National Response Framework

Federal disaster relief and emergency assistance are coordinated by the Federal Emergency Management Agency (FEMA) using the National Response Framework (NRF). The NRF, using the National Incident Management System (NIMS), establishes a single, comprehensive framework for the management of domestic incidents. The NRF provides the structure and mechanisms for the coordination of federal support to state, local, and Tribal incident managers; and for exercising direct federal authorities and responsibilities. Information about the National Response Framework can be found at https://www.fema.gov/media-library/assets/documents/117791.

National Incident Management System (NIMS)

HSPD-5 directed that the DHS Secretary develop and administer a National Incident Management System to provide a consistent, nationwide approach for Federal, State, and local governments to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. To provide for interoperability and compatibility among federal, state, and local capabilities, the NIMS will include a core set of concepts, principles, terminology, and technologies covering the incident command system; multi-agency coordination systems; unified command; training; identification and management of resources (including systems for classifying types of resources); qualifications and certification; and the collection, tracking, and reporting of incident information and incident resources. Information about the NIMS can be found at www.fema.gov/national-incident-management-system.

Emergency Support Function (ESF) Annexes

Emergency Support Function (ESF) Annexes are the components of the NRF that detail the mission, policies, structures, and responsibilities of federal agencies. They are utilized for coordinating resource and programmatic support to the states, tribes, and other federal agencies or other jurisdictions and entities during Incidents of National Significance. Each ESF Annex identifies the ESF coordinator and the primary and support agencies pertinent to the ESF. USDA-FS and USFA are the Co-coordinators of ESF #4 – Firefighting. USDA-FS coordinates at the national and regional levels with FEMA, state agencies, and cooperating agencies on all issues related to response activities. USFA coordinates with appropriate state agencies and local fire departments to expand structural firefighting resource capacity in the existing national firefighting mobilization system and provides information on protection of emergency services sector critical infrastructure.

The ESF primary agency serves as a federal executive agent under the Federal Coordinating Officer to accomplish the ESF mission. The ESF support agencies, when requested by the designated ESF primary agency, are responsible for conducting operations using their own authorities, subject-matter experts, capabilities, or resources. USDA-FS is the primary agency for ESF #4 – Firefighting.

See https://www.fema.gov/media-library/assets/documents/32180?id=7353 for further information regarding ESF #4.

Other NRF USDA-FS and DOI responsibilities are:

ESF Support Annex	USDA-FS Role	DOI Role
#01 Transportation	Support	Support
#02 Communications	Support	Support
#03 Public Works and Engineering	Support	Support
#04 Firefighting	Coordinator & Primary	Support
#05 Emergency Management	Support	Support
#06 Mass Care, Emergency Assistance, Housing, and Human Services	Support	Support
#07 Logistics Management and Resources Support	Support	Support
#08 Public Health and Medical Services	Support	Support
#09 Search and Rescue	Support	Primary
#10 Oil and Hazardous Materials Response	Support	Support

ESF Support Annex	USDA-FS Role	DOI Role
#11 Agriculture and Natural Resources	Primary	Primary
#12 Energy		Support
#13 Public Safety and Security	Support	Support
#15 External Affairs	Support	Support

National Oil and Hazardous Substances Pollution Contingency Plan (NCP, 40 CFR 300)

The NCP provides the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants. The NCP is required by section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9605, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), P.L. 99–499, and by section 311(d) of the Clean Water Act (CWA), 33 U.S.C. 1321(d), as amended by the Oil Pollution Act of 1990 (OPA), P.L. 101–380. The NCP identifies the national response organization that may be activated in response actions to discharges of oil and releases of hazardous substances, pollutants, and contaminants in accordance with the authorities of CERCLA and the CWA. It specifies responsibilities among the federal, state, and local governments and describes resources that are available for response, and provides procedures for involving state governments in the initiation, development, selection, and implementation of response actions, pursuant to CERCLA. The NCP works in conjunction with the National Response Framework through Emergency Support Function 10 – Oil and Hazardous Material Response.

Post-Katrina Emergency Management Reform Act

The *Post-Katrina Emergency Reform Act of 2006 (Public Law 109-295)* amended the Homeland Security Act. This law established the FEMA Administrator as responsible for managing the Federal response to emergencies and disasters, and for reporting directly to the President. The Secretary of Homeland Security is the Principal Federal Official, but has no direct authority for response or coordination. This law also amends the Stafford Act to allow FEMA, in the absence of a specific request or Presidential declaration, to direct other Federal agencies to provide resources and support where necessary to save lives, prevent human suffering, or mitigate severe damage.

Presidential Policy Directive-8

Presidential Policy Directive-8 (PPD-8), National Preparedness, March 30, 2011 is intended to strengthen all-of-Nation preparedness. PPD-8 directs the Secretary of Homeland Security to develop a national preparedness goal and a national preparedness system in coordination and consultation with other federal departments and agencies, state, local, tribal, and territorial governments, private

and non-profit sectors, and the public. The national preparedness system is comprised of:

- National planning frameworks for the prevention, protection, mitigation, response to, and recovery from national threats. These frameworks are similar and complementary to the National Response Framework (NRF).
- Corresponding Federal interagency operational plans.
- Guidance for the national interoperability of personnel and equipment.
- Guidance for business, community, family, and individual preparedness.

All-Hazards Coordination and Cooperation

In an actual or potential incident of national significance that is not encompassed by the Stafford Act, the President may instruct a federal department or agency, subject to any statutory limitations on the department or agency, to utilize the authorities and resources granted to it by Congress. In accordance with Homeland Security Presidential Directive-5, federal departments and agencies are expected to provide their full and prompt support, cooperation, available resources, consistent with their own responsibilities for protecting national security. Personnel assigned to all-hazard incidents may only perform duties within agency policy, training, and capability.

NWCG Role in Support, Coordination, and All-Hazards Response by Wildland Fire Agencies

The National Wildfire Coordinating Group has established guidelines to define NWCG's role in the preparedness for, coordination of, and support to all-hazards incidents.

General All-Hazards Guidelines for NWCG:

- The National Incident Management System (NIMS) is the foundation of all response. NWCG principles, procedures, and publications will comply with and support the NIMS. NWCG expects that all local, State, and Federal response agencies and organizations will comply with NIMS.
- NWCG uses the NIMS definition of All-Hazards, which includes wildland fire. This definition is:
  - All-Hazards: Describing an incident, natural or manmade, that warrants action to protect life, property, environment, and public health or safety, and to minimize disruptions of government, social, or economic activities.
- NWCG recognizes FEMA's role in overseeing the development, implementation, and maintenance of NIMS, which includes the Incident Command System (ICS) and its components (forms, core competencies, training, qualifications and standards, etc.).
- NWCG accepts the components of NIMS and will develop an endorsement process and additional qualifications requirements for positions having specific wildland fire application.

- NWCG recognizes and supports the use of position-specific qualifications from other NIMS compliant disciplines (law enforcement, structure fire, hazmat, etc.).
- NWCG supports the ongoing development and maintenance of wildland fire systems to be adaptable for all-hazards response.
- NWCG expects that all wildland fire personnel engaged in all-hazards response, whether at the national, regional or local level will base actions on both NWCG and agency policies, standards, doctrine, and procedures.
- NWCG member agencies ensure all personnel responding to all-hazards incidents are properly trained, equipped, and qualified for their assigned position.
- NWCG encourages all wildland fire agencies and personnel to receive appropriate preparedness training, focusing on general knowledge of all-hazards response, disaster characteristics, and the effects from these events on citizens and responders.
- NWCG encourages all wildland fire agencies and personnel to consider appropriate risk mitigation measures (e.g., vaccinations, personal protective equipment, etc.) prior to responding to all-hazards incidents.
- NWCG coordinates with member agencies to ensure accountability of wildland fire personnel during all-hazards response.

USFS All-Hazards Guiding Principles and Doctrine

The Forest Service has developed doctrine, known as the *Foundational Doctrine for All-Hazard Response*, outlining the guiding principles, roles, and responsibilities of the agency during all-hazards response. Forest Service responders and leadership are expected to follow this doctrine, established to help ensure the safest response conditions possible.

The following principles encompass the guidelines, roles, and responsibilities established in this doctrine:

- The intent of Forest Service all-hazard response and support is to protect human life, property, and at-risk lands and resources *while imminent threats exist.*
- Personnel should be prepared and organized to support all-hazard responses by providing trained personnel to utilize their inherent skills, capabilities, and assets, without requiring significant advanced training and preparation. Support to cooperators requiring wildland resources will be consistent with employee core skills, capabilities, and training.
- As incidents move from the *response phase* to the *recovery phase*, there should be a shift to demobilizing agency resources.
- Within all-hazard response environments, agency personnel may encounter situations in which there is an imminent threat to life and property outside of their Agency's jurisdiction. These environments include scenarios ranging from being first on scene at a vehicle accident, to committing

Agency resources to protect a local community. Leaders are therefore expected to use their judgment and respond appropriately.

- Wildland resources deployed to all-hazard responses will understand the dynamic and complex environment and utilize their leadership, training, and skills to adapt, innovate, and bring order to chaos.
- Leaders are expected to operate within the incident organizational structure encountered on all-hazard responses. When such structure is absent, they will utilize National Incident Management System principles to assure safe and effective utilization of agency resources.
- Leaders are expected to operate under existing policies and doctrine under normal conditions. On all-hazard responses, fire and aviation business and safety standards may have to be adapted to the situation to successfully accomplish the mission. When conflicts occur, employees will use their judgment, weigh the risk versus gain, and operate within the intent of Agency policy and doctrine.
- All-hazard response will be focused on missions that we perform consistently and successfully. Workforce assignments will be directed toward the core skills developed through our existing training and curriculum.
- Agency employees will be trained to operate safely and successfully in the all-hazard environment. Preparedness training will focus on gaining general knowledge of all-hazard response, disaster characteristics, as well as the effects from these events on citizens and responders.
- Specific operational skills will be facilitated through the National Incident Management System, working with the responsible agencies who supply the technical specialists who, in turn, provide the specific skill sets. The Forest Service will not train or equip to meet every hazard.
- Wildland employees are expected to perform all-hazard support as directed within their qualifications and physical capabilities. All employees have the right to a safe assignment. The employee may suspend his or her work whenever any environmental condition—or combination of condition—become so extreme than an immediate danger is posed to employee health and safety that cannot be readily mitigated by the use of appropriate, approved protective equipment or technology.
- Acceptable risk is risk mitigated to a level that provides for reasonable assurances that the all-hazard task can be accomplished without serious injury to life or damage to property.
- All-hazard incident-specific briefing and training will be accomplished *prior* to task implementation. This preparation will usually occur prior to mobilization where incident description, mission requirements, and known hazards are addressed. Key protective equipment and associated needs for these all-hazard tasks that wildland employees do not routinely encounter or perform will be identified. This will be done—and be in place—*prior* to task implementation.

- Agency employees will be provided with appropriate vaccinations, credentials, and personal protective equipment to operate in the all-hazard environment to which they are assigned.
- Additional information can be found in the Forest Service Foundational Doctrine for All-Hazard Response. https://www.fs.fed.us/fire/doctrine/conferences/all_hazard_response.pdf

All-Hazard Incident Management Teams (IMTs) and Other Non-Wildland Fire IMTs

Different entities have developed IMTs based on ICS core competencies under the National Incident Management System (NIMS). Federal agencies with IMTs include the U.S. Coast Guard, the Environmental Protection Agency, USDA's Animal and Plant Health Inspection Service (APHIS), DOI's National Park Service and U.S. Fish and Wildlife Service, and others. In addition, many states and metropolitan areas have developed All Hazard Incident Management Teams (AHIMTs). AHIMT consists of personnel from various disciplines (fire, rescue, emergency medical, hazardous materials, law enforcement, public works, public health and others) trained to perform the functions of the Command and General Staff at the Type 3 level. AHIMTs are often sponsored or administered by a state or local emergency management agency.

Many different entities that sponsor an AHIMT or other non-wildland fire IMT have requested that their personnel be allowed to "shadow" wildland fire IMT positions during incidents (sometimes referred to as "field training" or "field mentoring"). The primary purpose of shadowing is to gain insight to complex incident management. All shadowing events should be coordinated with the receiving GACCs and the IC at an incident.

- ***DOI –*** *https://www.doi.gov/emergency/emergency-policy.cfm*

International Wildland Fire Coordination and Cooperation

U.S. – Mexico Cross Border Cooperation on Wildland Fires

In April 2015, the Department of Interior and the Department of Agriculture signed a Wildfire Protection Agreement with Mexico. The agreement has two purposes:

- To enable wildfire protection resources originating in the territory of one country to cross the United States-Mexico border in order to suppress wildfires on the other side of the border within the zone of mutual assistance (10 miles/16 kilometers) in appropriate circumstances.
- To give authority for Mexican and U.S. fire management organizations to cooperate on other fire management activities outside the zone of mutual assistance.

National Operational Guidelines for this agreement are located at https://www.nifc.gov/nicc/logistics/references.htm. These guidelines cover issues at the national level and also provide a template for those issues that need

to be addressed in local operating plans. The local operating plans identify how the agreement will be implemented by the GACCs (and Zone Coordination Centers) that have dispatching responsibility on the border. The local operating plans will provide the standard operational procedures for wildfire suppression resources that could potentially cross the U.S. border into Mexico.

U.S. – Canada, Reciprocal Forest Firefighting Arrangement

Information about United States – Canada cross border support is located at https://www.nifc.gov/nicc/logistics/references.htm. This chapter provides policy guidance, which was determined by an exchange of diplomatic notes between the U.S. and Canada in 1982. This chapter also provides operational guidelines for the Canada – U.S. Reciprocal Forest Fire Fighting Arrangement. These guidelines are updated yearly.

U.S. – Australia/New Zealand Wildland Fire Arrangement

Information about United States – Australia/New Zealand support is located at https://www.nifc.gov/nicc/logistics/references.htm. This chapter provides a copy of the arrangements signed between the U.S. and the states of Australia and the country of New Zealand for support to one another during severe fire seasons. It also contains the AOP that provides more detail on the procedures, responsibilities, and requirements used during activation.

International Non-Wildland Fire Coordination and Cooperation

International Disasters Support

Federal wildland fire employees may be requested through the FS to support the U.S. Government's (USG) response to international disasters by serving on Disaster Assistance Response Teams (DARTs). A DART is the operational equivalent of an ICS team used by the U.S. Agency for International Development's Office of Foreign Disaster Assistance (OFDA) to provide an on-the-ground operational capability at the site of an international disaster. Prior to being requested for a DART assignment, employees will have completed a weeklong DART training course covering information about:

- USG agencies charged with the responsibility to coordinate USG responses to international disaster.
- The purpose, organizational structure, and operational procedures of a DART.
- How the DART relates to other international organizations and countries during an assignment. Requests for these assignments are coordinated through the FS International Programs, Disaster Assistance Support Program (DASP).
- DART assignments should not be confused with technical exchange activities, which do not require DART training.

More information about DARTs can be obtained at the FS International Program's website, https://www.fs.fed.us/global/aboutus/dasp/welcome.htm.

(This page intentionally left blank.)

Chapter 9
Fire Management Planning

Purpose

The purpose of fire management planning is to provide for firefighter and public safety, and outline fire management strategies and tactics that, when implemented, protect values and meet resource goals and objectives of the land and/or resource management plan. Planning strategically allows for responses to fire commensurate with risk, and movement towards desired conditions.

Fire planning products include a concise summary of information organized by fire management unit (FMU) or by other geospatially explicit representations of the landscape. These products should be updated as new information becomes available, as conditions on the ground necessitate updates, or when changes are made to the Land/Resource Management Plan (L/RMP).

Products may address: response to wildfire, hazardous fuels and vegetation management, burned area emergency stabilization and rehabilitation, prevention, community interactions and collaborative partnerships roles, and monitoring and evaluation of programs.

Fire Management planning efforts should address the vision and goals of the National Cohesive Wildland Fire Management Strategy (2014) (Cohesive Strategy).

The Cohesive Strategy vision is "To safely and effectively extinguish fire, when needed; use fire where allowable; manage our natural resources; and as a Nation, live with wildland fire."

The Cohesive Strategy goals are:

- Restore and maintain landscapes
- Fire-adapted communities
- Wildfire response

Policy

"Fire, as a critical natural process, will be integrated into land and resource management plans and activities on a landscape scale and across agency boundaries" (*Review and Update of the Federal Wildland Fire Management Policy, January 2001*).

Fire Management plans should be developed collaboratively between federal agencies and tribal, local, and state agencies to accomplish resource and protection objectives.

Every area with burnable vegetation must have an approved Fire Management Plan (FMP). Fire Management Plans are strategic plans that define a program to manage wildland fires based on the area's approved land management plan. When practical, Fire Management Plans (FMP) should contain mutually developed objectives for managing fires that cross jurisdictional boundaries.

Fire Management Plans must provide for firefighter and public safety; include fire management strategies, tactics, and alternatives; address values to be protected and values at risk; address the location and conditions under which resource and protection objectives can be met; consider public health issues; and be consistent with resource management objectives, activities of the area, and environmental laws and regulations. Fire Management Plans should be based upon the best available science.

Agency Planning Guidance

Department of Interior (DOI)

Fire Management Plans must be consistent with the DOI Interagency Fire Management Plan Framework and subsequent bureau direction. Fire Management Plan content may be represented in spatial, text-based and/or digital formats.

- The DOI framework is available at https://www.nwcg.gov/committees/interagency-fire-planning-committee/resources.
  - ***BLM – FMP Template*** *is available at http://web.blm.gov/internal/fire/fpfm/planning.html.*
  - ***NPS – FMP Template*** *and information is available at http://famshare.inside.nps.gov/wildlandfire/budgetandplanning/firemanagementplanning/firemanagementplans/default.aspx.*

U.S. Forest Service (FS)

Forest Service FMPs have been replaced with a combination of enhanced Spatial Planning contained in the Wildland Fire Decision Support System (WFDSS) and the Fire Management Reference System (FMRS), a collection of plans required for fire program management, such as aviation, operations, dispatch, and fire danger operating plan products. Fire Management Planning will be a continuing effort to ensure that guidance represented spatially in WFDSS and the FMRS are consistent with LRMP direction, reflecting available fire response options to move from current to desired conditions.

The FS has replaced the FSH 5109.19 with a Fire Management Planning Guide that further describes Spatial Fire Planning and the Fire Management Reference System (FMRS). As allowed in the Land and Resource Management Plan (LRMP), fire response strategies should be consistent with the Cohesive

Strategy and developed in collaboration with adjoining land managers. This Guide is at https://fsweb.wo.fs.fed.us/fire/fmp/.

Other Resources

For information on utilizing the Spatial Fire Planning method in WFDSS, see the WFDSS Spatial Fire Planning Guide located on the WFDSS Training page at https://wfdss.usgs.gov/wfdss/WFDSS_Training.shtml.

Concepts and Definitions

For further clarification of concepts and definitions that follow, refer to: *Terminology Updates Resulting from Release of the Guidance for the Implementation of Federal Wildland Fire Management Policy (2009),* NWCG Memorandum EB-M-10-024*,* and the *Guidance for Implementation of Federal Wildland Fire Management Policy, February 13, 2009.*

Land/Resource Management Plan

A document prepared with public participation and approved by the Agency Administrator that provides guidance and direction for land and resource management activities for an administrative area. The L/RMP may identify fire's role in a particular area and for a specific benefit, or may contain general statements regarding the role of fire across the land management unit. Guidance contained in the L/RMP provides the basis for the development of strategic fire management objectives and the fire management program in the designated area.

Fire Management Plan

A Fire Management Plan (FMP) identifies and integrates all wildland fire management and associated activities within the context of the approved L/RMP. The FMP is supplemented by operations plans, including but not limited to preparedness plans, pre-planned dispatch plans, fuels treatment plans, and prevention plans. FMPs assure that wildland fire management goals and objectives are coordinated.

Fire Management Unit

The purpose of Fire Management Units (FMUs) in planning is to assist in organizing information in complex landscapes. The process of creating FMUs divides the landscape into smaller geographic areas to more easily describe physical/biological/social characteristics and frame associated planning guidance based on these characteristics.

Compliance

Compliance generally includes the full range of considerations and procedures defined by each agency to comply with laws such as (but not limited to); the National Environmental Planning Act (NEPA), Section 106 of the Archeological

Resources Protection Act, Section 7 of the Endangered Species Act, Clean Air Act, Wilderness Act, Executive Orders, etc.

Spatial Fire Management Plan (SFMP)
A Spatial Fire Management Plan is a strategic plan that contains text based and spatially represented information that guides a full range of fire management activities and is supported by a land or resource management plan.

Spatial Fire Management Plan Mapsheet
A collection of one or more tables, graphics, maps or other information on a single page or poster.

Spatial Fire Management Plan Map Set
A compilation of all the mapsheets that make up a SFMP.

Connection to Other Plans

Fire Management Plans (DOI) and/or Spatial Fire Planning in WFDSS (FS) capture fire related direction and decisions from Land/Resource Management Plans (LRMP). If fire management direction and decisions were not adequately integrated into the existing LRMP, additional NEPA may be necessary.

Chapter 10
Preparedness

Preparedness Overview

Fire preparedness is the state of being ready to provide an appropriate response to wildland fires based on identified objectives and is the result of activities that are planned and implemented prior to fire ignitions.

Preparedness requires:

- Identifying necessary firefighting capabilities;
- Implementing coordinated programs to develop those capabilities;
- A continuous process of developing and maintaining firefighting infrastructure;
- Predicting fire activity;
- Implementing prevention activities;
- Identifying values to be protected;
- Hiring, training, equipping, pre-positioning, and deploying firefighters and equipment;
- Evaluating performance;
- Correcting deficiencies; and
- Improving operations.

Preparedness activities should focus on developing interagency response capabilities that will result in safe, effective, and efficient fire operations aligned with risk-based fire management decisions.

Preparedness activities will be consistent with direction in the approved Land and Resource Management Plan (LRMP) and in the Fire Management Plan (FMP).

Preparedness Planning

At the local level, preparedness planning and the resultant activities begin with a Fire Danger Operating Plan (FDOP), which includes a number of other plans that result in coordinated actions based on the fire situation.

References, templates, and other supporting materials pertaining to the FDOP process and related operationally-focused preparedness plans can be found at https://www.wfas.net/nfdrs2016.

Outputs from the FDOP process are used to support decisions found in many components of preparedness plans. These actions will ensure a unit is appropriately prepared to react to new and emerging wildfire incidents.

Preparedness plans should include, but are not limited to:

- Fire Danger Operating Plan
- Preparedness Level Plan
- Initial Response/Pre-planned Dispatch Plan
- Step-up/Staffing Plan
- Fire Prevention/Mitigation Plan (as specified by agency requirements)
- Closure/Restriction Plan (as specified by agency requirements)

Fire Danger Rating

The National Fire Danger Rating System (NFDRS) and the Weather Information Management System (WIMS) are the principle applications used by the federal land management agencies to assess fire danger. At every scale, fire danger rating is a key consideration for staffing and prepositioning preparedness resources, regulating industrial activity, or placing restrictions on public lands. Because these assessments are used by and affect a wide variety of stake holders including federal and state agencies, local governments, industrial and other private entities, as well as the general public, participation in a recognized fire danger system and careful management of weather and fire data is vital to ensure accurate assessments and the consistent application of fire danger rating, especially for broader scale assessments.

The following requirements apply to all NFDRS-compliant weather stations managed in WIMS:

- For the primary fuel model (i.e., the first model listed in the WIMS station catalog):
  - Identify an appropriate Staffing index;
  - Identify the Staffing index breakpoints (i.e., the two highest breakpoint values and their associated percentiles*); and
  - Identify the number of Decision Classes (i.e., the number of Staffing Levels).
- If not already entered as the primary fuel model, also enter Fuel Model G:
  - Identify ERC as the Staffing index;
  - Identify the ERC breakpoints (i.e., the two highest ERC breakpoint values and their associated percentiles*); and
  - Identify the number of Decision Classes (i.e., the number of Staffing Levels).

    * For units that have not performed detailed analysis to identify Fire Business Thresholds or Climatological Breakpoints, it is recommended to use the 90th and 97th percentiles as default values for these Critical Percentiles.
    - ***BLM** – 80th and 95th percentiles*

Communication of Fire Danger

Daily Observed and Forecasted Fire Danger Outputs will be:

- Communicated daily to local fire personnel to aid in situational awareness; and
- Should include the Staffing index and/or index/component used.

Fire danger will be conveyed to the public using the five Adjective Fire Danger Rating classes: low, moderate, high, very high, and extreme.

Fire Danger Operating Plan

Ideally developed for interagency field-level operations (e.g., corresponding to the area within the jurisdiction of a third-tier dispatch center), the FDOP is an integral component of local fire management planning. The FDOP documents the analysis process and the development of decision points to be used for future weather and fire occurrence situations, based on an analysis of local conditions, historic weather, and historic fire occurrence. The analysis and decision points are developed using decision support tools such as the National Fire Danger Rating System (NFDRS), the Canadian Forest Fire Danger Rating System (CFFDRS), the Palmer Drought Index, live fuel moisture data, monthly or seasonal wildland fire outlooks, seasonal climate forecasts, and wildland fire risk analyses. The analysis of historic weather and fire occurrence is conducted utilizing a statistical software program, such as but not exclusive to FireFamily Plus (FFP), which calculates fire danger indices and can correlate them to historic fire occurrence. The FDOP process blends science, historical data, established processes, and local knowledge to provide a unified framework for local interagency unit managers/administrators to make informed decisions that result in safe, efficient, and effective responses to fire situations.

Every field-level unit with a fire program should be covered by an FDOP and should participate in the planning process. FDOP developers should attend Intermediate NFDRS (S-491) and preferably, the Advanced NFDRS level courses. Units are encouraged to seek the participation of and review by NFDRS or CFFDRS Subject Matter Experts when developing the FDOP. Established FDOPs should be monitored, reviewed annually, and updated as necessary to ensure they continue to meet the preparedness needs of the local units.

In conjunction with the analysis noted above, the FDOP also describes:

- Processes, such as daily input and output monitoring of the Weather Information Management System (WIMS) at https://fam.nwcg.gov/fam-web/;
- Tools that will be utilized to communicate fire danger information, such as Fire Danger PocketCards, or seasonal trends analysis; and
- Related products, such as staffing, dispatch, and preparedness level plans (which can be included as components of the FDOP or linked, if presented as separate plans).

A FDOP template can be found at https://www.wfas.net/nfdrs2016.

Required minimum content for the FDOP includes the following components:

- **Roles and Responsibilities**
  This section of the FDOP defines the roles and responsibilities for those responsible for the development, maintenance and daily implementation of the plan, program management related to the plan, and associated training.
- **Fire Danger Area Inventory**
  This section of the FDOP presents the inventory of the basic components of the FDOP area, which will describe the general area, including the administrative units involved in the planning process. The fire danger area inventory will include:
  - Fire history, as well as identification of fire/ignition issues specific to the area;
  - Description of vegetation/fuels, topography, and weather/climatology resulting in the delineation of specific Fire Danger Rating Areas (FDRAs), which are broad landscapes (typically, on the scale of tens or hundreds of thousands of acres each) that are considered to have relatively homogeneous fire danger;
  - The existing weather station network and identification of any additional weather station system needs; and
  - Validation that each Remote Automated Weather Station (RAWS) meets the requirements of the *Interagency Wildland Fire Weather Station Standards and Guidelines* (PMS 426-3).
- **Operational Procedures**
  This section of the FDOP establishes the procedures used to gather and process data in order to integrate fire danger rating information into decision processes. The network of fire weather stations whose observations are used to determine fire danger ratings is identified. Station maintenance responsibilities and schedules are defined. Include:
  - Daily weather processing schedule and procedures;
  - Daily communication schedule and modes;
  - Seasonal station catalog adjustment schedule and responsible personnel;
  - Annual review of decision points and responsible personnel; and
  - Periodic review of PocketCards or other communication methodology and responsible personnel.
- **Decision Point Analysis**
  This section of the FDOP describes the analysis of climatological breakpoints and fire business thresholds that trigger changes in fire danger-related decisions within an FDRA. Decision points are identified using statistical analysis software such as but not limited to FFP. Distinct selections of fuel model and fire danger index/component (NFDRS or CFFDRS) are appropriate for different management decisions (such as staffing, initial response, or industrial and public restrictions).

Because Fire Business Thresholds correlate periods of historical fire danger and fire occurrence, they generally provide the best decision support and are appropriate for identifying Staffing Levels, Dispatch Levels, fire restrictions, Preparedness Levels, fire prevention activities, and other specific readiness actions. Climatological Breakpoints, which are expressed as percentiles, may be appropriate as decision points for longer term decisions and general preparedness activities, such as seasonal staffing start/end dates or contract aircraft availability periods.

Note: *WIMS relies exclusively on Climatological Breakpoints to compute Staffing Level and Adjective Rating. If Fire Business Thresholds are used as decision points, Staffing Level and Adjective Rating must be computed outside of WIMS.*

- **Fire Danger-based Decisions**

  This section of the FDOP describes the decision points used in Step-up/Staffing Plans, Initial Response/Pre-planned Dispatch Plans, Preparedness Level Plans, Prevention Plans (which include how Adjective Fire Danger Ratings are determined and will be applied), Closure/Restriction Plans, etc. It should include the rationale for the fuel model and index/component selection and the corresponding decision points for each of those plans. The plans may be included in the FDOP or be stand-alone plans.

Preparedness Level Plans

Preparedness Level Plans are required at the national, state/regional, and local levels. These plans address the five Preparedness Levels (1-5) and provide management direction based on identified levels of burning conditions (fire danger), fire activity, resource commitment/availability, such as incident management teams assigned, and other considerations (in contrast to Staffing Levels, which typically only consider fire danger, as described below). Preparedness Level Plans may be developed by a state/regional office for agency-specific use.

Supplemental preparedness actions to consider include, but are not limited to, the following items:

- Management briefings, direction, and considerations;
- Support function: consideration given to expanded dispatch activation and other support needs (procurement, supply, ground support, and communication);
- Support staff availability outside of fire organization;
- Fire danger/behavior assessment;
- Fire information – internal and external;
- Multi-agency coordination group/Area command activation; and
- Prescribed fire direction and considerations.

Refer to the *National Interagency Mobilization Guide* and GACC Mobilization Guides for more information on Preparedness Level Plans.

Step-up/Staffing Plans

Step-up/Staffing Plans are designed to direct incremental preparedness actions at the local level in response to changing fire danger. Each plan should address the unit's chosen number of Staffing Levels, and the corresponding actions to consider for those changing fire danger conditions, as reviewed annually. The Step-up/Staffing Plan should be based on analysis completed as part of the unit's FDOP and the analysis rationale, if not the entire plan, should be included as part of the FDOP.

Staffing Level

The Staffing Level should be used to guide daily internal fire operational decisions at the local level. The Staffing Level specifies appropriate daily staffing for initial response resources, such as when to implement 7-day coverage and adjusted work schedules, and the number of personnel committed to initial attack resources (in contrast to the Initial Response/Pre-planned Dispatch Plan – described below – that specifies the number of resources dispatched to an incident). Staffing Level helps define "How ready to be today?" A unit can operate with 3 to 9 levels of staffing. Most units typically use 5 (1, 2, 3, 4, 5) or 6 (1, 2, 3L, 3H, 4, 5) levels. The use of Fire Business Thresholds to determine Staffing Levels is encouraged; however, they must be computed outside of the WIMS.

The Step-up/Staffing Plan describes pre-approved escalating responses that are in the FDOP and FMP. A Step-up/Staffing Plan should also include recurring supplemental preparedness actions designed to enhance the unit's fire management capability during short periods (Fourth of July, or other pre-identified events) where staffing normally needs to be increased to meet initial attack, prevention, or detection needs.

The Staffing Plan should also consider supplemental staffing actions such as, but not limited to, the following items:

- Fire prevention actions, including closures/restrictions, media messages, signing, and patrolling;
- Prepositioning or augmentation of suppression resources;
- Cooperator discussion and/or involvement;
- Safety considerations: safety messages, safety officer;
- Increased initial attack dispatch staffing; and
- Increased detection activities.

In contrast to staffing actions established for the normal range of conditions, severity is a longer duration condition that cannot be adequately dealt with under

normal staffing, such as a killing frost converting live fuel to dead fuel or drought conditions. Severity is discussed later in this chapter.

Initial Response/Pre-planned Dispatch Plans

Local-level Initial Response/Pre-planned Dispatch Plans, also referred to as run cards, specify the fire management response (e.g., number and type of suppression assets to dispatch) within a defined geographic area to an unplanned ignition, based on fire weather, fuel conditions, fire management objectives, and resource availability.

Fire Management Officers will ensure that Initial Response/Pre-planned Dispatch Plans are in place, utilized, and provide for initial response commensurate with guidance provided in the FMP and/or LRMP. Initial Response/Pre-planned Dispatch Plans will reflect agreements and annual operating plans, and will be reviewed annually prior to fire season. These plans may be modified as needed during fire season to reflect the availability of national, prepositioned, and/or severity resources.

Fire Prevention/Mitigation Plans

Unit-level Fire Prevention/Mitigation Plans may be required and completed by conducting a wildland fire prevention/mitigation assessment. The purpose of the plan is to develop a strategy that will identify actions to reduce unwanted human-caused ignitions, thereby reducing wildland fire damages and losses, unnecessary risks to firefighters, and suppression costs. As fire danger moves from low to extreme, as defined in the FDOP, and/or human activity increases, prevention and mitigation activities must be increased to maintain effectiveness.

The Prevention/Mitigation Plan outlines how the Adjective Fire Danger Ratings are communicated to the public, and applied, in terms of responsible personnel and assigned activities. Prevention activities are intended to reduce the occurrence of unwanted human-caused fires and include, but are not limited to:

- Education (signage, school programs, radio and news releases, recreation contacts, local business contacts, exhibits);
- Engineering (public utility company, government agency/cooperator coordination);
- Enforcement/industrial program monitoring (patrol, permitting, inspections including firewood cutting, logging, mining, power line maintenance, and area closures); and
- Administration (patrol, communication, FDOP, sign and other plans and planning activities).
    - ***NPS –*** *Only units that experience more than an average of 26 human-caused fires per ten-year period are required to develop a fire prevention plan.*

- ***FWS*** *– Prevention assessment determines requirement for prevention plan. Refer to Fire Management Handbook Chapter 10.*
- ***FS –*** *Refer to FSM 5110.*
- ***BIA*** *– Refer to 90IAM 1.4C (6) – H, BIA National Wildfire Prevention Handbook for guidance, available at https://www.bia.gov/bia/ots/dfwfm/bwfm/wildfire-prevention-and-education/prevention-resource-library.*

National Fire Prevention Education Teams

National Fire Prevention and Education Teams (NFPETs) provide unit and agency managers with skilled and mobile personnel which have the ability to supplement or enhance ongoing local wildfire prevention and education activities, where hazard or risk is, or is expected to be, elevated above normal.

Teams are highly effective in their ability to reduce unwanted human-caused wildland ignitions and are equipped to rapidly complete on-site prevention assessments and plans, initiate implementation of such plans, and to begin immediate prevention and education activities.

A basic team is composed of three personnel with these minimum qualifications:

- 1 PETL – Prevention and Education Team Leader;
- 1 PETM – Prevention and Education Team Member; and
- 1 PIO2 – Public Information Officer Type 2.

Actual team composition may include additional support positions, as determined jointly by the team leader and the ordering unit, on a case-by-case basis, based on the team's anticipated tasking. The use of trainees is encouraged.

NFPETs can assist the local unit in preventing unwanted human-caused wildfires in several ways. They can assist the local unit to:

- Complete fire risk assessments;
- Determine the severity of the situation;
- Facilitate community awareness and education in fire prevention including prescribed burning;
- Coordinate announcement of interagency restrictions and closures;
- Coordinate fire prevention efforts with the public, special target groups, state and local agencies, and elected officials;
- Promote public and personal responsibility regarding fire prevention in the wildland/urban interface; and
- Assist Incident Management Teams in accomplishing their objectives in working with the public to develop fire protection plans.

To order an NFPET, place the order with the regional GACCs. See the National Interagency Mobilization Guide for additional information on ordering and using NFPETs.

Fire Danger PocketCard for Firefighter Safety

Fire Danger PocketCards provide, through a graphical interpretation of historic fire danger, a means for firefighters to understand the fire potential for a given local area during any day of the fire season. PocketCards apply to areas of uniform fire danger rating, known as FDRAs, which should be developed through an interagency FDOP process (if FDRAs aren't defined, PocketCards may be developed based on other areas of like fire danger). The PocketCard can also be an ideal tool for local seasonal tracking of fire season severity with the addition of daily indices (see "Local Unit Seasonal Tracking" section). The Fire Danger PocketCards must adhere to the NWCG standard located at https://fam.nwcg.gov/fam-web/pocketcards/default.htm.

PocketCards should be updated following a significant fire season but; otherwise, based on the length of the station or Special Interest Group (SIG) dataset:

- 10 years or less of historic weather data, update PocketCard annually;
- 11-14 years, update every other year;
- 15 years or more, update every 3 years.

In all cases, a high quality database should be used; i.e., 5 years of poor data and 10 years of good data does not equal 15 years of quality data.

Compliance with the standard, including quality, currency, and application of the PocketCard, is the responsibility of the local fire management unit.

- ***BLM –*** *All units will develop, maintain and ensure PocketCards are available to all personnel. Alaska is required to complete a Seasonal Trend Analysis in lieu of PocketCards. Final approval for PocketCards and Seasonal Trend Analyses will be obtained from the BLM representative to the NWCG Fire Danger Subcommittee (current contact information available at https://www.nwcg.gov/committees/fire-danger-subcommittee/roster).*
- ***FS –*** *Obtain Regional certification for Fire Danger PocketCards. Distribute PocketCards to each fireline supervisor on Type 3, 4, and 5 wildfires. Units have the option to do more frequent updates if they choose to do so.*
- ***BIA –*** *Agencies and Tribes will maintain Fire Danger PocketCards and ensure they are available to all personnel.*

The NWCG standards for updating and posting the cards can be found at https://fam.nwcg.gov/fam-web/pocketcards/default.htm.

Managing Weather Data in WIMS

Fire danger requires continual management in order to produce accurate results that are applied in a timely manner. Some daily weather observation variables

(such as state of the weather) must be manually validated and published daily. This procedure is essential for the calculation of daily and forecasted fire danger outputs in WIMS and ensures weather data storage in the National Fire and Aviation Management (FAMWeb) Database. These efforts are coordinated with local National Weather Service fire weather meteorologists to provide timely forecasted fire danger outputs.

In addition to daily weather management, certain WIMS data requires periodic adjustment. The following should be adjusted seasonally or as appropriate:

- Live fuel moisture model inputs, including herbaceous vegetation stage, green-up and freeze date, season codes, greenness factors.
- Dead fuel moisture model inputs, including the snow flag and starting 1000 hour and X1000 fuel moisture and KBDI values.

Decision points should be reviewed annually and adjusted, as appropriate, based on statistical analysis. If decision points are adjusted, PocketCards should also be validated and updated as necessary.

Management Actions for Remote Automated Weather Stations (RAWS)

Noncompliance Report

A weekly report from Wildland Fire Management Information (WFMI) weather module displays RAWS that are more than 1 year and 45 days past their annual maintenance date. Fire weather stations are to be maintained annually per *Interagency Wildland Fire Weather Station Standards and Guidelines* (PMS 426-3). The report is widely distributed by email and available at https://famit.nwcg.gov/applications/RAWS. If a RAWS is on the report, it has either not had annual maintenance, or the documentation for annual maintenance has not been completed in WFMI. Data from these RAWS should not be used or used with caution.

Portable RAWS

Fire managers should ensure that locally held portable RAWS are maintained prior to use. Non-maintained portable RAWS will not be activated for data processing through WFMI weather.

- ***BLM –*** *Refer to Chapter 2 for more guidance.*

Predictive Service Areas

Predictive Service Areas (PSA) are sub-geographic areas of similar climate, fuels and topography defined by Geographic Area Coordination Center (GACC) meteorologists generally for forecasting purposes. The PSAs are also used to display current and forecasted conditions at the national and Geographic Area level, such as maps showing 7-day Significant Fire Potential and statistics graphs of select indices and fuel moistures. While PSAs are defined using similar criteria as Fire Danger Rating Areas (FDRAs), the PSA-based products are intended for

longer range prediction purposes and strategic planning at the sub-geographic scale, and FDRA-based products are intended to guide daily operational decisions at the unit level.

National Predictive Services Fire Potential Outlooks and Advisories

National Significant Wildland Fire Potential Outlook

The National Significant Wildland Fire Potential Outlook is prepared and distributed by NICC Predictive Services on the first day of each month. The Outlook is a composite of outlooks prepared by the individual Geographic Area Predictive Services units and national discussions prepared by NICC Predictive Services. It provides fire managers at all levels with the information needed to make long range decisions concerning resource staffing and allocation. The Outlook identifies areas where significant wildland fire activity is expected to be above or below normal levels.

The Outlook covers a four-month period. Maps for each period display areas of below normal, normal, and above normal significant wildland fire potential. A brief synopsis of the current and predicted national and GACC situation is included in the report. Specific guidance on issuance and requirements for the National Significant Wildland Fire Potential Outlook can be found in the *National Interagency Mobilization Guide* at https://www.nifc.gov/nicc/mobguide/index.html.

National 7-day Significant Fire Potential Outlook

The National 7-day Significant Fire Potential Outlook is a composite of outlooks produced by each of the Geographic Area Predictive Services units. The 7-day provides a week-long projection of fuel dryness, weather, and fire potential. The 7-day depicts a nationwide view of the significant fire potential for the next seven days with links to the individual Geographic Area 7-day outlooks. The system is database-driven and is updated periodically as each Geographic Area Predictive Services unit posts its outlook. Each Geographic Area Predictive Services unit will determine whether to routinely produce a morning or afternoon product. Issuance times for each Area's outlook can be found in the Geographic Area Mobilization Guide and/or in its National Weather Service/Predictive Services Annual Operating Plan. Guidance on issuance and requirements for National 7-day Significant Fire Potential Outlook can be found in the *National Interagency Mobilization Guide* at https://www.nifc.gov/nicc/mobguide/index.html.

Fuels and Fire Behavior Advisories

Fuels and Fire Behavior Advisories are alerts issued as needed to address an exceptional or extreme circumstance that could threaten firefighter or public safety. Conditions that could be reasonably expected normally do not warrant a Fuels and Fire Behavior Advisory. Advisories will focus on fuel conditions and fire behavior that have long term impacts, not atmospheric conditions that can

be found in other Predictive Services products. Advisories will highlight and give specific examples of conditions that are currently on-going and have been experienced in the field. Advisories should be tailored so that firefighters at all experience levels can recognize the situation and act accordingly. Advisories should be coordinated with neighboring administrative units to ensure that all areas with similar conditions are being addressed. All Advisories that extend beyond a single local administrative unit or that will be posted on the national Advisory map must be coordinated with the NICC and GACC Predictive Service Units. Each Advisory must include a map of the affected area. Only one Advisory may be active at any time over any area. If multiple Advisory conditions are present incorporate them into one Advisory. Advisories will remain in effect for 14 days from issuance. If the Advisory conditions continue beyond the 14 days a new Advisory will need to be issued to update conditions and circumstances with more timely information. At the request of the issuer Advisories may be lifted before the 14 days has passed. For the Fuels and Fire Behavior Advisory Template and Protocols, see https://www.predictiveservices.nifc.gov/fuels_fire-danger/fuels_fire-danger.htm.

National Intelligence Products

See the *National Interagency Mobilization Guide*, Chapter 60.

Local Unit Seasonal Tracking

As identified in the FMP and/or FDOP, each unit selects and compares to normal, the current value and seasonal trend of one (or more) of the following indicators which are most useful in predicting fire season severity and duration in its area. By downloading daily weather observations and adding them to the database, FFP or similar statistical analysis software can be used to produce the current NFDRS, CFFDRS, and fuel moisture products, including statistical graphs of various indices and components such as:

- NFDRS (or CFFDRS) index and/or component values;
- Palmer Drought or Keetch-Byram Drought Index;
- 1000-hour fuel moisture;
- 100-hour fuel moisture;
- Live fuel moisture; and/or
- Growing Season Index.

The seasonal trend of each selected indicator is graphically compared to normal and all-time worst (for the historical period analyzed). This comparison is updated regularly and posted in dispatch and crew areas. The mechanism that is recommended for comparing and displaying these items is a PocketCard and/or fire danger seasonal graphs, which have been developed and used at the local unit to inform and educate firefighters on local conditions. PocketCards and seasonal fire danger graphs should use the same index and fuel model to display information so that the two can be easily compared.

Any local seasonal trends of indices/components or fuel moisture values should be communicated to the GACC Predictive Services unit to augment their assessments. Trends should be monitored throughout the fire season and communication should be on-going, particularly when significant changes in key indicators occur.

Fire Severity Funding

Fire severity funding is the authorized use of suppression operations funds (normally used exclusively for suppression operations and distinct from preparedness funds) for extraordinary preparedness activities that are required due to:

- FMP, FDOP, or Annual Operating Plan criteria that indicate the need for additional preparedness/suppression resources. The plan(s) should identify thresholds for severity needs.
- Anticipated fire activity will exceed the capabilities of local resources.
- Fire seasons that either start earlier or last longer than identified in the FDOP.
- An abnormal increase in fire potential or danger not planned for in existing preparedness plans.

Agency established decision points or thresholds will be used to determine severity funding needs.

The objective of fire severity funding is to appropriately manage risk and adjust planned specific actions and staffing in excess of the budgeted program to improve initial response capabilities and wildfire prevention activities, when extraordinary weather and fire conditions may result in the occurrence, or substantial threat of occurrence, of wildfires with significant damage potential.

Fire severity funding is not intended to:

- Raise preparedness funding levels to cover differences that may exist between funds actually appropriated and those identified in the fire planning process.
    - ***BLM –*** *Refer to Chapter 2 for more guidance.*
    - ***NPS/FWS/FS –*** *Mitigate threats to Threatened and Endangered Species habitat, wildland/urban interface, or other values identified in Land and Resource Management Plans.*

Typical Uses

Fire severity funds are typically used to:

- Increase prevention activities;
- Temporarily increase firefighting staffing;
- Pay for standby;
- Preposition initial attack suppression forces;
- Provide additional aerial reconnaissance; and
- Provide for standby aircraft availability.

Authorization

Authorization to use severity funding is provided in writing based on a written request with supporting documentation. Authorization is on a line item basis and comes with a severity cost code. Agencies will follow their administrative procedures for issuing severity cost codes. Authorization is provided for a maximum of 30 days per request; however, regardless of the length of the authorization, use of severity funding must be terminated when abnormal conditions no longer exist. If the fire severity situation extends beyond the 30-day authorization, the Unit/State/Region/Agencies/Tribes must prepare a new severity request.

State/Regional-Level Fire Severity Funding

Each fiscal year the national office will provide each state/region with funding and a severity cost code for state/regional short-term severity needs (e.g., wind events, cold dry front passage, lightning events, and unexpected events such as off road rallies, cultural events) that are expected to last less than one week. Expenditure of these funds is authorized by the State/Regional Directors at the written request of the Agency Administrator. State/Regional Directors are responsible and accountable for ensuring that these funds are used only to meet severity funding objectives and that amounts are not exceeded. The national office will notify the State/Regional Director, State/Regional Budget Officer, and the State/Regional FMO when the severity cost code is provided.

- ***BLM –*** *Refer to Chapter 2 and the BLM Fire Operations Website (http://web.blm.gov/internal/fire/fire_ops/index.html) for additional short-term severity guidance.*
- ***NPS –*** *Parks have the authority to approve "Step-up" actions only, as defined in their fire management plan. Regional offices approve severity (long term – up to 30 days) for parks up to $100,000 per severity event.*
- ***FWS –*** *Refer to the Fire Management Handbook Chapter 10 for additional short-term severity guidance.*
- ***FS –*** *Severity funding direction is found in FSM 5130 and current FY Program Direction.*
- ***BIA –*** *Regional Offices will establish procedures for approval and monitoring short-term severity usage/funds within their respective regions.*

National-Level Fire Severity Funding

National Agency Fire Directors or their delegates are authorized to allocate fire severity funding under specific conditions stated or referenced in this chapter. Expenditure of these funds is authorized by the appropriate approving official at the written request of the State/Regional Director. Approved severity funding will be used only for the preparedness activities and timeframes specifically outlined in the authorization, and only for the objectives stated above.

- ***BLM –*** *Refer to Chapter 2 and the BLM Fire Operations Website for additional national severity guidance.*
- ***NPS –*** *National office approves all single or cumulative requests exceeding $100,000.*

- ***FWS –*** *Additional information may be found on the FWS Sharepoint site.*
- ***FS –*** *Regional offices approve all severity requests.*
- ***BIA –*** *Refer to Chapter 6 for additional guidance.*

Appropriate Fire Severity Funding Charges and Activities

Severity funded personnel and resources will not use a severity cost code while assigned to wildfires. The wildfire FireCode number will be used instead.

Labor

Appropriate labor charges include:

- Regular pay for non-fire personnel;
- Regular pay for seasonal/temporary fire personnel outside their normal fire funded activation period; and
- Overtime pay for all fire and non-fire personnel.

Severity funded personnel and resources must be available for immediate initial attack regardless of the daily task assignment.

Vehicles and Equipment

Appropriate vehicle and equipment charges include:

- GSA lease rate and mileage;
- Hourly rate or mileage for Agency owned vehicles; and
- Commercial rentals and contracts.

Aviation

Appropriate aviation charges include:

- Contract extensions;
- The daily minimum cost for call when needed (CWN) aircraft;
- Preposition flight time; and
- Support expenses necessary for severity funded aircraft (facility rentals, utilities, telephones, etc.).

Travel and Per Diem

Severity funded personnel in travel status are fully subsisted by the government in accordance with their agency regulations. Costs covered include:

- Lodging;
- Government provided meals (in lieu of per diem);
- Airfare (including returning to their home base);
- Privately owned vehicle mileage (with prior approval); and
- Other miscellaneous travel and per diem expenses associated with the assignment.

Prevention Activities

Appropriate prevention activities include:

- Funding Prevention Teams (Prevention teams will be mobilized as referenced in the *National Interagency Mobilization Guide*, Chapter 20).
- Implementing local prevention campaigns, to include community risk assessments, mitigation planning, enforcement, outreach, and education
- Augmenting patrols.
- **Note:** Non-fire funded prevention team members should charge base 8 and overtime to the severity cost code for the length of the prevention activities assignment. Fire funded personnel should charge overtime only to the severity cost code for the length of the prevention activities assignment.

Inappropriate Fire Severity Funding Charges

- To cover differences that may exist between funds actually appropriated (including rescissions) and those identified in the fire planning process.
- Administrative surcharges, indirect costs, fringe benefits.
- Equipment purchases.
- Purchase, maintenance, repair, or upgrade of vehicles.
  - ***NPS/FWS/BIA –*** *Severity-related repair and maintenance of agency vehicles and equipment may be funded by severity because they do not have a use rate covering these charges. These charges must be approved by the National Office.*
- Purchase of radios.
- Purchase of telephones.
- Purchase of pumps, saws, and similar suppression equipment.
- Aircraft availability during contract period.
- Cache supplies that are normally available in fire caches.
- Fixed ownership rate vehicle costs.

Interagency Severity Requests

Agencies working cooperatively in the same geographic area must work together to generate and submit joint requests, to minimize duplication of required resources, reduce interagency costs, and to utilize severity funded resources in an interagency manner. However, each agency should request funds only for its fair-share contributions or offsets for pooled, interagency resources/activities. The joint request should be routed simultaneously through each agency's approval system, and the respective approving official will issue an authorization that specifies allocations by agency.

Requesting Fire Severity Funding

Each agency has established severity funding request protocols. The completed and signed request is submitted from the State/Regional Director to the appropriate approving official as per the sequence of action outlined below. Authorizations will be returned in writing.

Severity funding request information for all agencies can be found at https://www.nifc.gov/policies/pol_severity_funding.html.

Sequence of Action and Responsible Parties for Severity Funding Requests

Action	Responsible Party
In collaboration with interagency partners, as appropriate, identify and develop severity funding request.	Unit FMO
Review, modify, and approve (or reject) request. Forward to state/regional office.	Unit Agency Administrator
Review, modify, and recommend for approval (or rejection) unit request. Add state/regional needs and consolidate. Forward to State/Regional Director for approval within 48 hours.	State/Regional FMO
Review, modify, and approve (or reject) request. Forward to the appropriate National Fire Director/approving official within 48 hours. Notify the fire budget staff.	State/Regional Director
Review, modify, and approve (or reject) the request within 48 hours. Issue written authorization with a severity cost code.	Appropriate National Fire Director/Approving Official
Establish severity cost code in the appropriate finance system within 24 hours.	Applicable National Finance System
Notify unit office(s) and state/regional budget lead upon receipt of authorization.	State/Regional FMO
Utilize severity cost code. Ensure that project expenditures are only used for authorized purposes. Continually assess needs and submit new requests/extensions as required.	Unit FMO
Maintain severity files, including requests, authorizations, and summary of expenditures and activities.	Unit/State/Regional/ National Offices

FS – *Severity codes are pre-established at the beginning of the fiscal year. Requests are approved at the regional office with a copy to the national office for those exceeding $250,000 or including National Shared Resources.*

Labor Cost Coding For Fire Severity Funded Personnel

Fire preparedness personnel outside their normal activation period, employees whose regular salary is not fire funded, and Administratively Determined (AD) employees hired under an approved severity request should charge regular time and approved non-fire overtime to the severity suppression operations subactivity and the requesting office's severity cost code.

Fire preparedness personnel should charge their regular planned salary (base-eight) to their budgeted subactivity using their home unit's location code. Overtime associated with the severity request should be charged to the severity suppression operations subactivity and the requesting office's severity cost code.

Regular hours worked in suppression operations will require the use of the appropriate fire subactivity with the appropriate FireCode number. Overtime in fire suppression operations will be charged to the suppression operations subactivity with the appropriate FireCode number.

Employees from non-federal agencies should charge their time in accordance with the approved severity request and the appropriate local and statewide agreements. An interagency agreement for reimbursement must be established. The Interagency Agreement for Fire Management can be used as a template.

Documentation

The unit/state/regional and national office will document and file accurate records of severity funding activity. This will include complete severity funding requests, written authorizations, and expenditure records.

Severity Funding Reviews

State/Regional and National offices should ensure appropriate usage of severity funding and expenditures. This may be done as part of their normal agency fire program review cycle.

Qualification for Professional Liability Insurance Reimbursement

Public Law 110-161 provides for reimbursement for up to one half of the cost incurred for professional liability insurance (including any administrative processing cost charged by the insurance company) for temporary fire line managers, management officials, and law enforcement officers.

To qualify for reimbursement, "temporary fire line managers" must meet one of the following three criteria:

- Provide temporary supervision or management of personnel engaged in wildland fire activities;
- Provide analysis or information that affects a supervisor's or manager's decision about a wildland fire;
- Direct the deployment of equipment for a wildland fire, such as a base camp manager, an equipment manager, a helicopter coordinator, or an initial attack dispatcher.
    - ***DOI –*** *See Personnel Bulletin No. 08-07, March 20, 2008.*
    - ***FS –*** *Refer to https://fsweb.asc.fs.fed.us/HR.*

Chapter 11
Incident Management and Response

National Response Framework

The National Response Framework presents the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies—from the smallest incident to the largest catastrophe.

The Framework establishes a comprehensive, national, all-hazards approach to domestic incident response. Information about the National Response Framework can be found at https://www.fema.gov/media-library/assets/documents/117791.

National Incident Management System

The National Wildfire Coordinating Group (NWCG) follows the National Incident Management System (NIMS), which is a component of the National Response Framework. NIMS provides a universal set of structures, procedures, and standards for agencies to respond to all types of emergencies. NIMS will be used to complete tasks assigned to the interagency wildland fire community under the National Response Framework.

Incident Management and Coordination Components of NIMS

Effective incident management requires:

- Command organizations to manage on-site incident operations.
- Coordination and support organizations to provide direction and supply resources to the on-site organization.

Incident Command System (ICS)

The ICS is the on-site management system used in NIMS. The ICS is a standardized emergency management system specifically designed to provide for an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, communications, and procedures operating within a common organizational structure to manage incidents. ICS will be used by the agencies to manage wildland fire operations and all-hazard incidents.

Wildfire Complexity

Wildfires are typed by complexity, from Type 5 (least complex) to Type 1 (most complex). The ICS organizational structure develops in a modular fashion based on the complexity of the incident. Complexity is determined by completing a Risk and Complexity Assessment (Refer to samples in Appendix E and F).

Incidents not meeting the recommended incident typing characteristics in the *Wildland Fire Incident Management Field Guide* (PMS 210) and later in this chapter should have a documented Risk and Complexity Assessment (Appendix E) verifying the command organization is appropriate.

Wildfire Risk and Complexity Assessment

The National Wildfire Coordinating Group has adopted the Risk and Complexity Assessment (RCA) form as a replacement for the Incident Complexity Analysis form and the Organizational Needs Assessment form. The RCA assists personnel with evaluating the situation, objectives, risks, and management considerations of an incident and recommends the appropriate organization necessary to manage the incident. The Risk and Complexity Assessment is found in Appendix E.

The RCA also includes common indicators of incident complexity to assist firefighters and managers with determining incident management organizational needs. These common indicators are found in Appendix F.

The RCA can be used to populate the Relative Risk Assessment and Organization Assessment portions of the Wildland Fire Decision Support System (WFDSS).

The RCA is also available at https://www.nwcg.gov/publications/210.

Command Organizations

Incident Command

All wildfires, regardless of complexity, will have an Incident Commander (IC). The IC is a single individual responsible to the Agency Administrator(s) for all incident activities. ICs are qualified according to the NWCG *National Incident Management System: Wildland Fire Qualification System Guide* (PMS 310-1) and any additional agency requirements. The IC may assign personnel to any combination of ICS functional area duties in order to operate safely and effectively. ICS functional area duties should be assigned to the most qualified or competent individuals available.

Incident Commanders are responsible for:

- Obtaining a Delegation of Authority and/or expectations to manage the incident from the Agency Administrator. For Type 3, 4, or 5 incidents, delegations/expectations may be written or oral;
  - ***BLM –*** *BLM District Managers will provide a written Delegation of Authority and expectations to the unit's Type 3, 4, and 5 Incident Commanders annually prior to fire season.*
- Ensuring that safety receives priority consideration in all incident activities, and that the safety and welfare of all incident personnel and the public is maintained. Ensure standardized incident and communication center

protocols identified in the Medical Incident Report section of the *IRPG* are utilized. The Medical Incident Report is found in the Medical Plan (ICS-206-WF) form available at https://www.nwcg.gov/publications/ics-forms;

- Assessing the incident situation, both immediate and potential;
- Maintaining command and control of the incident management organization;
- Ensuring transfer of command is communicated to host unit dispatch and to all incident personnel;
- Assisting with WFDSS documentation and support in close coordination with the local office(s), if requested by the delegating agency administrator(s);
- Developing incident objectives, strategies, and tactics, consistent with the Delegation of Authority and latest published WFDSS decision(s);
- Developing the organizational structure necessary to manage the incident;
- Approving and implementing the Incident Action Plan, as needed;
- Ordering, deploying, and releasing resources;
- Ensuring incident financial accountability and expenditures meet agency policy and standards; and
- Ensuring incident documentation is complete.

For purposes of initial attack, the first IC on scene qualified at any level will assume the duties of initial attack IC. The initial attack IC will assume the duties and have responsibility for all suppression efforts on the incident up to his/her level of qualification until relieved by an IC qualified at a level commensurate with incident complexity.

As an incident escalates and de-escalates, a continuing reassessment of complexity should be completed to validate the current command organization or identify the need for a different level of incident management.

An IC is expected to establish the appropriate organizational structure for each incident and manage the incident based on his/her qualifications, incident complexity, and span of control. If the incident complexity exceeds the qualifications of the current IC, the IC must continue to manage the incident within his/her capability and span of control until replaced.

On-site Command Organizations

Command organizations responsible for incident management include:

- Type 5 Incident Command;
- Type 4 Incident Command;
- Type 3 Incident Command;
- Type 2 Incident Command;
- Type 1 Incident Command;
- National Incident Management Organizations (NIMO);
- Area Command; and
- Unified Command.

Incident Characteristics

Type 5 Incident Characteristics

- Ad hoc organization managed by a Type 5 Incident Commander.
- Primarily local resources used.
- ICS command and general staff positions are not activated.
- Resources vary from two to six firefighters.
- Incident is generally contained within the first burning period and often within a few hours after resources arrive on scene.
- Additional firefighting resources or logistical support are not usually required.
- May require a Published Decision in WFDSS.

Type 4 Incident Characteristics

- Ad hoc organization managed by a Type 4 Incident Commander.
- Primarily local resources used.
- ICS command and general staff positions are not activated.
- Resources vary from a single resource to multiple resource task forces or strike teams.
- Incident is usually limited to one operational period. However, incidents may extend into multiple operational periods.
- Written Incident Action Plan (IAP) is not required. A documented operational briefing will be completed for all incoming resources. Refer to the *Incident Response Pocket Guide* for a briefing checklist.
- May require a Published Decision in WFDSS or other decision support document.

Type 3 Incident Characteristics

- Ad hoc or pre-established Type 3 organization managed by a Type 3 Incident Commander.
- The IC develops the organizational structure necessary to manage the incident. Some or all of ICS functional areas are activated, usually at the Division/Group Supervisor and/or unit leader level.
- The incident complexity analysis process is formalized and certified daily with the jurisdictional agency. It is the IC's responsibility to continually reassess the complexity level of the incident. When the assessment of complexity indicates a higher complexity level, the IC must ensure that suppression operations remain within the scope and capability of the existing organization and that span of control is consistent with established ICS standards.
- Local and non-local resources used.
- Resources vary from several resources to several task forces/strike teams.
- May be divided into divisions.
- May require staging areas and incident base.
- May involve low complexity aviation operations.

- May involve multiple operational periods prior to control, which may require a written Incident Action Plan (IAP).
- Documented operational briefings will occur for all incoming resources and before each operational period. Refer to the *Incident Response Pocket Guide* for a briefing checklist.
- ICT3s will not serve concurrently as a single resource boss or have any non-incident related responsibilities.
- May require a Published Decision in WFDSS.
- May require a written Delegation of Authority.

Type 3 Incident Command

When ICT3s are required to manage an incident, they must not have concurrent responsibilities that are not associated with the incident and they must not concurrently perform single resource boss duties.

On October 1, 2018, PMS 310-1 qualifications as Operations Section Chief Type 3 (OPS3), Planning Section Chief Type 3 (PSC3), Logistics Section Chief Type 3 (LSC3), and Finance Section Chief Type 3 (FSC3) will be required for mobilization in these positions to Type 3 incidents outside the employee's local dispatch area. Reference NWCG Memorandum EB-M-16-016, *Transition Plan for upcoming changes to national mobilization requirements for Type 3 general staff positions* at https://www.nwcg.gov/executive-board/correspondence.

Prior to October 1, 2018, the following interim standards or locally established standards will be used for Type 3 positions. These interim position standards may be used for national mobilization as well as local incidents to provide time for employees to meet the PMS 310-1 standards.

Type 3 Functional Responsibility	Minimum Qualification Standards
Incident Command	Incident Commander Type 3 (ICT3)
Safety	Line Safety Officer (SOFR)
Operations	Task Force Leader (TFLD)
Division	Single Resource Boss – Operational qualification must be commensurate with resources assigned (i.e., more than one resource assigned requires a higher level of qualification).
Plans	Local entities can establish level of skill to perform function.
Logistics	Local entities can establish level of skill to perform function.
Information	Local entities can establish level of skill to perform function.

Type 3 Functional Responsibility	Minimum Qualification Standards
Finance	Local entities can establish level of skill to perform function.

After October 1, 2018, the PMS 310-1 position standard will be required for Type 3 incident mobilization outside the employee's hosting unit local dispatch area. The position standards in the table above or locally established position standards will only be allowed for employee's operating on Type 3 incidents within their local dispatch area.

Type 2 Incident Characteristics

- Pre-established incident management team managed by Type 2 Incident Commander.
- ICS command and general staff positions activated.
- Many ICS functional units required and staffed.
- Geographic and/or functional area divisions established.
- Complex aviation operations.
- Incident command post, base camps, staging areas established.
- Incident extends into multiple operational periods.
- Written Incident Action Plan required for each operational period.
- Operations personnel often exceed 200 per operational period and total personnel may exceed 500.
- Requires a Published Decision in WFDSS or other decision support document.
- Requires a written Delegation of Authority to the Incident Commander.

Type 2 Incident Command

These ICs command pre-established Incident Management Teams that are configured with ICS Command Staff, General Staff and other leadership and support positions. Personnel performing specific Type 2 command and general staff duties must be qualified at the Type 1 or Type 2 level according to the *310-1* standards and any additional agency requirements.

Type 1 Incident Characteristics

- Pre-established Incident Management Team managed by Type 1 Incident Commander.
- ICS command and general staff positions activated.
- Most ICS functional units required and staffed.
- Geographic and functional area divisions established.
- May require branching to maintain adequate span of control.
- Complex aviation operations.
- Incident command post, incident camps, staging areas established.
- Incident extends into multiple operational periods.

- Written Incident Action Plan required for each operational period.
- Operations personnel often exceed 500 per operational period and total personnel may exceed 1000.
- Requires a Published Decision in WFDSS or other decision support document.
- Requires a written Delegation of Authority to the Incident Commander.

Type 1 Incident Command

These ICs command pre-established Incident Management Teams that are configured with ICS Command Staff, General Staff and other leadership and support positions. Personnel performing specific Type 1 Command and General Staff duties must be qualified at the Type 1 level according to the PMS 310-1 standards and any additional agency requirements.

Incident Management Teams

Area Command

Area Command is an Incident Command System organization established to:

- Oversee the management of large or multiple incidents to which several Incident Management Teams have been assigned. Area Command may become Unified Area Command when incidents are multi-jurisdictional; or
- Provide strategic support and coordination services to decision makers such as Geographic Area MAC Groups, sub-geographic area MAC Groups, Agency Administrators, Geographic Area Coordination Centers, emergency operations centers, agency operations centers, or FEMA Joint Field Offices.

The primary determining factor for establishing Area Command is the span of control of the Agency Administrator.

National Area Command teams are managed by the National Multi-Agency Coordinating Group (NMAC) and are comprised of the following:

- Area Commander (ACDR);
- Assistant Area Commander, Planning (AAPC);
- Assistant Area Commander, Logistics (AALC); and
- Area Command Aviation Coordinator (ACAC).

Depending on the complexity of the interface between the incidents, other specialists may also be assigned in areas such as aviation safety, information, long-term fire planning, and risk assessment and analysis.

Area Command functions typically include:

- Establishing overall strategy, objectives, and priorities for the incident(s) under its command;
- Allocating critical resources according to agency priorities (i.e., aircraft, IHCs, incident support needs such as medical services, communication and internet operability equipment);

- Ensuring that incidents are properly managed;
- Coordinating mobilization, team transitions, and demobilization;
- Supervising, managing, and evaluating Incident Management Teams under its command; and
- Minimizing duplication of effort and optimize effectiveness by combining multiple agency efforts under a single Area or Geographic Theater Plan.

See Appendix O for Area Command (AC) Complexity Assessment.

Type 1 Incident Management Teams

Type 1 Teams are managed by Geographic Area Multi-Agency Coordinating Groups and are mobilized by the Geographic Area Coordination Centers. At national preparedness levels 4 and 5, these teams are managed by the National Multi-Agency Coordinating Group (NMAC).

National Incident Management Organization (NIMO)

NIMO Teams are managed by the Forest Service Fire and Aviation's Washington Office and are ordered thru the NICC. The mission of NIMO is to promote continuous improvement by introducing innovative concepts, approaches, and technologies while providing adaptive and agile incident management. The NIMO Coordinator can assist ordering units to order teams in short or long configurations, customized configuration for special capabilities, and managing long duration incidents.

NIMO's standard configuration consists of seven Command and General Staff positions qualified at the Type 1 level. If needed, NIMO can expand to meet various complexity levels.

Types of NIMO assignments include:

- National or Geographic Area/Regional support to provide strategic planning assistance, during incident review, and feedback.
- Work with Type 2 candidates on Type 1 incidents for successional planning.
- To serve as mentors, trainers and evaluators on a Type 2 or Type 3 incident or designated projects.
- Manage multiple Type 3 ignitions within an area (i.e., GACC, Forest, Zone).
- Support and mentoring to an Agency Administrator with a complex fire situation.
- International assignments.
- All-hazard incidents.
- Mission-specific assignments – NIMO will continue to assist Forest Service units and other agencies with special missions. Examples from the past include R2 Bark Beetle, R5 Marijuana Eradication, or support to Regions as a Force Multiplier during higher planning/activity levels.

Type 2 Incident Management Teams

Most Type 2 teams are managed by Geographic Area Multi-Agency Coordinating Groups and are coordinated by the Geographic Area Coordination Centers. Some Type 2 teams are managed by non-federal agencies (e.g., state or local governments) and availability of these teams is determined on a case by case basis.

Unified Command

Unified Command is an application of the Incident Command System used when there is more than one agency with incident jurisdiction or when incidents cross political jurisdictions. Under Unified Command, agencies work together through their designated Incident Commanders at a single incident command post to establish common objectives and issue a single Incident Action Plan. Unified Command may be established at any level of incident management or Area Command. Under Unified Command, all agencies with jurisdictional responsibility at the incident contribute to the process of:

- Determining overall strategies;
- Selecting alternatives;
- Ensuring that joint planning for tactical activities is accomplished; and
- Maximizing use of all assigned resources.

Advantages of Unified Command are:

- A single set of objectives is developed for the entire incident;
- A collective approach is used to develop strategies to achieve incident objectives;
- Information flow and coordination is improved between all jurisdictions and agencies involved in the incident;
- All involved agencies have an understanding of joint priorities and restrictions; and
- No agency's legal authorities will be compromised or neglected.

All-Hazard Incident Management Teams (IMTs) and Other Non-Wildland Fire IMT

Many different entities have developed IMTs based on ICS core competencies under the National Incident Management System (NIMS). See Chapter 8 for more information.

Coordination and Support Organizations

Organizations that provide coordination and support to on-site command organizations include:

- Initial Attack Dispatch;
- Expanded Dispatch;
- Buying/Payment Teams;

- National and Geographic Area Coordination Centers (refer to Chapter 8); and
- Local, Geographic Area, and National Multi-Agency Coordinating (MAC) Groups.

Refer to Chapter 19 for Initial Attack and Expanded Dispatch information.

Buying/Payment Teams

Buying/Payment Teams support incidents by procuring services, supplies, and renting land, facilities, and equipment. These teams may be ordered when incident support requirements exceed local unit capacity. These teams report to the Agency Administrator or the local unit administrative officer. See the *Interagency Incident Business Management Handbook* for more information.

Multi-Agency Coordination (MAC)

Multi-Agency Coordination Groups are part of the National Interagency Incident Management System (NIIMS) and are an expansion of the off-site coordination and support system. MAC groups are activated by the Agency Administrator(s) when the character and intensity of the emergency situation significantly impacts or involves other agencies. A MAC group may be activated to provide support when only one agency has incident(s). The MAC group is made up of agency representatives who are delegated authority by their respective Agency Administrators to make agency decisions and to commit agency resources and funds. The MAC group relieves the incident support organization (dispatch, expanded dispatch) of the responsibility for making key decisions regarding prioritization of objectives and allocation of critical resources. The MAC group makes coordinated Agency Administrator level decisions on issues that affect multiple agencies. The MAC group is supported by situation, resource status and intelligence units who collect and assemble data through normal coordination channels.

MAC group direction is carried out through dispatch and coordination center organizations. When expanded dispatch is activated, the MAC group direction is carried out through the expanded dispatch organization. The MAC group organization does not operate directly with Incident Management Teams or with Area Command Teams, which are responsible for on-site management of the incident.

MAC groups may be activated at the local, geographic, or national level. National level and Geographic Area level MAC groups should be activated in accordance with the preparedness levels criteria established in the National and Geographic Area Mobilization Guides.

The MAC Group Coordinator facilitates organizing and accomplishing the mission, goals and direction of the MAC group. The MAC group coordinator:

- Provides expertise on the functions of the MAC group and on the proper relationships with dispatch centers and incident managers;
- Fills and supervises necessary unit and support positions as needed, in accordance with coordination complexity;
- Arranges for and manages facilities and equipment necessary to carry out the MAC group functions;
- Facilitates the MAC group decision process; and
- Implements decisions made by the MAC group.

Activation of a MAC group improves interagency coordination and provides for allocation and timely commitment of multi-agency emergency resources. Participation by multiple agencies in the MAC effort will improve:

- Overall situation status information;
- Incident priority determination;
- Resource acquisition and allocation;
- State and Federal disaster coordination;
- Political interfaces;
- Consistency and quality of information provided to the media and involved agencies; and
- Anticipation of future conditions and resource needs.

Wildland Fire Decision Support System (WFDSS)

The Wildland Fire Decision Support System (WFDSS) is a web-based decision support system that provides a single dynamic documentation system for use beginning at the time of discovery and concluding when the fire is declared out. WFDSS is the decision support documentation platform for all federal wildfires. WFDSS allows the Agency Administrator to describe and assess the fire Situation, develop Incident Objectives and Requirements, develop a Course of Action, evaluate Relative Risk, complete an Organization Assessment, document the Rationale and publish a Decision.

For detailed information on the tools and capabilities in WFDSS, how managers may use the tools, and suggested WFDSS refresher training items, refer to Appendix N and https://wfdss.usgs.gov/wfdss/WFDSS_Home.shtml.

The Integrated Reporting of Wildfire Information (IRWIN) data exchange system passes wildfire data through the IRWIN system to automatically populate some fields on the WFDSS information tab (e.g., Incident Name, Point of Origin, etc.) and for those using a Computer Aided Dispatch (CAD), has replaced the need to load fires individually into WFDSS, for more information on the IRWIN project see https://www.forestsandrangelands.gov/WFIT/applications/IRWIN/index.shtml.

In order to publish a decision consistent with the Land Use Plan, applicable fire-related protection and resource management objectives and requirements from

Land Use Plans and/or FMPs must be incorporated pre-season into the WFDSS via the Data Management tab.

- ***NPS –*** *NPS recommends pre-loading management direction into WFDSS pre-season.*
- ***FWS/BIA –*** *FWS and BIA units are not required to pre-load management direction into WFDSS.*

A Published Decision documents:

- Strategic direction from Land/Resource Management Plans and/or Fire Management Plans;
- Incident objectives and requirements;
- Incident management strategies and courses of action;
- Estimated costs for the duration of the incident;
- All affected jurisdictions that participated in the decision process and concurred with the strategies selected;
- That Agency Administrator(s) has reviewed and approved the decision; and
- The framework for the actions to be performed under the Delegation of Authority which authorizes an Incident Commander to operate on a specific unit(s). See Agency Administrator Responsibilities under "Managing the Incident" heading and Appendix G for Delegation of Authority specifics.

The level of documentation in a decision should be commensurate with incident complexity, cost, and/or potential duration and spread. As incident complexity changes, additional analysis may be necessary to inform decision making.

Initial Decision

All fires will have a Published Decision within WFDSS when they:

- Escape initial attack; or
- Exceed initial response; or
- Include objectives with both protection and resource benefit elements consistent with land management planning documents.

Agency-specific direction established in memos or other policy documents may further define WFDSS documentation requirements. Agency Administrator roles and responsibilities are addressed in agency chapters 2-6.

Additional considerations for determining that a decision may be needed include:

- The fire affects or is likely to affect more than one agency or more than one administrative unit within a single agency (for example more than one National Forest);
- The fire is burning into or expected to burn into wildland-urban interface;
- Significant safety or other concerns such as air quality are present or anticipated; and

- The Relative Risk Assessment indicates the need for additional evaluation and development of best management practices for achieving land and resource objectives.

New Decision

A new decision is required when:

- The Periodic Assessment indicates the Course of Action is no longer valid; or
- The fire moves beyond the Planning Area; or
- The incident exceeds an established agency threshold for approval authority (cost or complexity); or
- The Risk and Complexity Assessment indicates that the incident exceeds existing management capability.

Considerations for determining when a new decision may be needed:

- Costs are expected to exceed the estimated final costs in the current Decision; or
- Management Action Points have changed since the current Decision was published.

Additional information about WFDSS can be found in Appendix N. User support information, training materials, and other resources can be found at the WFDSS homepage, https://wfdss.usgs.gov/wfdss/WFDSS_Home.shtml.

WFDSS Decision Approval and Publication

All agencies having jurisdiction within a WFDSS Planning Area must be provided the opportunity to participate as soon as possible in the decision-making process. In situations where one agency provides fire protection under agreement or contract to a jurisdictional agency, both jurisdictional and protecting agencies should be involved in the process. Of note, in order for one federal agency administrator to be delegated authority as an "Approver" for another agency, a pre-season agreement would generally need to be developed that would describe those authorities (see your agency's delegation of authority policies for additional guidance).

Every wildfire decision will consider the development of protection objectives which also provide for safety of firefighter and the public and minimize the loss of, and damage to, property, cultural and natural resources.

- ***FS –*** *Decisions are required to include protection objectives.*

Units considering developing a decision for a group of fires should refer to the WFM R&DA Whitepaper "WFDSS Incident Groups and Decisions (6/26/2016)" for considerations until functionality is updated within the system.

The cost estimate shown in the WFDSS Cost tab will represent estimated final cost for the incident and should be developed based on historic fire costs, estimation spreadsheets, or other sources. If to-date incident expenditures

exceed WFDSS estimated fire costs, the final cost estimate must be updated and validated through a periodic assessment or a new decision. For DOI bureaus, to-date agency costs that exceed the decision authority of the Agency Administrator require the publication of a new decision and/or notification as described in the Approval Authorities table. Approval of WFDSS wildfire decisions by Agency Administrators constitutes awareness of estimated final fire costs for the incident.

Decisions in WFDSS are approved and published by the appropriate Line Officer(s) and/or authorized agency administrator(s) for the agency(s) participating in the decision. Agency administrator authority is defined in the tables below but may be subject to re-delegation or reservation of authority.

As approvers of WFDSS decisions, Agency Administrators will ensure that periodic assessments are completed until the fire is declared out.

WFDSS Approval Authorities by Agency

DOI WFDSS Approval Authorities (outside of Alaska)

Cost Estimate[1]	WFDSS Approval
Less Than $5 Million	BLM District Manager NPS Park Superintendent FWS Refuge Manager BIA Agency Superintendent
$5 Million - $10 Million	BLM District Manager[2] NPS Park Superintendent[2] FWS/BIA Regional Director[3]
Greater Than $10 Million	BLM District Manager[2] NPS Park Superintendent[2] FWS/BIA National Director[3]

[1]***NPS/FWS/BIA –*** *Cost estimate should be based on estimated final cost of the incident.*

[2]***BLM/NPS –*** *District Managers/Park Superintendents will provide written notification to the state/regional and/or national director when an incident meets or exceeds federal combined expenditures of $5 million and/or $10 million in suppression costs, and more than 50% of the burned acres are managed by the BLM/NPS. Written notifications should be emailed with a cc to the Fire and Aviation Directorate Assistant Director/Chief, Branch of Wildland Fire.*

[3]***FWS/BIA –*** *Regional Directors and National Director may delegate WFDSS approval authority as per agency policy.*

USFS WFDSS Approval Authorities

Incident Type	USFS Approval
Type 3,4,5	District Ranger level with oversight by the Forest Supervisor
Type 2	Forest Supervisor level with oversight by the Regional Forester[4]
Type 1	Regional Forester level with National oversight[4]

[4]***FS –*** *This authority may be delegated to the next lower level provided that the line officer at the lower next level meets Line Officer wildfire response certification requirements.*

DOI WFDSS Approval Process in Alaska

Cost Estimate	Jurisdictions Included	WFDSS Approval
Any Cost Threshold	BLM or NPS	BLM District/Field Manager NPS Park Superintendent
Less Than $5 Million	BLM and/or Other DOI Lands	BLM District/Field Manager BLM AFS Fire Management Officers NPS Park Superintendent FWS Refuge Manager BIA Agency Superintendent
$5 Million - $10 Million	Other DOI Lands	BLM District/Field Manager BLM AFS Manager NPS Park Superintendent FWS/BIA Regional Director[1]
Greater Than $10 Million	Other DOI Lands	BLM District/Field Manager BLM AFS Manager NPS Park Superintendent FWS/BIA National Director[1]

[1]***FWS/BIA –*** *Regional Directors and National Director may delegate WFDSS approval authority as per agency policy.*

If internet connections or servers are unavailable, WFDSS documentation will be completed using the "temporary WFDSS paper form" and entered into the web-based application as soon as it becomes available.

WFDSS Support

The Wildland Fire Management Research Development and Application (WFM RD&A) group provides the national infrastructure for wildland fire decision making and WFDSS support. Field users should contact their WFDSS Geographic Area Editor for assistance prior to contacting WFM RD&A staff.

Information for requesting assistance from WFM RD&A can be found at the WFDSS homepage at https://wfdss.usgs.gov/.

Managing the Incident

Agency Administrator Definition

An Agency Administrator is the official responsible for the management of a geographic unit or functional area. Agency Administrators are the managing officer of an agency, division thereof, or jurisdiction having statutory responsibility for incident mitigation and management. Some examples include: NPS Park Superintendent, BIA Agency Superintendent, USFS Forest Supervisor, BLM District Manager, FWS Refuge Manager, State Forester, Tribal Chairperson, Fire Chief, Police Chief.

Agency Administrator Responsibilities

The Agency Administrator (AA) manages the land and resources on their organizational unit according to the established land management plan. Fire management is part of that responsibility.

Agency Administrators are responsible for safety oversight, and may request additional safety oversight as needed.

Situations that may require additional safety oversight:

- A fire escapes initial attack or when extended attack is probable;
- There is complex or critical fire behavior;
- There is a complex air operation;
- The fire is in an urban intermix/interface; and
- Other extraordinary circumstances.

The AA establishes specific performance objectives for the Incident Commander (IC) and delegates the authority to the IC to take specific actions to meet those objectives. Agency Administrator responsibilities to an Incident Management Team (IMT) include:

- Conduct an initial briefing to the Incident Management Team (Appendix D).
- Provide an approved WFDSS Decision.
  - ***FS*** *– Ensure that significant decisions related to strategy and costs are included in WFDSS.*
- Complete a Risk and Complexity Assessment (Appendix E and F) to accompany the WFDSS Published Decision.
  - ***FS*** *– Complete a Risk and Complexity Assessment (RCA) for Type 1, 2, and 3 incidents within WFDSS.*
- Coordinate with neighboring agencies on multi-jurisdiction fires to issue a joint Delegation of Authority and develop a single Published Decision in WFDSS for the management of unplanned ignitions.

- Issue a written Delegation of Authority (Appendix G) to the Incident Commander and to other appropriate officials, Agency Administrator Representative, Resource Advisor, and Incident Business Advisor. The delegation should:
  - State specific and measurable objectives, priorities, expectations, Agency Administrator's intent, constraints, and other required direction;
  - Establish the specific time for transfer of command;
  - Assign clear responsibilities for initial attack;
  - Define your role in the management of the incident;
  - Describe procedures for Conducting during action reviews with the IC;
  - Assign a resource advisor(s) to the IMT;
  - Define public information responsibilities;
  - Address accident investigation procedures and notification requirements for fire managers, line officer(s), and dispatch/coordination centers;
  - Assign a local government liaison to the IMT (if necessary);
  - Assign a local fire management liaison to the IMT (if necessary);
  - Assign an Incident Business Advisor (INBA) to provide incident business management oversight commensurate with complexity; and
  - Direct the IMT to address rehabilitation of areas affected by suppression activities.
- Coordinate mobilization with the Incident Commander:
  - Negotiate filling of mobilization order with the IC;
  - Establish time and location of Agency Administrator briefing;
  - Consider approving support staff additional to the IMT as requested by the IC; and
  - Consider authorizing transportation needs as requested by the IC.
- Provide pertinent support materials and documents (L/RMP, FMP, GIS data, local unit SOP's, maps, Service and Supply Plan, etc.) to the IMT.

In situations where one agency provides fire protection under agreement to the jurisdictional agency, both jurisdictional and protecting agencies will be involved in the development of the Delegation of Authorities to the Incident Management Teams and the Published Decision in WFDSS.

Agency Administrator Representative Responsibilities

The Agency Administrator Representative (the on-scene Agency Administrator) is responsible for representing the political, social, and economic issues of the Agency Administrator to the Incident Commander. This is accomplished by participating in the Agency Administrator briefing, in the IMT planning and strategy meetings and in the operational briefings.

Responsibilities include representing the Agency Administrator to the IMT regarding:

- Compliance with the Delegation of Authority and the Published Decision in WFDSS;
- Public Concerns (air quality, road or trail closures, smoke management, threats);
- Public safety (evacuations, access/use restrictions, temporary closures);
- Public information (fire size, resources assigned, threats, concerns, appeals for assistance);
- Socioeconomic, political, or tribal concerns;
- Land and property ownership concerns;
- Interagency and inter-governmental issues;
- Wildland urban interface impacts; and
- Media contacts.

Resource Advisor Responsibilities

The Resource Advisor is responsible for anticipating the impacts of fire operations on natural and cultural resources and for communicating protection requirements for those resources to the Incident Commander. The Resource Advisor should ensure IMT compliance with the Land/Resource Management Plan and Fire Management Plan. The Resource Advisor should provide the Incident Commander with information, analysis, and advice on these areas:

- Rehabilitation requirements and standards;
- Land ownership;
- Hazardous materials;
- Fuel breaks (locations and specifications);
- Water sources and ownership;
- Critical watersheds;
- Critical wildlife habitat;
- Noxious weeds/aquatic invasive species;
- Special status species (threatened, endangered, proposed, sensitive);
- Fisheries;
- Poisonous plants, insects and snakes;
- Mineral resources (oil, gas, mining activities);
- Archeological site, historic trails, paleontological sites;
- Riparian areas;
- Military issues;
- Utility rights-of-way (power, communication sites);
- Native allotments;
- Grazing allotments;
- Recreational areas; and
- Special management areas (wilderness areas, wilderness study areas, recommended wilderness, national monuments, national conservation areas, national historic landmarks, areas of critical environmental concern, research natural areas, wild and scenic rivers).

The Resource Advisor and Agency Administrator Representative positions are generally filled by local unit personnel. These positions may be combined and performed by one individual. Duties are stated in the *Resource Advisor's Guide for Wildland Fire* (NWCG PMS 313, NFES 1831, Aug 2017).

Use of Trainees

Use of trainees is encouraged. On wildland fire incidents, trainees may supervise trainees. However, when assigning trainees to positions where critical life-safety decisions are affected, trainees must be directly supervised by a fully qualified individual. For example:

- A Division Group Supervisor (DIVS) trainee may not work directly for an Operations Section Chief without additional field supervision. The potential for high hazard work with high risk outcomes calls for a fully qualified DIVS to be assigned supervision of the DIVS trainee.
- A Supply Unit Leader (SPUL) trainee may supervise a Receiving/Distribution Manager (RCDM) trainee. In this case, supervision may be successfully provided in a lower hazard environment with appropriate risk mitigation.

Incident Action Plan

When a written Incident Action Plan is required, suggested components may include objectives, organization, weather forecast, fire behavior forecast, division assignments, air operations summary, safety message, communications plan, and incident map. An incident medical plan is required in all written Incident Action Plans.

Incident Status Reporting

The Incident Status Summary (ICS-209), submitted to the GACC, is used to report large wildland fires and any other significant events on lands under federal protection or federal ownership. Lands administered by states and other federal cooperators may also report in this manner.

Large fires are classified as 100 acres or larger in timber fuel types, 300 acres or larger in grass fuel types, or when a NIMO, Type 1 or 2 Incident Management Team is assigned, regardless of the size of the incident or the suppression management strategy. An ICS-209 should be submitted daily for all uncontained full suppression wildfires that meet large fire criteria. An ICS-209 should be submitted weekly (Thursday evening), for all wildfires meeting large fire criteria that are being managed under strategies that are less than full suppression. The Agency Administrator may require additional reporting times. Refer to local, zone and/or GACC guidance for additional reporting requirements.

Incident History and Financial Records

Wildfire incidents on Federal lands managed by the FS and DOI (except BIA) require creation of an Incident History File (IHF) to document significant events, actions taken, lessons learned and other information with long-term

value for managing natural resources. IHF contents and instructions, and tools for creating the IHF are found at https://www.nwcg.gov/committees/incident-planning-subcommittee.

The host unit will be responsible for retaining the incident documentation package including the IHF and financial records.

Document and Computer Security

Precautions must be taken to secure incident information in its various formats. All forms of information shall be treated as Controlled Unclassified Information (CUI) and care must be exercised when handling the data to prevent the inadvertent viewing or unauthorized disclosure of information. CUI paper copies that compromise privacy and security shall be shredded before disposal when no longer needed. All computers used at the incident must be patched and have anti-virus software installed with recently updated definition files. All media used to transfer information into the incident (for example, but not limited to, USB flash drives, portable hard drives and CD/DVDs) must be scanned prior to use. Autorun capabilities must be disabled to prevent the spread of malware. All computers and storage devices shall be physically secured at all times.

Transfer of Command

The following guidelines will assist in the transfer of incident command responsibilities from the local unit to incoming Incident Management Team and back to the local unit.

- The local team or organization already in place remains in charge until the local representative briefs their counterparts on the incoming team, a Delegation of Authority has been signed, and a mutually agreed time for transfer of command has been established.
- The ordering unit will specify times of arrival and transfer of command, and discuss these timeframes with both the incoming and outgoing command structures.
- Clear lines of authority must be maintained in order to minimize confusion and maintain operational control.
- Transfers of command should occur at the beginning of an operational period, whenever possible.
- All operational personnel will be notified on incident command frequencies when transfer of command occurs.

Release of Incident Management Teams

The release of an IMT should follow an approved transfer of command process. The Agency Administrator must approve the date and time of the transfer of command. The Transfer of Command Plan should include the following elements:

- Remaining organizational needs and structure;
- Tasks or work to be accomplished;
- Communication systems and radio frequencies;

- Local safety hazards and considerations;
- Incident Action Plan, including remaining resources and weather forecast;
- Facilities, equipment, and supply status;
- Arrangement for feeding remaining personnel;
- Financial and payment processes needing follow-up; and
- Risk and Complexity Assessment.

Team Evaluation

At completion of assignment, Incident Commanders will receive a written performance evaluation from the Agency Administrator(s) prior to the teams' release from the incident. Certain elements of this evaluation may not be able to be completed at the closeout review. These include accountability and property control, completeness of claims investigation/documentation, and completeness of financial and payment documentation.

The final evaluation incorporating all of the above elements should be sent to the Incident Commander and the respective GACC within 60 days. See Appendix I for the IMT evaluation form.

The Delegation of Authority, the Published Decision in WFDSS, and other documented Agency Administrator's direction will serve as the primary standards against which the IMT is evaluated.

The Agency Administrator will provide a copy of the evaluation to the IC and the state/regional FMO, and retain a copy for the final fire package.

The state/regional FMO will review all evaluations and will be responsible for providing a copy of evaluations documenting performance to the Geographic Area Coordinating Group or agency managing the IMT.

Unit/Area Closures

Threats to public safety may require temporary closure of a unit/area or a portion of it. When a fire threatens escape from the unit/area, adjacent authorities must be given as much advance notice as possible in order to achieve orderly evacuation.

Incident Emergency Management Planning and Services

Refer to Chapter 7 for further guidance.

Fire Management in Wilderness

Actions taken in wilderness will be conducted to protect life and safety, to meet natural and cultural resource objectives, and to minimize negative impacts of the fire management actions and the fires themselves. In evaluating fire management actions, the potential degradation of wilderness character will be

considered before, and given significantly more weight than, economic efficiency and convenience. Unless human life or private property is immediately threatened, only those actions that preserve wilderness character and/or have localized, short-term adverse impacts to wilderness character will be acceptable. Any Delegation of Authority to Incident Management Teams will convey appropriate emphasis on the protection of wilderness character and resources and will ensure interaction with local wilderness resource advisors.

- ***BLM/NPS/FWS –*** *For all wilderness fire management actions proposing the use of any of the Wilderness Act 4(c) prohibitions, a minimum requirements analysis will be completed.*
- ***FS –*** *For all wilderness fire management actions proposing the use of any Wilderness Act 4(c) prohibitions, a minimum requirements analysis is recommended.*
- ***BIA –*** *For all wilderness fire management actions refer to the Land and Resource Management Plans.*

Operational Guidelines for Aquatic Invasive Species

In order to prevent the spread of aquatic invasive species, it is important that fire personnel recognize how our fire operations can prevent the transport of these species. The NWCG Invasive Species Subcommittee provides up-to-date operational guidelines, best management practices, and equipment cleaning guidance to minimize the spread of aquatic invasive species. Consult the NWCG website (https://www.nwcg.gov/committees/invasive-species-subcommittee) to obtain these protocols. Local area or agency guidelines may also be available and useful and local biologists, Resource Advisors (READ) and fire personnel should consult with each other during the pre-season regarding known aquatic invasive species locations to facilitate incident avoidance when possible. To minimize potential transmission of aquatic invasive species, it is recommended that you:

- Consult with local biologists, Resource Advisors (READ) and fire personnel for known aquatic invasive species locations in the area and avoid them when possible.
- Avoid entering (driving through) water bodies or wet areas when possible.
- Avoid transferring water between drainages or between unconnected waters within the same drainage when possible.
- Avoid sucking organic and bottom material into water intakes when drafting from a natural water body.
- Avoid obtaining water from multiple sources during a single operational period when possible.
- Remove all plant parts and mud from external surfaces of gear and equipment after an operational period.
- If gear contacts untreated water, consider decontaminating before moving to new drainages. Applicable gear includes helicopter buckets, snorkel ends, foot valves, and draft hoses. Water delivery equipment and accessories

(e.g., fireline hoses, wye valves, nozzles) that do not transfer tank water to waterbodies do not need to be disinfected.

- For decontamination and cleaning protocols, refer to NWCG Invasive Species Subcommittee guidance (https://www.nwcg.gov/committees/invasive-species-subcommittee) or local area or agency direction. NWCG protocols emphasize hot water power washing or drying over use of chemicals.
- Carry spare, clean, dry helicopter buckets, draft hoses, and foot valves to switch out with used ones when moving to a new water source. Decontaminate the wet gear while spares are being used.
- Prime engine pumps with water from the drafting source (e.g., streams, lake) rather than using water from the engine tank. This minimizes the leakage of possibly contaminated engine tank water through the foot valve. Ensure foot valves are operating and not leaking. Decontamination of engine or water tender tanks with hot water or chemicals is not recommended.

Operational Guidelines for Invasive Species

Suppression and support vehicles, tools, and machinery should be cleaned at a designated area prior to arriving and leaving the incident. Onsite fire equipment should be thoroughly cleaned including the undercarriage, fender wells, tires, radiator, and exterior of the vehicle. Firefighter personnel should clean personal equipment, boots, clothing, etc., of weed or other invasive species materials, including visible plant parts, soil, and other materials as identified by the resource advisor. The cleaning area should also be clearly marked to identify the area for post-fire control treatments, as needed.

Ensure that seed mixes and mulch used in suppression repair contain no federally or state designated noxious weeds by using seed mixes and mulches that have been examined by a laboratory or have current weed free certification from a state seed laboratory or equivalent qualified testing agent.

Responding to Non-Wildland Fire Incidents

Managers will avoid giving the appearance that their wildland fire resources are trained and equipped to perform structure, vehicle, and dump fire suppression, to respond to hazardous materials releases, or to perform emergency medical response for the public.

Wildland Urban Interface

The operational roles of the federal agencies as partners in the wildland urban interface are wildfire suppression, structure protection (see below), prescribed fire, hazard reduction, cooperative prevention and education, and technical assistance. Structural fire suppression is the responsibility of tribal, state, or local governments. Federal agencies may assist with exterior structural fire

protection activities under formal fire protection agreements that specify the mutual responsibilities of the partners, including funding (some federal agencies have full structural protection authority for their facilities on lands they administer and may also enter into formal agreements to assist state and local governments with structural protection).

– Review and Update of the 1995 Federal Wildland Fire Management Policy, January 2001, page 23.

Funding is not provided to prepare for or respond to emergency non-wildland fire response activities such as structure fires, vehicle fires, dump fires, hazardous materials releases, and emergency medical responses. Managers must ensure that fire management plans, interagency agreements, and annual operating plans clearly state agency and cooperator roles and responsibilities for non-wildland fire response activities that agency personnel are exposed to as a result of working in the interagency fire environment. Managers will also ensure that federal wildland fire resources are not identified on run cards or in dispatch plans for non-wildland fire responses.

Structure, Vehicle, Dumpster, Trash, and Landfill Fires

Wildland firefighters will not take direct suppression action on structure, vehicle, dumpster, trash, or landfill fires. Structure, vehicle, and landfill fire suppression is not a functional responsibility of wildland fire resources. These fires have the potential to emit high levels of toxic gases. This policy will be reflected in suppression response plans.

Wildland firefighters who encounter structure, vehicle, or landfill fires, or who are dispatched to such fires due to significant threat to adjacent agency protected lands/resources, will not engage in direct suppression action. Structure protection (not suppression) activities will be limited to exterior efforts, and only when such actions can be accomplished safely and in accordance with established wildland fire operations standards.

- ***NPS –*** *For structural fire (including vehicle, trash and dumpster fires) response, training, medical examination, and physical fitness requirements, and hazardous material response or control guidance, refer to Chapter 3.*
- ***FS –*** *Wildfires other than vegetation (such as dumpster, trash, landfill, or vehicle) as the primary fuel present hazards that are outside of the basic wildland firefighters training and protective equipment. Response actions will be limited to protection of life, property, and resources when they can be safely undertaken with proper risk assessment and mitigation. When agency employees are trained, qualified, and equipped to take action on other than vegetation fires, they may do so with proper risk assessment and mitigation (Incident Response Pocket Guide, PMS 461).*

Public Emergency Medical Response

Public emergency medical response is not a functional responsibility of wildland fire resources, and should not be part of a preplanned response that requires these duties. When wildland firefighters encounter emergency medical response situations, their efforts should be limited to immediate care (e.g., first aid, first responder) actions that they are trained and qualified to perform.

- ***NPS –*** *NPS employees who provide emergency medical services will adhere to the requirements contained in Director's Order and Reference Manual #51, Emergency Medical Services.*

Post-Wildfire Activities

Each wildland fire management agency is responsible for taking prompt action to determine the need for, and to prescribe and implement, emergency treatments to minimize threats to life or property or to stabilize and prevent unacceptable degradation to natural and cultural resources resulting from the effects of a fire on the lands they manage.

Post-wildfire activities references can be found in *Interagency Burned Area Emergency Response Guidebook, Interpretation of Department of the Interior 620 DM 7 and USDA Forest Service Manual 2523, For the Emergency Stabilization of Federal and Tribal Trust Lands, Version 4.0 dated Feb. 2006* and *Interagency Burned Area Rehabilitation Guidebook, Interpretation of Department of the Interior 620 DM 7, For the Burned Area Rehabilitation of Federal and Tribal Trust Lands, Version 1.3* dated October 2006 at https://www.fws.gov/fire/ifcc/Esr/home.htm.

Damages resulting from wildfires are addressed through four activities:

- Suppression Repair – Planned actions taken to repair the damages to resources, lands, and facilities resulting from wildfire suppression actions and documented in the Incident Action Plan. These actions are usually implemented prior to, or immediately after containment of the wildfire by the incident management organization. Repairs under this activity may be completed to return the value to pre-wildfire management activity condition as practical but may not improve the condition beyond what was existing prior to the incident.
- Emergency Stabilization – Planned actions to stabilize and prevent unacceptable degradation to natural and cultural resources, to minimize threats to life or property resulting from the effects of a wildfire, or to repair/replace/construct physical improvements necessary to prevent degradation of land or resources. Emergency stabilization actions must be taken within one year following containment of a wildfire and documented in a Burned Area Emergency Response Plan.
- Rehabilitation – Efforts taken within five years following 21 days after the ignition date of a wildfire to repair or improve wildfire-damaged lands unlikely to recover naturally to management approved conditions, or to

repair or replace minor assets damaged by wildfire. These efforts are documented in:

- ***DOI –*** *a separate Burned Area Rehabilitation Plan (BAR) or in combination with Burned Area Emergency Response Plan (BAER).*
- ***FS –*** *a Burned Area Emergency Response Plan (BAER).*

- Restoration – Continuing the rehabilitation beyond the initial five years or the repair or replacement of major assets damaged by the wildfire.

Post-Fire Activities

	Suppression Repair	Emergency Stabilization	Rehabilitation	Restoration
Objective	Repair suppression damages	Protect life and property	Repair damages	Long Term Ecosystem Restoration
Damage due to	Suppression activities	Post-fire events and fire	Fire	Fire
Urgency	Immediately after containment	1-12 months	1-5 years	5+ years
Responsibility	IC/Agency Administrator	Agency Administrator	Agency Administrator	Agency Administrator
Funding type	Suppression (fire)	Suppression (Emergency Stabilization)	Rehabilitation or regular program	Regular program

Emergency Stabilization Approval Authorities

	BIA	BLM	FWS	NPS	FS
Local Approval Level	<$250,000 Agency Supt.	$0 Field/ District Manager	$0 Refuge Manager	$0 Park Supt.	$0 District Ranger
					$0 Forest Supervisor
Regional/ State Approval Level	$250,000-$500,000 Regional Director	<$100,000 State Director	<$500,000 Regional Director with Regional Fire Management Coordinator concurrence	<$500,000 Regional Director	$500,000 Western Regional Foresters
					$100,000 Eastern Regional Foresters

	BIA	BLM	FWS	NPS	FS
National Approval Level	>$500,000 Director of Fire Management	>$100,000 Director	>$500,000 Chief, Branch of Fire Management	>$500,000 Chief, Division of Fire and Aviation	>$100,000 or $500,000 Director, Watershed & Wildlife Management

Burned Area Emergency Response (BAER) Teams

BAER Teams are a standing or ad hoc group of technical specialists (e.g., hydrologists, biologists, soil scientists, etc.) that develop and may implement portions of the Burned Area Emergency Response Plans. They will meet the requirements for unescorted personnel found in Chapter 7 under "Visitors to the Fireline" when working within the perimeter of an uncontrolled wildfire. The team's skills and size should be commensurate with the size and complexity of the wildfire.

It is the Agency Administrator's responsibility to designate an interdisciplinary BAER team. However, BAER teams must coordinate closely with IC and Incident Management teams to work safely and efficiently. Initial requests for funding for BAER should be submitted to the appropriate Agency Administrator for approval within 7 calendar days after the total containment of the fire. If additional time is needed, extensions may be negotiated with those having approval authority.

- ***DOI –*** *The Department of Interior maintains one National BAER Team to assist field units in planning for complex post-fire emergency stabilization. The National BAER Team is scalable in long and short configurations. It may be ordered as command and general staff, or ordered as individual resources. The full National BAER Team is dispatched to more difficult incidents involving extreme risks to human life and critical Federal assets. Potential floods, mud and debris flows, watershed/municipal water supplies, urban interface, and complex and multiple jurisdictions are the dispatch prioritization criteria issues factored into the mobilization decision. Less complex incidents will use local, regional, interagency, and contracted ad hoc BAER teams that may be supplemented with National BAER Team personnel. Bureau coordinators maintain rosters of BAER personnel for less complex incidents.*
- ***DOI –*** *The DOI-BAER Teams should be requested at least 10 days prior to expected date of wildfire containment and ordered as per the National Mobilization Guide.*
- ***FS –*** *Each Forest Service unit identifies a core BAER team prior to fire season. Regional coordinators maintain rosters of experienced BAER personnel in the Region. When needed, specific BAER personnel representing needed specialties from other units can either be contacted directly or through dispatch. See FSM 2523 and FSH 2509.13 for agency-specific policy and direction for BAER teams.*

Incident Business Management

Specific incident business management guidance is contained in the *Interagency Incident Business Management Handbook* (PMS 902). This handbook assists participating agencies of the NWCG to constructively work together to provide effective execution of each agency's incident management program by establishing procedures for:

- Uniform application of regulations on the use of human resources, including classification, payroll, commissary, injury compensation, and travel;
- Acquisition of necessary equipment and supplies from appropriate sources in accordance with applicable procurement regulations;
- Managing and tracking government property;
- Financial coordination with the protection agency and maintenance of finance, property, procurement, and personnel records and forms;
- Use and coordination of incident business management functions as they relate to sharing of resources among federal, state, and local agencies, including the military;
- Investigation and reporting of accidents;
- Investigating, documenting, and reporting claims;
- Documenting costs and implementing cost-effective criteria for managing incident resources; and
- Non-fire incidents administrative processes.
    - ***DOI –*** *The Department of the Interior All Hazards-Supplement to the Interagency Incident Business Management Handbook establishes business management guidelines for the Department of the Interior's (DOI's) all-hazards incidents. The DOI Supplement is available at https://www.doi.gov/emergency/emergency-policy.cfm.*

Cost Management

An Incident Business Advisor (INBA) must be assigned to any wildfire with costs of $5 million or more. If a qualified INBA is not available, the approving official will appoint a financial advisor to monitor expenditures.

Incident cost objectives will be included as a performance measure in Incident Management Team evaluations.

Large Fire Cost Review (FS)

See Chapter 18.

Significant Wildland Fire Review (DOI)

See Chapter 18.

Cache Management

Agencies often serve as interagency partners in national support caches and local area support caches, and may operate single agency initial attack caches. All caches will maintain established stocking levels, receive and process orders from participating agencies and follow ordering and fire replenishment procedures as outlined by the national and geographic area cache management plans and mobilization guides.

- ***FS –*** *Refer to FSM 5160 for specific requirements.*

Type 1 and 2 National Interagency Support Caches

There are fifteen National Interagency Support Caches (NISCs); eleven are managed by the Forest Service, three are managed by the BLM, and one is managed by the State of Idaho. The fifteen national caches are part of the National Fire Equipment System (NFES). Each of these caches provides incident support in the form of equipment and supplies to units within their respective geographic areas. The NFES cache system may support other emergency, disaster, fire-related or land management activities, provided that such support is permitted by agency policies and does not adversely affect the primary mission. These national caches do not provide supplies and equipment to restock local caches for non-incident requests. Non-emergency (routine) orders should be directed to the source of supply; e.g., DLA or private vendors.

The Great Basin Area Incident Support Cache at NIFC provides publications management support to the National Wildfire Coordinating Group (NWCG). Reference the *NWCG NFES Catalog Part 2: Publications* at https://www.nwcg.gov/publications/449-2 for more detailed information.

Forest Service National Symbols Program distribution is through the Eastern Area Incident Support Cache (NEK). This material is coordinated by the USDA Forest Service, under advisement of the National Association of State Foresters' (NASF) Cooperative Forest Fire Prevention Committee (CFFP). Materials include Smokey Bear /Junior Forest Ranger prevention items and Woodsy Owl environmental educational materials.

NEK also distributes DOI Fire Education materials. The website at https://www.symbols.gov/ contains the catalog of these materials, information about these programs, and online ordering instructions.

Type 3 Support Caches

These caches directly support more than one agency and generally cover more than one administrative unit. They will maintain stocking levels to meet the identified needs of the multiple agencies for whom service is provided.

Type 4 Local Caches

Numerous caches of this level are maintained by each agency. These caches will establish and maintain stocking levels to meet the initial response needs of the local unit(s).

Inventory Management

System Implementation

Each fire cache, regardless of size, should initiate and maintain a cache inventory management system. Agency management systems provide a check out/return concept that incorporates a debit/crediting for all items leaving the cache. This system is strictly followed in the Type 1 and 2 NISC's. Inventory management processes should be implemented for all Type 3 Support and Type 4 Local caches.

Accountability

Fire loss/use rate is defined as all property and supplies lost, damaged, or consumed on an incident. It is reported as a percentage that is calculated in dollars of items issued compared to items returned. Consumable items are not included in this total. All items stocked in agency fire caches will be categorized for return (loss tolerance/use rate) and accountability purposes.

Trackable Items

Trackable items include items that a cache may track due to dollar value, sensitive property classification, or limited quantities. Available items that are considered trackable are usually engraved or tagged with a cache trackable identification number. These items must be returned to the issuing cache at the end of the incident use, or documentation must be provided to the issuing cache as to why it was not returned. All trackable items are also considered durable. Accountability for trackable items is expected to be 100 percent.

Durable Items

Durable items include cache items considered to have a useful life expectancy greater than one incident. High percentages of return for these items are expected. These items are not specifically cache identified/tagged/engraved. Durable items include water handling accessories, helicopter accessories, tents and camp items such as heaters, lights, lanterns, tables, chairs, hose, tools, backpack pumps, sleeping bags, pads, cots, and personal protective equipment. A 90% level of return is the expected threshold for durable items.

Consumable Items

Consumable items include items normally expected to be consumed during incident use. Consumable items returned in unused condition are credited to the incident. Examples of consumable items are: batteries, plastic canteens, cubitainers, forms, MREs, fusees, hot food containers, petroleum products, and medical supplies.

Incident Management and Environmental Sustainability

Every incident should seek opportunities to reduce unnecessary waste and limit impacts associated with management actions. This may be accomplished, for example, by promoting recycling and encouraging the use of alternative energy sources as long as such efforts do not compromise operational or safety objectives.

Incident-to-Incident Transfer of Supplies and Equipment

Transfer of supplies and equipment between incidents is not encouraged, due to the increased possibility of accountability errors. In instances when it is determined to be economically feasible and operationally advantageous, the following must be accomplished by the Supply Unit Leader from the incident that is releasing the items.

Documentation will be completed on the *Interagency Incident Waybill* (NFES 1472) and must include the following:

- NFES Number.
- Quantity.
- Unit of Issue.
- Description.
- Trackable ID number, if item is trackable.
- Receiving incident name, incident number, and resource request number.
- The Supply Unit Leader will send the waybill transfer information to the servicing NISC to maintain proper accountability recording.

Upon request, the servicing NISC can provide the Supply Unit Leader with an Outstanding Items Report or Incident Summary Report to facilitate accurate waybill documentation.

Fire Loss Tolerance Reporting for Type 1 and 2 Incidents

In order to help managers keep incident-related equipment and supply loss to a minimum, incident management teams (IMTs) are required to maintain accountability and tracking of these items. Guidelines and procedures to assist with this accountability are provided in Chapter 30 of the *Interagency Incident Business Management Handbook*. To further facilitate these procedures and provide oversight, a fire loss report has been developed that provides detailed information regarding used and trackable item use. This report has been accepted by NWCG for all wildland fire agencies and will be compiled for all Type 1 and Type 2 incidents. Investigations may be conducted in those cases where thresholds may have been exceeded.

These reports are compiled by the NISC servicing the particular incident. Reports will then be forwarded to the responsible local office, with a copy to the state/regional FMO. The following steps must be followed to insure accurate reports:

- At the close of each incident, all property must be returned to the servicing NFES cache;
- If accountable/trackable property has been destroyed or lost, appropriate documentation must be provided to the cache for replacement and updating property records;
- All property purchased with emergency fire funds for an incident must be returned to the NFES cache system;
- All unused consumable and/or durable NFES items must be returned to the servicing NFES cache within 30 days of control of the incident; and
- Agency Administrators/fire management officers must review the fire loss report and recommend appropriate follow-up action if losses are excessive. Those actions and recommendations should be documented and filed in the final incident records.

Incident Supply and Equipment Return Procedures

Supplies and equipment ordered with suppression funds will be returned to the ordering unit at the close of the incident and dispersed in one of three ways:

- Items meeting NFES standards will be returned to the NISC for reuse within the fire supply system;
- Items not meeting the prescribed NFES standards will be purchased with program funds by the local unit if the items are needed for program use; or
- Items will be delivered to the unit's excess property program for disposal.

Cache Returns and Restock Procedures

All returns for credit and restock of caches to specific incident charges should be made within 30 days after the close of the incident. If that timeframe cannot be met, it is required that returns and restock be made during the same calendar year as items were issued. All returns should be tagged with appropriate incident number, accompanied by an interagency waybill identifying the appropriate incident number, or accompanied by issue documents to ensure proper account credit is given. Any items returned after the calendar year of issue will be returned to multiple-fire charges, unless specific incident charge documentation (issues) can be provided with the return.

Incident Replacement of Government Property

Refer to the *IIBMH*, Chapter 30 for procedures governing property management relating to incident activities. The Agency Administrator is responsible for providing agency property management guidelines and/or procedures to incident personnel.

Damage or Loss for assigned property is addressed under *IIBMH* Chapter 30. Specialty or non-cache items originally provided by the home unit through the use of preparedness funds will be replaced by home unit funds if the loss is due to normal wear and tear. If the government property is damaged on the incident due to a specific event, e.g., wind event damages tent, the incident may, upon receipt of required documentation and proof of damage, authorize replacement

using the *Incident Replacement Requisition (OF-315)*. Cache items will be replaced at the incident if available. Cache items that are not available at the incident may be authorized for restocking at the home unit via an authorized *Incident Replacement Requisition*.

For replacement of NFES items not carried by the National Incident Supply Cache responsible for supporting the incident (i.e., Wildland Firefighter's Pants, Type II), replacement must be authorized using the *Incident Replacement Requisition (OF-315)*, and should be accomplished by ordering the item from Defense Logistics Agency (DLA).

(This page intentionally left blank.)

Chapter 12
Suppression Chemicals and Delivery Systems

Policy for Use of Fire Chemicals

Use only products qualified and approved for intended use. Follow safe handling procedures, use personal protective equipment recommended on the product label and Safety Data Sheet (SDS).

A current list of qualified products and approved uses can be found on the Wildland Fire Chemical Systems (WFCS) website at https://www.fs.fed.us/rm/fire/wfcs/index.htm.

Refer to local jurisdictional policy and guidance related to use of wildland fire chemicals for protection of historic structures.

Products must be blended or mixed at the proper ratio prior to being loaded into aircraft. Quality control and safety requirements dictate that mixing or blending of wildland fire chemicals be accomplished by approved methods.

Types of Fire Chemicals

Long-Term Retardant

Long-term retardants contain fertilizer salts that change the way fuels burn. They are effective even after the water has evaporated. Retardants may be applied aerially by large air tanker, single engine airtanker (SEAT) and helicopter bucket. Some retardant products are approved for fixed tank helicopters. Some products are formulated specifically for delivery from ground sources. See the Qualified Products List (QPL) for specific uses for each product at https://www.fs.fed.us/rm/fire/wfcs/index.htm.

Recommended coverage levels and guidelines for use can be found in the 10 Principles of Retardant Application, NFES 2048, PMS 440-2 pocket card. Retardant mixing, blending, testing, and sampling requirements can be found at the WFCS website Lot Acceptance and Quality Assurance page https://www.fs.fed.us/rm/fire/wfcs/laqa.htm.

Fire Suppressant Foam

Fire suppressant foams are combinations of wetting and foaming agents added to water to improve the effectiveness of the water. They are no longer effective once the water has evaporated. Foam may be applied by engines, portable pumps, helicopters, and SEATs. Some agencies also allow application of foam from fixed-wing water scoopers. See the QPL for specific uses for each product.

Wet Water

Using foam concentrates at a mix ratio of 0.1 percent will produce a wet water solution.

Water Enhancer (Gel)

Water enhancers, such as firefighting gels, are added to water to improve the viscosity and adhesion of water. They are not effective once the water has evaporated. These products may be used in structure protection within the wildland interface or on wildland fuels. They are fully approved for use in helicopter bucket and engine application. Many are also approved, at specific mix ratios, for use in SEATs, and fixed tank helicopters. See the QPL for specific uses for each product.

Safety Information

Personnel Safety

All qualified wildland fire chemicals meet minimum requirements (June 2007) in regard to aquatic and mammalian toxicity (acute oral toxicity, acute dermal toxicity, primary skin irritation, and primary eye irritation). Specifications for long-term retardants, fire suppression foams, and water enhancers can be found on the WFCS website.

Personnel involved in handling, mixing, and applying fire chemicals or solutions shall be trained in proper procedures to protect their health and safety and the environment. Approved fire chemicals can be irritating to the eyes. Personnel must follow the manufacturer's recommendations; including use of PPE, as found on the product label and product SDS. The SDSs for all approved fire chemicals can be found on the website https://www.fs.fed.us/rm/fire/wfcs/msds.htm.

Human health risk from accidental drench with fire chemicals can be mitigated by washing with water to remove any residue from exposed skin.

Containers of any fire chemical, including backpack pumps and engine tanks, should be labeled to alert personnel that they do not contain only water and the contents are not potable.

Slippery footing is a hazard at storage areas, unloading and mixing sites, and wherever applied. Because all fire chemical concentrates and solutions contribute to slippery conditions, all spills must be cleaned up immediately, preferably with a dry absorbent pad or granules. Firefighters should be aware that fire chemicals can conceal ground hazards. Wildland fire chemicals can penetrate and deteriorate leather boots, resulting in wet feet and potentially ruined leather.

Aerial Application Safety

Personnel and equipment in the flight path of intended aerial drops should move to a location that will decrease the possibility of being hit with a drop.

Personnel near aerial drops should be alert for objects (tree limbs, rocks, etc.) that the drop could dislodge. The Incident Response Pocket Guide (IRPG) provides additional safety information for personnel in drop areas.

During training or briefings, inform all fire personnel of environmental guidelines and requirements for fire chemicals application and avoid contact with waterways.

Avoid dipping from rivers or lakes with a helicopter bucket containing residual fire chemicals without first cleaning/washing down the bucket.

Consider setting up an adjacent reload site and manage the fire chemicals in portable tanks or terminate the use of chemicals for that application.

Interagency Policy for Aerial and Ground Delivery of Wildland Fire Chemicals Near Waterways and Other Avoidance Areas

This policy is an expansion and update for the 2000 and 2009 updated Guidelines for Aerial Delivery of all wildland fire chemicals, including retardant, foam, and water enhancers, which were established and approved by the Forest Service (FS) and the Department of the Interior (DOI). The policy includes additional avoidance areas (both aquatic and terrestrial) for aerial delivery of fire chemicals as designated by individual agencies and includes additional FS reporting requirements.

This policy does not require the helicopter or airtanker pilot-in-command to fly in such a way as to endanger his or her aircraft, other aircraft, or structures or compromise ground personnel safety.

Aerial Delivery Policy	Ground Delivery Policy
• Avoid aerial application of all wildland fire chemicals within 300 feet (ft.) of waterways. • Additional mapped avoidance areas may be designated by individual agency. • Whenever practical, as determined by the fire incident commander, use water or other less toxic wildland fire chemical suppressants for direct attack or less toxic approved fire retardants in areas occupied by threatened, endangered, proposed, candidate or sensitive species (TEPCS) or their designated critical habitats.	• Avoid application of all wildland fire chemicals into waterways[1]

[1] Delivery on the ground provides for more precise delivery of fire chemicals to target areas. Thus, delivery is allowed within the aquatic mapped avoidance areas provided chemicals do not reach the waterway. Because there is the potential for TEPCS, their designated critical habitats, or other resources such as cultural or heritage areas to occur in waterway buffers or additional mapped avoidance areas, it is advised that a resource advisor be consulted prior to application to determine best action or the potential for environmental effects. See reporting section below for requirements.

Definition of Waterway
Any body of water (including lakes, rivers, streams, and ponds) whether or not it contains aquatic life.

Definition of Waterway Buffer
300 ft. distance on either side of a waterway.

Definition of Additional Mapped Avoidance Areas
On FS lands, there may be areas requiring additional protection outside of the 300-foot waterway buffer. This may include certain dry intermittent or ephemeral streams, areas designated for resource protection, as well as areas for the protection of TEPCS terrestrial habitats and population areas.

- ***FS –*** *Maps are available at https://www.fs.fed.us/fire/retardant/index.html.*

Guidance for Pilots
Pilots will avoid all waterways and additional mapped avoidance areas designated by individual agencies. To meet the 300-foot waterway buffer zone or additional mapped avoidance areas guideline, implement the following:

- All Aircraft: When approaching a waterway or other avoidance areas, the pilot shall terminate application of wildland fire chemical approximately 300 feet before reaching the area. When flying over a waterway, the pilot shall not begin application of wildland fire chemical until 300 feet after crossing the far bank or shore. The pilot shall make adjustments for airspeed and ambient conditions such as wind to avoid the application of wildland fire chemicals within the 300-foot buffer zone. Riparian vegetation may be an indicator of waterways and pilots should confirm to the extent possible that no water is present before dropping.
- Prior to fire retardant application, all aerial supervision and/or pilots shall be briefed on the locations of all TEPCS or other avoidance areas in the vicinity.
- If operationally feasible, pilots or the aerial supervision shall make a ‘dry run’ over the intended application area and/or coordinate with ground resources to identify avoidance areas and waterways in the vicinity of the wildland fire.
- Pilots will be provided avoidance area maps and information at all briefings (if not dispatched from one geographic area/unit and delivering to another geographic area).

Exceptions for Aerial Delivery of Long-Term Retardant on USDA Forest Service Lands (2011 Record of Decision)

- Deviations from the policy are allowed only for the protection of life or safety (public and firefighter).

Exceptions for All Other Agencies and All Other Fire Chemicals

- When alternative line construction tactics are not available due to terrain constraints, congested area, life and property concerns or lack of ground personnel, it is acceptable to anchor the wildland fire chemical application to the waterway. When anchoring a wildland fire chemical line to a waterway, use the most accurate method of delivery in order to minimize placement of wildland fire chemical in the waterway (e.g., a helicopter rather than a heavy airtanker).
- Deviations from the policy are acceptable when life or property is threatened and the use of wildland fire chemical can be reasonably expected to alleviate the threat.
- When potential damage to natural resources outweighs possible loss of aquatic life, the unit administrator may approve a deviation from these guidelines.

Reporting Requirements of Aerially Delivered Wildland Fire Chemicals Into Waterways, Waterway Buffer Areas and Mapped Avoidance Areas

During training or briefings, inform field personnel of:

- Environmental guidelines for fire chemical application;
- Requirements for avoiding contact with waterways;
- Additional mapped avoidance areas as designated by individual agency; and
- Their responsibility for upward reporting in the event of application, for whatever reason, into avoidance areas.

If application of wildland fire chemical occurs or anyone believes it may have been introduced within waterways, waterway buffered areas, or other mapped avoidance areas, the following is required as appropriate:

- They should inform their supervisor;
- The information will be forwarded to incident management and the agency administrator, usually through the resource advisor;
- The incident or host authorities must immediately contact specialists within the local jurisdiction; and
- Notifications and reporting will be completed as soon as possible.

Procedures have been implemented for the required reporting. All information, including reporting tools and instructions are posted on the websites at https://www.fs.fed.us/rm/fire/wfcs and https://www.fs.fed.us/fire/retardant/.

The FS has additional reporting requirements for threatened, endangered, proposed, candidate and FS listed sensitive species for aerially delivered fire

retardant only. This requirement resulted from the Forest Service's acceptance of Biological Opinions received from the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS), and the *2011 Record of Decision (ROD) for Nationwide Aerial Application of Fire Retardant on National Forest System Lands*. The procedures, reporting tools, and instructions can be found at the same websites listed above.

Endangered Species Act (ESA) Emergency Consultation

The following provisions are guidance for complying with the emergency section 7 consultation procedures of the ESA for wildland fire chemicals. These provisions do not alter or diminish an action agency's responsibilities under the ESA.

Where T&E species or their habitats are potentially affected by application of wildland fire chemicals, the following additional procedures apply and shall be documented in initial or subsequent fire reports:

- As soon as practicable after application of wildland fire chemical near waterways or other avoidance area as designated by agency, determine whether the application has caused any adverse effects to a T&E species or their habitat. This can be accomplished by the following:
  - Ground application of wildland fire chemical outside a waterway is presumed to avoid adverse effects to aquatic species and no further consultation for aquatic species is necessary;
  - Aerial application of wildland fire chemical outside 300 ft. (or in any additional buffer areas beyond 300 ft. established on NFS lands for certain species) of a waterway is presumed to avoid adverse effects to aquatic species and no further consultation for aquatic species is necessary;
  - Aerial application of wildland fire chemical within 300 ft. (or in any additional NFS lands buffer areas) of a waterway requires that the unit administrator determine whether there have been any adverse effects to T&E species within the waterway. If no adverse effects to aquatic T&E species or their habitats, no additional requirement to consult on aquatic species with FWS or NMFS is required; and/or
  - Application of wildland fire chemical within other avoidance areas as designated by agency requires the agency administrator to determine whether there have been any adverse effects to T&E species. If there are no adverse effects to species or their habitats there is no additional requirement to consult with FWS or NMFS.
    - ***FS – Note****: the FS has completed consultation with regulatory agencies (FWS and NOAA) for aerial delivery of fire retardant (only) in National Forest System lands; please refer to https://www.fs.fed.us/fire/retardant/ for additional information and re-initiation of consultation requirements.*

If the action agency determines that there were adverse effects on T&E species or their habitats then the action agency must consult with FWS and NMFS, as required by *50 CFR 402.05* (Emergencies). Procedures for emergency consultation are described in the *USFWS Endangered Species Consultation Handbook*, Chapter 8 (March, 1998). In the case of a long duration incident, emergency consultation should be initiated as soon as practical during the event. Otherwise, post-event consultation is appropriate. The initiation of the consultation is the responsibility of the unit administrator.

Operational Guidelines for Invasive Species

Refer to Chapter 11 for guidance on minimizing potential transmission of invasive species.

(This page intentionally left blank.)

Chapter 13
Firefighter Training and Qualifications

Introduction

National Wildfire Coordinating Group (NWCG) sanctioned firefighters are trained and qualified according to the NWCG and other standards, as outlined below.

Standards

Firefighters must meet standards identified in the NWCG publication, *National Incident Management System: Wildland Fire Qualification System Guide* (PMS 310-1). The PMS 310-1 may be found at https://www.nwcg.gov/publications/310-1.

Federal agencies have consolidated minimum standards and information for frequently used positions not included in the PMS 310-1. The *Federal Wildland Fire Qualifications Supplement* can be found on the NWCG Qualifications website at https://www.nifc.gov/IQCS/index.html.

Certain firefighters must meet standards identified in the *Interagency Fire Program Management Qualifications Standards and Guide* at https://www.ifpm.nifc.gov.

Agency standards for training and qualifications may exceed the minimum standards established by National Wildfire Coordinating Group (NWCG). Such additional standards will be approved by the Fire Directors, and implemented through the Incident Qualifications and Certification System (IQCS). Standards which may exceed the minimum standards established by NWCG are identified in:

- ***BLM –*** *BLM Standards for Fire Training and Workforce Development, available at https://www.nifc.gov/training/trainingBLM_main.html.*
- ***FWS –*** *The Fire Management Handbook.*
- ***FS –*** *The Forest Service Fire and Aviation Qualifications Guide (FSFAQG) at https://www.fs.fed.us/fire/publications/.*
- ***BIA –*** *Standards can be referenced at https://www.bia.gov/nifc/index.htm. Fire Management Leadership (FML), (geographic or national) is required for all Bureau Agency Administrators/Line Officers including Agency Superintendents; Agency Foresters or Natural Resource Mangers; and Regional Foresters. Regional Directors, Deputy Directors in natural resource program areas, and Tribal Natural Resource Program Administrators are also encouraged to attend this course. The national level course offered by NAFRI is the preferred alternative to the geographic course.*

Federal agencies will accept each other's qualifications/certifications, regardless of jurisdiction and throughout the duration of the incident.

Qualification and Certification Process

Each unit with fire management responsibilities will establish an Incident Qualification Card qualification and certification process, which may include a qualification and certification committee. In areas cooperating with other federal, state, or local agencies, an interagency qualification and certification committee should be established and include representatives from each unit.

- BIA – Regional/Local Unit Red Card Committees will be used to determine qualifications and training requirements.

These qualification and certification committees provide management oversight and review of the wildland and prescribed fire positions under their jurisdiction.

The committee:

- Ensures that qualifications generated by IQCS or other agency systems for employees are valid by reviewing the training and experience of each employee.
- Determines whether each employee possesses the personal characteristics necessary to perform the wildland and prescribed fire positions in a safe and efficient manner.
- Makes recommendations to the appropriate Agency Administrator or designee who is responsible for final certification signature.
- Develops interagency training needs and sponsors courses that can be offered locally.
- Ensures training nominees meet minimum requirements for attending courses.

Non-NWCG Agency Personnel Qualifications

Personnel from non-NWCG agencies meeting NWCG PMS 310-1 prerequisites can participate in and receive certificates for successful completion of NWCG courses. Agency employees can complete the Task Blocks, Evaluation Record and Verification/Certification sections of a cooperating organizations employee Position Task Book. Agency employees will not initiate or complete the Agency Certification sections of the Position Task Book for non-agency employees.

Personnel from agencies that do not subscribe to the NWCG qualification standards may be used on agency managed fires. Agency fire managers must ensure these individuals are only assigned to duties commensurate with their competencies, agency qualifications, and equipment capabilities.

Non-NWCG Agency Personnel Use on Prescribed Fire

The NWCG PMS 310-1, *National Incident Management System: Wildland Fire Qualification System Guide,* establishes the minimum qualifications for

personnel involved in prescribed fires on which resources of more than one agency are utilized—unless local agreements specify otherwise. This guide may be found at https://www.nwcg.gov/publications/310-1.

Incident Qualifications and Certification System (IQCS)

The Incident Qualifications and Certification System (IQCS) is the fire qualifications and certification record keeping system. The Responder Master Record report provided by the IQCS meets the agency requirement for maintaining fire qualification records. The system is designed to provide managers at the local, state/regional, and national levels with detailed qualification, experience, and training information needed to certify employees in wildland fire positions. The IQCS is a tool to assist managers in certification decisions. However, it does not replace the manager's responsibility to validate that employees meet all requirements for position performance based on their agency standards.

A hard copy file folder will be kept for each employee. The contents will include, but are not limited to training records for all agency required courses, evaluations from assignments, position task book verification, yearly updated IQCS forms, and the Responder Master Record from IQCS. All records will be stored and/or destroyed in accordance with agency policies.

- ***BLM –*** *These policies can be found at https://blmspace.blm.doi.net/wo/BLMrec/default.aspx.*
- ***BLM/NPS –*** *IQCS account managers will have an IQCS Delegation of Authority from the certifying official. A Delegation of Authority can be found at https://www.nifc.gov/IQCS/index.html.*
- ***FS –*** *Forest Service Fire and Aviation Qualifications Guide (FSFAQG) at https://www.fs.fed.us/fire/publications/.*
- ***BIA –*** *All BIA/Tribal units with Fire Management Programs are required to use IQCS to track all federal emergency responders. Agency Superintendents and Line Officers of Tribal fire programs are considered Certifying Officials pursuant to the definition in the NWCG PMS 310-1. As such, they are responsible for ensuring that agency fire management personnel develop and maintain fire management job qualifications and meet physical fitness standards in accordance with policy and assign personnel to fire suppression, prescribed fire, wildland fire use activities according to qualifications and demonstrated ability. They are responsible for entering and maintaining employee fire qualifications in the IQCS. Agency Superintendents and Line Officers of Tribal Fire Programs who choose Delegation of Authority of the Certifying Official role must do so in writing, utilizing the Delegation of Authority form found on the IQCS website at https://www.nifc.gov/IQCS/index.html.*

Certification of Non-Agency Personnel

Non-agency firefighters will be certified by state or local fire departments, or private training providers approved by a Memorandum of Understanding (MOU) through their local GACC. Agencies will not assist in the administration, or sponsor the Work Capacity Test (WCT), as the certifying agency.

Incident Qualification Card

The Agency Administrator (or delegate) is responsible for annual certification of all agency and Administratively Determined (AD) personnel serving on wildfire, prescribed fire, and all hazard incidents. This responsibility includes monitoring medical status, fitness, training, performance, and ensuring the responder meets all position performance requirements.

Training, medical screening, and successful completion of the appropriate WCT must be accomplished and documented. All Incident Qualification Cards issued to agency employees, with the exception of Emergency Firefighter (EFF-paid or temporary employees at the FFT2 level), will be printed using the IQCS. Incident Qualification Cards issued to EFF or temporary employees at the FFT2 level may be printed without use of the IQCS.

Each agency will designate employees at the national, regional/state, and local levels as Fire Qualifications Administrators, who ensure all incident experience, incident training, and position Task Books for employees within the agency are accurately recorded in the IQCS. All records must be updated annually or modified as changes occur.

- ***BLM –*** *BLM Recertification Policy: If an employee (including an agency-sponsored AD) has lost currency in a position, the employee is converted to trainee status for that position. In order to regain full qualification for the position, the employee must demonstrate the ability to perform in the position as determined by the Certifying Official. Prior to recertification, the employee must:*
  - *Complete the BLM Recertification Evaluation found at https://www.nifc.gov/training/trainingBLM_main.html.*
  - *Complete one or more evaluation assignments.*
  - *Complete any additional requirements as determined by the Certifying Official (e.g., additional assignments and/or courses).*

  NOTE: *This policy only applies to positions for which a task book is required.*
- ***BLM –*** *State Fire Management Officers will certify Position Task Books and Incident Qualification Cards for Area Command and Type 1 Command and General Staff positions.*
- ***NPS –*** *Certification for Area Command and Type 1 Command and General Staff (C&GS) position task books will be done at the national office level; Type 2 C&GS, and any position task books issued to park fire management*

officers will be certified at the regional office level. All other position task books may be certified at the local unit level.

- ***NPS –*** *It is NPS policy that two or more assignments be accomplished after completing a Position Task Book, and receiving certification, before an individual begins movement to the next higher level.*
- ***FS –*** *Refer to FSH 5109.17, chapter 10, and the FSFAQG.*
- ***BIA –*** *All personnel sponsored by BIA/Tribal units are required to have an Incident Qualification Card.*

Incident Qualification Card Expiration Dates

Incident Qualification Cards for responders that possess qualifications requiring Work Capacity Tests (WCT) and the Annual Fireline Safety Refresher Training course (RT-130) are valid through the earliest expiration date (either fitness or refresher) listed on the card. Incident Qualification Cards for responders that possess qualifications that do not require WCT or RT-130 for issuance are valid for 12 months from the date the card is signed by a certifying official.

- ***FS –*** *The WCT is considered effective for 13 months from the date passed. If an employee is on an emergency assignment on the date their WCT/refresher expires, they will complete their assignment including any extensions. Upon return to their duty station, they must complete the WCT/refresher and acquire a new Incident Qualification Card prior to accepting any new assignments.*

Universal Training Requirements

All personnel filling NWCG recognized positions on the fireline must have completed:

- S-130 Firefighter Training (including the required field exercises);
- S-190 Introduction to Wildland Fire Behavior;
- L-180 Human Factors on the Fireline;
- ICS-100 Introduction to ICS; and
- IS-700A NIMS: An Introduction (or current version).

Annual Fireline Safety Refresher Training

Annual Fireline Safety Refresher Training is required for those positions identified in the NWCG 310-1. Annual Fireline Safety Refresher Training must include the following core components:

- **Entrapment Avoidance –** Use training and reference materials (e.g., LCES, Standard Firefighting Orders, Watch Out Situations, Wildfire Decision Support System (WFDSS) direction, Fire Management Plan priorities) to study the risk management process as identified in the *Incident Response Pocket Guide* (IRPG) as appropriate to the participants;
- **Current Issues** – Review and discuss current topics which could be based on the new modules or areas of concern identified by your agency or

geographic area. Review forecasts and assessments for the upcoming fire season and discuss implications for firefighter safety;

- **Fire Shelter –** Review and discuss last resort survival including escape and shelter deployment site selection. Conduct "hands-on" fire shelter inspections. Practice shelter deployments in applicable crew/module configurations (wearing fireline personal protective equipment during fire shelter practice can enhance the learning experience for students); and
- **Other Hazards and Safety Issues –** Choose additional hazard and safety subjects, which may include SAFENET, current safety alerts, site/unit-specific safety issues and hazards.

These core components must be sufficiently covered to ensure that personnel are aware of safety concerns and procedures and can demonstrate proficiency in fire shelter deployment. The minimum refresher training hour requirements for each agency is identified below. Training time may be extended in order to effectively complete this curriculum or to meet local training requirements.

- ***BLM/BIA –*** *4 hours.*
- ***NPS/FWS/FS –*** *No minimum hourly requirement; core topics as shown above will be covered.*

The Annual Fireline Safety Refresher Training course (RT-130) is not a self-study course. Minimum requirements have been established for instructors for Annual Fireline Safety Refresher Training. These requirements will ensure that an appropriate level of expertise and knowledge is available to facilitate refresher training exercises and discussions.

- Lead instructors must be a qualified single resource boss.
- Unit instructors must be a qualified firefighter type one (FFT1).
- Adjunct instructors may be utilized to provide limited instruction in specialized knowledge and skills at the discretion of the lead instructor. They must be experienced, proficient and knowledgeable of current issues in their field of expertise.
- All instructors will need the knowledge and skills to utilize current educational technology as it relates to the Wildland Fire Safety Training Annual Refresher (WFSTAR) website, such as video streaming, downloading interactive videos, and use of mobile applications and devices.

For additional information please refer to the current *NWCG Field Manager's Course Guide* (PMS 901-1) at https://www.nwcg.gov/publications/901-1.

Annual Fireline Safety Refresher training will have a 12-month currency.

- ***FS*** *– Forest Service employees have a 13-month currency requirement for Annual Fireline Safety Refresher training.*

Firefighters who receive initial fire training are not required to take Annual Fireline Safety Refresher Training in the same calendar year. A website,

https://www.nifc.gov/wfstar/index.html, titled *Wildland Fire Safety Training Annual Refresher (WFSTAR)*, is available to assist in this training. Entrapment avoidance and deployment protocols are identified in the *Incident Response Pocket Guide (IRPG)* (PMS 461/NFES 1077). The guide contains a specific "Risk Management Process" and "Last Resort Survival Checklist."

- ***BLM –*** *The "Do What's Right" training is required annual training but is not a prerequisite for issuance of an Incident Qualification Card.*

Medical Examinations

Agency Administrators and supervisors are responsible for the occupational health and safety of their employees performing wildland fire activities, and may require employees to take a medical examination at any time.

- ***BLM/NPS/FWS/BIA —****An employee may be required to take a medical examination whenever there is a reasonable concern, based on objective evidence, about the employee's continued capacity to meet any of the physical or medical requirements of the position. Such an examination may be ordered for instances of job-related injuries/illnesses and for those that are not job-related. Supervisors should contact their Servicing Human Resource Office and Wildland Fire Safety Program Manager for assistance with preparing the memorandum for requiring a medical examination. The DOI MSP Program Management will review the memorandum before issuance to the employee.*
- ***FS –*** *See the USFS WCT Implementation Guide at www.fs.fed.us/fire/safety/wct/wct_index.html as well as the eMedical website at https://www.fs.fed.us/fire/safety/wct/MQP.index.html.*

Established medical qualification programs, as stated in 5 CFR 339, provide consistent medical standards for arduous positions in order to safeguard the health of employees whose work may subject them or others to significant health and safety risks due to occupational or environmental exposure or demand.

Any employee with an active worker's compensation (OWCP) case or other physical or medical limiting factors/restrictions that preclude them from fully performing the activities of an arduous position must disclose this as part of the self-certification or medical examination process.

Information on any medical records is considered confidential and must be kept in the employee's medical file.

Arduous Fitness Level – Department of Interior Wildland Firefighter Medical Standards Program (DOI MSP)

Per Office of Wildland Fire (OWF) Policy Memorandum 2016-014, "All employees (incumbents and applicants) must take an examination meeting Federal Interagency Wildland Fire Medical Standards every three years

regardless of employment status and hiring authority, including emergency firefighters (Administratively Determined – AD/casual hires) and collateral duty firefighters who participate in arduous duty wildland fire activities. An examination taken and successfully cleared in accordance with the DOI MSP direction is required prior to participating in the Arduous Duty Work Capacity Test (Pack Test), performing arduous duty, wildland fire duties, or any agency sanctioned physical fitness training to prepare for these duties. In the years between the periodic examinations, an employee will self-certify their medical concerns and risk in taking the Work Capacity Test." Information regarding the DOI MSP can be obtained from agency Wildland Fire Safety Program Manager and at https://www.nifc.gov/medical_standards/.

If diagnostic testing beyond what is required by the DOI MSP is needed to determine medical qualification, agency approval is required before the tests are conducted. If the agency approves a request for further testing, the agency is responsible for payment. Additional testing or treatment carried out without prior approval shall be at the individual's expense.

If a Department of the Interior arduous duty wildland firefighter (WLFF) develops a change in medical status (injury or illness) between periodic medical exams or self-certifications that prevents them from performing arduous duty, the WLFF is required to report this change to his/her supervisor and/or report it at the time of the next medical exam or self-certification.

- ***NPS –****NPS Law Enforcement Rangers who are collateral duty wildland firefighters will have their LE medical exam results reviewed against the Federal Interagency Wildland Firefighter Medical Standards for medical qualification determination. If a determination of Not Cleared is made, the DOI MSP Risk Mitigation/Waiver process will be used.*
- ***NPS –*** *Medical clearance must be entered into IQCS.*
- ***FWS –*** *Periodicity requirements for Refuge law enforcement examinations will be applied to arduous duty wildland fire positions. Law enforcement officers wishing to perform in NWCG PMS 310-1 or USFWS agency-specific wildland fire positions with an arduous fitness requirement must pass the arduous work capacity test on an annual basis. The HSQ will be used for off exam years prior to arduous work capacity testing.*
- ***FS –*** *Refer to current agency direction at https://www.fs.fed.us/fire/safety/wct/wct_index.html.*
- ***BIA –*** *Refer to agency specific standards located at https://www.nifc.gov/medical_standards/.*
- ***BIA –*** *BIA structural firefighters may submit a completed NFPA exam that includes all of the DOI MSP exam requirements for RMO review against the Federal Interagency Wildland Firefighter Medical Standards for wildland fire medical qualification.*

Medical Exam Process for Light and Moderate Fitness Levels

This section applies to employees who are only required to complete the WCT at the light or moderate fitness level.

If any qualifying answer is indicated on the HSQ, a medical examination is required prior to the employee taking the WCT.

Medical examinations will be performed utilizing the *Certificate of Medical Exam, U.S. Office of Personnel Management* OF-178. Stress EKGs are not required as part of the medical examination and will only be approved if recommended and administered by the medical examining physician. Cost for exams will be borne by the home unit. If medical findings during exam require further evaluation, then the cost of any further evaluation or treatment is borne by the employee/applicant. Costs for additional tests specifically requested by the agency will be borne by the home unit.

- ***FS –*** *Medical exams will be paid from a Washington Office fund code. Additional specialized testing other than the tests listed on the OF-178 will not be covered by the Forest Service.*

If the SHRO or FMO has a direct concern about an employee's/applicant's capacity to meet the physical or medical requirements of a position, the agency may require the employee/applicant to report for a specific medical evaluation. For more information, contact your SHRO or agency Wildland Fire Safety Program Manager.

The examining physician will submit the completed OF-178 (and applicable supplements) to the employee's servicing human resources office, where it will be reviewed and retained in the employee's medical file.

- ***BLM/NPS*** *– Standards for medical examinations using the OF-178 for light and moderate positions are available. https://www.nifc.gov/medical_standards/.*
- ***NPS –*** *The law enforcement medical exam for NPS rangers, who are collateral duty wildland firefighters, will suffice for arduous, moderate, and light fitness level clearance.*
- ***FWS –*** *Periodicity requirements for Refuge law enforcement examinations will be applied to light or moderate. Law enforcement officers wishing to perform in NWCG PMS 310-1 or USFWS agency-specific wildland fire positions with a light or moderate fitness requirement must pass the appropriate level work capacity test on an annual basis. The HSQ will be used for off exam years prior to light or moderate work capacity testing.*
- ***FS –*** *The completed OF-178 is submitted to the Reviewing Medical Officer for the Agency to review and medically clear.*
- ***BIA –*** *Individuals who opt out of the DOI MSP at the arduous level will be required to complete a Fitness for Duty exam prior to participating in a WCT at a lower fitness level.*

Health Screen Questionnaire (HSQ)
Title 5 CFR Part 339 – Medical Qualification Determinations, which provides a determination of an individual's fitness-for-duty, authorizes solicitation of this information.

The approved OMB Health Screen Questionnaire (HSQ) may be found at https://www.fs.fed.us/fire/safety/wct/FS_5100_31%20exp2019_2.pdf.

The information on the HSQ is considered confidential and once reviewed by the test administrator/coordinator to determine if the WCT can be administered, it must be kept in the employee's medical file (EMF). This file may only be viewed by Human Resource Management (HRM) or Safety personnel.

- ***FS –*** *HSQ's are NOT to be done at the WCT site. They are to be completed at least 4 weeks before taking the WCT unless in an emergency hire situation. Further direction can be found in the USFS WCT Implementation Guide at www.fs.fed.us/fire/safety/wct/wct_index.html.*

Work Capacity Tests

Work Capacity Test (WCT) Categories
The NWCG *National Incident Management System: Wildland Fire Qualification System Guide* (PMS 310-1) identifies fitness levels for specific positions. There are three fitness levels—Arduous, Moderate, and Light—which require an individual to demonstrate their ability to perform the fitness requirements of the position. Positions in the "no fitness level required" category are normally performed in a controlled environment, such as an incident base.

Law Enforcement physical fitness standard is accepted as equivalent to a "light" WCT work category.

Work Capacity Test Categories

WCT Category	Distance	Weight	Time
Arduous Pack Test	3 miles	45 lb	45 min
Moderate Field Test	2 miles	25 lb	30 min
Light Walk Test	1 mile	None	16 min

- **Arduous –** Duties involve field work requiring physical performance with above average endurance and superior conditioning. These duties may include an occasional demand for extraordinarily strenuous activities in emergencies under adverse environmental conditions and over extended periods of time. Requirements include running, walking, climbing, jumping, twisting, bending, and lifting more than 50 pounds; the pace of the work typically is set by the emergency conditions.
- **Moderate –** Duties involve field work requiring complete control of all physical faculties and may include considerable walking over irregular

ground, standing for long periods of time, lifting 25 to 50 pounds, climbing, bending, stooping, twisting, and reaching. Occasional demands may be required for moderately strenuous activities in emergencies over long periods of time. Individuals usually set their own work pace.

- **Light –** Duties mainly involve office type work with occasional field activity characterized by light physical exertion requiring basic good health. Activities may include climbing stairs, standing, operating a vehicle, and long hours of work, as well as some bending, stooping, or light lifting. Individuals can usually govern the extent and pace of their physical activity.

Work Capacity Test (WCT) Administration

The Work Capacity Test (WCT) is the official method of assessing wildland firefighter fitness levels. General guidelines can be found in the *Work Capacity Tests for Wildland Firefighters, Test Administrator's Guide* (PMS 307, NFES 1109).

- ***FS –*** *For FS direction on WCT administration, refer to the USFS WCT Implementation Guide at www.fs.fed.us/fire/safety/wct/wct_index.html.*

WCT Administrators must ensure that WCT participants have been medically cleared, either through the HSQ, Wildland Firefighter Medical Qualification Standards, or agency specific medical examination.

At a minimum, WCTs are administered annually to all employees, including AD/EFF who will be serving in wildland fire positions that require a fitness level. The currency for the WCT is 12 months.

- ***FS –*** *Currency for WCT is 13 months.*

The WCT results shall be documented on the WCT Record available online as Appendix Q at https://www.nifc.gov/policies/pol_ref_redbook.html. The WCT Record captures information that is covered under the Privacy Act and should be maintained in accordance with agency Freedom of Information Act (FOIA) guidelines.

Administration of the WCT of non-federal firefighters is prohibited for liability reasons. Potential emergency firefighters who would be hired under Emergency Hire authority by the agency must be in AD pay status or sign an agency-specific volunteer services agreement prior to taking the WCT.

A Job Hazard Analysis (JHA) or Risk Assessment (RA) shall be developed and approved for each field unit prior to administrating the WCT. Administer the test using the JHA/RA as a briefing guide.

- ***BLM –*** *A risk assessment shall be developed and approved for each field unit prior to administering the WCT.*
- ***BIA –*** *A RA shall be developed and approved for each field unit prior to administering the WCT. A RA for the WCT can be found at https://www.bia.gov/nifc/safety/WildlandFireRiskAssessment/index.htm.*

The local unit shall prepare a medical response plan (such as an ICS-206 form), evaluate options for immediate medical care and patient transport, and identify closest emergency medical services. A minimum of a qualified Medical First Responder/Emergency Medical Responder (EMR) must be on site during WCT administration. Based upon a thorough evaluation of potential medical treatment and evacuation scenarios, a higher level of on-site emergency medical qualifications and equipment may be warranted (e.g., Emergency Medical Technician (EMT) or paramedic).

An Automatic External Defibrillator (AED) is required on-site during all WCTs.

Personnel taking the WCT will only complete the level of testing (Pack, Field, Walk) required by the highest fitness level identified for a position on their Incident Qualification Card. Employees shall not take the WCT unless they have an Incident Qualification Card qualification that requires it, and only at the fitness level required by that position as identified in the NWCG 310-1 or agency-specific guidance or policy.

Treadmills are not approved for Work Capacity Testing.

WCT results must be entered into the IQCS annually to update the fitness level and date that will appear on the Incident Qualification Card. WCT dates entered in IQCS will reflect the date the employee passed the fitness test. The results of the most recent WCT will always supersede the results of any previous WCT, even if previous WCTs were within the currency period.

- ***NPS/FWS –*** *Law Enforcement Officers are required to provide a copy of the medical clearance for verification and tracking purposes to the appropriate incident qualifications and certifications system (IQCS) account manager. Account managers will reflect the appropriate examination type and currency for the Law Enforcement Officer examinations in the physical examinations portion of the IQCS system.*
- ***FS –*** *Failed or not completed WCT attempts are to be entered into the eMedical system by the HSQ Coordinator.*

Work Capacity Test – Retesting

Those who do not pass the WCT will be provided another opportunity to retest. Employees will have to wait at least 48 hours before retaking the WCT. If an employee sustains an injury (verified by a licensed medical provider) during a test, the test will not count as an attempt. Once an injured employee has been released for full duty, the employee will be given time to prepare for the test (not to exceed 4 weeks). The numbers of retesting opportunities that will be allowed include:

- Three opportunities total for permanent employees required to pass a test for duties in the fire program.
- One opportunity for temporary employees required to pass a test (a second chance maybe provided at the discretion of fire management).

- ***FS –*** *Direction can be found in the USFS WCT Implementation Guide at www.fs.fed.us/fire/safety/wct/wct_index.html.*
- ***BIA –*** *Employees who fail two WCT's will develop an appropriate Physical Fitness Plan with their supervisors to ensure accountability before the 3rd test is administered.*
- ***BIA*** *– Temporary Employees- A second test may be authorized by the local unit after 14 days to allow the individual to train for the WCT. A failed second test will result in a 90 day suspension without additional testing during that period.*

Physical Fitness

Physical Fitness and Conditioning

Agency Administrators are responsible for ensuring the overall physical fitness of firefighters. Employees serving in wildland fire positions that require a fitness rating of arduous as a condition of employment are authorized one hour of duty time each work day for physical fitness conditioning. Employees serving in positions that require a fitness rating of moderate or light may be authorized up to three hours per week.

- ***BLM*** *– See Chapter 2 for physical fitness conditioning requirements.*

Fitness conditioning periods may be identified and structured to include aerobic and muscular exercises. Team sports are not authorized for fitness conditioning. Chapters 5, 6, 7, 8, and 9 and Appendices F, G, and H of *Fitness and Work Capacity 2009 ed.* (PMS 304-2, NFES 1596) and the Interagency Fire Fitness Program in the USFS *WCT Implementation Guide* provide excellent guidance concerning training specifically for the pack test, aerobic fitness programs, and muscular fitness training. https://www.nifc.gov/FireFit/index.htm

- ***NPS –*** *A fitness plan is required for all NPS personnel participating in a fitness program (DO-57). For health and fitness purposes, those who are fire-qualified at less than the arduous fitness level are not required to meet the mandatory fitness program requirements of DO-57 for wildland fire management. They are strongly encouraged to participate in the voluntary fitness program, and must still meet physical fitness/work capacity requirements as outlined in the Wildland Fire Qualifications System Guide (310-1) for positions with Moderate and Light fitness requirements.*
- ***FWS –*** *Refer to Chapter 4, Physical Fitness and Conditioning.*
- ***FS –*** *Forest Service direction is found in FSH 5109.17 and the FSFAQG. NFFE Partnership bargaining unit employees may only be required to successfully complete the WCT once per year.*
- ***BIA –*** *Physical Fitness plan must have supervisor's approval.*

Minimum Age Requirements for Hazardous Duty Assignments on Federal Incidents

Persons under 18 years old will not perform hazardous duties during wildland fire management operations on federal jurisdictions.

Engine Modules

Staffing levels and specific requirements for engine personnel may be found in Chapter 14, Firefighting Equipment.

Helicopter Modules

Staffing levels and specific requirements for helicopter personnel may be found in Chapter 16, Aviation.

Smokejumpers (SMKJ)

Smokejumpers provide professional and effective fire suppression, fuels reduction, and fire management services to help land managers meet objectives.

Smokejumper Policy

Smokejumper operations are guided by direction in the interagency section of the *Interagency Smokejumper Operations Guide (ISOG).*

Each base will comply with smokejumper operations standards. The arduous duties, specialized assignments, and operations in a variety of geographic areas require smokejumpers to have uniform training, agency approved equipment, communications, organization, and operating procedures.

Smokejumper Communications

All smokejumpers carry programmable radios and are proficient in their use and programming procedures.

Smokejumper Training

To ensure proficiency and safety, smokejumpers complete annual training that covers aspects of aviation, parachuting, fire suppression tactics, administrative procedures, and safety related to the smokejumper mission and fire operations. The training program for first-year smokejumpers is four weeks long. Candidates are evaluated to determine:

- Level of physical fitness;
- Ability to learn and perform smokejumper skills;
- Ability to work as a team member;
- Attitude; and
- Ability to think clearly and remain productive in a stressful environment.

Smokejumper Target Qualifications

Position	IQCS Target	Smokejumper Training Target
Department Managers	T1 and T2 C&G	
Spotter	ICT3, DIVS, ATGS RXB2, SOFR	
Lead Smokejumper	STLD, TFLD	Senior Rigger, FOBS
Smokejumper	ICT4, CRWB, FIRB	FEMO
Rookie Smokejumper	ICT5, FFT1	

Smokejumper Medical Standards

Smokejumper medical standards are the same as the Federal Interagency Wildland Firefighter Medical Standards-Arduous Duty Wildland Firefighter.

USFS Smokejumper Physical Fitness Standards

The national minimum standards for smokejumpers are:

- 1.5 mile run in 11:00 minutes or less;
- 45 sit-ups;
- 25 pushups;
- 7 pull-ups;
- 110 lb. pack-out over 3 miles/level terrain/90 minutes*; and
- Successful completion of the WCT at the arduous level.

*This element is tested during Smokejumper Rookie Training.

  - ***BLM –*** *Refer to Chapter 2 for physical fitness standards.*

Interagency Hotshot Crews (IHC)

Interagency Hotshot Crews provide an organized, mobile, and skilled hand crew for all phases of wildfire suppression. IHCs are comprised of 18-22 firefighters and are used primarily for wildfire suppression, fuels reduction, and other fire management duties. IHC's are capable of performing self-contained initial attack suppression operations, and commonly provide incident management capability at the Type 3 or 4 levels.

IHC Policy

IHC standards provide consistent planning, funding, organization, and management of the agency IHCs. The sponsoring unit will ensure compliance with the established standards. The arduous duties, specialized assignments, and operations in a variety of geographic areas required of IHCs dictate that training, equipment, communications, transportation, organization, and operating procedures are consistent for all agency IHCs.

As per agency policy, all IHCs will be managed under the *Standards for Interagency Hotshot Crew Operations* (*SIHCO*).

- ***BLM/NPS –*** *BLM Preparedness Review Checklist #18 (Hotshot Crew) supersedes the checklist found in the SIHCO.*
- ***BLM –*** *Additional guidance for BLM IHCs is contained in Chapter 2.*
- ***BIA –*** *IHC Superintendent and Assistant Superintendent are required to have the additional qualification of IHCS and/or IHCA on their Red Card prior to mobilization. Additional information regarding this standard can be found in the Federal Wildland Fire Qualifications Supplement at https://www.nwcg.gov/publications/310-1.*

IHC Certification

The process for IHC certification is found in the *Standards for Interagency Hotshot Crew Operations (SIHCO).*

Annual Crew Pre-Mobilization Process

The superintendent of crews holding IHC status the previous season are required to complete the Annual IHC Mobilization Checklist (*SIHCO,* Appendix C) and send the completed document to the local GACC prior to making the crew available for assignment each season.

Annual IHC Readiness Review

On an annual basis the superintendent of crews holding IHC status the previous season are required to complete the Annual IHC Preparedness Review (*SIHCO* Appendix B). This process is designed to evaluate crew preparedness and compliance with *SIHCO*. The annual review will be conducted while the crew is fully staffed and operational. The review is not required prior to a crew being made available for incident assignment at the beginning of their availability period. When a review document is completed, the document is kept on file at the local (host) unit fire management office.

IHC Organization

Individual crew structure will be based on local needs using the following standard positions: Superintendent, Assistant Superintendent, Squad Leader, Skilled Firefighter, and Crewmember.

- ***BLM –*** *IHCs have the option of traveling with 25 personnel when on incident assignments.*
- ***NPS –*** *IHCs have the option of traveling with 22 personnel when on incident assignments as authorized by the sending or receiving unit.*

When traveling by charter aircraft, IHC's should be prepared to take no more than 20 personnel, unless they receive approval via normal dispatch channels.

IHC Availability Periods

IHCs will have minimum availability periods as defined in the *SIHCO*. Availability periods may exceed the required minimum availability period. The Crew Superintendent will inform the local supervisor and the GACC of any changes in the crew's availability.

National IHC Status Reporting System

IHCs will report status through the National IHC Status Reporting System. IHC superintendents will regularly update the system with any change in crew status and/or current utilization when on assignment.

IHCs may report status by three methods:

- Via e-mail to BLM_FC_Crews@blm.gov (preferred method);
- Via the internet to the Hotshot Status submission form (link available from the Crew page of the NICC website); or
- Contacting the NICC Crew Desk at 208-387-5400.

IHC Communications

IHCs will provide a minimum of eight programmable multi-channel radios per crew as stated in the *SIHCO*.

IHC Transportation

Crews will be provided adequate transportation. The number of vehicles used to transport a crew should not exceed five. All vehicles must adhere to the certified maximum Gross Vehicle Weight (GVW) limitations.

Other Hand Crews

Policy

All crews must meet minimum crew standards as defined below as well as any additional agency, state, or contractual requirements. Typing will be identified at the local level with notification made to the local GACC.

Minimum Crew Standards for National Mobilization

Minimum Standards	Type 1	Type 2 with IA Capability	Type 2
Fireline Capability	Initial Attack – Can be broken up into squads, fireline construction, complex firing operations (backfire)	Initial Attack – Can be broken up into squads, fireline construction, firing to include burnout	Initial Attack – fireline construction, firing as directed
Crew Size	18-22	18-20	18-20

Minimum Standards	Type 1	Type 2 with IA Capability	Type 2
Leadership Qualifications	Permanent Supervision Supt: TFLD, ICT4, FIRB Asst Supt: STCR or TFLD and CRWB, ICT4 3 Squad Leaders: CRWB[1] and ICT5 2 Senior Firefighters: FFT1	Crew Boss: CRWB 3 Squad Bosses: ICT5	Crew Boss: CRWB 3 Squad Bosses: FFT1
Language Requirement	All senior leadership including Squad Leaders and higher must be able to read and interpret the language of the crew as well as English.	Same as Type 1	Same as Type 1
Experience	80% 1 season	60% 1 season	20% 1 season
Full Time Organized Crew	Yes (work and train as a unit 40 hrs per week)	No	No
Communications	8 programmable radios	4 programmable radios	4 programmable radios
Sawyers	4 agency certified as FAL2 and 50% of crew certified as FAL3 or better.	3 agency qualified	None
Training	As required by the *SIHCO* or agency policy prior to assignment	Basic firefighter training and/or annual firefighter safety refresher prior to assignment	Basic firefighter training and/or annual firefighter safety refresher prior to assignment
Logistics	Crew level agency purchasing authority	No purchasing authority	No purchasing authority
Maximum Weight	5,300 lbs	5,300 lbs	5,300 lbs
Dispatch Availability	Available nationally	Available nationally	Variable
Production Factor	1.0	.8	.8
Transportation	Own transportation	Transportation needed	Transportation needed
Tools and Equipment	Fully equipped	Not equipped	Not equipped

Minimum Standards	Type 1	Type 2 with IA Capability	Type 2
Personal Gear	Arrives with: crew first aid kit, personal first aid kit, headlamp, 1 qt. canteen, web gear, sleeping bag	Same as Type 1	Same as Type 1
PPE	All standard designated fireline PPE	All standard designated fireline PPE	All standard designated fireline PPE
Certification	Must be annually certified by the local host unit Agency Administrator or designee prior to being made available for assignment.	N/A	N/A

[1]CRWB will be required for IHC Squad Leaders on January 21, 2018.

- ***BLM –*** *for additional standards and certification requirements, refer to Chapter 2.*

Wildland Fire Modules (WFM)

The primary mission of a WFM is to provide an innovative, safe, highly mobile, logistically independent, and versatile fire module with a primary commitment to maintain fire's role as a natural ecological process for wildland fire management and incident operations.

WFMs are comprised of 7-10 firefighters. The WFM program facilitates the use of fire and other management techniques involving planned and unplanned wildland fire events. WFMs are highly skilled and versatile fire crews, which provide technical and ecological based expertise in the areas of long term planning, ignitions, holding, and suppression, and fire effects monitoring. For more information please refer to PMS 430: *Interagency Standards for Wildland Fire Module Operations (ISWFMO).*

WFM Policy

All WFM operations will be conducted adhering to the *Interagency Standards for Wildland Fire Module Operations* (*ISWFMO*), PMS 430. Sponsoring units in conjunction with the appropriate Geographic Area Coordination Center will ensure compliance of all WFMs according to the standards set within the ISWFMO. The arduous duties, specialized assignments, and operations in a variety of geographic areas require WFMs to have uniform training, agency approved equipment, communications, organization, and operating procedures.

WFM Types and Certification

WFMs ready for assignment will be certified as Type 1 WFM (WFM1) or Type 2 WFM (WFM2). Refer to the *Interagency Standards for Wildland Fire Module Operations* (I*SWFMO*) – PMS 430 for additional information.

WFM Availability Periods

WFMs will have minimum availability periods as defined in the *ISWFMO*. Availability for Type 1 WFMs may exceed the minimum period defined. Type 1 WFMs will be available for off unit assignment during the designated 90 day availability period. The module leader will inform the local supervisor and the GACC of any changes to the modules availability.

WFM Organization

Individual module structures vary based on local and agency needs using the following standard positions: Module Leader/ Foreman, Assistant Leader/ Foreman, Lead Firefighter, Senior Firefighter, Crewmember.

Minimum WFM Standards for Interagency Mobilization

Minimum Standards	Type 1	Type 2
Fireline Capability	Ability to form separate logistically self-sufficient independent groups, fire line construction, complex firing operations(backfire), monitoring, strategic planning, fire reconnaissance, public information.	Monitoring, fireline construction, firing to include burnout.
Crew Size	7-10	7-10
Leadership Qualifications	- Qualifications are not tied to a particular position within the WFM. All modules will have the following qualifications: TFLD, RXB2*, ICT4, CRWB, FIRB, FOBS - Module Lead: TFLD, CRWB - Asst. Module Lead: ICT4, FEMO - 1 Squad Boss: ICT5 - 2 Senior Firefighters: FFT1 *RXB2 (1) could be any of the module members	- Crew Boss: CRWB - 1 Squad Boss: ICT5

Minimum Standards	Type 1	Type 2
Language Requirement	All senior leadership, including Squad Bosses and higher, must be able to read and interpret the language of the crew as well as English.	Same as Type 1
Experience	90% > 1 season	60% > 1 season
Full Time Organized Crew	Yes (work and train as a unit 40 hrs. per week, 90 continuous days)	No
Communications	5 programmable radios	4 programmable radios
Sawyers	2 agency qualified	1 agency qualified
FEMO	2	2 (1 of 2 can be trainee)
Training	As required by the *ISWFMO* prior to assignment	Basic firefighter training or RT-130 prior to assignment
Medical First Responder Training	Yes	No
Logistics	Multiple crew level agency purchasing authorities	Generally no purchasing authority, may need assistance by incident logistics
Dispatch Availability	Availability determined by sponsoring agency	Availability variable by sponsoring agency
Mobilization Time	Within 2 hours of receipt of resource order when on duty, 8 hours when off duty	Within 24 hours of receipt of resource order.
Transportation	Own transportation	Transportation needed
Tools and Equipment	Fully equipped for each geographic region.	May need assistance by incident logistics
Specialized Digital, Remote Operations, Monitoring, Equipment	Yes	No
Personal Gear	Arrives with: crew First Aid kit, personal first aid kit, headlamp, 1 quart canteen, web gear, sleeping bag	Arrives with: crew First Aid kit, personal first aid kit, headlamp, 1 quart canteen, web gear, sleeping bag
PPE	All standard designated fireline PPE	All standard designated fireline PPE
Certification	Must be annually certified by the Regional or State Office of the host unit Agency Administrator or designee prior to being made available for assignment.	Must complete the mobilization checklist by the local host unit or Agency Administrator or designee prior to being made available for assignment.

- ***BLM –*** *BLM WFMs will meet standards identified in the Interagency Standards for Wildland Fire Module Operations (PMS 430). In addition, BLM WFMs will meet the following requirements:*

- *All BLM WFMs will meet the standards for Type 1 WFMs identified in the Interagency Standards for Wildland Fire Module Operations. Type 2 WFMs will not be formed, sponsored, or statused in the Resource Ordering and Status System (ROSS) by BLM units.*
- *Approval from the Assistant Director, Fire and Aviation is required prior to establishing and/or statusing new Type 1 WFMs.*
- *Any BLM unit may provide personnel to WFMs sponsored by another agency. All BLM personnel must meet the standards outlined in the Interagency Standards for Wildland Fire Module Operations, and the Interagency Standards for Fire and Fire Aviation Operations.*
- *Units may utilize Type 1 and/or Type 2 WFMs for BLM incidents. Incident commanders will order the appropriate resource to accomplish incident objectives.*
- *Fire Suppression Modules and WFMs are separate and distinct resources. The BLM has established standards for fire suppression modules in Chapter 2 of this publication. Fire managers and incident commanders should order the appropriate resource to accomplish incident objectives.*

- ***NPS –*** *Modules are coordinated regionally and mobilized/demobilized through established ordering channels through the GACCs.*

Chainsaw Operators and Fallers

In 2014, NWCG established faller qualifications in the PMS 310-1. Agencies have established additional evaluation and certification requirements:

- ***BLM/NPS/FWS/BIA -*** *Use of the NWCG position task books is required. The requirements for final evaluators for each position are as follows:*
  - *The individual tasks required for completion of the FAL3 PTB must be evaluated by a qualified FAL2 or FAL1. The Final Evaluator's Verification for a FAL3 trainee must be completed by a qualified FAL2 or FAL1.*
  - *The individual tasks required for completion of the FAL2 PTB must be evaluated by a qualified FAL2 or FAL1. The Final Evaluator's Verification for a FAL2 trainee must be completed by a qualified FAL1.*
  - *The final certification of all wildfire faller positions will remain the responsibility of the IQCS Certifying Official.*
  - *All wildfire saw operation qualifications are maintained through the IQCS system and displayed on the Incident Qualification Card.*
    - ***BLM*** *– The individual tasks required for completion of the FAL1 PTB must be evaluated by a qualified FAL1. The Final Evaluator's Verification for a FAL1 trainee must be completed by a qualified FAL1 Evaluator. Each BLM State Fire Management Officer will certify and maintain a list of their current FAL1 Evaluators.*
    - ***NPS/BIA –*** *The individual tasks required for completion of the FAL1 PTB must be evaluated by a qualified FAL1. The Final*

Evaluator's Verification for a FAL1 trainee must be completed by a qualified FAL1.

- ***FWS –*** *Follow evaluator qualification requirements listed in the FAL1, FAL2, and FAL3 position task books.*

- ***FS –*** *Use of the NWCG combined position task book for FAL1, FAL2, and FAL3 is not authorized for Forest Service use. Forest Service sawyers will continue to use agency specific certification processes outlined in Forest Service Manual 2358.*
  - *Sawyers shall not use saws outside the limits of their certification or qualifications, except during formal evaluation proceedings or under the immediate supervision of a higher qualified sawyer.*
  - *All sawyers must comply with FS policy and the FSFAQG requirements for FAL3, FAL2, or FAL1 to operate a chainsaw or crosscut saw on a wildland fire incident. Requirements include:*
    - *Possess a current first aid and CPR certification (FSH 6709.11, sec 52.3).*
    - *Initially complete a Nationally Recognized Sawyer Training Course (Wildland Fire Chain Saws, S-212).*
    - *Completion of a field proficiency evaluation with appropriate saw operator skill level along with restrictions (if any) noted on their National Sawyer Certification Card.*
  - *The National Sawyer Certification Card is valid for 3 years and is subject to review any time prior to expiration. Minimum requirements for sawyer training and field proficiency reevaluation include:*
    - *Completion of a knowledge refresher (classroom or field) and a field proficiency evaluation equivalent to the initial evaluation.*
    - *Sawyer Instructors are required to be recertified by instructing at least one NRSTC or refresher NRSTC every three years.*
  - *FS sawyers may function as evaluators for partner agencies using the FAL3 and FAL2 position task book.*
  - *Fallers who are certified or recertify after October 1, 2014 will be required to be certified in progression (i.e., must be FAL3 to be FAL2). However if the initial evaluation is FAL2 the account manager shall grant the position competency for FAL3. Those certified initially as FAL1 will have position competencies for FAL2 and FAL3 granted.*
  - *FS will accept other agency chainsaw certifications on incidents occurring on FS lands provided they meet NWCG minimum standards.*
  - *FS will accept a transferring employee's faller qualification if it was certified following the PMS 310-1 standard.*

- ***BIA –*** *Use of FAL1, FAL2 and FAL3 PTBs is mandatory and not up to unit discretion.*

Position Code	*Performance Currency*	*Training Currency*	*Fitness Level*	*CPR*	*First Aid and Bloodborne Pathogens*
FAL3	*5 years*	*S-212*	*Arduous*	*2 Years*	*3 Years*
FAL2	*5 years*	*S-212*	*Arduous*	*2 Years*	*3 Years*
FAL1	*3 years*	*Certification/Recertification*	*Arduous*	*2 Years*	*3 Years*

- *The FAL1that needs to be recertified every 3 years may be recertified by other agencies.*
- *BIA will accept other agencies FAL1 credentials upon hire.*
- *Emergency Firefighter (AD) Chainsaw Operators – Chainsaw training is authorized for AD employees who are required to operate chainsaws for fire suppression or hazardous fuels reduction project work. Supervisors of Type 2 and Type 2 IA crews who have employees who operate chainsaws must have emergency medical response capabilities. The possession of emergency response capabilities can be fulfilled through one of the following two options: 1) Crews will minimally possess one or more individuals who are currently certified to administer CPR and provide first aid. 2) If the crew does not possess this capability, other provisions must be made by the supervisor to provide these services while engaged in chainsaw operations.*

Chapter 14
Firefighting Equipment

Introduction

The agency wildland fire program equipment resources include engines, dozers, water tenders, and other motorized equipment for fire operations.

Policy

Each state/region will comply with established standards for training, equipment, communications, organization, and operating procedures required to effectively perform arduous duties in multi-agency environments and various geographic areas.

Approved foam concentrate may be used to improve the efficiency of water, except near waterways where accidental spillage or over spray of the chemical could be harmful to the aquatic ecosystem, or other identified resource concerns.

Firefighting Engine/Water Tender Common Standards

Driving Standard

Refer to driving standards in Chapter 7.

- ***BIA –*** *Refer to Chapter 6 for BIA Specific Motor Vehicle Policies. BIA and DOI policy requires all personnel who operate a vehicle with a Gross Vehicle Weight (GVW) over 26,000 pounds to have a valid CDL.*

Engine/Tactical Water Tender Water Reserve

Engine/tactical water tender operators will maintain at least 10 percent of the pumpable capacity of the water tank for emergency engine protection and drafting.

Chocks

At least one set of wheel chocks will be carried on each engine/water tender and will be properly utilized whenever the engine is parked or left unattended. This includes engine/water tender operation in a stationary mode without a driver "in place."

Fire Extinguisher

All engines/water tenders will have at least one 5 lb. ABC rated (minimum) fire extinguisher, either in full view or in a clearly marked compartment.

Nonskid Surfaces

All surfaces will comply with National Fire Protection Association (NFPA) 1906 Standard for Wildland Fire Apparatus requirements.

First Aid Kit
Each engine/water tender shall carry, in a clearly marked compartment, a fully equipped 20-25 person first aid kit.

Gross Vehicle Weight (GVW)
Each engine and water tender will have an annually certified weight slip in the vehicle at all times. Weight slip will show individual axle weights and total GVW. Operators of engines and water tenders must ensure that the maximum certified gross vehicle and axle weight ratings are never exceeded, including gear, personnel, and fuel. The NFPA 1906 standard of 250 pounds per seat position for each person and their personal gear will be used to calculate the loaded weight.

- ***FS –*** *Refer to FSH 7109.19, Chapter 30 for calculation of Rough Road Factor reduction for driving on rough or unsurfaced roads.*

Speed Limits
Posted speed limits will not be exceeded.

Lighting
Headlights and taillights shall be illuminated at all times while the vehicle is in motion. All new orders for fire engine apparatus will include an overhead lighting package in accordance with agency standards. Lighting packages will meet NFPA 1906 standards at the time of manufacture. Engines currently in service may be equipped with overhead lighting packages. A red, white, and amber combination is the accepted color scheme for fire.

Emergency Light Use
Emergency lighting will be used only during on site wildland fire operations or to mitigate serious safety hazards. Overhead lighting and other emergency lighting must meet state code requirements, and will be illuminated whenever the visibility is reduced to less than 300 feet.

- ***BLM/NPS –*** *See agency chapters or policy for specific guidance.*
- ***FWS –*** *Refer to Service policy 621 FW 1.*
- ***FS –*** *See FSM 5120, FSM 5130, and FSH 5109.16 for red lights and siren policy.*

Fire Equipment Maintenance and Inspections
Apparatus safety and operational inspections will be accomplished either on a post-fire or daily basis. Offices are required to document these inspections. Periodic maintenance (as required by the manufacturer) shall be performed at the intervals recommended and properly documented. All annual inspections will include a pump performance test to ensure the pump/plumbing system is operating at desired specifications (pressure and gallons per minute).

Mobile Attack (Pump and Roll)

Firefighters must be seated and belted within an enclosed cab or walk alongside the apparatus during mobile attack (pump and roll) operations. Riding, standing or seated on the exterior of the apparatus is prohibited. Utilization of the NFPA 1906 "on-board pump-and-roll fire-fighting position" if equipped, is not permitted.

Firefighting Engines

Operational Procedures

All engines will be equipped, operated, and maintained within guidelines established by the Department of Transportation (DOT) and regional/state/local operating plans. All personnel assigned to agency fire engines will meet all gear weight, cube, and manifest requirements specified in the *National Interagency Mobilization Guide*.

Engine Typing

Engine typing and respective standards have been established by NWCG (reference the *Wildland Fire Incident Management Field Guide* (PMS 210), Chapter 4).

Engine Type	**Structure**		**Wildland Engines**				
Components	***1***	***2***	***3***	***4***	***5***	***6***	***7***
Tank Minimum Capacity (gal)	300	300	500	750	400	150	50
Pump Minimum Flow (gpm)	1000	500	150	50	50	50	10
@ Rated Pressure (psi)	150	150	250	100	100	100	100
Hose 2½"	1200	1000	-	-	-	-	-
1½"	500	500	1000	300	300	300	-
1"	-	-	500	300	300	300	200
Ladders per NFPA 1901	Yes	Yes	-	-	-	-	-
Master Stream 500 gpm Min.	Yes	-	-	-	-	-	-
Pump and Roll	-	-	Yes	Yes	Yes	Yes	Yes
Maximum GVWR (lbs.)	-	-	-	-	26,000	19,500	14,000
Personnel (NWCG min.)	4	3	3	2	2	2	2

- ***FS –*** *See https://www.fs.fed.us/fire/equipment/engine-models/models.html for description of Forest Service national engine standards.*

Fire Engine Staffing

For Type 4, 5, 6, and 7 engines, minimum staffing is two individuals one of which is Engine Boss qualified.

For Type 3 engines, minimum staffing is three individuals, including an Engine Boss.

- ***BLM –*** *For BLM engine staffing requirements see Chapter 2.*
- ***NPS –*** *For NPS engine staffing requirements see Chapter 3.*

Engine Inventories

An inventory of supplies and equipment carried on each vehicle is required to maintain accountability and to obtain replacement items lost or damaged on incidents. The standard inventory for engines is found in Appendix M.

Water Tenders

Water Tender Typing

Water tender typing and respective standards have been established by NWCG (reference the *Wildland Fire Incident Management Field Guide* (PMS 210), Chapter 4).

Water Tender Type	Support			Tactical	
Requirements	***S1***	***S2***	***S3***	***T1***	***T2***
Tank Capacity (gal)	4000	2500	1000	2000	1000
Pump Minimum Flow (gpm)	300	200	200	250	250
@Rated Pressure (psi)	50	50	50	150	150
Max. Refill Time (mins)	30	20	15	-	-
Pump and Roll	-	-	-	Yes	Yes
Personnel (min)	1	1	1	2	2

Water Tender Qualifications and Staffing Standards

- **Water Tender (Non-Tactical)**
  - **Qualifications:** CDL (tank endorsement)
    - ***BLM –*** *Refer to the Federal Wildland Fire Qualifications Supplement.*
  - **Staffing:** A water tender (non-tactical) may be staffed with a crew of one driver/operator when it is used in a support role as a fire engine refill unit or for dust abatement. These operators do not have to pass the Work Capacity Test (WCT) but are required to take annual refresher training.

- **Water Tender (Tactical)**
  Tactical use is defined as "direct fire suppression missions such as pumping hoselays, live reel use, running attack, and use of spray bars and monitors to suppress fires."
  - **Qualifications:**
    - ***BLM –*** *ENOP, CDL (tank endorsement)*
    - ***NPS/FWS –*** *ENGB, CDL (tank endorsement)*
    - ***FS –*** *FFT1, CDL*
  - **Staffing:** Tactical water tenders will carry a minimum crew of two:
    - ***BLM –*** *One ENOP and one FFT2.*
    - ***BLM*** *– 668 Super Heavy Tactical Tenders will be staffed with one engine boss and one engine crewmember.*
    - **NPS/FWS –** *one ENGB and one FFT2.*
    - ***FS –*** *One FFT1 and one FFT1/FFT2.*

Dozers/Tractor Plows

Dozer/Tractor Plow Training and Qualifications

Agency personnel assigned as dozer/tractor plow operators will meet the training and experience standards for a Firefighter 2 (FFT2). This includes all safety and annual refresher training. While on fire assignments, all operators and support crew will meet PPE requirements including the use of aramid fiber clothing, hard hats, fire shelters, boots, etc.

Dozer/Tractor Plow Physical Fitness Standards

All employee dozer/tractor plow operators will meet requirements stated in the *Federal Wildland Fire Qualifications Supplement.*

Dozer/Tractor Plow Operational Procedures

- Agency owned and operated dozer/tractor plows will be equipped with programmable two-way radios, configured to allow the operator to monitor radio traffic.
- Agency and contract dozer/tractor plows will have agency supplied supervision when assigned to any suppression operations.
- Contract dozers must be provided with radio communications, either through a qualified Heavy Equipment Boss (HEQB) or an agency-supplied radio. Contract dozer/tractor plows will meet the specifications identified in their agreement/contract.
- Operators of dozer/tractor plows and transport equipment will meet DOT certifications and requirements regarding the use and movement of heavy equipment, including driving limitations, CDL requirements, and pilot car use.

All-Terrain Vehicles (ATV)/Utility Terrain Vehicles (UTV)

The operation of ATV/UTVs can be high risk. The use of ATV/UTVs should be evaluated to ensure that use is essential to accomplish the mission, rather than for convenience.

- ***BLM –*** *BLM personnel will not use ATVs for any wildland fire management activity including preparedness, suppression, prescribed fire, hazardous fuels reduction, post-fire rehabilitation, and emergency stabilization and restoration, regardless of incident jurisdiction or project/activity location after January 1, 2018.*
- ***BIA –*** *Effective immediately, all BIA programs will cease the procurement of ATVs used for wildland fire management activities (including preparedness, suppression, prescribed fire, hazardous fuels reduction, post-fire rehabilitation, and emergency stabilization and restoration). Any ATV currently in service may continue to be utilized for non-industrial wildland fire management activities/operations until January 1, 2019. After this date, BIA personnel will not utilize ATVs for any wildland fire management activities, regardless of incident jurisdiction or project/activity location.*
- ***BIA –*** *Programs may continue to procure and utilize other commercially available utility terrain vehicles (UTVs), provided the vehicle has manufactured-installed seat belts, a steering wheel, is a multi-seat or newly available single-seat model (e.g., Polaris Ace) and is equipped with a certified roll-over protection structure (ROPS) designed and installed by the original equipment manufacturer as standard equipment.*
- ***BLM –*** *Employees of cooperating agencies/entities may utilize ATVs on BLM incidents if allowed by their individual agency/entity policy.*

Because of the high risk nature, agencies have developed specific operational policy (refer to current agency policy). ATV/UTV operators will meet the training and certification requirements of their agency; employees certified by their agency will be considered qualified ATV/UTV operators regardless of incident jurisdiction. Common policy requirements for wildland fire operations are highlighted below:

- A JHA/RA must be completed and approved by the supervisor prior to vehicle operation.
- All personnel authorized to operate an ATV/UTV must first complete agency specific or manufacturer-provided training in safe operating procedures and appropriate PPE.
- Re-evaluation/Re-certification – Operators shall be re-evaluated every three years. Infrequent users (less than 16 hours of riding a year) shall have a check ride prior to scheduled use of an ATV/UTV.
- Specific authorization for ATV/UTV use is required – All ATV/UTV operations must hold a valid Motor Vehicle Operator's Identification Card, OF-346 or agency equivalent.

- ***BLM –*** *Upon completion of agency-specific UTV training and operator certification requirements, Utility-Terrain Vehicle Operator (UTVO) will be placed on the employee's Incident Qualification and Certification (IQCS) Card (Red Card). IQCS Certifying Officials are responsible for verifying that UTV operator qualifications are current, and that the UTVO qualification is removed from the Red Card if agency-specific training, certification, or currency requirements lapse.*
- ***NPS/FWS/BIA –*** *Upon completion of agency-specific ATV/UTV training and operator certification requirements, All-Terrain Vehicle Operator (ATVO) will be placed on the employee's Incident Qualification and Certification (IQCS) Card (Red Card). IQCS Certifying Officials are responsible for verifying that ATV/UTV operator qualifications are current, and that the ATVO qualification is removed from the Red Card if agency-specific training, certification, or currency requirements lapse.*
- ***NPS –*** *All Off-Highway Vehicle (OHV) operators (including ATV/UTV) must hold a valid state Motor Vehicle Operator's Permit. Operating restrictions identified on the operator's permit must be adhered to while operating an OHV (e.g., use of corrective lenses, etc.). NPS ATV operators must be qualified at either the Basic or Advanced Level as described in RM-50B depending on the hazard potential of the operation. All ATV operators shall be provided refresher training each year in accordance with a JHA and reevaluated by an ASI Certified Trainer every 3 years. The reevaluation shall be documented. RM-50B, Appendix B (ATV Operator Accountability/Certification Tracking Record) may be used to document the reevaluation. Further information on ATV/UTV use is found in RM-50B.*

- ATVs can only have a single rider—passengers are prohibited even if ATV is designed for two riders.
- UTVs passengers are limited to the number of seats installed by manufacturer. The operator and passenger(s) must use seatbelts while the vehicle is in motion.
- Operators must use required PPE while loading/unloading ATV/UTV.
- Cargo loads shall be loaded and secured as to not affect the vehicle's center of gravity, and shall not exceed manufacturer's recommendations for maximum carrying capacity; and
- When transporting external fuel containers with a UTV/ATV, a 5 lb. class BC fire extinguisher must be secured to the UTV/ATV.

Required PPE

ATV Head Protection for Wildland Fire Operations

- ATV helmets must be worn at all times during ATV operations (on and off the fireline); and

- ATV helmets must meet Snell SA2010, SA2015, or DOT certification.
  - A ¾ face model meeting Snell SA2010, SA2015 certification is acceptable for use.
  - Use of half "shorty" helmets requires a JHA/RA for fireline use and must include justification for its use. Refer to MTDC Tech Tip publication, *A Helmet for ATV Operators with Fireline Duties* (0651-2350-MTDC).

UTV Head Protection for Wildland Fire Operations:

- Helmets must meet DOT, ANSI Z90.1; or Snell SA2010, SA2015 certification unless:
  - UTV is used for low speeds and smooth travel surfaces, administrative use (e.g., campgrounds, incident base camps) UTV operators are not required to wear hardhats or helmets; or
  - UTV is equipped with approved Rollover Protection System (ROPS), and:
    - ***BLM –*** *A comprehensive and properly prepared RA of the specific conditions demonstrates no more than a medium residual risk level, then a hard hat meeting NFPA 1977 or ANSI Z 89.1 2009 Type 1, Class G standards may be worn with chin straps secured in place under chin.*
    - ***NPS –*** *Approved helmets are required for UTV operations that are rated moderate (amber) or high (red) using the "ORV Risk Assessment Tool" included in the NPS Off-Highway Vehicle Policy.*
    - ***FWS –*** *Per 243 FW 6.6 B.1, a hardhat meeting NFPA 1977 or ANSI Z 89.1 standards may be worn with chin straps secured in place unless the risk assessment for the operation dictates wearing a securely fastened motorcycle helmet.*
    - ***FS –*** *UTV Helmet (for fire use) – Helmets must have Snell SA certification. Wearing hardhats while driving or riding on a UTV is not allowed. Forest Service policy provides no exception to the helmet requirement for low speeds, smooth travel surfaces, or administrative use (FSH 6709.11, Chapter 10).*

Eye protection (goggles, face shield, or safety glasses) based upon JHA/RA:

- Eye protection is not required for a UTV equipped with an original manufacturer windshield that protects the face from branches, flying debris, etc., unless otherwise required by an associated industrial use activity or JHA/RA.

If operating ATV/UTV on the fireline, the following are required:

- Leather or leather/flame resistant combination gloves. Flame resistant flight gloves or NFPA 1977 compliant Driving Gloves can be used by

heavy equipment operators, drivers and fireline supervisors when not using fireline hand tools.

- National Fire Protection Association (NFPA) 1977 compliant long-sleeved flame resistant shirt (yellow recommended).
- NFPA 1977 compliant flame resistant trousers.
- Wildland fire boots.
- Appropriate head protection as described above.
    - ***FS –*** *Shirt, trousers, and gloves used by USFS personnel must meet Forest Service specification 5100-91 (shirt), 5100-92 (trousers), 6170-5 (gloves), or be NFPA 1977 compliant.*

ATV/UTV operator shall carry a personal communication device (e.g., two-way radio, cellular phone, or satellite phone).

All other ATV/UTV specific guidance is found in the respective agency's policy:

- ***BLM –*** *Refer to BLM Manual 1112-1, Chapter 17 Off-Highway Vehicles at http://web.blm.gov/internal/wo-500/directives/dir-hdbk/h1112-1.pdf. Refer to Instruction Memorandum No. WO 2017-014, Transporting Utility Terrain Vehicles (UTVs) in Pick-up Trucks.*
- ***NPS –*** *Refer to Reference Manual50B Occupational Health and Safety, Section 6.1 Off-Highway Vehicle Safety at https://www.nps.gov/policy/RM50Bdoclist.htm.*

Vehicle Cleaning/Invasive Species Prevention

Refer to Chapter 11 for guidance on minimizing potential transmission of invasive species.

Incident Remote Automated Weather Stations

Incident Remote Automated Weather Stations (IRAWS – NFES 5869) are readily deployable, portable weather stations that may be utilized in unprepared locations to monitor local weather conditions. IRAWS are intended for use on or near the fireline or at other all-risk incidents, and are installed and operated as desired by Fire Behavior Analysts (FBAN) and/or Incident Meteorologists (IMET) to record and distribute real time weather data.

National resource IRAWS systems are cached at the National Interagency Fire Center (NIFC) and may be ordered through standard equipment resource ordering systems. Following release from an incident, these stations must be returned to the Remote Sensing/Fire Weather Support Unit (RSFWSU) at NIFC for maintenance, recalibration, and redeployment.

Aerial Ignition Devices

Information on types of aerial ignition devices, operational guidelines, and personnel qualifications may be found in the *Interagency Aerial Ignition Guide* (PMS 501) available at https://www.nwcg.gov/publications/501.

Ground Ignition Devices and Transporting/Dispensing Fuel

For ground ignition devices, follow the *Interagency Ground Ignition Guide* (PMS 443) for operational guidelines, personnel qualifications, and equipment selection. https://www.nwcg.gov/publications/443

- ***BLM –*** *A 10 lb. class BC fire extinguisher is required for UTVs equipped with a ground ignition device.*

For transporting and dispensing fuel, follow the *Interagency Transportation Guide for Gasoline, Mixed Gas, Drip-Torch Fuel, and Diesel* (PMS 442) found at https://www.nwcg.gov/publications/442 or agency-specific guidance.

- ***NPS –*** *Follow the Forest Service standard for military style jerrican (UN 3A1) (Page 8, PMS 442).*
- ***FS –*** *Direction is found in FSH 6709.11.*

Chapter 15
Communications

Policy

Agency specific policies for radio communications may be found in:

- Department of Interior, Department Manual, Radio Communications Handbook (377 DM).
- USDA Forest Service Handbook (FSH) 6609.14 Chapters 10-40 and Forest Service Manual (FSM) 6600 Systems Management Chapter 6640 – Telecommunications.

Dispatch Recording Devices

Recording of phone calls without all party's prior knowledge and consent is not permitted. Recording of radio traffic is appropriate.

- ***BLM –*** *Radio recording devices will be used by BLM dispatch offices or any interagency office dispatching BLM resources.*

Cellular/Satellite Phone Communications

Cellular/satellite telephones will not be used to communicate tactical or operational traffic unless no other means are available. Cellular/satellite telephones will not be used for flight following in lieu of normal flight following procedures. Telephone communications may be used for logistical purposes.

Refer to Chapter 7 for policy regarding use of mobile devices while operating a vehicle.

Radio Communications

Radio communications provide for the flow of tactical information needed for the command/control and safety of personnel and resources.

Radio Contracts

Radios used for fire and aviation activities must be approved by the National Interagency Incident Communication Division (NIICD). Information on contracts, software, hardware requirements and approved radios is available at https://www.nifc.gov/NIICD/documents.html, or contact your agency Telecommunications Department or the National Interagency Fire Center Communications Duty Officer (NIFC CDO) at (208) 387-5644.

- ***BLM –*** *For information on BLM contracts, software, and hardware requirements and approved radios, contact the Branch of Radio Operations (FA-350) at (208) 387-5830.*

Radio Frequency Management

FM frequencies are authorized and assigned by the designated Washington Office frequency manager and managed by the state and local Communications Officers. Frequencies shall not be used without express permission from the local, state, regional, or national level designated frequency management personnel.

Daily Operational Frequency Management

Frequency assignments for normal daily and initial attack operations are made on a permanent basis and are requested through the normal Radio Frequency Authorization process from the local, state, regional or national level designated frequency management personnel.

Air operations initial attack frequencies, both AM and FM, will be assigned by the NIFC CDO. These assignments will be on an interagency basis and coordinated with the Geographic Area Coordination Centers (GACCs).

Mutual Aid Frequency Management

Mutual aid frequency sharing agreements can be made at the local level. However, mutual-aid frequency sharing agreements are only valid in the specific location where they originated. These agreements do not authorize the use of a shared frequency other than in the specified local area.

NIFC national fire frequencies are not to be used for these agreements. The only exception may occur when an agency holds a National Telecommunications Information Agency (NTIA) Radio Frequency Authorization (RFA) for a frequency that is included in the NIFC Channeling Plan. If this occurs, notification and coordination with the NIFC CDO is requested.

Incident Frequency Management

National level coordination and assignments of incident frequencies is the responsibility of the National Interagency Incident Communications Division (NIICD) and is managed by the NIFC CDO.

When communications requirements exceed normal operations, the NIFC CDO may request that GACCs assign a Communication Coordinator (COMC) to facilitate geographic area frequency management. Additional information may be found in the *National Interagency Mobilization Guide*.

- Frequencies for Type 1 and 2 incidents are assigned by the NIFC CDO and are managed by a qualified Communications Unit Leader (COML). The COML will request, assign, and report all frequencies used on the incident to the NIFC CDO/COMC. This will include the request and assignment of

all aircraft frequencies. Frequency use will be documented on the ICS-205 Incident Radio Communications Plan and on ICS-220 Air Operation Summary forms. These completed forms will be made available to incident personnel.

- Type 3 incidents, or other incidents that do not have an assigned COML, will coordinate and request all frequency and communication equipment needs through the COMC and/or the NIFC CDO.

If additional frequencies are required, the COML will order them through the established ordering process.

Additional frequencies for any operation may be available on a temporary basis, and may be requested by the NIFC CDO from the Washington Office Spectrum managers when:

- The NIICD national frequencies are all committed within a specific geographic area;
- New incidents within a specific complex create a need for additional frequencies;
- The fire danger rating is extreme and the potential for additional new incidents is high; and/or
- When there is frequency congestion due to significant numbers of incidents in close proximity.

Aviation Operations Frequency Management

- Air-to-Air initial attack – AM frequencies are assigned yearly to the GACCs by the NIFC CDO in coordination with the Federal Aviation Administration (FAA). Once assigned, management of those frequencies is the responsibility of the GACC and may be allocated to zones. Frequencies allocated to zones for initial attack are not to be dedicated for project fire use. If additional frequencies are required, they must be requested from and assigned by the NIFC CDO.
- Air-to-Ground – FM frequencies will be assigned and coordinated by the NIFC CDO and agency frequency managers.

Both AM and FM aviation frequency assignments will be used on an interagency basis and a master record of these assignments is maintained by the NIFC CDO. Updated frequency information is coordinated annually with the GACCs.

Pre-assigned National Frequencies

National Air Guard Frequency (168.6250 MHz)

A National Interagency Air Guard frequency for aircraft will be used for emergency aviation communications. Continuous monitoring of this frequency in narrowband mode is mandatory by agency dispatch centers. A Continuous Tone Coded Squelch System (CTCSS) tone of 110.9 Hz must be used when

transmitting on the National Air Guard Frequency. This frequency must be programmed into the last channel of every group in fire handheld radios.

This frequency, 168.6250 MHz is only used for:

- Air-to-air emergency contact and coordination;
- Ground-to-air emergency contact; and
- Initial call, recall, and re-direction of aircraft when no other contact frequency is available.

National Flight Following Frequency (168.6500 MHz)

The National Flight Following Frequency is used to monitor interagency and contract aircraft. All aircraft on point-to-point or mission flights should establish/terminate flight following, and confirm Automated Flight Following (AFF) on the National Flight Following frequency.

All dispatch centers/offices will monitor the national fight following frequency at all times. A CTCSS tone of 110.9 must be used when transmitting and receiving on the National Flight Following frequency.

The National Flight Following frequency is to be used for flight following, dispatch, or redirection of aircraft. No other use is authorized.

National Interagency Air Tactics Frequencies (166.6750 MHz, 167.9500 MHz, 169.1500 MHz, 169.2000 MHz, 170.0000 MHz)

These frequencies are used to support air-to-air or ground-to-air communications on incidents west of the 95th meridian. These frequencies shall be used for air-to-air and ground-to-air communications only. They are not for use as ground tactical operational frequencies.

Transmitter power output of radios installed in aircraft utilizing these frequencies shall be limited to 10 watts. Use of these frequencies in base stations and repeaters is prohibited.

These frequencies will be assigned by the NIFC CDO or in coordination with the local unit if a NTIA-RFA is in effect.

National Interagency Airtanker Base Frequency (123.9750 MHz)

This frequency is assigned by the FAA to all airtanker bases (unless otherwise notified) for exclusive use. Use of this frequency is restricted to a radius of 40 nautical miles and 10,000 feet MSL from the coordinates of the airtanker base. No other use is authorized.

Smokejumper and Rappel/RADS Air-to-Ground Frequency (168.550 MHz)

BLM and USFS Smokejumpers have been granted exclusive use of primary National air-to-ground tactical frequency 168.550.

This frequency is also granted for use, with a separate transmit and receive tone, as a secondary/backup frequency for the BLM and USFS Rappel/Rope Assisted Delivery System (RADS) aerial delivery operations if the local air to ground tactical frequency is being used for initial attack operations and use of that local frequency could cause interference issues.

Use of this frequency for other than the delivery of aerial firefighters is prohibited. A CTCSS tone must be used when transmitting and receiving on the Smokejumper and Rappel/RADS Air-to-Ground Frequency. Smokejumpers use CTCSS tone 123.0; Rappel/RADS crews use CTCSS tone 110.9.

Government-wide Area Common User Frequencies (163.1000 MHz, 168.3500 MHz)

These frequencies are used on a non-interference basis and are not exclusive to any user. These frequencies are not to be used for air-to-ground operations and are prohibited by DOI and USDA from use as a frequency during operations involving the protection of life and property.

- **NOTE:** When traveling between incidents, be sure to monitor for incident radio traffic in the area before using these frequencies.

National Interagency Fire Tactical Frequencies (168.0500 MHz, 168.200 MHz, 168.6000 MHz, 168.2500 MHz, 166.7250 MHz, 166.7750 MHz)

These frequencies are approved for ground tactical operations (line of sight) on incidents. Maximum transmitter output is 5 watts.

Not authorized for:

- Air-to-air communications;
- Air-to-ground communications; or
- Radio transmitter power output more than 5 watts.

Permission to use these frequencies requires prior approval from the NIFC CDO (or COMC when mobilized).

Incident Radio Support

All National Incident Radio Support Cache (NIRSC) communications equipment will be returned to NIRSC at NIFC immediately after the incident is turned over to the jurisdictional agency.

No cache communications equipment shall be moved from one incident to another without being first returned to NIRSC for refurbishment. Unused and red-sealed equipment may be moved, but only upon approval of the NIFC CDO or COMC.

Military Communications on an Incident

Military units assigned to an incident are assigned radios approved for use on incidents. Each battalion is typically assigned 80 handheld radios. Sixteen of these radios are used by military crew liaisons. Intercrew communications within a military unit is provided by the military on their radios using their frequencies. All frequency assignments at the incident will be made by the COML in accordance with the ICS-205.

Some military units have aviation VHF-FM radios compatible with civilian systems. Other units must be provided VHF-FM radios prior to dispatch to an incident. Wiring harnesses and radios will be resource ordered by the incident. The resource order will include a request for qualified personnel from NIICD to perform the installation of the equipment. Equipment will not be sent without qualified personnel to install it.

Chapter 16
Aviation Operations and Resources

Purpose and Scope

Aviation resources are one of a number of tools available to accomplish fire related land management objectives.

Aviation use must be prioritized based on management objectives and probability of success.

The effect of aviation resources on a fire is directly proportional to the speed at which the resource(s) can initially engage the fire, the effective capacity of the aircraft, and the deployment of ground resources.

These factors are magnified by flexibility in prioritization, mobility, positioning, and utilization of the versatility of many types of aircraft.

In addition to the priorities listed in the *National Interagency Mobilization Guide*, Chapter 10 under headings "Total Mobility" and "Priorities", mobilization of aircraft should be based on optimizing the use of exclusive-use contracted aircraft. Call-when-needed aircraft will be the last ordered and the first released. The exception to this is use for initial action response and capability.

Risk management is a necessary requirement for the use of any aviation resource. The risk management process must include risk to ground resources, and the risk of not performing the mission, as well as the risk to the aircrew.

Organizational Responsibilities

National Office – Department of Interior (DOI)

Office of Aviation Services (OAS)

The Office of Aviation Services (OAS) is responsible for the coordination of aviation policy development and maintenance management within the agencies of the Department of the Interior (DOI). The OAS has no operational responsibility. The OAS provides aviation safety program oversight, accident investigation, and inspection/approval of aircraft and pilots for DOI agencies.

Bureau of Land Management (BLM)

National Aviation Office (NAO) – NAO develops BLM policy, procedures, and standards. It also maintains functional oversight, and facilitates interagency coordination for all aviation activities. The principal goals are safety and cost-effectiveness. The NAO supports BLM aviation activities and missions. This includes fire suppression, through strategic program guidance, managing aviation programs of national scope, coordination with OAS, and interagency

partners. The Fire and Aviation Directorate has the responsibility and authority, after consultation with State Fire Management Officers, for funding and acquisition of all fire aircraft, prioritizing the allocation of BLM aircraft on a Bureau wide basis, and approving State Office requests to acquire supplemental aircraft resources. Refer to *BLM National Aviation Plan and Manual 9400* for aviation policy and guides. Refer to 112 DM 12 for a list of responsibilities.

National Park Service (NPS)

The Branch of Aviation develops NPS policy, procedures, and standards for all fire and non-fire aviation activities. This includes providing guidance on fire suppression, as well as standardizing aviation programs at the national level, coordinating with OAS and interagency partners. The Branch of Aviation also has responsibility for operational execution of the aviation program. The Branch ensures personnel receive aviation training, provides internal training for fleet pilots, has responsibility for quality assurance and quality control of park aviation programs and provides fiscal analysis to determine numbers and types of aircraft for the bureau.

Bureau of Indian Affairs (BIA)

The NAO is responsible for supporting all BIA Aviation programs through an active and professional aviation organization that:

- Develops and coordinates efficient aviation policy and management processes;
- Provides guidance for aviation programmatic and operational risk management;
- Leads aviation safety assurance and promotion programs;
- Provides aircraft acquisition support as specified by Indian Affairs management objectives; and
- Develops and promotes a skilled aviation management workforce.

National Office – U.S. Department of Agriculture

Forest Service (FS)

The FS has responsibility for all aspects of its aviation program, including aviation policy and budget development, aircraft acquisition, pilot standardization, and maintenance management. In addition, the FS has operational responsibility for functional oversight of aviation assets and facilities, accident investigation, and aircraft and pilot inspection.

The Assistant Director (AD), Aviation, is responsible to the Director of Fire and Aviation Management for the management and supervision of the National Headquarters Office in Washington DC, and the detached Aviation Unit in Boise. The AD, Aviation provides leadership, support and coordination for national and regional aviation programs and operations. Refer to FSM 5704.22 for list of responsibilities.

The Branch Chief, Aviation Operations reports to the AD, Aviation, and is responsible for national aviation operational management and oversight.

The Branch Chief, Pilot Standardization reports to the AD, Aviation, and is responsible for pilot and aircrew standardization and approval of agency and contract pilots and aircrew.

The Branch Chief, Airworthiness reports to the AD, Aviation, and is responsible for national aircraft airworthiness and maintenance program management and oversight.

The Branch Chief, Aviation Business Operations reports to the AD, Aviation and is responsible for policy maintenance and development, budget development, and planning.

The Aviation Strategic Planner reports to the AD, Aviation and is responsible for strategic planning and reporting.

The Branch Chief, Aviation Safety Management Systems reports to the AD, Risk Management and Training, and is responsible for the national aviation safety and risk management program and oversight.

State/Regional Office

- ***BLM –*** *State FMOs are responsible for providing oversight for aircraft hosted in their state. State FMOs have the authority and responsibility to approve, with National Office concurrence, acquisition of supplemental aircraft resources within their state. State FMOs have the authority to prioritize the allocation, pre-positioning and movement of all aircraft assigned to the BLM within their state. State Offices will coordinate with the National Office on movement of their aircraft outside of their State. A State Aviation Manager (SAM) is located in each state office. SAMs are delegated as the Contracting Officers Representative (COR) for all exclusive use aircraft hosted by their state. SAMs implement aviation program objectives and directives to support the agency mission and state objectives. A state aviation plan is required to outline the state aviation program objectives and to identify state-specific policy and procedures.*
- ***NPS –*** *A Regional Aviation Manager (RAM) is designated for each Region. RAMs oversee the tactical execution of their region's aviation programs, provide technical expertise and aviation safety oversight of the parks in their geographic area. RAMs observe regional aviation activities and provide liaison with the national Branch of Aviation and other agencies as appropriate. A Regional aviation operations and management plan is required to outline the Region's aviation program objectives and to identify Region-specific policy and procedures.*
- ***FWS –*** *A Regional Aviation Manager (RAM) is designated for each Region. RAMs implement aviation program objectives and directives to support the*

agency mission and Region objectives. Several Regions have additional support staff, and/or pilots assigned to support aircraft operations and to provide technical expertise. A Regional aviation operations and management plan is required to outline the Region's aviation program objectives and to identify Region-specific policy and procedures.

- ***FS –*** *Regional Aviation Officers (RAOs) are responsible for directing and managing Regional aviation programs in accordance with the National and Regional Aviation Management Plans, and applicable agency policy direction. (Refer to FSM 5700 and FSH 5709.16 for list of responsibilities). RAOs report to Director of Fire and Aviation for their specific Region. Regional Aviation Safety Managers (RASMs) are responsible for aviation safety in their respective Regions, and work closely with the RAO to ensure aviation safety is an organizational priority (refer to FSM 5700 and FSH 5709.16 for list of responsibilities). Most Regions have additional aviation technical specialists and pilots who help manage and oversee the Regional aviation programs. Most Regions also have Aviation Maintenance Inspectors, Fixed-wing Program Managers, Helicopter Program Managers, Helicopter Operations Specialists, Inspector Pilots, etc.*
- ***BIA –***
  - *Provides oversight and approval of the acquisition and use of BIA aircraft within their region;*
  - *Has the authority to prioritize the allocation, reallocation, pre-positioning and movement of all aircraft assigned to the BIA within their region. All movements will be coordinated with the NAO;*
  - *Manages and provides oversight of all BIA aircraft assigned to the region;*
  - *Coordinates with Agencies, Geographical Coordination centers, NAO aircraft coordinators on aviation resources assigned to their region;*
  - *Ensures all region assigned aviation resources are effectively utilized as efficient BIA resources;*
  - *Delegates or designates the RAM, who ensures appropriate aviation roles and positions are filled by qualified personnel;*
  - *Ensures all aviation employees meet DOI and BIA training requirements; and*
  - *Ensures Inter-agency Agreement (IAA) between region and Office of Aviation Services (OAS) Acquisition Services Directorate (ASD) is valid and in force. Coordinate modifications to IAA as projects and missions dictate.*

Local Office

Some areas have interagency aviation programs that utilize an Aviation Manager for multiple units. Duties are similar as other local level managers.

- ***BLM –*** *Unit Aviation Managers (UAMs) serve as the focal point for the Unit Aviation Program by providing technical expertise and management of aviation resources to support Field Office/District programs. Field/District*

Offices are responsible for hosting, supporting, providing daily management, and dispatching all aircraft assigned to their unit. Field/District Offices have the authority to request additional resources; to establish priorities, and make assignments for all aircraft assigned to the BLM within their unit or zone.

- ***NPS –*** *Unit or Park Aviation Managers have the responsibility to provide aviation expertise and management of aviation resources at each park unit. Organizational responsibility refer to DO-60, RM-60.*
- ***FS –*** *Unit Aviation Officers (UAOs)/Forest Aviation Officers (FAOs) have the responsibility for aviation activities at the local level, including aviation mission planning, risk management and safety, supervision, and evaluation. UAOs/FAOs assist Line Officers with risk assessment/management and cost analysis. Refer to FSM 5700 Zero Code for a list of responsibilities.*
- ***BIA –*** *The AAM/UAM manages the unit aviation program by providing technical and management direction of aviation resources to support Agency programs. The AAM/UAM has functional responsibility in the following areas:*
  - *The AAM/UAM is authorized to provide for daily management of all aviation resources;*
  - *Ensures Agency flight compliance with USDI/BIA/Region and Agency policies and regulations;*
  - *Develop and implement the Agency/Unit aviation management plan, as well as specific operating plans for other aviation programs (i.e., Helitack, SEAT, and aerial supervision);*
  - *Ensures completion of the Project Aviation Safety Plan (PASP) with appropriate approvals/briefing of Line Officer;*
  - *Ensures that appropriate training is provided to aviation users and supervisors. Monitors aviation training compliance for the Agency/Unit;*
  - *Designates and assigns an alternate aviation manager when needed;*
  - *Ensures that visiting aircrews have received flight crew briefing/aviation orientation and guides;*
  - *Confirms DOI/BIA/OMB requirements are met and completes the cost analysis requirements and schedules the flight with a qualified vendor;*
  - *Ensures the accuracy of the Aircraft Use Report. Processes and maintains copies and records documenting the flight as required by the DOI manual;*
  - *Confirms that a qualified Flight Manager is assigned to all project/resource flights;*
  - *Is responsible for the distribution and use of the Aviation Boundary Plan/Checklist if one is in place;*
  - *Ensures Agency/Unit Aviation Security Plan is current and implemented in accordance with DOI policy;*
  - *May serve as the COR for BIA exclusive use aircraft on their Agency/Unit if aircraft manager is not current or qualified as such;*

- *Authorized to order approved aircraft utilizing agency procurement documents and procedures. Also establish priorities and allocate all aircraft assigned to the BIA within their unit or zone; and*
- *Maintains an up to date aviation reference library with all applicable aviation policy and procedural references.*

Aviation Information Resources

Aviation reference guides and aids for agency aviation management are listed for policy, guidance, and specific procedural requirements.

- ***BLM –*** *9400 Manual Appendix 1, National Aviation Plan (NAP) and applicable aviation guides as referenced in the NAP.*
- ***NPS –*** *RM-60 Aviation Management Reference Manual, IHOG, and IASG.*
- ***FWS –*** *Service Manual 330-339, Aviation Management and IHOG.*
- ***FS –*** *FSM 5700, FSH 5709.16 and applicable aviation guides when approved by the agency and referenced in policy.*
- ***BIA –*** *BIA National Aviation Plan (NAP) and applicable aviation guides as referenced in the NAP.*

Safety alerts, operational alerts, instruction memoranda, information bulletins, incident reports, and other guidance or information are issued as needed.

An up-to-date library with aviation policy and procedural references will be maintained at all permanent aviation bases, dispatch, and aviation management offices.

Aviation Safety

The FS, BLM, and BIA have adopted Safety Management Systems (SMS) as the foundation for the aviation safety program. The four pillars of SMS are Safety Policy, Safety Risk Management, Safety Assurance, and Safety Promotion. SMS is the standard for aviation safety set by the International Civil Aviation Organization (ICAO) and the Federal Aviation Administration (FAA).

SMS focuses on:

- Emphasis on proactive risk management;
- Promotes a "Just" culture;
- Addresses systemic safety concerns;
- Holds the organization accountable;
- Identifies "What" so we can manage the manageable; and
- Communicates the "Why" so the culture can learn from mistakes.

The intent of SMS is to improve the aviation culture by increasing hazard identification, reduce risk-taking behavior, learn from mistakes, and correct procedures before a mishap occurs rather than after the accident. More information on SMS is available at the Wildland Fire Lessons Learned Center

under the Lessons Learned link at www.wildfirelessons.net. Additionally, the current approved US Forest Service Aviation SMS Guide is available at www.fs.fed.us/fire/av_safety/.

Risk Assessment and Risk Management

The use of risk management will help to ensure a safe and successful operation. Risk is the probability that an event will occur. Assessing risk identifies the hazard, the associated risk, and places the hazard in relationship to the mission. A decision to conduct a mission requires weighing the risk against the benefit of the mission and deciding whether the risks are acceptable.

Aviation missions always have some degree of risk. The four sources of hazards are methods, medium, man, and machine. Managing risk is a 5-step process:

1. Identify hazards associated with all specified and implied tasks for the mission.
2. Assess hazards to determine potential of occurrence and severity of consequences.
3. Develop controls to mitigate or remove risk, and make decisions based on accepting the least risk for the best benefit.
4. Implement controls – (1) education controls, (2) physical controls, and (3) avoidance controls.
5. Supervise and Evaluate – enforce standards and continuously re-evaluate their effectiveness in reducing or removing risk. Ensure that controls are communicated, implemented, and enforced.

- ***FS –*** *FSM 5700. Employees shall use an operational risk management process to evaluate the risk and hazards prior to every flight.*

How to Properly Refuse Risk (Aviation)

Every individual (government and contracted employees) has the right and obligation to report safety problems affecting his or her safety and has the right to contribute ideas to correct the hazard. In return, supervisors are expected to give these concerns and ideas serious consideration. When an individual feels an assignment is unsafe, he or she also has the obligation to identify, to the degree possible, safe alternatives for completing that assignment. Turning down an assignment is one possible outcome of managing risk.

A "turn down" is a situation where an individual has determined he or she cannot undertake an assignment as given and is unable to negotiate an alternative solution. The turn down of an assignment must be based on assessment of risks and the ability of the individual or organization to control or mitigate those risks. Individuals may turn down an assignment because of safety reasons when:

- There is a violation of regulated safe aviation practices;
- Environmental conditions make the work unsafe; or
- They lack the necessary qualifications or experience.

Individuals will directly inform their supervisor that they are turning down the assignment as given. The most appropriate means of documented turn down criteria is using the Aviation Watch Out Situations (*IRPG*).

Supervisors will notify the Air Operations Branch Director (AOBD) or unit aviation leadership immediately upon being informed of a turn down. If there is no AOBD, notification shall go to the appropriate Section Chief, the Incident Commander or local fire and aviation staff. Proper handling of turn downs provides accountability for decisions and initiates communication of safety concerns within the incident organization.

If the assignment has been turned down previously and the supervisor asks another resource to perform the assignment, he or she is responsible to inform the new resource that the assignment had been turned down and the reasons why. Furthermore, personnel need to realize that a "turn down" does not stop the completion of the assigned operation. The "turn down" protocol is an integral element that improves the effective management of risk, for it provides timely identification of hazards within the chain of command, raises risk awareness for both leaders and subordinates, and promotes accountability.

If an unresolved safety hazard exists the individual needs to communicate the issue/event/concern immediately to his or her supervisor and document as appropriate.

Aviation Safety Support

Aviation Safety and Technical Assistance Team (ASAT)

During high levels of aviation activity, it is advisable to request an Aviation Safety Assistance Team (ASAT). An ASAT's purpose is to enhance risk management, efficiency, effectiveness, and provide technical assistance while reviewing aviation operations. If an ASAT cannot be filled internally, the request may be placed with NICC through established ordering channels using individual overhead requests. An ASAT should operate under a Delegation of Authority from the appropriate State/Regional Aviation Manager(s) or Multi Agency Coordinating Group. Formal written reports shall be provided to appropriate manager(s) as outlined at the in-brief. A team should be developed to fit the need of the requesting unit and may consist of the following:

- Aviation Safety Manager;
- Operations Specialist (helicopter and/or fixed wing);
- Pilot Inspector;
- Maintenance Inspector;
- Avionics Inspector (optional); and
- Aircraft Dispatcher (optional).

Aviation Safety Briefing

Every passenger must receive a briefing prior to each flight. The briefing is the responsibility of the Pilot in Command (PIC) but may be conducted by the pilot, flight manager, helicopter manager, fixed-wing base manager, or an individual with the required training to conduct an aviation safety briefing. The pilot should also receive a mission briefing from the government aircraft manager. Refer to the *IRPG* and *IHOG* Chapter 10.

Aviation Hazard

An aviation hazard is any condition, act, or circumstance that compromises the safety of personnel engaged in aviation operations. Pilots, flight crew personnel, aviation managers, incident air operations personnel, and passengers are responsible for hazard identification and mitigation. Aviation hazards may include but are not limited to the following:

- Deviations from policy, procedures, regulations, and instructions;
- Improper hazardous materials handling and/or transport;
- Airspace conflicts/flight following deviation;
- Deviation from planned operations;
- Failure to utilize PPE or Aviation Life Support Equipment (ALSE);
- Failure to meet qualification standards or training requirement;
- Extreme environmental conditions;
- Improper ground operations;
- Improper pilot procedures;
- Fuel contamination; and
- Unsafe actions by pilot, air crew, passengers, or support personnel.

Aviation hazards also exist in the form of wires, low-flying aircraft, and obstacles protruding beyond normal surface features. Each office will post, maintain, and annually update a "Known Aerial Hazard Map" for the local geographic area where aircraft are operated, regardless of agency jurisdiction. This map will be posted and used to brief flight crews. Unit Aviation Managers are responsible for ensuring the development and updating of Known Aerial Hazard Maps (IHOG).

Aerial Applications of Wildland Fire Chemical Safety

Chapter 12 contains information concerning the aerial application of wildland fire chemicals.

SAFECOM

The DOI and the FS have an incident/hazard reporting form called The Aviation Safety Communiqué (SAFECOM). The database, available at https://www.safecom.gov/, fulfills the Aviation Mishap Information System (AMIS) requirements for aviation mishap reporting for the DOI agencies and the FS. Categories of reports include: Accidents, Airspace, Hazards, Incidents,

Maintenance, Mishap Prevention, and Kudos. The system uses the SAFECOM Form OAS-34 or FS-5700-14 to report any condition, observation, act, maintenance problem, or circumstance with personnel or aircraft that has the potential to cause an aviation-related mishap. The SAFECOM system is not intended for initiating punitive actions. Submitting a SAFECOM is not a substitute for "on-the-spot" correction(s) to a safety concern. It is a tool used to identify, document, track, and correct safety related issues. A SAFECOM does not replace the requirement for initiating an accident or incident report.

Any individual (including vendors/cooperators) with knowledge of an incident/hazard should complete a SAFECOM. The SAFECOM form, including attachments and pictures, should be entered directly on the internet at https://www.safecom.gov/ or faxed to the Department of the Interior's Office of Aviation Services, Aviation Safety (208) 433-5069 or to the FS at (208) 387-5735 ATTN: SAFETY. Electronic cc copies are automatically forwarded to the National, Regional, State, and Unit Aviation Managers.

The agency with operational control of the aircraft at the time of the hazard/incident/accident is responsible for completing the SAFECOM and submitting it through agency channels.

Aircraft Incidents/Accidents

Notification to the FS or OAS and DOI agency Aviation Safety Managers is required for any aircraft mishap involving damage or injury. Use the hotline (888) 464-7427 or the most expeditious means possible. Initiate the appropriate unit Aviation Mishap Response Plan.

Low-level Flight Operations

The only fixed-wing aircraft missions authorized for low-level fire operations are:

- Smokejumper/Para-cargo;
- Aerial Supervision Module (ASM) and Lead operations; and
- Retardant, water, and foam application.

Operational Procedures

- A high-level recon will be made prior to low-level flight operations.
- All flights below 500 feet will be contained to the area of operation.
- PPE is required for all fixed-wing, low-level flights. Helmets are not required for multi-engine airtanker crews, smokejumper pilots, and Leadplane/ASM flight/aircrew members.

Congested Area Flight Operations

Airtankers can drop retardant in congested areas under DOI authority given in *14 CFR Part 137*.

FS authority is granted under exemption 392, from *14 CFR Part 91.119* as referenced in *FSM 5714*. When such operations are necessary, they may be authorized subject to these limitations:

- Airtanker operations in congested areas may be conducted at the request of the city, rural fire department, county, state, or federal fire suppression agency;
- An ASM/Leadplane is ordered to coordinate aerial operations;
- The air traffic control facility responsible for the airspace is notified prior to or as soon as possible after the beginning of the operation;
- A positive communication link must be established between the ASM or Leadplane, airtanker pilot(s), and the responsible fire suppression agency official; and
- The IC for the responsible fire agency or designee will advise the ASM/Leadplane/airtanker that all non-essential people and movable property have been cleared prior to commencing retardant drops.

Unmanned Aircraft Systems

Unmanned Aircraft Systems (UAS) operations shall be conducted under the provisions of the *Interagency Fire Unmanned Aircraft Systems Operations Guide* (PMS 515).

When UAS are flown for USFS/DOI work or benefit, Federal Aviation Administration (FAA), USFS, and DOI regulations apply.

Units wishing to utilize UAS must have a plan in place for how they are going to collect, process, and disseminate data gathered by a UAS.

Consult with your Unit Aviation Officer or the Regional/State aviation staff to assist in selecting and ordering the aircraft best suited for the mission.

The following minimum standards apply:

- All aircraft (to include UAS) purchase, lease, or acquisition **must** follow department procurement policy and procedures.
- All aircraft and pilots employed by the USFS or DOI agencies **shall** be credentialed in accordance with departmental policy.
    - UAS flights under USFS operational control **must** adhere to USFS policy and regulations regarding their use. Guidance can be found in FSM 5713.7, the USFS National Aviation Safety and Management Plan and at https://www.fs.fed.us/science-technology/fire/unmanned-aircraft-systems.

  - UAS flights under DOI operational control **must** adhere to DOI policy and regulations regarding their use. Guidance can be found in 350-353 Departmental Manuals and Operational Memorandum 11 at https://www.doi.gov/aviation/library/opm.
- Federal use of cooperator agency UAS may be authorized by a Cooperator Aircraft Letter of Approval.

Key Points

- An emergency COA (ECOA) must be issued for beyond visual line of sight (BVLOS) operations within a TFR. ECOA requests shall be coordinated through departmental channels (i.e., DOI-OAS).
- Cooperators, pilot associations and volunteer aviation groups or individuals must meet FAA, USFS/DOI policy.
- Personally owned UAS or model aircraft **may not** be used by federal agencies or their employees for interagency fire use.
- Individuals who are determined to have interfered with wildland fire operations may be subject to civil penalties and potentially criminal prosecution.
- Agency specific information can be found at:
  - ***FAA –*** *https://www.faa.gov/uas*
  - ***DOI –*** *https://www.doi.gov/aviation/uas*
  - ***BLM –*** *https://sites.google.com/a/firenet.gov/blm-uas/program*
  - ***FS –*** *https://fsweb.wo.fs.fed.us/fire/fam/aviation/uas/uasflights.htm*

Airspace Coordination

The Interagency Airspace Program is an aviation safety program designed to enhance aviation safety and reduce the risk of a mid-air collision. Guidance for this program is found in the Interagency Airspace Coordination Guide (IACG), which has been adopted as policy by the DOI and FS. Additional guidance may be found in the *National Interagency Mobilization Guide* and supplemented by local Mobilization Guides.

- ***FS –*** *Refer to FSM 5709.16 Chapter 3.*

Some BLM, BIA, state and FS units have Memorandums of Understanding (MOUs) with local military airspace authorities for airspace coordination. Briefings from Unit Aviation Managers/Officers (UAM/UAO) are crucial to ensure that any local airspace information is coordinated before flight.

All firefighting aircraft are required to have operative transponders and will use a national firefighting transponder code of 1255 when engaged in, or traveling to, firefighting operations (excluding ferry flights), unless given a discrete code by Air Traffic Control (ATC).

Additional coordination information can be found by contacting:

- ***BLM –*** *State Aviation Managers, National Airspace Program Manager*
- ***NPS –*** *Regional Aviation Managers*
- ***FWS –*** *National Aviation Safety and Operations*
- ***FS –*** *Regional Aviation Officers, National Airspace Program Manager*
- ***BIA –*** *Regional Aviation Managers*

Flight Request and Approval

- ***NPS –*** *Reference RM 60, Appendix 3 and 4.*
- ***FS –*** *Refer to FSM 5709.16, Chapter 30 for all flights.*

Point-to-Point Flights

A "Point-to-point" flight is one that originates at one developed airport or permanent helibase and flies directly to another developed airport or permanent helibase with the sole purpose of transporting personnel or cargo (this term does not apply to flights with a scheduled air carrier on a seat fare basis). These types of flights are often referred to as "administrative" flights and only require the aircraft and pilot to be carded and approved for point-to-point flight. A point-to-point flight is conducted higher than 500 feet above ground level (AGL).

Agency policy requires designating a Flight Manager for point-to-point flights transporting personnel. The Flight Manager is a government employee that is responsible for coordinating, managing, and supervising flight operations. The Flight Manager is not required to be on board for most flights. For those flights that have multiple legs or are complex in nature a Flight Manager should attend the entire flight. The Flight Manager will meet the qualification standard for the level of mission assigned as set forth in the *Interagency Aviation Training Guide* (IAT).

- ***BLM –*** *Reference the BLM National Aviation Plan, Chapter 3, available at https://www.nifc.gov/aviation/av_BLMlibrary.html.*
- ***NPS –*** *Reference RM-60, Appendix 3 for agency specific policy.*
- ***FS –*** *Refer to FSM 5709.16 Chapter 30 and the Forest Service Administrative Use of Aircraft Desk Reference.*
- ***BIA –*** *Reference the BIA National Aviation Plan.*

Mission Flights

Mission flights are defined as flights not meeting the definition of point-to-point flight. A mission flight requires work to be performed in the air (retardant or water delivery, fire reconnaissance, smokejumper delivery), or through a combination of ground and aerial work (delivery of personnel and/or cargo from helibases to helispots or unimproved landing sites, rappelling or cargo let-down, horse herding).

- PPE is required for any fixed wing mission flight conducted below 500'AGL. Flight helmets are not required for multi-engine airtanker crews, smokejumper pilots and Leadplane/ASM flight/aircrew members.
- Required attire for ATGS and fire reconnaissance are:
  - Leather shoes or boots; and
  - Natural fiber shirt, full length cotton or nomex pants, or flight suit.
- The use of full PPE is required for all helicopter flights (point to point and mission) and associated ground operations. The specific items to be worn are dependent on the type of flight, the function an individual is performing, or the ground operation being conducted. Refer to the tables in Chapter 9 of the *IHOG* for specific requirements.
- All personnel will meet training and qualification standards required for the mission.
- Agency FM radio capability is required for all mission flights.
- All passengers must be authorized and all personnel onboard must be essential to the mission.
  - ***FS –*** *Special Use Mission Flight is any flight that is not point-to-point. Special use mission flights require special pilot endorsements, flight evaluations, training, and/or specialized aircraft equipment. For all special use mission flights, all pilots and aircraft must be specifically approved in writing for that flight.*

Mission flights for fixed-wing aircraft include but are not limited to the following:

- Water or retardant application;
- Parachute delivery of personnel or cargo;
- Leadplane/ASM/Airtanker operations;
- Takeoff or landing requiring special techniques due to hazardous terrain, obstacles, or surface conditions; and
- Aerial Supervision.

Mission helicopter flights include but are not limited to the following:

- Flights conducted within 500 feet AGL;
- Water or retardant application;
- Helicopter coordinator and ATGS operations;
- Aerial ignition activities;
- External load operations;
- Rappelling;
- Takeoff or landing requiring special techniques due to hazardous terrain, obstacles, pinnacles, or surface conditions;
- Free-fall cargo;
- Fire reconnaissance;
- Short-haul operations; and
- Night helicopter operations.

Flight-Following All Aircraft

Flight-Following is mandatory for all flights. Refer to the *National Interagency Mobilization Guide* for specific direction.

- Agency FM radio capability is required for all mission flights.
- For mission flights, there are two types of Agency Flight Following: Automated Flight Following (AFF) and radio check-in. AFF is the preferred method of agency flight following. If the aircraft and flight following office have AFF capability, it shall be utilized. Periodic radio transmissions are acceptable when utilizing AFF. Reference the AFF procedures section of the *National Interagency Mobilization Guide* for more information.
- All dispatch centers designated for fire support shall have the ability to monitor AFF as well as the capability to transmit and receive "National Flight Following" and "Air Guard."
- If AFF becomes inoperable the aircraft will normally remain available for service, utilizing radio/voice system for flight following. Each occurrence must be evaluated individually and decided by the COR/CO.
- Helicopters conducting Mission Flights shall check-in prior to and immediately after each takeoff/landing per IHOG 4.II.E.2.

Sterile Cockpit All Aircraft

Sterile cockpit rules apply within a 5-mile radius of the airport. The flight crew will not perform radio or cockpit communication during that time that is not directly related to safe flight of the aircraft from taxi to 5 miles out and from 5 miles out until clearing the active runway. This would consist of reading checklists, communication with Air Traffic Control (ATC), Flight Service Stations, Unicom, or other aircraft with the intent of ensuring separation or complying with ATC requirements. Communications by passengers or air crew members can be accomplished when the audio panels can be isolated and do not interfere with flight operations of the flight crew.

Exception: When conducting firefighting missions within 5 miles of an uncontrolled airport, maintain sterile cockpit until departing the traffic pattern and reaching final altitude. Monitor CTAF frequency if feasible while engaged in firefighting activities. Monitor CTAF as soon as practical upon leaving the fire and returning to the uncontrolled airport. When conducting firefighting missions within Class B, C, or D airspace, notify dispatch that ATC communications will have priority over dispatch communications.

Interagency Interim Flight and Duty Limitations/Aviation Stand Downs

Aviation stand downs are a means to find time, in an otherwise demanding flight schedule, to reflect on core aviation safety values. In this context, aviation stand downs refer to an administrative decision to keep tactical aviation resources on the ground through all or part of their normal duty day or days.

Interim flight and duty limitations are a method to manage pilot and crew fatigue by reducing the length of the duty day or increasing the number of days off in the normal duty day cycle. During extended periods of high flight activity, fatigue must be mitigated by fire and aviation managers.

Aviation stand downs and interim flight and duty day limitations can be implemented at the Geographic Area or National level. In either case, the procedure for implementation is the same. Requests for implementation of flight and duty limitations, or proposed stand down parameters, will be made through the National Aviation Office through which it originated.

Decisions and procedures for implementation will be made on a coordinated, interagency basis, involving the GACC, NICC, and National Aviation Representatives at NIFC and Aviation Contracting Officers. Details of the proposal will be formalized and coordinated with other affected agencies and implemented through the National Multi-Agency Coordinating Group (NMAC).

Interim Flight and Duty Limitations Implementation

During extended periods of a high level of flight activity or maximum 14-hour days, fatigue factors must be taken into consideration by Fire and Aviation Managers. Phase 2 and/or Phase 3 Duty Limitations will be implemented for specific geographic area's aviation resources. The minimum scope of operation should be by geographic area; e.g., Northwest, Great Basin.

Phase 1 – Standard Flight and Duty Limitations (Abbreviated Summary)

- 14-hour maximum duty day;
- 8 hours maximum daily flight time for mission flights;
- 10 hours for point-to-point, with a 2 pilot crew;
- Maximum cumulative flight hours of 36 hours, up to 42 hours in 6 days; and
- Minimum of 10 hours uninterrupted time off (rest) between duty periods.
- Two days off within any 14-day period.

This does not diminish the authority or obligation of any individual COR (Contracting Officer Representative) or Aviation Manager to impose shorter duty days or additional days off at any time for any flight/maintenance crew members for fatigue. This authority is currently provided for in agency direction and contract specifications. Aviation managers should consider the following actions:

- Any tactical aircraft flight crew member (airtanker, helicopter, ASM/leadplane, SEAT or air attack) may request an additional day off in conjunction with their normally scheduled day(s) off.
- The additional day off may be granted when requested. Flight crews are encouraged to honestly assess their fatigue level and request an additional day off if they believe it is needed.

- Aircraft availability will be paid when this occurs regardless of whether a relief crew is provided or not.
- When an additional day off is granted, document this in the remarks section of the aircraft payment document.
- In order to assure sufficient coverage, additional days off will need to be coordinated within the currently assigned GACC and communicated to national aviation managers. Coordinate with your aviation managers, contracting officers and dispatch organizations to implement these actions.

Phase 2 – Interim Duty Limitations

When Phase 2 is activated, pilots shall adhere to the flight and day-off limitations prescribed in Phase 1 and the duty limitations defined under Phase 2.

Each flight crew member shall be given an additional day off each 14-day period. Crews on a 12-and-2 schedule shall have 3 consecutive days off (11-and-3). Flight crews on 6-and-1 schedules shall work an alternating weekly schedule of 5 days on, 2 days off, then 6 days on and one day off.

Aircraft fixed daily rates and special rates, when applicable, shall continue to accrue during the extra day off. Contractors may provide additional approved crews to maximize utilization of their aircraft. All costs associated with providing the additional crew will be at the contractor's expense, unless the additional crew is requested by the Government.

Phase 3 – Interim Duty Limitations

When Phase 3 is activated, pilots shall adhere to the flight limitations of Phase 1 (standard), the additional day off of Phase 2, and the limitations defined under Phase 3.

Flight crew members shall have a minimum of 12 consecutive hours of uninterrupted rest (off duty) during each duty day cycle. The standard duty day shall be no longer than 12 hours, except a crew duty day extension shall not exceed a cumulative 14-hour duty day. The next flight crew rest period shall then be adjusted to equal the extended duty day; i.e., 13- hour duty day, 13 hours rest; 14- hour duty day, 14 hours rest. Extended duty day applies only to completion of a mission. In no case may standby be extended beyond the 12-hour duty day.

Double crews (2 complete flight crews assigned to an aircraft), augmented flight crews (an additional pilot-in-command assigned to an aircraft), and aircraft crews that work a rotating schedule; i.e., 2 days on, 1 day off, 7 days on, 7 days off, or 12 days on, 12 days off, may be exempted from Phase 2 Limitations upon verification that their scheduling and duty cycles meet or exceed the provisions of Paragraph a. of Phase 2 and Phase 1 Limitations.

Exemptions of Phase 3 provisions may be requested through the local Aviation Manager or COR, but must be approved by the FS RAO or DOI Area Aviation Manager.

Aviation Assets

Typical agency aviation assets include: Helitack or Rappel, Aerial Supervision (ATGS, HLCO, Leadplane, and ASM), Large (multi-engine) Airtankers, Very Large Airtankers (VLATs), Single Engine Airtankers (SEATs), and Smokejumpers.

- ***BLM –*** *All BLM acquired aircraft (exclusive use, On-Call, and CWN) are available to move to areas of greatest Bureau need, thereby maximizing efficiency and effectiveness. Specific authorities and responsibilities for Field/State and National Offices are outlined earlier in this chapter. Offices are expected to adhere to procedures established in the National Aviation Plan for both acquisition and use reporting.*
- ***FS –*** *All FS aircraft (agency-owned, exclusive use, leased and CWN) are available to move to areas of greatest agency need, thereby maximizing efficiency and effectiveness. Forest Service units are expected to adhere to procedures established in policy for acquisition and use reporting.*
- ***BIA –*** *All BIA acquired aircraft (exclusive use, On-Call, and CWN) are available to move to areas of greatest Bureau need, thereby maximizing efficiency and effectiveness. Specific authorities and responsibilities for Regional/Agencies and National Offices are outlined in the National Aviation Plan for both acquisition and use reporting.*

Helitack

Helitack crews perform suppression and support operations to accomplish fire and resource management objectives.

Organization – Crew Size

- ***BLM –****The minimum crew size for a BLM exclusive-use Type 3 helicopter is seven personnel. The minimum crew size for a BLM exclusive-use Type 2 helicopter is ten personnel. All BLM exclusive-use crews will consist of key positions including; supervisor, assistant, squad boss, and crew members. The BLM States may establish larger crew size and standards for their exclusive use helicopter crews based on program need. Any increase in crew size will be documented in the respective State Aviation Plan. BLM helicopters operated in Alaska need only be staffed with a qualified Helicopter Manager (HMGB).*
- ***NPS –*** *Helicopter exclusive-use modules will consist of a minimum of eight fire funded personnel. The NPS regions may establish larger crew size and standards for their exclusive use helicopter crews based on the need for an all hazard component (Fire, SAR, Law Enforcement, and EMT). Exception to minimum helicopter crew staffing standards must be approved by the*

National Aviation Office. NPS helicopters operated in Alaska need only be staffed with a qualified Helicopter Manager (HMGB).

- ***FS –*** *Regions may establish minimum crew size and standards for their exclusive use helitack crews. Experience requirements for exclusive-use helicopter positions are listed in FSFAQG, Chapter 4.*
- ***BIA –*** *All helicopter personnel responsibilities are outlined in the IHOG. CWN helitack training and currency requirements are contained in the NWCG PMS 310-1. Each region hosting exclusive-use helicopters is responsible for providing essential management, overhead, equipment, facilities and the resources necessary to fully support the helitack crew. Host regions are encouraged to increase helitack crew size minimum requirements to enhance operational efficiency. Recommended minimum staffing levels:*
  - *Type 3 helicopter – 7 helitack personnel*
  - *Type 2 helicopter – 15 helitack personnel*

Operational Procedures

The *Interagency Helicopter Operations Guide* (IHOG) NFES 1885 is policy for helicopter operations.

Communication

The helitack crew standard is one handheld programmable multi-channel FM radio per every two crew persons, and one multi-channel VHF-AM programmable radio in the primary helitack crew (chase) truck. Each helitack crew (chase) vehicle will have a programmable VHF-FM mobile radio. Each permanent helibase will have a permanent programmable FM radio base station and should be provided a VHF-AM base station radio.

Transportation

Dedicated vehicles with adequate storage and security will be provided for helitack crews. The required Gross Vehicle Weight (GVW) of the vehicle will be dependent upon the volume of equipment carried on the truck and the number of helitack crewmembers assigned to the crew.

- ***BLM/BIA –*** *Minimum vehicle configuration for a seven person crew will consist of one Class 661 Helitack Support Vehicle and one Class 156 or Class 166 vehicle.*

Training and Experience Requirements

All helitack members will meet fire qualifications as prescribed by the National Wildfire Coordinating Group (NWCG) 310-1 and their agency manual requirements. The following chart establishes experience and training requirements for FS, BLM, NPS, FWS, and BIA exclusive use, Fire Helicopter Crew Positions.

Non-exclusive use HECM's and HMGB's should also meet the following currency requirements.

Note: the Interagency Aviation Training Guide (October 2017) states additional aviation training requirements (A courses). The Guide is available at https://www.iat.gov/docs/IAT_Guide_2017_10.pdf.

Exclusive Use Fire Helicopter Position Prerequisites

Position[1]	Minimum Prerequisite Experience[2]	Minimum Required Training[3]	Currency Requirements
Fire Helicopter Crew Supervisor	One season[4] as an Assistant Fire Helicopter Crew Supervisor, ICT4, HMGB, HEB2		RT-372[5] RT-130
Assistant Fire Helicopter Crew Supervisor	One season as a Fire Helicopter Squad Boss, ICT4, HMGB, HEB2(T)	ICS-200, S-215, S-219, S-260, S-270	RT-372[5] RT-130
Fire Helicopter Squad Boss	One season as a Fire Helicopter Crewmember, FFT1, ICT5	S-211, S-212	RT-130
Fire Helicopter Crewmember	One season as a FFT2, HECM Task Book	S-271	RT-130

[1] All exclusive use Fire Helicopter positions require an arduous fitness rating.
[2] Minimum experience and qualifications required prior to performing in the exclusive use position. Each level must have met the experience and qualification requirements of the previous level(s).
[3] Minimum training required to perform in the position. Each level must have met the training requirements of the previous level(s).
[4] A "season" is continuous employment in a primary wildland fire position for a period of 90 days or more.
[5] After completing S-372, must attend Interagency Helicopter Manager Workshop (RT-372) within three years and every three years thereafter.

Note: Exceptions to the above position standards and staffing levels may be granted on a case-by-case basis by the BLM National Aviation Office, NPS Regional Office, FWS Regional Office, or FS Regional Office as appropriate.

- Some positions may be designated as COR/Alternate-COR. If so, see individual Agency COR training and currency requirements.
- Fire Helicopter Managers (HMGB) are fully qualified to perform all the duties associated with Resource Helicopter Manager.

Helicopter Rappel and Cargo Let-Down

Any rappel or cargo let-down programs must be approved by the appropriate agency national headquarters.

- ***BLM –*** *BLM personnel involved in an Interagency Rappel Program must have SFMO approval.*
- ***NPS/BIA –*** *Approval is required by the National Office.*
- ***FS –*** *Approval is required by the National Office.*

All rappel and cargo let-down operations will follow the I*nteragency Helicopter Rappel Guide* (IHRG), as policy. Any exemption to the guide must be requested by the program through the state/region for approval by the National Aviation Office (BLM), or Director of Fire and Aviation (FS).

Emergency Medical Short-Haul

The emergency medical short-haul mission is intended to extract injured or ill personnel from areas where a ground based evacuation would expose rescuers to greater risk or where such evacuation would likely cause greater harm or threaten the life or limbs of the patient due to added exposure or time delay. Based on a risk assessment, short-haul transport of personnel/patients may occur over the most reasonable distance to a location where another type of medical transportation is available (e.g., ground ambulance, EMS/life fight, or internal in an agency helicopter).

All emergency medical short-haul programs must be approved by the appropriate agency national headquarters.

- ***NPS/FS/BIA –*** *National Office approval is required.*

All short-haul operations will comply with the following policy:

- ***NPS –*** *Helicopter Short-haul Handbook.*
- ***FS –*** *Emergency Medical Short-Haul Operations Plan (EMSHOP).*

Exemptions to the policy must be requested by the program through the regional office for approval by the National Aviation Office (NPS) or Director of Fire and Aviation (FS).

Aerial Ignition

The *Interagency Aerial Ignition Guide* (IAIG) is policy for all aerial ignition activities.

Fire Chemical Avoidance Areas

See Chapter 12 (Suppression Chemicals and Delivery Systems) for guidance.

Aerial Supervision Principles for ATGS, HLCO, ASM, and Leadplane

The response speed of aerial supervision resources contributes greatly to established aggressive initial attack doctrine and should be utilized accordingly.

Aerial supervision resources will be dispatched when available to initial/extended attack incidents in order to enhance safety, effectiveness, and efficiency of aerial/ground operations.

When aerial supervision resources are collocated with airtankers, they will be launched together to maximize the safety, effectiveness, and efficiency of incident operations unless aerial supervision is currently over the incident.

Incidents with three or more aircraft over/assigned to them should also have aerial supervision in the form of ATGS or ASM/Leadplane. A qualified smokejumper spotter (senior smokejumper in charge of smokejumper missions) may coordinate smokejumper operations with on-scene aircraft over a fire until a qualified ATGS arrives.

Operational Procedures and Policy

The *Interagency Aerial Supervision Guide* (IASG, PMS 505) provides operational procedures for all aerial supervision resources. The IASG and additional aerial supervision forms are maintained online at the NWCG website https://www.nwcg.gov/publications/505.

The *NIMS Wildland Fire Qualification System Guide* (PMS 310-1) provides training, qualification, and currency standards.

The IASG contains additional requirements and is policy for the BLM, FS, BIA, FWS, and NPS.

Air Tactical Group Supervisor (ATGS)

The ATGS coordinates incident airspace and manages incident air traffic. The ATGS is an airborne firefighter who coordinates, assigns, and evaluates the use of aerial resources in support of incident objectives. Specific duties and responsibilities are outlined in the *Wildland Fire Incident Management Field Guide* (PMS 210) and the *Interagency Aerial Supervision Guide* (NFES 2544).

Program Management

The air attack program is managed at the national level by agency program managers. The National Interagency Aviation Committee (NIAC) provides guidance through the Interagency Aerial Supervision Subcommittee (IASS), which authorizes an Agency Program Manager/ATGS GACC Representative to provide operational and programmatic oversight at the Geographic Area level.

Training

Classroom training is completed as per the PMS 310-1.

Field (flight) training assignments are coordinated and prioritized by the Geographic Area Training Representatives and Agency Program Manager/ATGS GACC Representatives.

National interagency ATGS training aircraft have been identified and are utilized for the sole purpose of ATGS flight training.

Operational Considerations

- Ground resources will maintain consistent communication on assigned air to ground frequencies with aerial supervision to maximize the safety, effectiveness, and efficiency of aerial operations.
- Relief aerial supervision should be ordered for sustained operations to ensure continuous coverage over an incident.
- Personnel who are performing aerial reconnaissance and detection will not perform aerial supervision duties unless they are fully qualified as an ATGS.
- ATGS aircraft must meet the aircraft/avionics typing requirements listed in the IASG and the pilot must be carded to perform the air tactical mission. Rotor-wing pilots are not required to be carded for air tactical missions.

Leadplane

A leadplane is a national shared resource. Any operation that limits the national resource availability must be approved by the agency program manager.

Agency policy requires an ASM or Leadplane to be on order prior to aerial retardant/suppressant delivery over a congested area. Operations may proceed before the ASM or Leadplane arrives if communications are established with on-site resources, authorization is granted from the IC, and the line is cleared prior to commencing aerial application operations.

Aerial Supervision Module (ASM)

The ASM is a national shared resource.

The ASM is crewed with both a Leadplane qualified pilot (LEDP) and an Air Tactical Supervisor (AITS). These individuals are specifically trained to operate together as a team. The resource is primarily designed for providing both functions (Leadplane pilot and ATGS) simultaneously from the same aircraft, but can also provide single role service.

The LEDP is primarily responsible for aircraft coordination over the incident. The AITS develops strategy and implements tactical plans through coordination with the IC or designee.

Operational Considerations

Any operation that limits the national resource availability must be approved by the agency program manager.

Aerial or incident complexity and environmental considerations will dictate when the ASM ceases low-level operations. The ASM flight crew has the responsibility to determine when the complexity level of the incident exceeds the capability to perform both ATGS and leadplane functions from one aircraft.

The crew will request additional supervision resources, or modify the operation to maintain mission safety and efficiency.

Policy
Only those individuals certified and authorized by the BLM–National Aviation Office or the FS–Branch Chief Pilot Standardization will function as an Air Tactical Supervisor (AITS) in an ASM mission profile.

Aerial Supervision Module Program Training and Qualifications
Training and qualification requirements for ASM crewmembers are defined in the IASG.

Reconnaissance or Patrol Flights

The purpose of aerial reconnaissance or detection flights is to locate and relay fire information to fire management. In addition to detecting, mapping, and sizing up new fires, this resource may be utilized to provide ground resources with intelligence on fire behavior, provide recommendations to the IC when appropriate, and describe access routes into and out of fire areas for responding units. Only qualified Aerial Supervisors (ATGS, ASM, HLCO and LEDP) are authorized to coordinate incident airspace operations and give direction to aviation assets. Flights with a "Recon, Detection, or Patrol" designation should communicate with tactical aircraft only to announce location, altitude and to relay their departure direction and altitude from the incident.

Airtankers

Federally contracted airtankers are national resources. Geographic areas administering these aircraft will make them available for initial attack and extended attack fires on a priority basis. Early-ups for large fire support can have a significant effect on the resource availability late in the day. NICC must be included in this discussion. The rationale for use of airtankers prior to normal start times for large fire support must include obtainable incident objectives in support of ground resources. Host GACCs will check with NICC prior to releasing flight crews on T-1 and T-2 airtankers and VLATs for the day when those resources are not being used within the host area, and could be utilized elsewhere for emerging or ongoing fire activity.

The *National Interagency Mobilization Guide*, Chapter 50, "Airtankers" contains additional direction regarding staffing and maintenance of support functions to mobilize national resources.

For aviation safety and policy concerning wildland fire chemicals see Chapter 12 (Suppression Chemicals and Delivery Systems).

Airtankers are owned and operated by commercial vendors or owned by the Forest Service and operated by contractors. The management of airtankers is governed by:

- ***BLM –*** *The requirements of the DM, BLM NAP, and BLM Manual 9400.*
- ***FS –*** *Airtankers operate in accordance with 14 CFR Part 137, specific contracts, Grants of Exemption and operations plans.*
- ***BIA –*** *The requirements of the DM and BIA NAP.*

Airtanker Types

Airtankers are typed according to their load capacity:

- Very Large Air Tankers (VLAT) – 5,000 gallons or more
- Type 1 – 3,000 to 5,000 gallons
- Type 2 – 1,800 to 2,999 gallons
- Type 3 – 800 to 1,799 gallons
- Type 4 – up to 799 gallons

State of Alaska Airtankers

Canadian registered CV-580 airtankers under contract to the State of Alaska can be mobilized to the lower 48 as approved cooperator aircraft. These airtankers have been approved by OAS under 351 DM 4 and OPM-53 for interagency use. Operationally they can be used similar to other federally contracted airtankers and can be directed by U.S. ASM/leadplanes or Canadian Bird Dogs.

Canadian Airtankers

Canadian airtankers can be activated through the NIFC/CIFFC agreement. These Canadian airtankers are operated as a "group" with Canadian Bird Dogs as part of their operational model. Bird Dogs have a Canadian Air Attack Officer (AAO) on board and function similar to a U.S. ASM/leadplane.

The standard operating procedure for the Canadian Airtanker Groups is as follows:

- Canadian airtankers must be supervised by a Bird Dog or U.S. ASM/leadplane, and must include at a minimum a low level "show me" pass.
- Canadian Bird Dogs may provide low level target identification runs ("show me" pass) for either Canadian or US contracted airtankers.
- Canadian Bird Dogs can perform the functions of an ATGS.
- Canadian Bird Dogs are not authorized to "lead" U.S. federally contracted airtankers.
- U.S. ASM/leadplanes are authorized to "lead" Canadian airtankers.

Airtanker Rotation

The national airtanker fleet includes a mix of Exclusive Use (EU), Call When Needed (CWN)/On-Call Type 1 and Type 2 airtankers (Large Airtankers or LATs), Very Large Airtankers (VLATs), Single Engine Airtankers (SEATs) and

Forest Service owned airtankers. To ensure consistent utilization, rotation, and management of the national airtanker fleet, the following is interagency direction for the management of airtanker rotation and supplements direction contained in *Interagency Airtanker Base Operations Guide* (PMS 508) and in *Interagency SEAT Operations Guide* (PMS 506).

All LATs, VLATs and SEATs operating from the same base shall be dispatched in rotation based on the type of airtanker requested on a first in/first out basis regardless of contract type (EU, CWN/On-Call or Forest Service owned) or the location of the incident.

First in/first out also applies to airtankers that are requested for a load/return. When an incident requires multiple loads of retardant, Aerial Supervisors/Incident Commanders will notify the appropriate dispatch center of the need for additional retardant and any operational retardant delivery requirements. To ensure timely and effective retardant delivery, dispatch will order the next available airtanker in rotation if an airtanker that meets the requirement of the request is available and located at the load and return airtanker base.

Exceptions

1. Airtankers that are not Initial Attack (IA) qualified will not be dispatched to a fire unless a leadplane or Aerial Supervision Module (ASM) will be on-scene upon the arrival of the non-IA qualified airtanker.
2. Incident commanders/aerial supervision requests a specific type of resource (e.g., VLAT, LAT, or SEAT).
3. On-scene aerial supervision determines that the use of a specific make/model airtanker is not effective based on factors such as risk, maneuverability in terrain, and/or effectiveness.
4. The next airtanker in rotation has an operating restriction at the base where it is being assigned. Operating restrictions may include fuel and retardant availability, airtanker base or airport restrictions, significant downloading of fuel or retardant based on performance, daylight remaining, or distance to the incident is not considered effective.
5. Repositioning of an airtanker closer to where their maintenance crews or supplies are available. The National Interagency Coordination Center (NICC) will facilitate in coordination with the Geographic Area Coordination Center (GACC).
6. A benefit to the government would be realized by changing the rotation. This will be facilitated by the GACC or NICC with consideration to days off, mission requirements, and/or anticipated need.
7. Airtankers are returning after day(s) off. Upon returning to availability from days off, these airtankers will be at the end of the rotation at the airtanker base. Airtankers that work a seven day schedule retain their position in the rotation.

8. MAFFS, NICC ordered state cooperators, and NICC ordered Canadian airtankers will begin rotation at that base after the contracted and FS owned airtanker(s) at the beginning of each day.
9. Water Scoopers will not be included in airtanker base rotations.

Rotation of State Airtankers

Rotation of State resources on State incidents at a state airtanker base is established by their agency.

In cases where State resources are operated in conjunction with federally contracted airtankers on an incident primarily on federal lands, the State airtankers are added to the rotation after the federal airtankers at the beginning of each day.

Additional Information

Forest Service/DOI contracted airtankers, when assigned to incidents managed by other agencies or state cooperators remain under the direction of the Contracting Agency. Forest Service and DOI Contracted airtankers are bound only by their contract and will be treated fairly and equitability during their assignment with other federal or state agencies.

Airtanker Payloads

Loading Type 2, Type 1 or VLAT airtankers with water or dropping water operationally shall not occur unless the Forest Service National Airtanker Program Manager has been notified. Use of water operationally from these airtankers will require the following prior to notification:

- Use of retardant is restricted by the fire management plan (FMP) for the unit requesting the approval to use water. A copy of the section of the FMP restricting use of retardant shall be provided to the Airtanker Program Manager with the notification.
    - Prior to ordering an airtanker, the receiving unit should request the appropriate water aerial dispensing aircraft, such as a water scooper or helicopter.

During pre or post season fires, loading airtankers with water may be necessary when the nearest airtanker base may not be operational and capable of loading retardant. Once an airtanker base is operational and can load retardant, use of water shall cease.

Use of water enhancers (gels) is strictly prohibited in Type 2, Type 1 or VLAT airtankers contracted by the USDA Forest Service.

Airtanker Base Operations

Certain parameters for the operation of airtankers are agency-specific. For dispatch procedures, limitations, and times, refer to geographic area

mobilization guides and the *Interagency Airtanker Base Operations Guide* (*IABOG*).

Loading Operations

Forest Service contracted airtankers, owned airtankers and Modular Airborne Firefighting System (MAFFS) airtankers shall be loaded using a Mass Flow Meter to measure the payload in pounds. Refer to the Forest Service Large Airtanker Operations Plan for more information.
https://www.fs.fed.us/fire/aviation/av_library/index.html

Airtanker Base Personnel

There is identified training for the positions at airtanker bases; the Interagency Airtanker Base Operations Guide (IABOG) contains a chart of required training for each position. Permanent, reload and temporary large airtanker bases will meet the minimum requirements listed in Appendix E (Airtanker Base Fire Readiness Review) of the IABOG and have a staffing plan prior to an airtanker landing at the airtanker base airport. All personnel conducting airtanker base operations should review the IABOG and have it available.

Startup/Cutoff Time for Multi Engine Airtankers

Refer to the *Interagency Aerial Supervision Guide* (NFES 2544).

Single Engine Airtankers

Single Engine Airtanker (SEAT) Operations, Procedures, and Safety

The *Interagency SEAT Operating Guide* (ISOG, NFES 1844) defines operating standards and is policy for both the DOI and FS.

Single Engine Airtanker Manager Position

The SEAT Manager (SEMG) duties and responsibilities are outlined in the ISOG. SEMGs ensure adherence to contract regulations, safety requirements, and fiscal accountability.

Operational Procedures

Using SEATs in conjunction with other aircraft over an incident is standard practice. Agency or geographical area mobilization guides may specify additional procedures and limitations.

Depending on location, operator, and availability, SEATs are capable of dropping suppressants, water, or approved chemical retardants. Because of the load capacities of the SEATs (500 to 800 gallons), quick turn-around times should be a prime consideration.

SEAT operations at established airtanker bases or reload bases are authorized. All BLM and FS Airtanker base operating plans will permit SEAT loading in conjunction with large airtankers.

Multi-Engine Water Scoopers

Forest Service contracted exclusive use and CWN multi-engine water scoopers are national resources. Geographic areas administering these aircraft will make them available for initial attack and extended attack fires on a priority basis. Generally, a water scooper manager will be assigned by the Forest Service National Aviation Office. The manager will be on site to coordinate water scooper operations, logistics and water body assessment.

Forest Service multi-engine water scoopers, by contract, shall not use retardant, foam or gels.

Smokejumper Pilots

The *Interagency Smokejumper Pilot Operations Guide* (ISPOG) serves as policy for smokejumper pilot qualifications, training, and operations.

Helicopters

Helicopter Types

The minimum specifications for the typing of helicopters are by allowable payload, number of passenger seats and water or retardant carrying capability.

ICS Type Specifications for Helicopters

Attributes	Type 1	Type 2	Type 3
Useful load at 59°F at sea level	5,000 pounds	2,500 pounds	1,200 pounds
Passenger seats	15 or more	9-14	4-8
Retardant or water carrying capability	700 gallons	300 gallons	100 gallons
Maximum gross takeoff/landing weight	12,501+ pounds	6,000-12,500 pounds	up to 6,000 pounds

The *National Interagency Mobilization Guide*, Chapter 50, contains additional direction regarding staffing and maintenance support functions to mobilize national resources. For aviation safety and policy concerning wildland fire chemicals (water enhancers, retardants and foams), reference https://www.fs.fed.us/rm/fire/wfcs/. Other helicopter information can be found in the *Interagency Helicopter Operations Guide* (PMS 510) at https://www.nwcg.gov/publications/510.

Military or National Guard Helicopters and Pilots

The *Military Use Handbook* (NFES 2175) will be used when planning or conducting aviation operations involving regular military aircraft. Ordering military resources is done through the National Interagency Coordination Center (NICC); National Guard resources are utilized through local or state Memorandum of Understanding (MOU).

Modular Airborne Fire Fighting System (MAFFS)

The *MAFFS Operating Plan* (available from the National Interagency Coordination Center) will be used when planning or conducting aviation operations involving MAFFS military aircraft. Ordering MAFFS is done through the National Interagency Coordination Center (NICC); MAFFS are utilized through a national agreement (see the *National Interagency Mobilization Guide*). Several states have the ability to activate MAFFS through separate agreements that do not require ordering through NICC.

Cooperator Aircraft

Aircraft procured/owned by cooperating agencies (state, local, and International) may be utilized on federally managed fires when cooperative agreements are in place and the aircraft have been approved by letter nationally or regionally.

The purpose of this direction is to keep non-federally approved aircraft under the operational control of the agency providing the aircraft, to the extent possible.

States may use aircraft that have not been identified as an "Approved Cooperator Aircraft" on federal lands when and where the state is the protecting agency in a reciprocal or off-set agreement or when state lands are threatened and the state maintains operational control of the aircraft.

The following conditions apply for non-federally approved aircraft:

- No federal employees are allowed to ride on board the aircraft.
- No federal employee may be assigned to a position that exercises contractual control.
- They are approved to have federal personnel load retardant at federal airtanker bases, regardless of jurisdiction.
- Federal personnel may provide aerial supervision (ATGS, ASM, HELCO, leadplane) under existing standard procedures and agreements.
- They remain under state operational control regardless of the agency affiliation of the firefighters directing the aircraft on an incident with state jurisdiction.
- They are approved to interact with federal dispatch personnel as long as the aircraft remains under the operational control of the state or for safety reasons.

Under emergency circumstances, where **human life is immediately at risk** by wildland fire on lands under federal protection, a federal line officer can approve the use of non-federally approved aircraft to address the immediate threat. Under circumstances where a Governor has declared a state of emergency, a federal line officer at the State/Regional level, may consider any fire under federal protection, as an immediate threat to human life. This exemption must only take place when sufficient federal firefighting aircraft are not readily available to meet the emergency need. Line officers are encouraged to consult with their agency aviation management personnel to aid in decision-making.

As exemptions are exercised, they must be documented by the approving federal line officer in accordance with their agencies guidance to include submitting a SAFECOM within 24 hours.

(This page intentionally left blank.)

Chapter 17
Fuels Management

Introduction

The purpose of the Fuels Management (FM) programs within the Department of the Interior (DOI) and the Forest Service (FS) is to reduce hazardous fuels and risks to human communities and improve the health of the land by creating fire-resilient landscapes and restoring fire-adapted ecosystems.

The DOI and FS, along with other federal, state, Tribal, and local partners, will work to ensure effective FM efforts are collectively planned and implemented. These efforts will be consistent with the direction provided in:

- *Review and Update of the 1995 Federal Wildland Fire Management Policy (January 2001)*
- *Guidance for Implementation of Federal Wildland Fire Management Policy (February 13, 2009)*

Policy

The federal fire agencies use the *Interagency Prescribed Fire Planning and Implementation Procedures Guide* (PMS 484) to manage prescribed fire activities. This guide provides standardized procedures specifically associated with the planning and implementation of prescribed fire.

Fuels Management – Policy, project planning and implementation priorities, and standards common to all agencies:

- The safety of firefighters and the public is the number one priority when planning and implementing projects/treatments;
- All projects/treatments will support resource management objectives as identified in their agency-specific Land/Resource Management Plans;
- All projects/treatments will have plans that contain measurable objectives;
- All projects/treatments will comply with National Environmental Policy Act (NEPA) and all other regulatory requirements;
- All projects/treatments will be tracked and progress will be reported within required timeframes; and
- All projects will be monitored to determine if treatment objectives were met and to document weather, fire behavior, fuels information, and smoke dispersion. Evaluation reports are to be completed and maintained in the project file.

Some programmatic differences are identified in the following agency-specific documentation and serve as agency-specific direction.

- ***BLM –*** *Refer to FA IM 2015-003.*
- ***NPS –*** *Refer to RM 18.*

- ***FWS –*** *Refer to Fire Management Handbook, Chapter 17.*
- ***FS –*** *Refer to FSM 5140.*
- ***BIA –*** *Refer to Bureau of Indian Affairs Fuels Management Business Rules, July 2008.*

Reporting Fuels Management Accomplishments

The Hazardous Fuels Reduction (HFR) Module of the National Fire Plan Operations and Reporting System (NFPORS) is the national system for submitting proposed projects for approval, tracking accomplishments of the program, reporting performance, measuring accomplishments, and accountability for all agencies in the Department of Interior.

Forest Service fuels management accomplishments are entered into the Forest Service Activity Tracking System (FACTS) as the official system of record for tracking and reporting. This data is shared with NFPORS to facilitate interagency joint reporting needs.

Information on FACTS can be found at https://fsweb.ftcol.wo.fs.fed.us/frs/facts/index.shtml. Acres treated through Forest Service funded State Fire Assistance grants are recorded directly in NFPORS.

Reporting Fuels Treatment Effectiveness Monitoring (FTEM)

Anytime a wildfire starts in or interacts with a fuel treatment area, policy for all agencies requires that we document the outcome to examine whether the treatment had the desired effect of reduced fire behavior and/or provided opportunities to firefighters for effective management of the wildfire.

- ***BLM –*** *Offices will complete a fuels treatment effectiveness assessment and input appropriate information into the Fuels Treatment Effectiveness Monitoring (FTEM) online tool for all wildfires which start in, burn into, or burn through any portion of a fuel treatment area that has been completed and reported in the Hazardous Fuels Module of the National Fire Plan Operations and Reporting System (NFPORS) from fiscal year 2003 to present. If offices have wildfire/treatment intersections that have occurred prior to 2003 or are not in NFPORS, as long as offices can document that fuels dollars were expended on these treatments and the wildfire is recorded in the Wildland Fire Management Information (WFMI) system, the record should be entered into FTEM. It is important that treatment data entered into FTEM are consistent with the NFPORS, and that wildfire information is consistent with the WFMI system. Refer to FA IM-2015-001.*
- ***NPS –*** *Refer to RM 18 and Documenting Hazardous Fuels Reduction Program Treatment Effectiveness Memo, 10/09/2012.*
- ***FWS –*** *Refer to Fire Management Handbook, Chapter 17.*
- ***FS –*** *Refer to FSM 5140.*

- ***BIA –*** *Refer to Bureau of Indian Affairs Fuels Treatment Effectiveness Final Guidance Memo, 06/05/2013.*

Reporting Planned Fuels Treatments Burned in a Wildfire

For NPS and FWS, acres burned in a wildfire may only be reported in the NFPORS Hazardous Fuels Reduction Module as "Fire Use" if all the following conditions are met:

- The area burned was in a pre-existing NFPORS treatment unit;
- The accomplishment has been approved from the Regional and/or National level;
- NEPA is complete; and
- The planned objectives were met.
    - **BLM –** *Offices will report (using instructions from Attachment 1 of IM FA-2017-034) all acres burned in a naturally-caused wildfire (accomplishments of resource objectives for known human-caused fires will not be reported) that accomplish resource objectives in the HFR module of NFPORS when:*
        - *An interdisciplinary team approach is used to determine the specific burned acres where LUP resource objectives were met by wildfire; and*
        - *An Agency Administrator approves the determination and notifies the State Fuels Lead/Specialist. Together they ensure appropriate reporting in NFPORS.*
    - ***FS –*** *Acres burned from an unplanned natural ignition may be reported as "Fire Use" accomplishment if the resulting fire effects meet objectives from the Land and Resource Management Plan or project-specific NEPA decision document. Human-caused wildfires may not be counted as accomplishment toward target regardless of the outcome. See Reporting of Wildfire Acres That Meet Resource Management Objectives section below for additional information.*
    - ***BIA –*** *Refer to Bureau of Indian Affairs Fuels Management Business Rules, July 2008, page 36.*

Reporting of Wildfire Acres That Meet Resource Management Objectives

Acres burned in a wildfire that achieve resource management objectives as defined in Land and Resource Management Plans/Fire Management Plans (LRMP/FMP) will be reported in the NFPORS Non-National Fire Plan (Non-NFP) module. While strategies for managing individual wildfires are established through the fire management decision process, the identification of acres which achieved LRMP/FMP objectives should be made after the fire is declared out, regardless of the fire management objective, strategy or tactic used (e.g., even though a wildfire strategy may be full suppression, the effects of a wildfire on resources may be beneficial). The determination of benefit must be based on land management objectives which are affected by fire severity, intensity, and

other fire impacts. Post-fire impact, such as invasion of exotic species and the need for rehabilitation, should be considered in this determination. At a minimum, acres reported in the Non-NFP module must meet the following criteria:

- The LRMP/FMP supports attainment of resource benefit through use of fire;
- An interdisciplinary approach is used to determine whether the LRMP/FMP objectives were met; and
- Line manager approves the determination.
    - ***FWS –*** *Reporting will take place in FMIS, not in the NFPORS Non-National Fire Plan module. Reference FMIS User Guide at https://fishnet.fws.doi.net/regions/9/nwrs/fire/FMR/FMIS1.*
    - ***FS –*** *Direction for reporting accomplishments from unplanned ignitions is found in the Hazardous Fuels Reduction Treatments Tracking and Accomplishments Reporting Requirements document posted on the FACTS support page at https://fsweb.ftcol.wo.fs.fed.us/frs/facts/support/documents/index.shtml.*

Prescribed Fire During Preparedness Levels 4 and 5

Approval at the Regional or State Office level is required prior to ignition of prescribed fires at National Preparedness Levels 4 and 5. Approving officials should consider relative risks and opportunities as well as availability of local resources to implement without the need for additional outside resources that could add additional strain on resource availability nationally. To limit the potential for mixed messages when at GACC or National Preparedness Levels 4 and 5, agencies should coordinate information on planned implementation of prescribed fires with interagency partners at the local, GMAC and NMAC levels.

- ***BLM –*** *The State Director or designee will approve prescribed fire at National or Geographic Area Preparedness Level 4 or 5.*
- ***NPS –*** *At National Preparedness Level 4 or 5, concurrence from NPS Branch of Fire Management must be obtained prior to implementing prescribed fires. At Geographic Area Preparedness Level 4 or 5, NPS Regional Fire Management concurrence must be obtained prior to implementing prescribed fires.*
- ***FWS –*** *During Geographic Area Preparedness Level 4 or 5, written concurrence from RFMC is required prior to ignition. During National Preparedness Level 5, concurrence from Headquarters, Branch of Fire Management must be obtained prior to implementing prescribed fires. Refer to FMH, Chapter 17 for additional information.*
- ***FS –*** *The Regional Forester will approve or disapprove new prescribed fires or continue existing prescribed fire at National Preparedness Levels 4 and 5 or if National Fire Danger Rating System forecasted adjective rating*

is "Extreme" for the county that the prescribed fire is located or any adjacent county. Reference FSM Interim Directive WO-ID-5140-2017-1.

- ***BIA –** At National Preparedness Levels 4 and 5, prescribed fire (Rx) applications can be initiated or continued if the proposed action is approved by an agency at the Regional level. The approval must be based on an assessment of risk, impacts of the proposed actions on Area resources and activities, and include feedback from the GMAC. At National Preparedness Level 5, for Rx applications to be initiated or continued that require additional support of resources from outside the local unit or require resource ordering of an IMT, the Regional Fuels Specialist must prepare a written justification to request permission to implement a new prescribed fire and submit to the BIA Director of Fuels Management. A National MAC representative will assess risk and impacts of the proposed action(s) and present to NMAC for review prior to proceeding. The final decision to implement resides with the implementing agency.*

Federal Agencies Assistance

Reference Section VI of the *Interagency Agreement for Wildland Fire Management among the Bureau of Land Management, Bureau of Indian Affairs, National Park Service, Fish and Wildlife Service of the United States Department of The Interior, and the Forest Service of the United States Department of Agriculture,* effective 2011-2015.

Agencies will enter into separate agreements for personnel and other resources provided for planning and implementation of fuels management treatments and activities. This may or may not result in an exchange of funds subject to the applicable statutory authority used.

- ***FS –** USFS units will make every attempt to establish agreements in advance when planning to utilize resources from cooperating agencies to implement or respond as contingency resources for prescribed fire. However, for prescribed fire activities and exigent circumstances, where an agreement was not executed and funds were not obligated prior to commencing work, a ratification may not be necessary if an approved agreement is executed and funds obligated on I-web within 30 calendar days of the start of work. See FSH 1509.11 Chapter 10, Section 15.81.*
- ***BIA –** Refer to Bureau of Indian Affairs Fuels Management Business Rules, July 2008, pages 23-24.*

Hazard Pay/Environmental Differential for Prescribed Fire Implementation

Current policy is that hazard pay will not be paid for any prescribed fire. Under certain circumstances, (i.e., low level flight operations), hazard pay or environmental differential may be warranted. Offices should contact their servicing personnel office with specific questions.

Non-NWCG Agency Personnel Use on Prescribed Fire

For information regarding use of non-NWCG agency personnel on prescribed fires, see Chapter 13.

Use of Contractors for Prescribed Fire Implementation

Agencies can contract to conduct all or part of the planning and implementation of prescribed fire operations and/or all or part of mechanical treatments for fuels management projects. Contractors must meet NWCG 310-1 qualification requirements and agency standards for specific skill positions for prescribed fire operations.

If a contractor is actively involved in igniting, holding, or mopping up an agency prescribed fire, a Contracting Officer's Authorized Representative (COR) or Project Inspector (PI) will be on site (exceptions can be made for late stage mop up and patrol) to ensure that the prescribed fire objectives are being met and that the terms of the contract are adhered to. The Agency Administrator and/or FMO will determine the qualifications required for the agency representative (COR or PI).

- ***FS –*** *Contractors must meet requirements for any specific skill positions for prescribed fire operations as described in NWCG PMS 310-1 or FSH 5109.17 for positions not found in the PMS 310-1 (e.g., RXB3). Reference FSM 5140.*
- ***BIA –*** *Refer to Bureau of Indian Affairs Fuels Management Business Rules, July 2008, pages 22.*

Use of AD Pay Plan for Prescribed Fire

Refer to the DOI Administratively Determined (AD) Pay Plan for Emergency Workers (Casuals) for information regarding the use of emergency workers for prescribed fire. The DOI AD Pay Plan does not allow for use of Casuals for mechanical or chemical treatment fuels reduction projects.

Forest Service does not have this authority.

Activation of Contingency Resources

In the event contingency resources are activated, sending units should respond and support the requesting agency immediately.

Non-fire Fuels Management Activities

For policy, guidance, and standards for implementation of non-fire fuel reduction treatments (e.g., mechanical, biological, chemical), refer to agency-specific policy and direction.

Chapter 18
Reviews and Investigations

Introduction

Reviews and investigations are used by wildland fire and aviation managers to assess and improve the effectiveness and safety of organizational operations.

Information (other than factual) derived from safety reviews and accident investigations should only be used by agencies for accident prevention and safety purposes.

Multiagency Cooperation

Many reviews and investigations involve cooperation between Federal, State, County, and Municipal Agencies. To comply with each agency's authorities, policies, and responsibilities, a multiagency review or investigation may be necessary. A multiagency Delegation of Authority should be provided to outline roles, responsibilities, and expected deliverables.

The Team Leader or delegating official(s) should establish cooperative relationships with the other agencies involved in the review or investigation to ensure policies and responsibilities are met. This may involve negotiations, cooperative agreements, and coordination with the agency Designated Agency Safety and Health Official (DASHO) or the agency official who signs the Delegation of Authority.

Federal Interagency Investigations

Close calls or accidents that involve interagency (USFS or DOI) personnel and/or jurisdiction (e.g., USFS firefighter injured on FWS jurisdictional wildland fire and vice versa) shall be reviewed or investigated cooperatively and conducted at the appropriate level as outlined in this chapter.

Agency Administrators will ensure that affected agencies are involved throughout the review/investigation process.

When an incident does not meet the serious accident criteria, the affected Agency Administrators should jointly decide what type and level of investigation will be conducted based on agency processes outlined in this chapter. Questions should be addressed to your agency Wildland Fire Safety Program Manager.

Reviews

Reviews are methodical examinations of system elements such as program management, safety, leadership, operations, preparedness, training, staffing, business practices, budget, cost containment, planning, and interagency or intra-

agency cooperation and coordination. Reviews do not have to be associated with a specific incident. The purpose of a review is to ensure the effectiveness of the system element being reviewed, and to identify deficiencies and recommend specific corrective actions. Established review types are described below and include:

- Preparedness Reviews
- After Action Reviews
- Fire and Aviation Safety Team Reviews
- Safety Assistance Team Visits
- Aviation Safety and Assistance Team Reviews
- Large Fire Cost Reviews (FS)
- Significant Wildland Fire Reviews (DOI)
- Individual Fire Reviews
- Lessons Learned Reviews
- Rapid Lesson Sharing
- Declared Wildfire Reviews

Review Types and Requirements

Type	When Conducted	Delegating or Authorizing Official
Preparedness Review	Annually, or management discretion	Local/State/Region/ National
After Action Review	Management discretion	N/A
Fire and Aviation Safety Team Review	As fire activity dictates	Geographic Area Coordinating Group
Safety Assistance Team Visit	As fire activity dictates	Local/State/Region/ National
Aviation Safety Assistance Team Review	As aviation activity dictates	State/Regional Aviation Manager or MACG
Large Fire Cost Review (FS)	Washington Office discretion	Washington Office
Significant Wildland Fire Review (DOI)	Refer to OWF Policy Memorandum 2016-013	Agency Director, Agency Administrator or individual bureau direction
Individual Fire Review	Management discretion	Local/State/Region/ National
Lessons Learned Review • ***NPS/FS –*** *FLA may be used*	Management discretion	Local/State/Region/ National
Rapid Lesson Sharing	Management discretion	N/A

Type	When Conducted	Delegating or Authorizing Official
Declared Wildfire Review	See *Interagency Prescribed Fire Planning and Implementation Procedures Guide* (PMS 484)	See *Interagency Prescribed Fire Planning and Implementation Procedures Guide* (PMS 484)

Preparedness Reviews

Preparedness Reviews assess fire programs for compliance with established fire policies and procedures outlined in the current *Interagency Standards for Fire and Fire Aviation Operations* and other pertinent policy documents.

Preparedness Reviews identify organizational, operational, procedural, personnel, or equipment deficiencies, and recommend specific corrective actions. Interagency Preparedness Review Checklists can be found at https://www.nifc.gov/policies/pol_ref_intgncy_prepcheck.html.

After Action Reviews (AAR)

An AAR is a learning tool intended for the evaluation of an incident or project in order to improve performance by sustaining strengths and correcting weaknesses. An AAR is performed as soon after the event as possible by the personnel involved. An AAR should encourage input from participants that is focused on:

- What was planned?
- What actually happened?
- Why it happened?
- What can be done the next time?

An AAR is a tool that leaders and units can use to get maximum benefit from the experience gained on any incident or project. When possible, the leader of the incident or project should facilitate the AAR process. However, the leader may choose to have another person facilitate the AAR as needed and appropriate. AARs may be conducted at any organizational level. However, all AARs involve the exchange of ideas and observations, and focus on improving proficiency. The AAR should not be utilized as an investigational review. The format can be found in the *Interagency Response Pocket Guide (IRPG),* PMS 461, NFES 1077. Additional AAR information is available at https://www.fireleadership.gov/toolbox/after_action_review/index.html.

Fire and Aviation Safety Team (FAST) Reviews

Fire and Aviation Safety Teams assist Agency Administrators during periods of high fire activity by assessing policy, rules, regulations, and management oversight relating to operational issues. They can also do the following:

- Provide guidance to ensure fire and aviation programs are conducted safely;

- Assist with providing immediate corrective actions;
- Review compliance with OSHA abatement plan(s), reports, reviews, and evaluations; and
- Review compliance with *Interagency Standards for Fire and Fire Aviation Operations*.

FAST reviews can be requested through geographic area coordination centers to conduct reviews at the state/regional and local level. If a more comprehensive review is required, a national FAST can be ordered through the National Interagency Coordination Center.

FASTs include a team leader, who is either an Agency Administrator or fire program lead with previous experience as a FAST member, a safety and health manager, and other individuals with a mix of skills from fire and aviation management.

FASTs will be chartered by their respective Geographic Area Coordinating Group (GACG) with a Delegation of Authority, and report back to the GACG.

FAST reports will include an executive summary, purpose, objectives, methods/procedures, findings, recommendations, follow-up actions (immediate, long-term, national issues), and a letter delegating authority for the review. FAST reports should be submitted to the GACG with a copy to the Federal Fire and Aviation Safety Team (FFAST) chair within 30 days. See Appendix L for sample FAST Delegation of Authority.

Safety Assistance Team (SAT) Visits

In addition to FAST reviews, SAT visits emphasize engaging individual firefighters, managers, and administrators to grasp potential issues, with a focus on firefighting safety fundamentals. SAT visits are not inspections. SATs are often ordered when activity within an area escalates rapidly, or when a high level of activity has been occurring for a long time. SATs can be single agency or interagency in scope and composition.

The goals of a Safety Assistance Team are to:

- Assist fire managers and IMTs with site visits with firefighters, fire managers, and program leaders.
- Be service oriented, assisting the local units.
- Provide early warning of potentially hazardous conditions or situations.

Direct intervention, circumventing normal chain of command, is authorized when necessary; however, the overall objective is to create a work environment where the normal operating procedures are responsible for safe practices.

Aviation Safety Assistance Team (ASAT) Reviews

Refer to Chapter 16 for ASAT information.

Large Fire Cost Reviews (FS)
A Large Fire Cost Review may be conducted at the discretion of the Washington Office, at the request of the Regional Office, or when requested by multi-jurisdictional cooperators.

Significant Wildland Fire Reviews (DOI)
A Significant Wildland Fire Review will be conducted when an incident (single fire or complex) meets or exceeds federal combined expenditures of $15 million in suppression costs, and more than 50% of the burned acres are managed by one or more DOI bureaus.

A review may also be conducted when an incident (single fire or fire complex) meets or is expected to meet one or more of the following criteria:

- There are significant political, social, natural resource, complexity, size, or policy issues;
- There are significant and complicated cost-share or multi-jurisdictional issues; or
- The affected agency/Agency Administrator requests a review.

It is the agency's responsibility to advise the appropriate individual(s) within their agency of the need for a Significant Wildland Fire Review. When a multi-jurisdictional fire requires review, the DOI bureaus will determine which agency will be designated as the lead in the review process.

The Agency will provide a Delegation of Authority to the Significant Wildland Fire Review Team authorizing the implementation of a review. When possible, Significant Wildland Fire Reviews should be conducted when the Incident Management Team is still in place to allow prompt access to records and incident personnel.

- ***BLM –*** *The Assistant Director, Fire and Aviation will initiate, facilitate, and provide oversight for the SWFR process. Upon determination of the need for a SWFR, the AD will coordinate with the appropriate state director and assemble a SWFR team, provide a Delegation of Authority, and initiate the SWFR using direction found at http://web.blm.gov/internal/fire/budget/Reports/Report_Menu_new.htm. The AD will provide briefings to the Bureau Director, as appropriate.*
- ***NPS –*** *Significant Wildland Fire Reviews (SWFR) will be conducted at Management discretion and the Delegating Official may be at the Local, Regional, or National level. See the Agency Administrator and Fire Management Performance Tables in Chapter 3 and the "Review Types and Requirements" table for further information.*

Individual Fire Reviews
Individual fire reviews examine all or part of the operations on an individual fire. The fire may be ongoing or controlled. These reviews may be local, state/regional, or national. These reviews evaluate decisions and strategies,

correct deficiencies, identify new or improved procedures, techniques or tactics, determine cost-effectiveness, and compile and develop information to improve local, state/regional, or national fire management programs.

Lessons Learned Reviews (LLRs)

The purpose of a LLR is to focus on the near miss events or conditions in order to prevent potential serious incident in the future. In order to continue to learn from our near misses and our successes it is imperative to conduct a LLR in an open, non-punitive manner. LLRs are intended to provide educational opportunities that foster open and honest dialog and assist the wildland fire community in sharing lessons learned information. LLRs provide an outside perspective with appropriate technical experts assisting involved personnel in identifying conditions that led to the unexpected outcome and sharing findings and recommendations.

A LLR should be tailored to the event being reviewed. The scope of the review should be commensurate with the severity of the incident. A LLR will not be substituted for a Serious Accident Investigation (SAI) or Accident Investigation (AI), should the criteria for either of those be met, but may be used as a supplement to the SAI or AI.

- ***NPS –*** *Facilitated Learning Analysis (FLA) may be used for incidents meeting the AI criteria.*
- ***FS –*** *Facilitated Learning Analysis (FLA) may be used for incidents meeting the AI criteria or if a CRP is not being utilized for an incident meeting SAI criteria. A guide for the FLA process is available at http://bit.ly/FLA_guide.*

A LLR will be led by a facilitator not involved in the event. A facilitator should be an appropriate fire management expert who possesses skills in interpersonal communications, organization, and be unbiased to the event. Personnel involved in the event will be participants in the review process. Depending upon the complexity of the event, the facilitator may request assistance from technical experts (e.g., fire behavior, fire operations, etc.).

The LLR facilitator will convene the participants and:

- Obtain a Delegation of Authority from appropriate agency level. See Appendix J for a sample LLR Delegation of Authority;
- Identify facts of the event (sand tables maybe helpful in the process) and develop a chronological narrative of the event;
- Identify underlying reasons for success or unintended outcomes;
- Identify what individuals learned and what they would do differently in the future;
- Identify any recommendations that would prevent future similar occurrences;
- 24- and 72-hour reports may be produced, but are not required; and

- Provide a final written report including the above items to the pertinent Agency Administrator(s) within two weeks of event occurrence unless otherwise negotiated. Names of involved personnel should not be included in this report (reference them by position).

A copy of the final report will be submitted to the respective agency's national fire safety lead who will provide a copy to the Wildland Fire Lessons Learned Center (LLC). E-mail: llcdocsubmit@gmail.com.

Rapid Lesson Sharing (RLS)

RLS is a type of Lessons Learned Review (LLR) for field personnel to quickly share lessons with others. RLS can be used to document and share lessons learned as a result of close calls, minor accidents, successes, efficient ways of performing work, adaptations, or anything wildland fire personnel can learn from.

To submit or view RLS documents, go to http://www.wildfirelessons.net/Resources/RapidLessonSharing.

Declared Wildfire Reviews

Every prescribed fire resulting in a wildfire declaration will receive an outcome review. Declared wildfire outcome review direction is found in these agency documents:

- *Interagency Prescribed Fire Planning and Implementation Procedures Reference Guide* (PMS 484)
  - ***BLM –*** *Refer to FA IM-2014-001.*
  - ***NPS –*** *Refer to RM-18, Chapter 7 and 17.*
  - ***FWS –*** *Refer to Fire Management Handbook, Chapter 17.*
  - ***FS –*** *Refer to FSM 5140.*
  - ***BIA –*** *Refer to Bureau of Indian Affairs Fuels Management Program Supplement to the Interagency Prescribed Fire Planning and Implementation Procedures Reference Guide (December 2008), Chapter 3.*

Declared Wildfire Reviews will be submitted to the Wildland Fire Lessons Learned Center (LLC) by the agency fuels program lead. Submissions should be sent to llcdocsubmit@gmail.com.

Investigations

Investigations are detailed and methodical efforts to collect and interpret facts related to an incident or accident, identify causes (organizational factors, local workplace factors, unsafe acts), and develop control measures to prevent recurrence.

Distinct types of wildland fire incidents and accidents have specific investigation requirements.

Wildland Fire Incident and Accident Types and Definitions

- **Serious Wildland Fire Accident –** An unplanned event or series of events that resulted in death, injury, occupational illness, or damage to or loss of equipment or property. For wildland fire operations, a serious accident involves any of the following:
  - One or more fatalities;
  - Three or more personnel who are inpatient hospitalized as a direct result of or in support of wildland fire operations;
  - Property or equipment damage of $250,000 or more; and/or
  - Consequences that the Designated Agency Safety and Health Official (DASHO) judges to warrant a Serious Accident Investigation.
- **Wildland Fire Accident –** An unplanned event or series of events that resulted in injury, occupational illness, or damage to or loss of equipment or property to a lesser degree than defined in "Serious Wildland Fire Accident."
- **Near-miss –** An unplanned event or series of events that could have resulted in death, injury, occupational illness, or damage to or loss of equipment or property but did not.
- **Entrapment –** A situation where personnel are unexpectedly caught in a fire behavior-related, life-threatening position where planned escape routes or safety zones are absent, inadequate, or compromised. Entrapment may or may not include deployment of a fire shelter for its intended purpose. Entrapment may result in a serious wildland fire accident, a wildland fire accident, or a near-miss.
- **Burnover –** An event in which a fire moves through a location or overtakes personnel or equipment where there is no opportunity to utilize escape routes and safety zones, often resulting in personal injury or equipment damage.
- **Fire Shelter Deployment –** The removing of a fire shelter from its case and unfolding it to use as protection against heat, smoke and burning embers.
- **Fire Trespass –** The occurrence of unauthorized fire on agency-protected lands where the source of ignition is tied to some type of human activity.

Investigation Types and Requirements

Wildland Fire Event	Investigation Type	Management Level Requiring Notification[1]	Management level that determines review type and authorizes review[2]
Serious Wildland Fire Accident	Serious Accident Investigation (SAI) ***FS –*** *Coordinated Response Protocol (CRP). If CRP is not activated, then an FLA will be implemented using a Regional Delegation of Authority.*	National	National
Wildland Fire Accident	Accident Investigation (AI) ***NPS/FS –*** *FLA may be used*	***BLM/NPS -****National* ***FS/FWS –*** *Management Discretion*	Region/State/Local
Entrapment/ Burnover	SAI, AI, LLR, depending on severity	National	National/Regional/ State
Fire Shelter Deployment	SAI, AI, LLR, depending on severity	National	National/Regional/ State
Near-miss	LLR, AAR	Management Discretion	Region/State/Local
Fire Trespass	Fire Cause Determination and Trespass Investigation	Local	Local

[1]In the event that a wildland fire entrapment or fatality occurs, immediate notification to NICC is required. A *Wildland Fire Entrapment/Fatality Initial Report* (PMS 405-1) should be completed and mailed to NICC electronically or by fax machine within 24 hours. Submit this report even if some data is missing. The PMS 405-1 is located at https://www.nifc.gov/nicc/logistics/coord_forms.htm.

[2] Higher level management may exercise their authority to determine the type of review or investigation.

- ***BLM –*** *BLM accidents that involve fire and aviation employees or equipment will be investigated according to the requirements stated in this chapter. Investigations will occur regardless of land jurisdiction. Facts will be collected, causes (organizational factors, local workplace factors, unsafe acts) identified, and an accident investigation report produced. The report will include recommended corrective actions and control measures. Report issuance and follow-up will be through established command channels. BLM Agency Administrators may jointly delegate authority to investigate*

accidents in cases of mixed jurisdiction or employee involvement. Joint delegations must ensure that BLM investigation requirements are met. The Facilitated Learning Analysis (FLA) process may be used as a supplemental element to required BLM accident investigation processes.

- ***FS –** Forest Service Line Officers are the deciding officials regarding what type of accident investigation or analysis method is to be used for accidents or near misses occurring under Forest Service jurisdiction.*

Investigation Processes

Processes Common to All Wildland Fire Accident Investigations

- **Site Protection** – The site of the incident should be secured immediately and nothing moved or disturbed until the area is photographed and visually reviewed by the investigation team. Exact locations of injured personnel, entrapments, injuries, fatalities, and the condition and location of personal protective equipment, property, and other equipment must be documented.
- **Management of Involved Personnel** – Treatment, transport, and follow-up care must be immediately arranged for injured and involved personnel. The Agency Administrator or delegate should develop a roster of involved personnel and supervisors and ensure they are available for interviews by the investigation team. The Agency Administrator should consider relieving involved supervisors from fireline duty until the preliminary investigation has been completed. Attempt to collect initial statements from the involved individuals prior to a Critical Incident Stress Management (CISM) session.
- **Delegation of Authority** – A Delegation of Authority shall be issued to the investigation team leader. The Delegation of Authority will outline roles, responsibilities, and expected deliverables. Delegation of Authority templates are available at https://www.nifc.gov/safety/safety_reprtsInvest.html.
- **Critical Incident Stress Management (CISM)** – CISM is the responsibility of local Agency Administrators, who should have individuals pre-identified for critical incident stress debriefings. Also refer to the *Agency Administrator's Guide to Critical Incident Management* (PMS 926), available at https://www.nwcg.gov/publications/926. Individuals or teams may be available through Employee Assistance Programs (EAPs) or Geographic Area Coordination Centers (GACCs).

Wildland Fire Serious Accident Investigation (SAI) Process

For interagency serious accident investigations, a multi-agency Delegation of Authority to conduct the investigation may be issued. The delegation will ensure that the investigation meets the policy requirements of involved agencies.

- ***BLM/FWS –** The Interagency Serious Accident Investigation Guide establishes core direction for BLM, FWS, and interagency serious accident investigations (exceptions for aviation accidents are stated in the guide). It provides serious accident investigation teams a standardized and*

comprehensive process for conducting serious accident investigations. The guide is available at https://www.nifc.gov/safety/safety_reprtsInvest.html.

Serious accident investigation reports will be completed, routed, and disseminated according to processes established in the guide. Reports may contain information supplemental to the requirements of the guide if it augments the BLM's ability to learn and to develop further improvements.

The guide may be used entirely or in part for accidents that do not meet the serious accident definition.

- ***FS –** Coordinated Response and Learning Review (CRP/LR) – How the USFS will Respond to Serious Accidents.*

A Coordinated Response Protocol (CRP) has been developed to coordinate the multiple reports and services needed following a serious accident. The CRP placed people first and is designed to coordinate internal and external investigations in a way that minimizes the exposure of our personnel (as much as possible) to a large number of interviews. The CRP also coordinates or oversees organizational support to the victims and their families to ensure that immediate needs are met and that benefits are received in a timely manner. The CRP coordinates or facilitates the Learning Review Team, Peer Support/Critical Incident Stress Management, Law Enforcement Investigations, Union Representation, and Human Resources support.

The Learning Review is a Phased approach that is designed to gather information in a way that is respectful and as complete as possible. The "Inquiry Phase" is designed to collect individual perceptions and to present them in a format that avoids judgment of action. It is of particular interest to understand the context in which decisions and actions were made. The LR recognizes that the traditional report serves as a starting point for learning from the event. While all reports will be available on line, a stated goal of the LR is to create a report for leadership so they will be able to make informed decisions regarding systemic change and a field product, designed to enhance the ability to learn based on scenarios, sensemaking and facilitated dialogue.

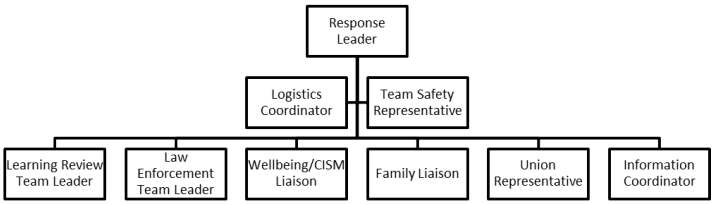
Forest Service directives and guidelines regarding the investigation of serious employee injuries and fatalities establish specific roles for the Office of Safety and Occupational Health (OSOH) and Law Enforcement and Investigations (LEI) staffs[1]. There is a requirement to conduct a claims investigation for any fatality or serious injury, and there is inherent value in conducting a Learning Review. To ensure that these potentially disparate roles are fulfilled, the following interim guidance is provided:
1. The Special Agent in Charge (SAC) and the appropriate Region/Station/Area Safety Manager will be notified immediately of

incidents meeting the threshold for a Coordinated Response, who will report them to the Designated Agency Safety and Health Official (DASHO), the Director of LEI, and the Director of OSOH. This notification will engage a scalable coordinated response, the Coordinated Response Protocol (CRP). This protocol is designed as a collaborative effort that places the wellbeing of our personnel as the top priority.

2. The SAC will assume responsibility for site security, and through coordination with the Director of LEI, will conduct a preliminary incident review. The review will be completed as soon as possible, and in most cases within 72 hours. If there is no indication of criminal wrongdoing, the event will be turned over to the Response Leader (formerly named the Team Leader). If at any time during the CRP there is a reasonable indication that a criminal investigation is warranted, the Response Leader and Directors of LEI and OSOH will confer with the DASHO regarding how to proceed with the CRP.

3. The CRP Team may include the members listed in the following diagram. The role of each team member is fully explained in the CRP Guide.

Response Team Structure



4. CRP Team Leaders will coordinate their efforts with the Response Leader and strive to minimize traumatic impacts of the Learning Review and claims investigation on all the employees involved.

5. For every Forest Service accident in which the potential for a claim against the federal government exists, the CRP Team will coordinate the Learning Review and a claims investigation. OOL will conduct the Learning Review. LEI will conduct a claims investigation and complete the required report.

6. In cases involving National Transportation Safety Board (NTSB), the designated NTSB Investigator in Charge (IIC) will determine party status, which includes the USFS participation in the investigative process. For some aviation accidents, the IIC may rely solely on party members to collect and supply information for the NTSB report without actually being on the accident scene. The NTSB prohibits law enforcement involvement with their accident investigations and is mandated to refer any suspicion of illegal activity to the FBI for investigation.

[1] These roles are delineated in the Law Enforcement Manual at Forest Service Manual (FSM) 5303.11, the Service Wide Claims

Management Handbook at Forest Service Handbook (FSH) 6509.11h, the Coordinated Response Protocol Guide, and FSH 6709.12.

Fire Director Responsibilities

The Fire Director(s) or designee(s) of the lead agency, or agency responsible for the land upon which the accident occurred, will:

- Ensure the agency safety manager and Designated Agency Safety and Health Official (DASHO) have been notified;
- Immediately appoint, authorize (through Delegation of Authority), and deploy an accident investigation team;
- Provide resources and procedures adequate to meet the team's needs;
- Receive the factual and management evaluation reports and take action to accept or reject recommendations;
- Forward investigation findings, recommendations, and corrective action plan to the DASHO (the agency safety office is the "office or record" for reports);
- Convene an accident review board/ board of review (if deemed necessary) to evaluate the adequacy of the factual and management reports and suggest corrective actions;
- Ensure a corrective action plan is developed, incorporating management initiatives established to address accident causal factors; and
- Ensure Serious Accident Investigations remain independent of other investigations.

Agency Administrator Responsibilities

- Develop local preparedness plans to guide emergency response.
- Identify agencies with jurisdictional responsibilities for the accident.
- Provide for and emphasize treatment and care of survivors.
- Ensure the Incident Commander secures the accident site.
- Conduct an in-briefing to the investigation team.
- Facilitate and support the investigation as requested.
- Determine need and implement Critical Incident Stress Management (CISM).
- Notify home tribe leadership in the case of a Native American fatality.
- Prepare and issue the required 24-Hour Preliminary Report unless formally delegated to another individual.

Notification

Agency reporting requirements will be followed. As soon as a serious accident is verified, the following groups or individuals should be notified:

- Agency Administrator;
- Public affairs;
- Agency Law Enforcement;
- Safety personnel;

- County sheriff or local law enforcement as appropriate to jurisdiction;
- National Interagency Coordination Center (NICC) through the local dispatch center and GACC. Provide a *Wildland Fire Entrapment/Fatality Initial Report* (PMS 405-1) directly to NICC within 24 hours;
- Agency headquarters; and
- OSHA will be notified according to agency policy when an employee is killed on the job or suffers a work-related hospitalization, amputation, or loss of an eye. https://www.osha.gov/report.html
  - A fatality must be reported within **8 hours**.
  - An in-patient hospitalization, amputation, or eye loss must be reported within **24 hours**.

Notification to the respective agency's fire national safety/risk management lead is required.

Designating the Investigation Team Lead

The 1995 Memorandum of Understanding (MOU) between the U.S. Department of the Interior and the U.S. Department of Agriculture states that serious wildland fire-related accidents will be investigated by interagency investigation teams.

The *Memorandum of Agreement (MOA) between Department of Agriculture Forest Service and Department of Interior* augments and provides clarification to the 1995 MOU for investigation type and team lead/deputy team lead/interagency representative designation. The MOA also provides an interagency template for joint Delegation of Authority. The MOA is available at https://www.nifc.gov/safety/safety_reprtsInvest.html.

Following initial notification of a serious accident, the agency DASHO will designate a Serious Accident Investigation Team Lead(s) and provide that person(s) with a written Delegation of Authority to conduct the investigation and the means to form and deploy an investigation team.

- ***BLM/NPS/FWS –*** *The agency DASHOs have delegated this responsibility to the respective agency Fire Directors.*
- ***BLM –*** *The Fire and Aviation Directorate Safety Program Manager mobilizes SAI teams in coordination with the SAI Team Leader.*

Accidents involving more than one agency will require a collaboratively developed Delegation of Authority that is signed by each of the respective agencies.

Serious Accident Investigation Team (SAIT) Composition

SAIT members should not be affiliated with the unit that sustained the accident.

- **Team Leader (Core Team Member)**
  A senior agency management official, at the equivalent associate/assistant regional/state/area/division director level. The team leader will direct the

investigation and serve as the point of contact to the Designated Agency Safety and Health Official (DASHO).

- **Chief Investigator (Core Team Member)**
  A qualified accident investigation specialist is responsible for the direct management of all investigation activities. The chief investigator reports to the team leader.
- **Accident Investigation Advisor/Safety Manager (Core Team Member)**
  An experienced safety and occupational health specialist or manager who acts as an advisor to the team leader to ensure that the investigation focus remains on safety and health issues. The accident investigation advisor/safety manager also works to ensure strategic management issues are examined. Delegating Officials or their designee may, at their discretion, fill this position with a trained and qualified NWCG Safety Officer, Line (SOFR), Safety Officer, Type 2 (SOF2), or Safety Officer, Type 1 (SOF1).
- **Interagency Representative**
  An interagency representative will be assigned to every fire-related Serious Accident Investigation Team. They will assist as designated by the team leader and will provide outside agency perspective. They will assist as assigned by the Team Leader and will provide a perspective from outside the agency.
- **Technical Specialists**
  Personnel who are qualified and experienced in specialized occupations, activities, skills, and equipment, addressing specific technical issues such as specialized fire equipment, weather, and fire behavior.
- **Public Affairs Officer**
  For investigations with high public visibility and significant news media interest, a public affairs officer (PAO) should be considered a part of the team. The PAO should develop a communications plan for the team, be a designated point of contact for news media, and oversee all aspects of internal and external communications. Ideally, the PAO should be qualified as a Type 1 or Type 2 public information officer and be familiar with SAI team organization and function.
  - ***BLM –*** *All media related documents (news releases, talking points, etc.) should be cleared through NIFC Public Affairs prior to external release.*

Core SAIT members are required to take the Interagency Serious Accident Investigation Course 1112-05 prior to serious accident investigation assignment. This training is also required every 5 years for recurrency.

- ***BLM/FWS/FS –*** *This training is required every 5 years to retain currency.*

SAI 24- and 72-Hour Reports

Final 24- and 72-hour reports will be approved by the SAI delegating official, then sent to the agency fire safety/risk management lead who will provide a

copy to the Wildland Fire Lessons Learned Center (LLC). E-mail: llcdocsubmit@gmail.com.

- **24-Hour Preliminary Report** – This report contains known basic facts about the accident. It will be completed and forwarded by the responsible Agency Administrator to the SAI delegating official. Names of injured personnel will not be included in this report. Personnel may be referenced by position.
- **72-Hour Expanded Report** – This report provides additional factual information, if available. The information may include the number of victims and severity of injuries. The focus should be on information that may have immediate impact on future accident prevention. This report will be completed and forwarded by the SAI team to the SAI delegating official. Names of injured personnel will not be included in this report. Personnel may be referenced by position.

SAI Final Report

Within 45 days of the incident, a final report consisting of a Factual Report (FR) and a Management Evaluation Report (MER) will be produced by the investigation team to document facts, findings, and recommendations and forwarded to the Designated Agency Safety and Health Official (DASHO) through the agency Fire Director(s).

- **Factual Report –** This report contains a brief summary or background of the event, and facts based only on examination of technical and procedural issues related to equipment and tactical fire operations. It does not contain opinions, conclusions, or recommendations. Names of injured personnel are not to be included in this report (reference them by position). Post-accident actions should be included in this report (emergency response attribute to survival of a victim, etc.). Factual Reports will be submitted to Wildland Fire Lessons Learned Center (LLC) by the respective agency's fire safety/risk management leads. E-mail: llcdocsubmit@gmail.com.
- **Management Evaluation Report (MER) –** The MER is intended for internal use only and explores management policies, practices, procedures, and personal performance related to the accident. The MER categorizes findings identified in the factual report and provides recommendations to prevent or reduce the risk of similar accidents.

Factual Report and Management Evaluation Report formatting can be found on the NIFC website at https://www.nifc.gov/safety/safety_reprtsInvest.html.

Accident Review Board/Board of Review

An Accident Review Board/Board of Review is used by some agencies to evaluate recommendations, and develop a corrective action plan. Refer to the respective agency's Safety and Health policy.

Wildland Fire Accident Investigation (AI) Process

Accident investigations and reports should be commensurate with the complexity and/or severity of the accident. Investigations and reports may range from large investigation teams producing comprehensive reports to first-level supervisors initiating investigations and reporting injury/property damage in agency reporting systems.

Notification

When an accident occurs, agency notification requirements will be followed. Notification requirements universally include:

- Local dispatch center
- Unit Fire Management Officer
- Agency Administrator
- OSHA (refer to Chapter 7 for reporting criteria)

Investigation Team Membership

Investigation team membership should be commensurate with the complexity and/or severity of the accident. An investigation team should consist of a team leader and an adequate number of technical specialists and subject matter experts. For complex investigations, team membership may also include a chief investigator, a safety advisor/manager, and additional technical specialists, and a writer/editor. Team members may have dual roles (e.g., chief investigator/safety advisor).

Investigation Methodology

Accident Investigations (AI) are detailed and methodical efforts to collect and interpret facts related to an accident and to provide specific recommendations to prevent recurrence. The AI should include the following actions:

- Visual inspection of involved site, equipment, or material;
- Detailed analysis of equipment or material, as necessary;
- Interviews with involved personnel, witnesses, managers, and other pertinent persons;
- Collection and review of written statements;
- Review of records, archives, plans, policies, procedures, and other pertinent documents;
- Consideration of environmental, equipment, material, procedural, and human factors as they related to the incident; and
- Development of specific findings and related recommendations for the AI report.

Accident Investigation 24- and 72-Hour Reports

24- and 72-hour reports should be completed when a formal AI will be conducted. Final 24- and 72-hour reports will be approved by the AI delegating official, then sent to the agency fire safety/risk management lead who will

provide a copy to the Wildland Fire Lessons Learned Center (LLC). E-mail: llcdocsubmit@gmail.com.

- **24-Hour Preliminary Report** – This report contains known basic facts about the accident. It will be completed and forwarded by the responsible Agency Administrator to the next higher level (e.g., District Manager forwards to State Director). Names of injured personnel will not be included in this report. Personnel may be referenced by position.
- **72-Hour Expanded Report** – This report provides additional factual information, if available. The information may include the number of victims and severity of injuries. The focus should be on information that may have immediate impact on future accident prevention. This report will be completed and forwarded by the AI team to the AI delegating official. Names of injured personnel will not be included in this report. Personnel may be referenced by position.

Accident Investigation Final Report

Within 45 days of the accident, a final report including facts, findings, and recommendations shall be submitted to the senior manager dependent upon the level of investigation (e.g., local Agency Administrator, State/Regional Director, and Agency Fire Director or their designee). If a lower level investigation is conducted, a courtesy copy of the final report shall be sent to the respective agency's national fire safety/risk management lead.

The Final Report (minus names of employees—they should be referenced by position) will be submitted to Wildland Fire Lessons Learned Center (LLC) by the respective agency's National Fire Safety Leads. E-mail: llcdocsubmit@gmail.com.

Accident Investigation Report Standard Contents

- **Executive Summary** – A brief narrative of the facts involving the accident including dates, locations, times, name of incident, jurisdiction(s), number of individuals involved, etc. Names of injured personnel or personnel involved in the accident are not to be included in this report (reference them by position).
- **Narrative** – A detailed chronological narrative of events leading up to and including the accident, as well as rescue and medical actions taken after the accident. This section will contain who, what, and where.
- **Investigation Process** – A brief narrative of actions taken by the investigation team. This narrative should include investigation team membership, Delegation of Authority information (from who and contents, include a copy as an appendix), investigative actions and timeline (when the team conducted interviews, inspections, site visits, etc.), and if other sources were consulted (i.e., professional accident reconstruction experts, equipment manufacturers, etc.). This section should also address if environmental, equipment, material, procedural, and human factors were present, and state how findings/recommendations were developed.

- **Findings/Recommendations**
  - **Findings** – Developed from the factual information. Each finding is a single event or condition. Each finding is an essential step in the accident sequence, but each finding is not necessarily causal or contributing, and each finding may not have an associated recommendation. Findings should only include information necessary to explain the specific event or condition. Findings must be substantiated by the factual data. Findings should not include opinion or speculation.
  - **Discussion** – This provides explanation or information pertinent to a specific finding.
  - **Recommendations** – Recommendations are proposed actions intended to prevent similar accidents. Recommendations should be directly related to findings, should not contain opinion or speculation, and when appropriate, should identify the specific organization responsible for completing the recommended action. Recommendations will be evaluated and may be incorporated into future operational direction through established processes.
- **Conclusions and Observations** – Investigation team's opinions and inferences, and "lessons learned" may be captured in the section. This section is not required.
- **Reference Materials**
  - **Maps/Photographs/Illustrations** – Graphic information used to document and visually portray facts.
  - **Appendices** – Reference materials (e.g., fire behavior analysis, equipment maintenance reports, agreements).

An AI Delegation of Authority template, AI report template and examples of AI reports can be found at the NIFC Safety website https://www.nifc.gov/safety/safety_reprtsInvest.html.

Fire Cause Determination and Trespass Investigation

Introduction

Agency policy requires determination of cause, origin, and responsibility for all wildfires. Accurate fire cause determination is a critical first step for a successful fire investigation and for targeting fire prevention efforts. Proper investigative procedures, which occur concurrent with initial attack, more accurately pinpoint fire causes and can preserve valuable evidence that would otherwise be destroyed by suppression activities. Fire trespass refers to the occurrence of unauthorized fire on agency-protected lands where the source of ignition is tied to some type of human activity.

- ***BIA –*** *For guidance regarding origin and cause determination on lands under the jurisdiction of the Bureau of Indian Affairs, see 90 IAM 1.4C (10) Wildland Fire Management - National Fire Investigation Handbook available at https://www.bia.gov/policy-forms/handbooks.*

Policy

The agency must pursue cost recovery, or document why cost recovery is not required, for all human-caused fires on public lands. The agency will also pursue cost recovery for other lands under fire protection agreement where the agency is not reimbursed for suppression actions, if so stipulated in the agreement.

For all human-caused fires where negligence can be determined, trespass actions are to be taken to recover cost of suppression activities, land rehabilitation, and damages to the resource and improvements. Only fires started by natural causes will not be considered for trespass and related cost recovery.

The determination whether to proceed with trespass action must be made on "incident facts," not on "cost or ability to pay." Trespass collection is both a cost recovery and a deterrent to prevent future damage to public land. It is prudent to pursue collection of costs, no matter how small. This determination must be documented and filed in the unit office's official fire report file.

- ***BIA –*** *For guidance regarding fire trespass and damage to Indian Forest Products on lands under the jurisdiction of the Bureau of Indian Affairs see 53IAM 7-H Indian Forest Management Handbook – Forest Trespass, available at https://www.bia.gov/sites/bia.gov/files/assets/bia/ots/dfwfm/pdf/idc-022535.pdf https://www.bia.gov/policy-forms/handbooks.*

The Agency Administrator has the responsibility to bill for the total cost of the fire and authority to accept only full payment. On the recommendation of the State/Regional Director, the Solicitor/Office of General Counsel may compromise claims of the United States, up to the monetary limits ($100,000) established by law 31 U.S.C. 3711[a], 4 CFR 103-104, and 205 DM 7.1 and 7.2. The Solicitor/Office of General Counsel will refer suspension or termination of the amount, in excess of $100,000, exclusive of interest, penalties, or administrative charges, to the Department of Justice.

Unless specified otherwise in an approved protection agreement, the agency that has the land management jurisdiction/administration role is accountable for determining the cause of ignition, responsible party, and for obtaining all billable costs, performing the billing, collection, and distribution of the collected funds. The agency with the fire protection responsibility role must provide the initial determination of cause to the agency with the land management jurisdiction/administration role. The agency providing fire protection shall provide a detailed report of suppression costs that will allow the jurisdictional agency to proceed with trespass procedures in a timely manner.

Each agency's role in fire trespass billing and collection must be specifically defined in the relevant Cooperative Fire Protection Agreement. The billing and collection process for federal agencies is:

- For example, a federal agency fire occurs on another federal agency's land and is determined to be a trespass fire. BLM provides assistance, and supplies costs of that assistance to the federal agency with jurisdictional responsibility for trespass billing. The responsible federal agency bills and collects trespass, and BLM then bills the federal agency and is reimbursed for its share of the collection.
- For example, where BLM administered land is protected by a state agency, the billing and collection process is:
    - The state bills BLM for their suppression costs. The BLM will pursue trespass action for all costs, suppression, rehabilitation, and damages, and deposits the collection per BLM's trespass guidance.

Initiation of fire cause determination must be started with notification of an incident. Initial attack dispatchers are responsible for capturing all pertinent information when the fire is reported and throughout the incident. The initial attack Incident Commander and the initial attack forces are responsible for initiating fire cause determination and documenting observations starting with their travel to the fire. If probable cause indicates human involvement, an individual qualified in fire cause determination (INVF or cooperator equivalent) should be dispatched to the fire.

Agency references:

- ***BLM –*** *9238-1*
- ***NPS –*** *RM-18, Chapter 6 and RM-9*
- ***FWS –*** *Fire Management Handbook*
- ***FS –*** *FSM 5130 and FSM 5300*
- ***BIA –*** *53 IAM Chapter 7-H and 90IAM 1.4C (10)*

Related Policy Documents

These documents provide specific direction related to incident and accident investigations.

	Safety	Prescribed Fire
DOI	485 DM Chapter 7	
BLM	DOI Occupational Safety and Health Program – Field Manual, 1112-1	
NPS	DO/RM-50B, RM-18 Chapter 3	RM-18, Chapter 7
FWS	Service Manual 095	

	Safety	Prescribed Fire
FS	FSH-6709.11	FSM-5140
	FSM-5100 and FSH-6709.11, FSM 5720 (Aviation), FSM 5130 (Ground Operations), FSM 6730 (Specific policy), FSH 6709.12 Chapter 30 (General guidance), and most recent Accident Investigation Guide, for specific guidance.	Same as Safety
Interagency	Information on accident investigations may be found at https://www.nifc.gov/safety/safety_reprtsInvest.html. For reporting use PMS 405-1*, Wildland Fire Fatality and Entrapment Initial Report,* https://www.nifc.gov/nicc/logistics/coord_forms.htm.	Same as Safety

Chapter 19
Dispatch and Coordination System

Introduction

The primary mission of the national dispatch/coordination system is the timely, cost-effective, and efficient coordination, mobilization, and demobilization of wildland fire resources. This mission is accomplished at the direction of Agency Administrators and designated fire managers at the local, geographic, and national level and delegated to the Center Manager. Agency Administrators and fire managers are responsible for providing direction to their respective dispatch/coordination centers. The dispatch/coordination system implements the movement of resources in response to the direction as delegated.

Agency Administrators and fire managers will:

- Provide oversight for the development and implementation of dispatch/coordination center plans and operating procedures (e.g., initial response plans, dispatch operating guides/manuals, and mobilization guides) that enable the effective implementation of the fire management plan.
- Through prior planning, provide dispatch with an initial response plan to allocate resources to new incidents under the leadership of the Center Manager or delegated acting.
- Establish priorities for prepositioning and deployment of fire suppression resources based on evaluation of current/predicted fire activity and firefighting resource status and availability, and communicate these priorities to the dispatch/coordination managers through established command channels for implementation.
- Serve as authorized representatives on local, geographic, and national coordinating groups and MAC groups.

Dispatch/Coordination Center Managers will:

- Ensure that dispatch/coordination center decisions and actions are consistent with priorities, established plans, and operating procedures as determined by Agency Administrators and fire managers.
- Implement pre-planned response for allocation of resources to new incidents, pursuant to their delegation from Agency Administrators and designated fire managers.
- Develop and implement dispatch/coordination center plans and operating procedures (e.g., initial response plans, dispatch operating guides/manuals, and mobilization guides) that enable the effective implementation of the fire management plan.

National Dispatch/Coordination System

The wildland fire dispatch and coordination system in the United States has three levels (tiers):

- National – National Interagency Coordination Center
- Geographic – Geographic Area Coordination Centers
- Local – Local Dispatch Centers

Logistical dispatch operations occur at all three levels, while initial attack dispatch operations occur primarily at the local level. Any geographic area or local dispatch center using a dispatch system outside the three-tier system must justify why a non-standard system is being used and request written authorization from the BLM, FWS, and/or NPS National Office or USFS Regional Office.

National Interagency Coordination Center (NICC)

The NICC is located at NIFC, in Boise, Idaho. The principal mission of the NICC is the cost-effective and timely coordination of land management agency emergency response for wildland fire at the national level. This is accomplished through planning, situation monitoring, and expediting resource orders between the BIA Areas, BLM States, National Association of State Foresters, FWS Regions, FS Regions, NPS Regions, National Weather Service (NWS) Regions, Federal Emergency Management Agency (FEMA) Regions through the United States Fire Administration (USFA), and other cooperating agencies.

The NICC coordinates any requests for support from foreign countries, either through Departments of Agriculture and Interior agreements (Canada and Mexico) or arrangements (Australia and New Zealand), or from the Forest Service International Programs' Disaster Assistance Support Program (DASP) through the U.S. Agency for International Development's Office of Foreign Disaster Assistance.

The NICC supports non-fire emergencies when tasked by an appropriate agency, such as FEMA, through the National Response Framework. The NICC collects and consolidates information from the GACCs and disseminates the *National Incident Management Situation Report* through the NICC website at https://www.nifc.gov/nicc/sitreprt.pdf.

Geographic Area Coordination Centers (GACCs)

There are 10 GACCs, each of which serve a specific geographic portion of the United States. Each GACC interacts with the local dispatch centers, as well as with the NICC and neighboring GACCs. Refer to the *National Interagency Mobilization Guide* for a complete directory of GACC locations, addresses, and personnel.

The principal mission of each GACC is to provide the cost-effective and timely coordination of emergency response for all incidents within the specified geographic area. GACCs are also responsible for determining needs, coordinating priorities, and facilitating the mobilization of resources from their areas to other geographic areas.

Local Dispatch Centers

Local dispatch centers are located throughout the country as dictated by the needs of fire management agencies. Local dispatch centers dispatch multi-agency wildland firefighting resources within a pre-established and identified dispatch zone boundary. The principal mission of a local dispatch center is to provide safe, timely, and cost-effective coordination of emergency response for all incidents within its specified geographic area. This entails the coordination of initial attack responses and the ordering of additional resources when fires require extended attack.

Local dispatch centers are also responsible for supplying intelligence and information relating to fires and resource status to their GACC and to their agency managers and cooperators. Local dispatch centers may work for, or with, numerous agencies, but should only report to one GACC.

Some local dispatch centers are also tasked with law enforcement and agency administrative workloads for non-wildfire operations. If this is the case, a commensurate amount of funding and training should be provided by the benefiting activity to accompany the increased workload. If non-wildfire workload is generated by another agency operating in an interagency dispatch center, the agency generating the additional workload should offset this increased workload with additional funding or personnel.

Mobilization Guides

The NICC and each GACC annually publish a Mobilization Guide. The Mobilization Guides identify standard procedures which guide the operations of multi-agency logistical support activity throughout the coordination system. These guides are intended to facilitate interagency dispatch coordination, ensuring timely and cost-effective incident support services are provided. Local and Geographic Area Mobilization Guides supplement the *National Interagency Mobilization Guide*.

The *National Interagency Mobilization Guide* (NFES 2092) and links to Geographic Area Mobilization Guides are available at https://www.nifc.gov/nicc/.

Local Mobilization Guide/Dispatch Operating Plan

Local dispatch centers will have a local mobilization guide or dispatch operating plan to supplement the GACC and National Mobilization Guides. The

mobilization guide or operating plan will include or provide reference to the minimum elements and procedures to guide the operation of a local dispatch center. See Appendix P for minimum required elements and procedures for inclusion in a local mobilization guide/dispatch operating plan or at https://www.nifc.gov/policies/pol_intgncy_guides.html.

Local and Geographic Area Drawdown

Drawdown is the predetermined number and type of suppression resources that are required to maintain viable initial attack (IA) capability at either the local or geographic area. Drawdown resources are considered unavailable outside the local or geographic area for which they have been identified.

Drawdown is intended to:

- Ensure adequate fire suppression capability for local and/or geographic area managers; and
- Enable sound planning and preparedness at all management levels.

Although drawdown resources are considered unavailable outside the local or geographic area for which they have been identified, they may still be reallocated by the Geographic Area or National MAC to meet higher priority obligations.

Establishing Drawdown Levels

Local drawdown is established by the local unit and/or the local MAC group and implemented by the local dispatch office. The local dispatch office will notify the Geographic Area Coordination Center (GACC) of local drawdown decisions and actions.

Geographic area drawdown is established by the GMAC and implemented by the GACC. The GACC will notify the local dispatch offices and the National Interagency Coordination Center (NICC) of geographic area drawdown decision and actions.

National Ready Reserve (NRR)

NRR is a means by which the NMAC identifies and readies specific categories, types, and quantities of fire suppression resources in order to maintain overall national readiness during periods of actual or predicted national suppression resource scarcity.

NRR implementation responsibilities are as follows:

- NMAC establishes national ready reserve requirements by resource category, type, and quantity.

- NICC implements NMAC intent by directing individual GACCs to place specific categories, types, and quantities of resources on national ready reserve.
- GACCs direct local dispatch centers and/or assigned IMTs to specifically identify resources to be placed on national ready reserve.
- NICC mobilizes national ready reserve assets through normal coordination system channels as necessary.

National ready reserve resources must meet the following requirements:

- May be currently assigned to ongoing incidents;
- Must be able to demobe and be en route to new assignment in less than 2 hours;
- Resources must have a minimum of 7 days left in 14 day rotation (extensions will not be factored in this calculation);
- May be assigned to incidents after being designated ready reserve, in coordination with NICC; and
- Designated ready reserve resources may be adjusted on a daily basis.

NMAC will adjust ready reserve requirements as needed. Furthermore, in order to maintain national surge capability, the NMAC may retain available resources within a geographic area, over and above the established geographic area drawdown level.

Dispatch/Coordination Center Administration

Memorandum of Understanding (MOU)

Each dispatch/coordination center will have a Memorandum of Understanding (MOU) signed by all cooperators. This MOU will be reviewed and updated annually. Dispatch/coordination center MOUs and their associated Annual Operating Plans (AOPs) will be current and will define:

- The roles and responsibilities of each interagency partner's fiscal and infrastructure support responsibilities;
- Administrative oversight/support groups involved with the dispatch/coordination center;
- Clear fiscal reimbursement procedures and interagency funding procedures;
- The dispatch/coordination center's organizational charts;
- Communication protocols for local and geographic area cooperating Agencies, including briefings, planned meetings, and conference calls;
- Procedures for Incident Management Team mobilization and close-out; and
- Supporting documentation, such as any local initial attack or fire and aviation agreements for units serviced by the center.

Funding for facilities, equipment, and staffing needs shall be identified in each participating agency's planning and budget process, and included in the MOU/AOP.

Service and Supply Plans

All local dispatch centers shall maintain a Service and Supply Plan that contains current copies of procurement documents related to locally available resources. Service and Supply Plans must be current, complete, organized, and accessible to Initial Attack and Expanded Dispatchers.

The Service and Supply Plan will contain current copies of competitive Incident Blanket Purchase Agreements (I-BPAs), as well as source lists for incident-only agreements. Resources and their respective contracts/agreements will be entered into ROSS if applicable, and naming conventions will meet national standards.

For additional required components of a Service and Supply Plan, refer to Appendix P at https://www.nifc.gov/policies/pol_ref_redbook.html.

Continuity of Operations Plan (COOP)

All centers will maintain a current Continuity of Operations Plan (COOP) which includes a pre-identified alternate location with adequate supplies, notification procedures for activation, a back-up computer system, and contingency plans for loss of telecommunications equipment and/or loss of access to network connectivity. Additionally, all centers which are required to maintain communications with field going resources, including aircraft, will maintain an identified back-up power source and redundancies in communication systems for a possible loss of radios and/or telecommunications equipment.

Dispatch/Coordination Center Manager Delegation of Authority

All Dispatch/Coordination Center Managers shall have a signed Delegation of Authority providing an adequate level of operational authority from all participating agencies. The Delegation of Authority will include appropriate supervisory authority, and a process for completion of employee performance evaluations.

The Dispatch/Coordination Center Manager may, where appropriate, complete a Delegation of Authority for staff that identifies roles and responsibilities for Acting Center Manager, Coordinator-on-Duty, Floor Supervisor, and/or Internal Duty Officer.

National Interagency Coordination Center (NICC) Functional Responsibilities

The NICC has established the Coordinator-On-Duty (NICC COD) position. The NICC COD is responsible for managing the daily operation of the NICC and for resource allocation decisions in alignment with NMAC direction.

The National Interagency Coordination Center (NICC) is responsible for the following:

- **Positioning and Movement of Resources**
  NICC, in conjunction with the GACCs, is responsible for ensuring a coordinated response to wildland fire incidents and/or all-hazard incidents under the National Response Framework or other appropriate authorities. NICC positions resources (personnel, aircraft, supplies, and equipment) to meet existing and anticipated incident, preparedness, severity, wildland, and prescribed fire needs regardless of geographic location or agency affiliation. NICC coordinates movement of resources across Geographic Area boundaries. NICC allocates resources according to National Multi-Agency Coordinating Group (NMAC) direction when competition for wildland fire resources occurs among Geographic Areas.
- **Management of National Aviation Resources**
  As directed or delegated by NMAC, NICC allocates national resource aviation assets to the Geographic Areas based upon national priorities. These national resources include:
  - Federal airtankers
  - Large transport aircraft
  - Modular Airborne Fire Fighting System (MAFFS) Airtankers
  - Type 1 and 2 FS Exclusive Use/Call-When-Needed contracted helicopters
  - Airborne Thermal Infrared (IR) Fire Mapping aircraft
  - Leadplanes and Aerial Supervision Modules

  NICC has established authorities and procedures for dispatching aviation resources. These authorities and procedures include:
  - Aircraft ordering protocols for fire, logistical and administrative flights;
  - Tracking of all aircraft ordered through NICC that cross geographic area boundaries;
  - Mechanisms for disseminating availability and commitment status throughout the dispatch/coordination system; and
  - Procedures for mobilization and use of large transport aircraft (NICC is the sole source for large transport aircraft).
  - GACCs hosting national Type 1 and 2 helicopters will coordinate with NICC prior to releasing flight crews for the day when those resources are not being used within the host area and could be utilized elsewhere for emerging or ongoing fire activity.
- **Management of National Support Resources**
  NICC mobilizes national support resources such as National Interagency Radio Support Cache radio systems and kits, Incident Remote Automatic Weather Stations, Project Remote Automatic Weather Stations, National Contract Mobile Food Services, and National Contract Mobile Shower Facilities. Refer to the *National Interagency Mobilization Guide* for more information.

- **Allocation of Other National Resources**
  As directed or delegated by the NMAC, NICC mobilizes national program resources such as National Interagency Buying Teams, Administrative Payment Teams, Burned Area Emergency Response Teams, and National Fire Prevention and Education Teams to the Geographic Areas based upon national priorities. Refer to the *National Interagency Mobilization Guide* for more information.
- **Predictive Services and Intelligence**
  Predictive Services is a decision support unit for federal, state and local land agencies for operational management of and strategic planning for wildland firefighting resources. Predictive Services accomplishes this through analysis of weather and climate, fuels, and fire activity and behavior. The products and services provide support for the proactive management of wildland fire with an eye toward safety, cost containment, efficiency and ecosystem health. Additionally, Predictive Services will advance the state of science through collaborations with cooperating agencies, including academic, research and private sector partners.

  The National Predictive Services staff works under the direction of the National Interagency Coordination Center (NICC) Manager, with guidance from the National Multi-Agency Coordinating Group (NMAC). Geographic Area Coordination Center (GACC) Predictive Services staff work under the direction of the GACC Manager, with guidance from the Geographic Area Coordinating Groups. National and GACC missions share importance and as such National and GACC Predictive Services work in unison to create and maintain products and services which provide value to users at all levels.

  Predictive Services is comprised of Meteorologists and Fuels and Fire Behavior Analysts at NICC and the GACCs. GACC Managers and Geographic Area Coordinating Groups decide the need for and allocation of positions within each GACC with input from National Predictive Service staff, the NICC Manager and NMAC.

  Intelligence gathering is a fundamental component of the national coordination system for federal, state and local land agencies. Intelligence coordination is accomplished through compiling reports from all levels of the firefighting organization as well as communicating with individual GACCs and local jurisdictions concerning their ongoing, historical and expected fire occurrence. The products and services provide support for the proactive management of wildland fire with an eye toward safety, cost containment, efficiency and ecosystem health.

  The National Intelligence Coordination staff works under the direction of the National Interagency Coordination Center (NICC) Center Manager, with guidance from the National Multi-Agency Coordinating Group

(NMAC). Geographic Area Coordination Center (GACC) Intelligence Coordination staff work under the direction of the GACC Center Manager, with guidance from the Geographic Area Coordinating Groups. National and GACC missions share importance and as such, National and GACC Predictive Services work in unison to create and maintain products and services which provide value to users at all levels.

The Intelligence sections are comprised of Intelligence Coordinators and Intelligence Officers at NICC and the GACCs. GACC Managers and Geographic Area Coordinating Groups decide the need for and allocation of positions within each GACC with input from National Intelligence Coordination staff, the NICC Manager and NMAC.

- **International and Department of Defense Assistance**
  NICC serves as the focal point for international assistance requested from NMAC either under existing agreements or by the US Department of State. NICC also serves as the focal point for any requests for assistance from the Department of Defense.

  For more information, see agreements at https://www.nifc.gov/nicc/logistics/references.htm.

Geographic Area Coordination Center (GACC) Functional Responsibilities

The GACCs have established the Coordinator-On-Duty (COD) position. The COD is responsible for managing the daily operation of the GACC and for resource allocation decisions in alignment with NMAC direction.

Geographic Area Coordination Centers (GACCs) are responsible for the following:

- **Positioning and Movement of Resources**
  GACCs, in conjunction with NICC and local dispatch centers, are responsible for ensuring a coordinated response to wildland fire incidents and/or all-hazard incidents under the National Response Framework or other appropriate authorities. GACCs mobilize and position resources (personnel, aircraft, supplies, and equipment) internally among local dispatch centers to meet existing and anticipated incident, preparedness, severity, wildland, and prescribed fire needs, regardless of geographic location or agency affiliation. GACCs coordinate movement of resources within Geographic Area boundaries and allocate resources according to Geographic Area Multi-Agency Coordinating Group (GMAC) direction when competition for wildland fire resources occurs within the Geographic Area. GACCs will ensure adequate fire suppression capability for local and/or Geographic Area managers, and enable sound planning and preparedness at all management levels.

Geographic Areas will establish priorities for their incidents and wildland fires and report them to NICC. GACCs will notify NICC and adjoining GACCs of the commitment of National Resources within their Area, and will notify the local dispatch offices and the NICC of Geographic Area drawdown decision and actions.

Activities associated with the National Response Framework will be accomplished utilizing established dispatch coordination procedures. The affected GACC will coordinate ordering points with Regional Response Coordination Centers (RRCC) and Joint Field Offices (JFO).

- **Management of Aviation Resources**
  GACCs have established authorities and procedures for dispatching aviation resources. These procedures include:
  - Aircraft ordering protocols for fire, logistical and administrative flights;
  - Procedures for tracking of all aircraft within Geographic Area boundaries;
  - Mechanisms for disseminating availability and commitment status throughout the dispatch/coordination system;
  - Ordering and operational procedures between the GACC, dispatch center(s) and airtanker base(s);
  - Procedures for flight following (including protocols for use of Automated Flight Following (AFF) and initial call on the National Flight Following Frequency);
  - Procedures for ordering and establishing TFR's and operating guidelines for airspace deconfliction for Military Air Space (MTR, SUA, MOA) and Restricted Areas. GACCs will participate in planned airspace meetings annually;
  - Procedures for ordering and utilization of FAA temporary towers; and
  - Procedures for reporting through the SAFECOM system.
- **Predictive Services**
  The GACC Managers will provide daily supervision of their respective Predictive Services programs, including developing GACC-specific operating plans. These plans will encompass the daily activities of the GACC Predictive Services program, including supervision, the flow of information within the GACC and Geographic Area, and the products produced for Geographic Area purposes. GACC Center Managers will have ultimate responsibility for ensuring GACC Predictive Services staffs have the appropriate allocation of time and resources to produce required national products including but not limited to the National 7-day Significant Fire Potential Outlook; the National Significant Wildland Fire Potential Outlook; and Fuels and Fire Behavior Advisories as needed.
- **Intelligence**
  The GACC Center Managers will provide daily supervision of their respective Intelligence Coordination programs, including developing GACC-specific operating plans. These plans will encompass the daily

activities of the GACC Intelligence Coordination program, including supervision, the flow of information within the GACC and Geographic Area, and the products produced for Geographic Area purposes including Multi-Agency Coordination Group management. The GACC Center Managers will have ultimate responsibility for ensuring GACC Intelligence Coordination staffs have the appropriate allocation of time and resources to produce required national products.

Local Dispatch Center Functional Responsibilities

Local Dispatch centers are responsible for initial attack dispatching, coordination of communications, intelligence gathering and dissemination, and logistical support for local incidents and field operations.

- **Initial Attack Dispatching**
  Local dispatch centers are the focal point for the report of, and initial response to wildland fires, and under appropriate authorities, other emergency incidents at the local level. Deployment of response resources is made in accordance with local processes and procedures as outlined in the dispatch center's mobilization guide.

  Each dispatch office with the responsibility for initial response to wildland fires shall have a pre-planned response plan that allocates resources to new wildland fires in accordance with fire management direction, initial attack agreements, and established ordering procedures. The pre-planned response plan will be reviewed and updated annually prior to fire season.

  Additionally, each center will have a method to document actions taken and resources sent to wildland fires. Centers may use either a manual or computer aided dispatch system.

  Each dispatch center shall have maps posted that depict initial attack response areas, land ownership, jurisdictional and protection boundaries, hazards, and resource concerns. Each center will also ensure that Computer Aided Dispatch (CAD) and Geographic Information System (GIS) products are current, functioning, and utilized.

  Dispatch centers will have protocols in place for frequency management, priority use of frequencies, and procedures for obtaining additional frequencies.

  Local Dispatch centers will have protocols in place for timely request and dissemination of Fire Weather Forecasts, Spot Weather Forecasts, Fire Weather Watches, and Red Flag Warnings to firefighters, Incident Commanders, and field-going personnel.

The National Multi-Agency Coordinating Group (NMAC) has established incident name protocols. Guidance can be found at https://www.nifc.gov/nicc/administrative/nmac/index.html.

All required reference material will be current and accessible, and expired or out-of-date material will be removed.

- **Intelligence**

The intelligence function is responsible for gathering and disseminating incident, resource, weather and predictive services information. Each dispatch center will ensure that locations and conditions of the fire weather stations are known and a current weather station catalog is available. Weather data will be archived daily in WIMS and seasonal inputs will be maintained, including vegetative state, fuel moisture values, daily state of the weather observations, and updating breakpoints.

  - ***FS*** *– Dispatch centers are required to have a person trained in the National Fire Danger Rating System (NFDRS) assigned to data quality assurance responsibilities.*

Dispatch centers will ensure that coordination/communication with the local NWS Forecast Office occurs annually prior to fire season.

Local dispatch centers will have a process in place for submission of the daily situation report and ICS-209s.

Dispatch centers with websites will ensure current intelligence and weather information is posted.

- **Expanded Dispatch and Incident Business Management**

Expanded dispatch is a functional branch of the Incident Support Organization (ISO) that supports incidents and expands as local fire conditions and activity dictates. Expanded dispatch is established when a high volume of activity indicates that increased dispatch and coordination capability is required.

Each dispatch center will have an Expanded Dispatch Operating Plan which provides specific details about when, where, and how to implement an expanded dispatch. The plan will identify logistical support facilities available for expanded dispatch use. These facilities will be pre-identified, procured, and available for immediate setup, along with necessary equipment.

The expanded dispatch workspace will be separate from, but accessible to, the initial attack organization. The area should have adequate office space, including suitable lighting, heating/ cooling systems, and security. Expanded dispatchers will have access to communications equipment including telephones, fax machines, copiers, and computer hardware with adequate data storage space.

Qualified personnel should be on site in order to adequately staff required expanded dispatch functions. Expanded dispatch supervisors are responsible for establishing a staffing and operating schedule for expanded dispatch, including operational period changes, briefings, and strategy meetings.

- **Aviation**
  Each dispatch center will have documented procedures established for dispatching of aviation resources. These procedures will include:
  - Aircraft ordering protocols for fire, logistical and administrative flights;
  - Procedures for disseminating availability and commitment status throughout the dispatch/coordination system;
  - Procedures for coordination with airtanker bases;
  - Procedures for airtanker, smokejumper and rappeller use and restrictions;
  - Procedures for flight following (including protocols for use of Automated Flight Following (AFF) and initial call on the National Flight Following Frequency);
  - Procedures for ordering and establishing TFRs;
  - Procedures for airspace de-confliction for Military Air Space (MTR, SUA, MOA) and Restricted Areas, and current Aviation flight hazard maps or military operating area sectionals;
  - Procedures for requesting FAA Temporary Towers; and
  - Procedures for reporting through the SAFECOM system.

Accident Notification

When an accident occurs, agency notification requirements will be followed. As soon as the accident is verified, the following should be notified:

- Local dispatch center;
- Unit Fire Management Officer; and
- Agency Administrator(s).

Additional notifications should occur in the dispatch/coordination system, from the local dispatch center to the NICC through the GACC.

Incident Emergency Management Planning

To achieve successful medical response, Agency Administrators will ensure that their units have completed the following items prior to each field season:

- A Medical Emergency Response Plan that identifies medical evacuation options, local/county/state/federal resource capabilities, capacities, ordering procedures, cooperative agreements, role of dispatch centers, and key contacts or liaisons;
- Standardized incident and communication center protocols identified in the Medical Incident Report section of the *IRPG*.

- For incidents that require the preparation of an IAP, Form ICS-206-WF will be used. This form is available at https://www.nwcg.gov/publications/ics-forms.

Dispatch/Coordination Center Reference Material

All coordination/dispatch centers will have reference materials available to all dispatchers. See Appendix P for a list of minimum required reference materials at https://www.nifc.gov/policies/pol_ref_redbook.html.

Training

Dispatch/Coordination center staff will be trained in, and follow established procedures for, the use of applications utilized in center operations.

Personnel will be cross trained in each function (i.e., aircraft, crews, overhead, equipment, intelligence) in order to provide staffing coverage. Dispatch personnel will be trained in and follow center procedures for the following (as applicable):

- Resource Ordering and Status System (ROSS);
- Computer Aided Dispatch (CAD);
- Fire Code;
- Automated Flight Following (AFF);
- Unit Identifiers;
- SIT Report/209; and
- Other applications (e.g., WFDSS, I-Suite).

All dispatch center employees will have a documentation file for current season training, past season fire training, certifications and experience, fire experience, performance evaluations, and have task books initiated appropriate to their training needs. All supervisors will be familiar with safety and accident reporting processes (i.e., Safety Management Information System (SMIS), SAFENET, SAFECOM).

All employees will have current red cards produced by the Incident Qualification and Certification System (IQCS) as per Chapter 13.

- ***BLM –*** *BLM employees are required to complete the BLM Fire and Aviation Employee Orientation Checklist, available at the BLM Fire Operations website http://web.blm.gov/internal/fire/fire_ops/index.html.*

Facilities and Equipment

All dispatch/coordination centers will have a telephone system with an adequate number of lines for normal business volume, and the capability to expand as conditions dictate. Centers will have teleconference capabilities commensurate with the anticipated volume of business.

Copying, facsimile, computer, and GIS systems shall meet operational needs (quantity and capability) and comply with agency standards. Software will be compatible with Information Resource Management and agency requirements for security.

All facilities shall have an evacuation plan, security plan, and safety practices in place to safe guard the health and welfare of employees.

Adequate facilities will be available to host an expanded dispatch or MAC group and shall include telephones, computer access, copiers, and basic office supplies. Rooms for MAC Group use will have adequate IT equipment and support.

All centers will have adequate workspace with room for reference materials and other necessary items to perform assigned duties. Individual workspace should be provided away from the initial attack floor for each permanent employee, and a break room area should be provided for employees.

Employees will have access to a locked area to store data that may contain personally identifiable information (PII) or personal items.

Radio Systems

Radio systems will have an adequate number of frequencies to provide for separation of incidents and use by all interagency partners. Base station and repeater transmissions shall be recorded and maintained in accordance with agency records management policies. Radio systems may have alert tones available for use as determined by local center policies.

(This page intentionally left blank.)

Appendix A
Sample Questions for Fire Site Visits by Agency Administrators

Management Direction

____Who is the incident commander? If the fire is being managed under Unified Command, are all commanders present? Is the incident operating smoothly?
____What is the incident organization?
____What is the current situation? What has been damaged or is at risk?
____Have you received adequate direction for the management of the incident?
____Is a Wildfire Decision Support System required/still valid?
____What are the incident management objectives? Constraints? Probability of success?
____Are the tactics in the Incident Action Plan realistic and achievable with current resources?
____Is a resource advisor needed?
____What are your estimates of suppression costs?
____What are the incident commander's concerns?
____What are the local, social, economic, and political issues?
____Are there rehabilitation needs?
____What can I, as the agency administrator, do to help?

Safety

____What are your safety concerns?
____Are these concerns resolved? If not, what needs to be done?
____What is the general safety attitude and emphasis?
____Have you assessed the potential hazardous situations and determined if the fire can be fought safely?
____Have you applied the Fire Orders, Watchout Situations, Lookout, Communication, Escape Routes, Safety Zones (LCES) process in selecting safe and effective strategies and tactics?
____Have you effectively briefed firefighters on hazards, safety zones, escape routes, and current and expected weather and fire behavior?
____Is the safety officer position filled? If not, how is this function being addressed?
____Are you monitoring work schedules to ensure adequate rest? Are you meeting the standard work/rest guidelines?
____Have you provided for adequate rest, food, water, and health services for all personnel?
____Are all the fire personnel qualified for the positions they hold, and are they physically able to perform?
____Have you had any injuries or accidents?

Fire Suppression Operations

____What is the fire weather forecast (present and extended)?
____What is the fire behavior potential?
____Are fire personnel briefed on incident objectives, strategies, tactics, organization, communications, hazards, and safety principles?
____Are the strategy and tactics based on current and forecasted weather?
____Are the strategy and tactics safe, effective, and consistent with management's objectives and accepted fire policies and procedures?
____Do you have effective communication on the incident and with dispatch?
____Are you monitoring weather and fire behavior to make needed adjustments to strategy and tactics?
____Are you using tactical aircraft? Do you have an assigned air tactical group supervisor?
____Is aircraft use safe, effective, and efficient? Do you have a TFR?
____If the fire escapes initial attack, what will your role be in developing the Wildfire Decision Support System?

Administration

____Do you have any administrative concerns?
____What arrangements have you made to complete time reports, accident forms, fire report, etc.?
____Did all orders and procurement go through dispatch?
____Do you have any outstanding obligations?
____Are all rental agreements and use records properly completed?
____How did the fire start? If human-caused, has an investigation been initiated to determine the cause and develop a trespass case?
____Do you know of any current or potential claims?

Dispatch Office

____Is the incident receiving fire weather and fire behavior information?
____Is the incident getting the resources ordered in a timely manner?
____Is dispatch adequately staffed?
____What are the local, area, and National Preparedness Levels? How do they affect this fire?
____Are the elements identified at the various Preparedness Levels being considered?
____What are the current local, area and national fire situations?
____What is the priority of existing fires and how are the priorities being determined?

Appendix B
Manager's Supplement for Post Incident Review

Incident Commander _____
Incident Name and Number _____
Start Date and Duration of Incident _____
Date of Incident Debriefing _____
List of Debriefing Attendees:

Brief synopsis of fire behavior and narrative of the incident:

Fire Size-up:
- Gave an accurate sizeup of the fire to dispatch upon arrival?
- Managed fire suppression resources in accordance with the management objectives for the area and availability of resources?
- Did the unit support organization provide timely response and feedback to your needs? (Appendix A)
- Were there any radio communication issues?

Provide for the Safety and Welfare of Assigned Personnel:
- Gave operation briefing prior to firefighters being assigned to incident operations.
- How were incoming resources debriefed; via radio, personal contact?
- Were agency work/rest guidelines followed? Was adequate food and water provided to firefighters?

Fire Suppression Operations:
- Explain how the strategies and tactics used met management objectives, without compromising adherence to the Fire Orders, Watch Out Situations, and LCES?
- How were weather conditions monitored: daily weather briefings, spot weather forecasts or other?
- Were there adjustments needed to strategy and tactics?
- What were the potentially hazardous situations, and their mitigations?
- How were projected changes in the weather, tactics, hazards and fire behavior communicated to fire personnel?
- Were communications effective with dispatch and supervisor?
- Were all interested parties kept informed of progress, problems, and needs? Was aviation support used? If so, was it effective?
- Were there any injuries, close calls, or safety issues that should be discussed? Were these documented?

Administrative Responsibilities:
- Submitted complete documentation to supervisor for time, accidents, incident status, unit logs, evaluations, and other required or pertinent reports?
- Provided timely and effective notification of the fire status and unusual events or occurrences to dispatch and management.
- As requested, provided effective input into the Wildfire Decision Support System.
- If necessary, provided team transition briefing as assigned.
- Form ICS 201 was completed in accordance with local policy.

(This page intentionally left blank.)

Appendix C
Sample Delegation for Unit Fire Management Officers

_____, Fire Management Officer for the _____ (Unit) is delegated authority to act on my behalf for the following duties and actions:

1. Represent the _____(Agency) in the _____ Multi-Agency Coordinating Group in setting priorities and allocating resources for fire emergencies.

2. Coordinate all prescribed fire activities in the _____ (Unit) and suspending all prescribed fire and issuance of burning permits when conditions warrant.

3. Ensure that only fully qualified personnel are used in wildland fire operations.

4. Coordinate, preposition, send, and order fire and aviation resources in response to current and anticipated zone fire conditions.

5. Oversee and coordinate the _____ Interagency Dispatch Center on behalf of the _____ (Agency).

6. Request and oversee distribution of severity funding for Unit Fire and Aviation.

7. Approve Fire Program requests of overtime, hazard pay, and other premium pay.

8. Ensure all incidents are managed in a safe and cost-effective manner.

9. Coordinate and provide all fire and prevention information needs to inform internal and external costumers with necessary information.

10. Coordinate all fire funding accounts with the Budget Officer to assure unit fiscal guidelines are adhered to and targets are met.

11. Approve and sign aviation request forms.

12. Approve Red Cards in accordance with agency policy.

13. Authorized to hire Emergency Firefighters in accordance with the Emergency Worker Pay Plan.

_____ _____
Fire Management Officer Date

_____ _____
Agency Administrator Date

(This page intentionally left blank.)

Appendix D
Agency Administrator's Briefing to Incident Management Team

Briefing Package for Incident Management Teams

The purpose of this template is to provide a format and content outline for the host unit to use when briefing an incident management team (IMT). Some items will not be relevant to some units; delete or add additional information as needed. An optional outline is included for those units that would like to use WFDSS to conduct the IMT briefing.

Overview for ALL Team Members

- Introduction – Agency Administrator
  - Other Agencies and Cooperators
- Objectives and Course of Action – Agency Administrator/FMO (use WFDSS as needed)
  - Objectives Tab – Incident Objectives and Incident Requirements
  - Course of Action Tab – Overview of strategic direction
- Situational update – Assigned IC or FMO (use WFDSS as needed)
  - Fire start date, cause
  - Situation Tab – Situational overview
    - Analysis
      - Short Term, Near Term and FSPro
    - Fire Environment and Safety
      - Est Ground Evacuation
      - Retardant Avoidance
    - Disturbance History (in the area)
      - Historical Fires
      - Fuel Treatments
    - Fire Weather and Danger
      - Significant Fire Potential – Predictive Services
      - RAWS stations
      - Local Fire Environment information (Fire Weather, Fire Behavior) – localized anomalies, terrain influences, weather patterns or fire behavior, current and predicted fire weather/fire behavior
    - Boundaries
      - Responsible/Jurisdictional boundaries
      - Federal Boundaries
      - County
    - Designated Areas
      - Wilderness/Potential Wilderness
      - Special designation
      - BLM – oil/gas/range/horse and burro
    - Infrastructure
      - Facilities
      - Communication
      - Energy
      - Roads and Trails

        - Natural and Cultural Resources
            - Air Quality
            - Critical Habitat
            - Sage Grouse Habitat
        - Other considerations to include:
            - Current Planning Area in Published Decision
            - Values at Risk – or other considerations that aren't in WFDSS
            - Resource Benefits – explain where fire is beneficial on the landscape
            - Assessment Tab – current risks and potential benefits (use WFDSS as needed)
        - Risk and Complexity Analysis
        - Benefits of fire on this landscape (type of fire, where, when)
- Decision and Costs –Agency Administrator of FMO (use WFDSS as needed)
    - Cost Tab – outline cost thresholds for current Decision
    - Decision Tab – Review the Rationale of the Agency Administrator
- Local Concerns – Agency Administrator or FMO
    - Environmental, Social, Political, Economic
    - Law Enforcement or Investigations if applicable
    - Area Closures – potential impacts to local income, outfitter guides etc.
    - Initial Attack Responsibilities
    - Training Responsibilities – Inclusion of local and geographic area priority trainees
- Incoming IC Comments
- Closing Remarks – Agency Administrator
    - Agency Administrator's Key Points from Leader's Intent
      Breakout Group Meetings to Follow

Overview for ALL Team Members

Incident Commander

Written Package	Oral Briefing

• Current and expected weather, fire behavior and fire danger
• Delegation of Authority
• Leaders Intent
• WFDSS Decision Document
• Contact List
• ICS-209
• IAP and Map
• Closure Orders
• Local Wildfire Guidance documentation
• Heavy Equipment Policy
• Medical Evacuation protocol
• Coordination of Hazardous Materials
	• Set up daily coordination calls between IC, AA, (include others as needed)
	• Financial Considerations/Limitations
	• Other coordination expectations – such as adjoining agencies, tribal consultation, elected officials.
	• Local resource concerns (anadromous fish, cultural sites, timber, invasive species, etc.)
	  o Resource Advisor
	• Other incidents/IMTs in the area or GACC
	• Hazardous Materials
	  o Unexploded ordinances, asbestos, mining contaminants etc.

Information

Written Package	Oral Briefing
• Contact list information (phone number, roles etc.) for appropriate agencies, elected officials, business leaders • Daily updates email list • Template for press releases • Local media contacts • Media guide • JIC contact numbers • *Local Unit Public Information Plan*	• If JIC activated, how the IMT will interact • Expectations of public meetings, or coordinated outreach from the IMT • *Public Information plan within 24 hours*

Operations

Written Package	Oral Briefing

• WFDSS decision
  o MAPs
  o Course of Action
• Fire department contacts/resource list/availability
  o Provide structure protection guidance (as relative to FS region and adjoining ownership as needed)
  o Evacuation plans and trigger points
  o Structure protection guidance
• Contact list
• Resource orders/resource list
  o Outgoing IC/Operations resource list – what's on order, what's assigned to the fire currently, what still needs to be ordered
• Area maps/geospatial PDF map of fire area
  o Unit frequencies and repeater map
  o Retardant avoidance maps
  o Structure inventory data/maps
  o Values at risk maps if different than what is in WFDSS
• Unit aviation briefing guide
• Suppression rehabilitation plan
• Mop up or rehabilitation standards/guidance
• Turn back standards
	• Weather/fire danger information
	• Fire behavior models and predictions
	• Management action points
	  o Trigger points or evaluation lines for tactical operations
	  o Natural barriers
	• Structure protection guidance (overview from local perspective)
	• Spike camp vs. crew shuttle
	• Dozer line placement restrictions, recommendations and requirements
	• Known structures with protection expectations
	• IA responsibilities and procedures
	• Rehabilitation standards or expectations
	• Unit-identified hazards and potential mitigations (e.g., working in grizzly bear habitat, mining hazards, asbestos contaminated areas)

Written Package	Oral Briefing
• Heavy equipment policy • Medical evacuation protocol • Unit identified hazards and potential mitigations (e.g., working in grizzly bear habitat, mining hazards, asbestos contaminated areas) • Coordination of hazardous materials	

Air Operations

Written Package	Oral Briefing
• Aviation briefing guidance • Regional and local frequency guides • TFR maps • Frequency maps • Aviation hazard map • Unit helibase map • Retardant avoidance maps • Available aviation resources (on order and on loan) • Local airports and airstrips • Contact list (Local air operations personnel and phone numbers)	• Tactical resources (smokejumpers, AA, airtankers) ordering process • Helibase locations used in the past • Fuel – stationary and mobile • Helibase areas (proximity to fire) • Communication limitations • Helicopters available locally • Local weather issues (e.g., wind, smoke) • Restricted areas (military, local flight paths, HARP, clear radar) • Known hazards • Housing for pilots • Retardant status • TFR • *Retardant or water usage reporting requirements*

Safety

Written Package	Oral Briefing
• Emergency Medical Field Evacuation Plan • Serious Accident and Incident within the Incident Plan • Standards for Burn Injuries Memorandum • Burn Care Facilities List • CISM Guidelines for Fire Management Information Sheet • Critical Incident Stress Management Request Form • Wildland Fire Fatality and Entrapment Initial Report Form	• Accidents to date • Unit identified hazards (e.g., unexploded ordinances, bear baiting stations, mines, snag patches, extremely rough terrain etc.) • Unit protocol for communication of varying degrees of accidents ○ What level of notification does the Agency Administrator want? • Local medical plans, hospital locations, etc.

Written Package	Oral Briefing
• Memorandum of Agreement between Department of Agriculture FS and DOI • Unit identified hazards and potential mitigations (e.g., working in grizzly bear habitat, mining hazards, asbestos contaminated areas) • Completed ICS-206 for area • Contact List	

Finance Section (Could be combined with Logistics)

Written Package	Oral Briefing
• Unit Incident Business Operating Guidelines • Contracts and agreements o List of all current agreements including land use agreements, fuel agreements, local purchase, equipment/resources agreements o Cell phone carrier information o Cost share agreements o Fire department cooperative fire agreements o Weed washing stations contract options • Comp/claims requirements and contacts (Hospital Liaison) • Fiscal limitations and constraints • Identify INBA and contracting officer(s) • Buying unit • Contact list	• Overview of local/cooperator agreements

Logistics Section

Written Package	Oral Briefing
• Incident Map o ICP camp locations – map o Drop points • Contracts o Cell phone carrier information o Weed washing stations contract options	• Medical information for the area – protocol • Availability of caterer or local restaurants for IMT/crews • Communication recommendations o Cell phone coverage (carriers) • Resource ordering – ROSS access and orders • Known ground support issues

Written Package	Oral Briefing
• Unit frequencies and repeater pap • Medical information for area • Expanded dispatch highlights • Agreements ○ List of all current agreements including Land Use Agreement, fuel agreements, local purchase, equipment/resources agreements • Contact list	○ Rental car/vehicle availability • ICP/camp site recommendations (used in past) • Discussion of agreements

Planning Section

Written Package	Oral Briefing

• Delegation of Authority
• Leader's Intent
• WFDSS decision
• 209/IAP email list
• GIS contacts
• ICS 209
• Resource List (ROSS orders)
• Weather, fire danger and current fuel moistures
  ○ Contacts for these products – local weather office, fuels specialist etc.
  ○ Current spot weather forecast
• Initial Map and IAP
• ROSS orders/resource list
• Contact list
• Specific wildfire guidance documentation
• RAWS ordering
• IR availability/ordering
• Final product expectations
  ○ Narrative/Executive Summary (IMT)
  ○ Transition Plan (IMT)
  ○ Demobilization Plan (IMT/Expanded)
  ○ Maps (IMT)
  ○ Documentation (IMT) – number of packages required
  ○ Hard drive (IMT)
  ○ Rehabilitation Plan (Area)
  ○ Evacuation Plan (Local)
	• WFDSS documentation
	  ○ Modeling support/products
	• ICS 209 deadlines, protocols for complexities, limited fires, etc.
	• Training responsibilities

Written Package	Oral Briefing
○ Structure Protection Plan (Area/IMT) ○ Known sites update (IMT/Area) • Electronic data ○ FTP site posting directions or information repository (IMT hard drive) ○ GIS data ○ Known sites template	

Contacts Unit Name

Area	Name	Job Title	Work Phone #	Alternate #
Agency Administrator		*Agency Administrator*		
		Executive Assistant		
Fire Management		Fire Management Officer		
		Aviation Officer		
		Dispatch Center Manager		
		Asst. Dispatch Center Manager		
		IA Dispatcher		
Administrative Representative		Incident Business Specialist		
Unit Claims Liaison		Budget Officer		
Resource Advisor		Biologist		
Archeologist		Archeologist		
Public Information		Public Affairs Officer		
Safety		Safety Officer		
Law Enforcement		Patrol Captain		
		Law Enforcement Officer		
Vehicles/Fleet		Fleet Manager		
Information Systems		GIS Coordinator		
		Web Manager		
		Computer Specialist		

Area	Name	Job Title	Work Phone #	Alternate #
		Telecom & Radio Asst.		
Hazmat Coordinator		Engineer		
D1		District Ranger		
		Fire Management Officer		
		Office Manager		
Priority Trainee Program		GATR		

Zone and General

Area	Name	Job Title	Work Phone #	Alternate #
Acquisition Mgmt.	Duty Officer	Contract Specialist		
	Duty Officer	Purchasing Agent		
		Contracting Officer		
		Contracting Officer		
		Supervisory Contracting Officer		
		Purchasing Supervisor		
		Grants & Agreements Spec.		
		Property Management Officer		
Union Representative		Chief Union Steward		
		President, NFFE Local 60		
Human Resource Management		Employee Relations Specialist		
		Labor Relations Advisor shared w/ R6		
HRM-OWCP	ASC Mon-Fri 0700-1800 MDT		877-372-7248	

Area	Name	Job Title	Work Phone #	Alternate #
Information Systems	ROSS/eISuite Helpdesk		866-224-7677	
	USFS Customer Help Desk (CHD)		866-945-1354	

Regional and Interagency

Potential contacts may include Hospital Liaison(s), Incident Business Coordinator and Buying Team Coordinator, Regional Contracting Specialist (VIPR), Regional Contractor Liaison, State Department of Transportation, State Troopers, State Land Office Area Manager, local law enforcement, electric/power company, etc.

(This page intentionally left blank.)

Appendix E
Wildland Fire Risk and Complexity Assessment

The Wildland Fire Risk and Complexity Assessment should be used to evaluate firefighter safety issues, assess risk, and identify the appropriate incident management organization. Determining incident complexity is a subjective process based on examining a combination of indicators or factors. An incident's complexity can change over time; incident managers should periodically re-evaluate incident complexity to ensure that the incident is managed properly with the right resources.

Instructions:
Incident Commanders should complete Part A and Part B and relay this information to the Agency Administrator. If the fire exceeds initial attack or will be managed to accomplish resource management objectives, Incident Commanders should also complete Part C and provide the information to the Agency Administrator.

Part A: Firefighter Safety Assessment

Evaluate the following items, mitigate as necessary, and note any concerns, mitigations, or other information.

Evaluate these items	Concerns/Mitigations/Notes
LCES	
Fire Orders and Watch Out Situations	
Multiple operational periods have occurred without achieving initial objectives.	
Incident personnel are overextended mentally and/or physically and are affected by cumulative fatigue.	
Communication is ineffective with tactical resources and/or dispatch.	
Operations are at the limit of span of control.	
Aviation operations are complex and/or aviation oversight is lacking.	
Logistical support for the incident is inadequate or difficult.	

Part B: Relative Risk Assessment

Values				Notes/Mitigation
B1. Infrastructure/Natural/Cultural Concerns **Based on the number and kinds of values to be protected, and the difficulty to protect them, rank this element low, moderate, or high.** Considerations: key resources potentially affected by the fire such as urban interface, structures, critical municipal watershed, commercial timber, developments, recreational facilities, power/pipelines, communication sites, highways, potential for evacuation, unique natural resources, designated areas (i.e., wilderness), T&E species habitat, and cultural sites.	**L**	**M**	**H**	
B2. Proximity and Threat of Fire to Values **Evaluate the potential threat to values based on their proximity to the fire, and rank this element low, moderate, or high.**	**L** Far	**M**	**H** Near	
B3.Social/Economic Concerns **Evaluate the potential impacts of the fire to social and/or economic concerns, and rank this element low, moderate, or high.** Considerations: impacts to social or economic concerns of an individual, business, community or other stakeholder; degree of support for the wildland fire program and resulting fire effects; other fire management jurisdictions; tribal subsistence or gathering of natural resources; air quality regulatory requirements; public tolerance of smoke, including health impacts; potential for evacuation and ingress/egress routes; and restrictions and/or closures in effect or being considered.	**L**	**M**	**H**	
Hazards				**Notes/Mitigation**
B4. Fuel Conditions **Consider fuel conditions ahead of the fire and rank this element low, moderate, or high.** Evaluate fuel conditions that exhibit high ROS and intensity for your area, such as those caused by invasive species or insect/disease outbreaks; and/or continuity of fuels.	**L**	**M**	**H**	
B5. Fire Behavior **Evaluate the current and expected fire behavior and rank this element low, moderate, or high.** Considerations: intensity; rates of spread; crowning; profuse or long-range spotting.	**L**	**M**	**H**	
B6. Potential Fire Growth **Evaluate the potential fire growth, and rank this element low, moderate, or high.** Considerations: Considerations would include current and expected fire growth based on fire behavior analysis and the weather forecast and/or the ability to control the fire.	**L**	**M**	**H**	

Probability				Notes/Mitigation
B7. Time of Season **Evaluate the potential for a long-duration fire and rank this element low, moderate, or high.** Considerations: time remaining until a season ending event.	**L** Late	**M** Mid	**H** Early	
B8. Barriers to Fire Spread **Evaluate the barriers to fire spread and their potential to limit fire growth, and rank this element low, moderate, or high.** Considerations: If many natural and/or human-made barriers are present, rank this element low. If some barriers are present, rank this element moderate. If no barriers are present, rank this element high.	**L** Many	**M**	**H** Few	
B9. Seasonal Severity **Evaluate fire danger indices and rank this element low/moderate, high, or very high/extreme.** Considerations: Fire danger indices such as energy release component (ERC); drought status; live and dead fuel moistures; fire danger indices; adjective fire danger rating; geographic area preparedness level.	**L/M**	**H**	**VH/ E**	
Enter the number of items circled for each column.				

Relative Risk Rating (circle one):

Low	Majority of items are "Low" with a few items rated as "Moderate" and/or "High."
Moderate	Majority of items are "Moderate" with a few items rated as "Low" and/or "High."
High	Majority of items are "High." A few items may be rated as ""Low" or "Moderate."

Part C: Organization

Relative Risk Rating (from Part B)			
Circle the Relative Risk Rating (from Part B)	**L**	**M**	**H**

Implementation Difficulty					Notes/Mitigation
C1. Potential Fire Duration **Evaluate the estimated length of time that the fire may continue to burn if no action is taken and amount of season remaining. Rank this element low, moderate, or high.** Note: This will vary by geographic area.	**N/A** Very Short	**L** Short	**M**	**H** Long	
C2. Incident Strategies (Course of Action) **Evaluate the level of firefighter and aviation exposure required to successfully meet the current strategy and implement the course of action. Rank this element as very low, low, moderate, or high.** Consider the likelihood that those resources will be effective; exposure of firefighters; reliance on aircraft to accomplish objectives; and whether there are clearly defined trigger points.	**Very Low**	**L**	**M**	**H**	
C3. Functional Concerns **Evaluate the need to increase organizational structure to adequately and safely manage the incident, and rank this element very low (minimal resources committed), low (adequate), moderate (some additional support needed), or high (current capability inadequate).** Considerations: Incident management functions (logistics, finance, operations, information, planning, safety, and/or specialized personnel/equipment) are inadequate and needed; availability of resources; access to EMS support; heavy commitment of local resources to logistical support; ability of local businesses to sustain logistical support; substantial air operation which is not properly staffed; worked multiple operational periods without achieving initial objectives; incident personnel overextended mentally and/or physically; Incident Action Plans, briefings, etc. missing or incomplete; performance of firefighting resources affected by cumulative fatigue; and ineffective communications.	**Very Low**	**L**	**M**	**H**	

Socio/Political Concerns					Notes/Mitigation
C4. Objective Concerns **Evaluate the complexity of the incident objectives and rank this element very low, low, moderate, or high.** Considerations: clarity; ability of current organization to accomplish; disagreement among cooperators; tactical/operational restrictions; complex objectives involving multiple focuses; objectives influenced by serious accidents or fatalities.	**Very Low**	**L**	**M**	**H**	
C5. External Influences **Evaluate the effect external influences will have on how the fire is managed and rank this element very low, low, moderate, or high.** Considerations: limited local resources available for initial attack; increasing media involvement, social/print/television media interest; controversial fire policy; threat to safety of visitors from fire and related operations; restrictions and/or closures in effect or being considered; pre-existing controversies/ relationships; smoke management problems; sensitive political concerns/interests.	**Very Low**	**L**	**M**	**H**	
C6. Ownership Concerns **Evaluate the effect ownership/jurisdiction will have on how the fire is managed and rank this element very low, low, moderate, or high.** Considerations: disagreements over policy, responsibility, and/or management response; fire burning or threatening more than one jurisdiction; potential for unified command; different or conflicting management objectives; potential for claims (damages); disputes over suppression responsibility.	**Very Low**	**L**	**M**	**H**	
Enter the number of items circled for each column.					

Part C: Organization (continued)

Recommended Organization (circle one):

Type 5	Majority of items rated as "Very Low"; a few items may be rated in other categories.
Type 4	Majority of items rated as "Low," with some items rated as "Very Low," and a few items rated as "Moderate" or "High."
Type 3	Majority of items rated as "Moderate," with a few items rated in other categories.
Type 2	Majority of items rated as "Moderate," with a few items rated as "High."
Type 1	Majority of items rated as "High"; a few items may be rated in other categories.

Rationale:
Use this section to document the incident management organization for the fire. If the incident management organization is different than the Wildland Fire Risk and Complexity Assessment recommends, document why an alternative organization was selected. Use the "Notes/Mitigation" column to address mitigation actions for a specific element, and include these mitigations in the rationale.

Name of Incident: _____ Unit(s): _____

Date/Time: _____ Signature of Preparer: _____

The RCA is also available at https://www.nwcg.gov/?q=publications/210.

Appendix F
Indicators of Incident Complexity

Common indicators may include the area (location) involved; threat to life, environment and property; political sensitivity, organizational complexity, jurisdictional boundaries, values at risk, and weather. Most indicators are common to all incidents, but some may be unique to a particular type of incident. The following are common contributing indicators for each of the five complexity types.

Type 5 Incident Complexity Indicators

General Indicators	Span of Control Indicators
• Incident is typically terminated or concluded (objective met) within a short time once resources arrive on scene. • For incidents managed for resource objectives, minimal staffing/oversight is required. • Resources vary from two to six firefighters. • Formal Incident Planning Process not needed. • Written Incident Action Plan (IAP) not needed. • Minimal effects to population immediately surrounding the incident. • Critical Infrastructure, or Key Resources, not adversely affected.	• Incident Commander (IC) position filled • Single resources are directly supervised by the IC • Command Staff or General Staff positions not needed to reduce workload or span of control

Type 4 Incident Complexity Indicators

General Indicators	Span of Control Indicators
• Incident objectives are typically met within one operational period once resources arrive on scene, but resources may remain on scene for multiple operational periods • Multiple resources may be needed • Resources may require limited logistical support • Formal Incident Planning Process not needed • Written Incident Action Plan (IAP) not needed • Limited effects to population surrounding incident • Critical Infrastructure or Key Resources may be adversely affected, but mitigation measures are uncomplicated and can be implemented within one Operational Period • Elected and appointed governing officials, stakeholder groups, and political organizations require little or no interaction	• IC role filled • Resources either directly supervised by the IC or supervised through an ICS Leader position • Task Forces or Strike Teams may be used to reduce span of control to an acceptable level • Command Staff positions normally not filled to reduce workload or span of control • General Staff position(s) normally not filled to reduce workload or span of control

Type 3 Incident Complexity Indicators

General Indicators	Span of Control Indicators
• Incident typically extends into multiple operational periods • Incident objectives usually not met within the first or second operational period • Resources may need to remain at scene for multiple operational periods, requiring logistical support • Numerous kinds and types of resources may be required • Formal Incident Planning Process is initiated and followed • Written Incident Action Plan (IAP) needed for each Operational Period • Responders may range up to 200 total personnel • Incident may require an Incident Base to provide support • Population surrounding incident affected • Critical Infrastructure or Key Resources may be adversely affected and actions to mitigate effects may extend into multiple Operational Periods • Elected and appointed governing officials, stakeholder groups, and political organizations require some level of interaction	• IC role filled • Numerous resources supervised indirectly through the establishment and expansion of the Operations Section and its subordinate positions • Division Supervisors, Group Supervisors, Task Forces, and Strike Teams used to reduce span of control to an acceptable level • Command Staff positions may be filled to reduce workload or span of control • General Staff position(s) may be filled to reduce workload or span of control • ICS functional units may need to be filled to reduce workload

Type 2 Incident Complexity Indicators

General Indicators	Span of Control Indicators
• Incident displays moderate resistance to stabilization or mitigation and will extend into multiple operational periods covering several days • Incident objectives usually not met within the first several Operational Periods • Resources may need to remain at scene for up to 7 days and require complete logistical support • Numerous kinds and types of resources may be required including many that will trigger a formal demobilization process • Formal Incident Planning Process is initiated and followed • Written Incident Action Plan (IAP) needed for each Operational Period • Responders may range from 200 to 500 total • Incident requires an Incident Base and several other ICS facilities to provide support • Population surrounding general incident area affected • Critical Infrastructure or Key Resources may be adversely affected, or possibly destroyed, and actions to mitigate effects may extend into multiple Operational Periods and require considerable coordination • Elected and appointed governing officials, stakeholder groups, and political organizations require a moderate level of interaction	• IC role filled • Large numbers of resources supervised indirectly through the expansion of the Operations Section and its subordinate positions • Branch Director position(s) may be filled for organizational or span of control purposes • Division Supervisors, Group Supervisors, Task Forces, and Strike Teams used to reduce span of control • All Command Staff positions filled • All General Staff positions filled • Most ICS functional units filled to reduce workload

Type 1 Incident Complexity Indicators

General Indicators	Span of Control Indicators
• Incident displays high resistance to stabilization or mitigation and will extend into numerous operational periods covering several days to several weeks. • Incident objectives usually not met within the first several Operational Periods. • Resources may need to remain at scene for up to 14 days, require complete logistical support, and several possible personnel replacements. • Numerous kinds and types of resources may be required, including many that will trigger a formal demobilization process. • DOD assets, or other nontraditional agencies, may be involved in the response, requiring close coordination and support. • Complex aviation operations involving multiple aircraft may be involved. • Formal Incident Planning Process is initiated and followed. • Written Incident Action Plan (IAP) needed for each Operational Period. • Responders may range from 500 to several thousand total. • Incident requires an Incident Base and numerous other ICS facilities to provide support. • Population surrounding the region or state where the incident occurred is affected. • Numerous Critical Infrastructure or Key Resources adversely affected or destroyed. Actions to mitigate effects will extend into multiple Operational Periods spanning days or weeks and require long-term planning and considerable coordination. • Elected and appointed governing officials, stakeholder groups, and political organizations require a high level of interaction.	• IC role filled • Large numbers of resources supervised indirectly through the expansion of the Operations Section and its subordinate positions • Branch Director Position(s) may be filled for organizational or span of control purposes • Division Supervisors, Group Supervisors, Task Forces, and Strike Teams used to reduce span of control • All Command Staff positions filled and many include assistants • All General Staff positions filled and many include deputy positions • Most or all ICS functional units filled to reduce workload

The RCA is also available at https://www.nwcg.gov/?q=publications/210.

(This page intentionally left blank.)

Appendix G
Sample Delegations of Authority AA to IMT and Leader's Intent

Delegation of Authority
Colorado State Office
Montrose Field Office

As of 1800, May 20, 2005, I have delegated authority to manage the Crystal River Fire, Number E353, San Juan Resource Area, to Incident Commander Bill Jones and his Incident Management Team.

The fire, which originated as four separate lightning strikes occurring on May 17, 2005, is burning in the Crystal River Drainage. My considerations for management of this fire are:

1. Provide for firefighter and public safety.
2. Manage the fire with as little environmental damage as possible.
3. Key cultural features requiring priority protection are:
4. Key resources considerations are:
5. Restrictions for suppression actions include:
6. Minimum tools for use are:
7. My agency Resource Advisor will be:
8. The fire borders are:
9. Manage the fire cost-effectively for the values at risk.
10. Provide training opportunities for the resources area personnel to strengthen our organizational capabilities and work with the Geographic Area Training Representative (GATR) to identify opportunities for Priority Trainees.
11. Minimum disruption of residential access to private property, and visitor use consistent with public safety.
12. Efforts should be made to minimize some impacts to communities and ensure that communication is maintained with the state Air Quality Bureau.

(Signature and Title of Agency Administrator) (Date)

Amendment to Delegation of Authority

The Delegation of Authority dated May 20, 2005, issued to Incident Commander Bill Jones for the management of the Crystal River Fire, number E353, is hereby amended as follows. This will be effective at 1800, May 22, 2005.

13. Key cultural features requiring priority protection are:
14. Use of tracked vehicles authorized to protect Escalante Cabin.

Signature and Title of Agency Administrator Date

Delegation of Authority for *Incident Name*
Date:
To: Incident Commander – *Name of IC*

From: Jurisdictional Agencies

Subject: *Incident Number and jurisdictional unit*

Effective at *XXXX hours* on *Provide the Date*, You are delegated authority for the management of the *XXXX* Incident on the *XXXX Jurisdictional* Unit – *include other jurisdictions if needed.* You have full authority for incident management activities on *this/these jurisdiction(s)* within the framework of law, agency policies, and direction provided within the Delegation of Authority, Wildland Fire Decision Support System Decision, the *Leader's Intent* letter (optional) and the Team Briefing Package provided.

This Delegation carries with it the full authority for the management of the resources (personnel and equipment), costs, and rehabilitation of incident management efforts directly associated with this *incident(s).* Your primary responsibility is to organize, manage and direct your assigned resources for safe, efficient and effective management of the incident. You are accountable to the Agency Administrator or designated representative.

Agency Administrator *Agency/Jurisdictional Unit*	*Date/Time*
Agency Administrator *Agency/Jurisdictional Unit*	*Date/Time*

I accept this Delegation:

Incident Commander	*Date/Time*

Leader's Intent

This is an **optional** document with the following information provided as a template. The purpose is to provide information to an IMT that is not directly related to the strategic direction for managing a wildfire (strategic direction belongs in the WFDSS Decision). Some items will not be relevant to your Unit; delete or add additional information as needed. Items *italicized* and underlined are areas where you should review the information and either add unit-specific information or delete those statements.

Overview
This leader's intent document is one piece of many components of the entire briefing package provided to the incident management team (IMT). In addition to this leader's intent letter, the IMT will also receive the following documentation to support the management of this incident:

- Delegation of Authority
- Published decision from the Wildland Fire Decision Support System
- Briefing package

Communications
It is expected we will meet *daily or as needed* to be informed on significant accomplishments or issues. Daily discussion points include but aren't limited to the following:

- *Safety*
- *Other identified values at risk*
- *Risk trade-offs*
- *Relationships with partners and stakeholders*
- *External communication*
- *Operational effectiveness (Your assessment of likelihood of success of achieving all objectives)*
- *Benchmarks based on team capabilities, span of control, daily progress*
- *Complexity*
- *Cost*
- *Ramp up and ramp down strategies*
    - *Final fire package*

Expect to have a preliminary team evaluation at the incident closeout and a final evaluation at the end of fire season when all incident business transactions have been finalized.

Expanded dispatch is in place, please coordinate and work through XX expanded dispatch center located at the interagency communication center for additional resources or support needs.

Strategic Planning
Successful management of this fire requires a common understanding of the values that require protection, their priority for protection, the probability they will be impacted, under what circumstances they require protection, what protection might look like, and how we manage our response. *Strategic direction is aligned with the Land and Resource Management Plan/Resource Management Plans and associated amendments as detailed in the WFDSS Decision*. It is expected that you and your necessary staffs read and follow

the Decision (Incident Requirements, Incident Objectives, Course of Action, Rationale) in WFDSS. If you have questions or concerns, contact me directly to discuss or clarify. The team should assist with the following:

- Keep line officer informed of significant accomplishments/issues of which can be documented in the Periodic Assessment throughout the duration of the incident.
- Through your risk assessment process, provide feedback regarding needed changes to the Incident Objectives and Course of Action to mitigate unnecessary risk to firefighters.
- Provide input regarding any other identified values to be addressed in planning operations and in the WFDSS Decision.
- Provide input to the current Risk and Complexity Analysis (RCA) in WFDSS and the need for updates; RCA updates can be made to document changed conditions without publishing a new decision.
- Provide support in updating and revising the decision as necessary, and/or determining if an update to components of the decision or documentation is needed (e.g., expectation that the planning area will be breached).
- *Develop, update, and revise management action points as necessary to protect identified values (e.g., structural inholdings, communication sites, culturally sensitive areas) (The unit can list values here, or refer to WFDSS).*

Throughout the life of the incident there will likely be oral discussions, agreements or changes in tactics/management of the fire as a whole that deviate from this letter or the WFDSS Decision documentation. Such deviations must be discussed with *me* in person so that we can determine solutions and update the WFDSS Decision as needed.

Human Resources

- All personnel assigned shall be treated with dignity and respect. Manage the human resources assigned to the fire in a manner that promotes a positive and harassment-free work environment and creates a "no tolerance" atmosphere for harassment, alcohol, or illegal drug use.
- *All personnel assigned should receive evaluations prior to leaving the incident. Encourage supervisors to provide meaningful feedback regarding performance and conduct.*

Safety

- Visitor and public safety is a concern.
  - *Provide timely information to publics impacted by the fire/closure areas.*
  - *Coordinate closures/evacuations with Law Enforcement as identified in the briefing package.*
  - *If needed, utilize the appropriate Cooperative Law Enforcement Agreement in the briefing package.*
- Coordinate and consult with Safety and Health Manager or designated Agency Representative as identified in the briefing package.
- Coordinate hazardous material matters with unit Safety Officer. Specific information has been included in the briefing package.
- *Camp security is advised due to base camp's proximity to town.*
- *Known safety hazards within the proximity of the fire area; e.g., grizzly bear baiting station at XX location, grizzly habitat (considerations for camp, spike camps, night operations, etc.), large standing snag patch from fire, trees are severely weakened,*

excessively steep terrain (provide a geographical location) with large rock outcrops and no values of concern.

Operations

Attention to firefighter and aviation safety is an absolute necessity! Incident Action Plans should reflect leader's intent for the incident. Tactical actions will be assessed and effective mitigation measures will be in place to avoid putting firefighting personnel at unnecessary risk; *Consider not implementing tactical actions by assessing the value being protected versus the risk (even if mitigated) required to protect it*.

- **Structure Protection**
  - Ensure firefighters who engage in structure protection are staying within their tactical training, capabilities, and agency policies.
  - Document significant issues for values at risk within the ICS 209.
  - *Utilize the Community and Structure Fire Protection Guidelines (refer to your local guidance if relevant).*
- **Retardant**
  - Review the fire retardant avoidance maps and documentation *provided during the IMT in-brief OR in WFDSS*, and coordinate with the Resource Advisor as identified in the briefing package.
  - *Follow reporting guidelines for retardant use as defined in the briefing package.*
  - *Follow the guidance/protocol within the Wildfire Guidelines for Resource Protection if retardant is misplaced.*
  - *Use retardant only when and where it is expected to be successful in slowing fire spread or reducing intensities so ground firefighters may engage the fire more safely with a higher likelihood of success.*
- **Aviation**
  - Aviation safety is a high priority. An Aviation Risk Assessment will be completed on all aviation missions in support of fire management. For additional guidance regarding Aviation Resources or local protocol refer to the Briefing Package and work with the Unit Aviation Officer or their designee as a liaison.
  - *An initial TFR has been established for the fire area, coordinate changes to the current TFR with the Unit Aviation Officer.*
- **Initial Attack Operations**
  - *You will be responsible for Initial Attack activities within your designated TFR.*
  - *The local unit may call upon you for additional support as needed for Initial Attack activities.*
- **Cultural and Resource Protection and/or Enhancement**
  - Avoid damage to sensitive cultural resources within the fire area; coordinate suppression actions with the line resource advisor/archeologist. Specific sensitive cultural information was included within the briefing package.
  - *Ensure all tactical actions adhere to the Unit Wildfire Guidelines for Resource Protection and develop a rehabilitation plan for the impacts associated with those actions.*
  - *Not all wildfire is detrimental in this Planning Area. Specific strategic direction is provided in the WFDSS Decision.*

Public Information

- *Develop a public information plan for the incident within XX hours and work closely with the unit Public Affairs Specialist to disseminate information to internal staff, external partners, and interested publics. Refer to the briefing package for names and contacts.*
- Accuracy and timeliness of public information is important. Public meetings should be held as needed and on a routine basis.
- Maintain contact with appropriate agencies, elected officials, business leaders and members of the public as identified within the briefing package.
- Informational meetings or briefings and news releases are to be coordinated with the Agency Representatives as identified within the briefing package.

Finance

- *Document decisions that have incident cost ramifications within the IC Daily log and provide clear rationale for the decisions.*
- Utilize the *XX* Incident Business Plan; please work with the designated INBA for the incident. Refer to the briefing package for contact information.
- *A buying team is in place, XX Dispatch Center.*
- *Develop a total cost projection for managing the incident in line with the strategic direction provided for federal lands, this needs to be completed within XX hours of being delegated authority.*
- Provide assistance in developing a cost share agreement as mutually agreed upon by the *XX* jurisdictions involved.

Logistics

- *Telecommunications contracts have been previously established with Verizon for phone and data plans to support IMT base camps. Specific information is included within the briefing package.*
- *The Local Unit has previously identified base camp and spike camp locations, please evaluate these areas before establishing new locations. Land use agreements for these sites are in place, coordinate with the Incident Business Advisor for specific information.*
- *Maps of these areas will be provided within the briefing package.*
    - Invasive and noxious weeds – *Vehicle and equipment washing is required on fires within XX area. Insert localized information.* Refer to Wildfire Guidelines for Resource Protection on *the local unit* for additional information (*provided with the briefing package*). Please direct questions to the assigned Resource Advisor.

Other

- To build capacity, the use of trainees is strongly suggested to be incorporated into team functions where available. Local trainees will receive first priority for assignments. *A list of the local trainees is included within the briefing package*.
- Work with the Geographic Area Training Representative (GATR) to identify opportunities for Priority Trainees.
- *Coordinate and work closely with the following positions/personnel – contact information as well additional contacts maybe found in the briefing package*.
- Line Officer

- District FMO/Unit FMO
- Unit Aviation Officer
- Interagency Dispatch Center Manager
- Public Affairs Officer
- Unit Safety Officer
- Incident Business Advisor
- Resource Advisor
- Agency/Interagency Partners
- Other IMTs in the adjoining area

_____ _____
Line Officer Signatory Date

_____ _____
Optional signatures add if needed Date

_____ _____
Incident Commander Date

(This page intentionally left blank.)

Appendix H
Local Incident Commander Briefing to IMT

The Incident Briefing, ICS-201 form provides the basis for the local incident commander to brief the incoming team.

Briefing Information

Forms Available or Attached:		Other Attachments:
☐ ICS 201	☐ ICS 215	☐ Map of Fire
☐ ICS 207	☐ ICS 220	☐ Aerial Photos
☐ ICS 209		☐ Weather Forecast

Fire Start Date:
Time:
Fire Cause:
Fuels Ahead of Fire:
Fuels at Fire:
Fire Behavior:
Fire Spread:
Natural Barriers:
Anchor Points:
Perimeter Secured, Control/Mitigation Efforts Taken, and Containment Status:

Life, Improvements, Resources and Environmental Issues:				
Weather Forecast:				
	Established	Possible		
ICP:	☐	☐		
Base:	☐	☐		
Camp(s):	☐	☐		
Staging Area(s):	☐	☐		
Copy Machine Available			☐ Yes	☐ No
Safety Issues:		EMS in Place:	☐ Yes	☐ No
Air Operations Effectiveness to Date:				
Air Related Issues and Restrictions:				
Hazards (Aircraft and People):				
Access from Base to Line:				
Personnel and Equipment on Incident (Status and Condition):				
Personnel and Equipment Ordered:				
Cooperating and Assisting Agencies on Scene:				

Helibase/Helispot Location:
Crash Fire Protection at Helibase:
Medivac Arrangement:
Communication System in Use: ☐ Radio ☐ Telephone ☐ Cell Phone
Water Availability:
Review of Incident Action Plan; Copy of Approved Wildfire Decision Support System Published Decision:
Smoke Conditions:
Local Political Issues:
Damage Assessment Needs:
Security Problems:

(This page intentionally left blank.)

Appendix I
Incident Management Team Performance Evaluation

Team IC		**Incident Type**	
Incident Name		**Incident Number**	
Assignment Dates		**Total Acres**	
Host Agency		**Evaluation Date**	
Administrative Unit		**Sub-Unit**	

At the conclusion of each incident management team (IMT) assignment, the agency administrator or representative should complete this initial performance evaluation (sections 1-5). This evaluation should be discussed directly with the incident commander. The initial performance evaluation should be delivered by the agency administrator without delay to the incident commander, the state/regional fire management officer, and the chair of the IMT's home geographic area multi-agency coordination group to ensure prompt follow-up to any issues of concern.

Complete the following. evaluation narratives and rating for each question.
0 – did not achieve expectations 3 – met expectations 5 – excelled

1. How well did the Team accomplish the objectives described in the Wildland Fire Decision Support System (WFDSS) the Delegation of Authority, and the Agency Administrator briefing?

Circle one	0	1	2	3	4	5

(Explain)

2. How well did the team manage the cost of the incident? Did the team follow agency incident operating guidelines? Were follow-up issues identified and documented for the Agency Administrator (e.g., invoices, OWCP and vendor issues)?

Circle one	0	1	2	3	4	5

(Explain)

3. How did the team demonstrate sensitivity to resource limits/constraints and environmental concerns?						
Circle one	0	1	2	3	4	5
(Explain)						
4. How well did the team deal with sensitive political and social concerns?						
Circle one	0	1	2	3	4	5
(Explain)						
5. Was the team professional in the manner in which they assumed management of the incident and how they managed the total incident? How did the team handle transition either to another IMT or in returning the incident the hosting agency?						
Circle one	0	1	2	3	4	5
(Explain)						
6. How well did the team anticipate and respond to changing conditions, was the response timely and effective?						
Circle one	0	1	2	3	4	5
(Explain)						
7. How well did the team place the proper emphasis on safety?						
Circle one	0	1	2	3	4	5
(Explain)						

8. Did the team activate and manage the mobilization/demobilization in a timely and cost effective manner?						
Circle one	0	1	2	3	4	5
(Explain)						
9. How well did the team use local resources, trainees, and closest available forces?						
Circle one	0	1	2	3	4	5
(Explain)						
10. How did the team notify the incident agency regarding triggers for initiating a cost share agreement or Large Fire Cost Review (FS)/Significant Wildland Fire Review (DOI)? How were those recommendations implemented?						
Circle one	0	1	2	3	4	5
(Explain)						
11. Was the IC engaged and in charge of the team and the incident? How well did the IC function and operate as a leader?						
Circle one	0	1	2	3	4	5
(Explain)						

12. How timely was the IC in assuming responsibility for the incident and initiating action?						
Circle one	0	1	2	3	4	5
(Explain)						
13. How did the IC show sincere concern and empathy for the hosting unit and local conditions?						
Circle one	0	1	2	3	4	5
(Explain)						
14. Did the IMT provide an organized financial package (comps/claims documentation completed, payment documents forwarded, I-suite updated, etc.) to the host unit or next IMT prior to demobilization?						
Circle one	0	1	2	3	4	5
(Explain)						
15. Other comments:						

Agency Administrator or Representative:		Date:	
Incident Commander:		Date:	

Appendix J
Sample Delegation – Lessons Learned Review (LLR)

Memorandum

To: LLR Facilitator; [*Title of person/office this is meant for*]

From: Delegating Official

Subject: Delegation of Authority – [*Incident name*] LLR

Situation Summary:

You are hereby designated the authority to lead and conduct a LLR for [*Incident name*]. The review process will begin at [*Identify LLR start time, date, and location*]. The Fire Staff and Fire Management Office have identified the group of employees who will also be participating. That information will be provided to you upon your arrival.

You have the authority to tailor your team and the LLR process to fit the situation and your style of facilitation. However, I would like you to utilize the guidance outlined in the *Interagency Standards for Fire and Fire Aviation Operations Chapter 18,* while conducting the LLR. This includes:

- convening the participants;
- identifying facts of the event and developing a chronological narrative of the event;
- identifying underlying reasons for success or failure;
- identifying what was learned and what should/could be done differently in the future;
- identify any recommendations that would prevent future similar occurrences; and
- providing a final, written report covering the above items, which is due to me within two weeks of the event occurrence.

If you need any assistance, your primary contact will be [*Name of primary contact*].

Thank you for your time and assistance.

(This page intentionally left blank.)

Appendix K
Recommendations for Incident Emergency Medical Services

Resource	Initial Attack	<250 People	250 to 500 People	> 500 People
Medical Unit Leader (MEDL)	No	TBD by IC and jurisdictional agency	YES (1)	YES (1)
First Responder or Basic FA	Yes	Yes	N/A	N/A
MEDL EMTs	No	No	1	2
EMTs	No	To be determined by the IC or jurisdictional agency	1	2
MEDL Quals	N/A	N/A	310-1 Basic EMT	310-1 Basic EMT
Med Unit EMT Quals	N/A	Basic EMT	310-1 Basic EMT	310-1 Basic EMT
EMTs per Division	N/A	To be determined in consultation with Operations and/or Medical Unit	To be determined in consultation with Operations and/or Medical Unit	To be determined in consultation with Operations and/or Medical Unit
Establish Local Medical Direction	N/A	To be determined by the IC or jurisdictional agency	Yes	Yes
First Aid Kits	Pocket & Vehicle First Aid Kits	Pocket, Vehicle and Crew First Aid Kits	Pocket, Vehicle and Crew First Aid Kits	Pocket, Vehicle and Crew First Aid Kits
100-person First Aid Kit	No	To be determined by the IC or jurisdictional agency	Yes	No
500-person First Aid Kit	No	No	No	Yes
AED	To be determined by the IC or jurisdictional agency	To be determined by the IC or jurisdictional agency	Yes	Yes
Oxygen	No	No	TBD	Yes

Resource	Initial Attack	<250 People	250 to 500 People	> 500 People
OTC Meds	No	To be determined in consultation with Safety Officer, Medical Unit Leader, and Finance Section Chief	To be determined in consultation with Safety Officer, Medical Unit Leader, and Finance Section Chief	To be determined in consultation with Safety Officer, Medical Unit Leader, and Finance Section Chief
Emergency Transport	N/A	Method to provide transport to the nearest medical facility is to be identified in the Incident Action Plan	Method to provide transport to the nearest medical facility is to be identified in the Incident Action Plan	Method to provide transport to the nearest medical facility is to be identified in the Incident Action Plan

NOTE: *Regional differences/protocols exist that vary from these recommendations and may require a higher level of EMS service. Examples of regional differences/protocols are: 1) Northern Rockies (Incident Medical Specialist Program); 2) Pacific Northwest (Incident Medical Specialist Program); and 3) Alaska (Firemedic Program).*

Appendix L
Delegation of Authority – FAST

Delegation of Authority
_____Geographic Area
Fire and Aviation Safety Team (FAST)

Situation Summary (issues and concerns/reason for ordering the FAST)

Objectives (measurable)

Team Skills Required (per objectives listed above)

The final team composition will be determined at time of dispatch and members named on the resource order.

Mission
The FAST is to conduct an independent assessment and evaluation of operational and managerial activities (related to the specific objectives stated above) at the following locations (mission segments):

The team may determine visits to other incidents/organizations/operations as appropriate, and may do so after coordination with the GMAC. The FAST will contact the GMAC Coordinator (describe frequency of contact):

The FAST is to provide technical or managerial assistance when requested and where necessary to immediately correct an identified, critical problem. The FAST may also provide short-term assistance in managing situations or incidents when requested by the incident, organization, or operation.

Protocols
The FAST will organize and conduct an entry briefing with the appropriate managers of the locations/incidents identified previously. The entry briefing will provide the objectives and operational parameters of the mission.

Once the mission segment is completed, the FAST will organize and conduct an exit briefing with the same officials or their designees, during which a draft of the mission-segment report will be presented and discussed. Components of this report will include:

- Purpose and Objectives
- Findings, Commendations, and Recommendations
- Follow-up Actions Needed
- Immediate
- Long-term
- Scope (local, area, national)
- Copy of the Delegation of Authority

The FAST will contact the GMAC Coordinator_____.

FAST will provide a final written report to the GMAC Coordinator upon completion of all mission segments. This report will include:

- FAST Final Report Outline
- Executive Summary
- Purpose and Objectives
- Summary (Findings, Recommendations, Commendations, Assistance Provided)
- Critical and Immediate Follow-up Actions Required
- Introduction
- Methods and Procedures
- Mission Segments (Summary of Incidents, Organizations, Operations Reviewed. Include copies of Mission Segment Reports)
- Analysis
- Findings and Trends, Commendations, and Recommendations
- Follow-up Actions Needed
- Immediate
- Long-term
- Scope (local, area, national)
- A copy of the Delegation of Authority

The _____ Multi-Agency Coordination Group hereby charters and delegates the preceding authority to_____, FAST Leader, effective on _____.

/s/

Chair, _____ Coordinating Group

Date: _____

Appendix M
NUS Engines

The following chart shows the NUS minimum stocking levels required for agency engines.
BLM units see the agency-specific NUS on the NFEP website.

Category	Item Description	NFES #	Type	Type
			3, 4, & 5	6
Fire Tools and Equip	McLeod	0296	1	
	Combination Tool	1180	1	1
	Shovel	0171	3	2
	Pulaski	0146	3	2
	Backpack Pump	1149	3	2
	Fusees (case)	0105	1	½
	Foam, concentrate, Class A (5-gallon)	1145	1	1
	Chainsaw (and chaps)		1	1
	Chainsaw Tool Kit	0342	1	1
	Drip Torch	0241	2	1
	Portable Pump		*	*
Medical	First Aid Kit, 20-25 person	1143	1	1
	Burn Kit		1	1
	Body Fluids Barrier Kit	0640	1	1
General Supplies	Flashlight, general service	0069	1	1
	Chock Blocks		1	1
	Tow Chain or Cable	1856	1	1
	Jack, hydraulic (comply w/GVW)		1	1
	Lug Wrench		1	1
	Pliers, fence		1	1
	Food (48-hour supply)	1842	1	1
	Rags	3309	*	*
	Rope/Cord (feet)		50	50
	Sheeting, plastic, 10’ x 20’	1287	1	1
	Tape, duct	0071	1	1
	Tape, filament (roll)	0222	2	2
	Water (gallon/person) minimum		2	2
	Bolt Cutters		1	1
	Toilet Paper (roll)	0142	*	*
	Cooler or Ice Chest	0557	*	*
	Hand Primer, Mark III	0145	*	*
	Hose Clamp	0046	2	1
	Gaskets (set)		1	1
	Pail, collapsible	0141	1	1
	Hose Reel Crank		*	*

Category	Item Description	NFES #	Type	Type
			3, 4, & 5	6
Safety	Fire Extinguisher (5 lb)	2143	1	1
	Flagging, Pink (roll)	0566	*	*
	Flagging, Yellow w/Black Stripes (roll)	0267	*	*
	Fuel Safety Can (Type 2 OSHA, metal, 5-gallon)	1291	*	*
	Reflector Set		*	*
	Class 2 or 3 High Visibility Apparel (1 per seat belt)	1242	**	**
Vehicle and Pump Support	General Took Kit (5180-00-177-7033/GSA)		1	1
	Oil, automotive, quart		4	2
	Oil, penetrating, can		1	1
	Oil, automatic transmission, quart		1	1
	Brake Fluid, pint		1	1
	Filter, gas		1	1
	Fan Belts		1	1
	Spark Plugs		1	1
	Hose, air compressor w/adapters		1	0
	Fuses (set)		1	1
	Tire Pressure Gauge		1	1
	Jumper Cables		1	1
	Battery Terminal Cleaner		*	*
	Tape, electrical, plastic	0619	1	1
	Tape, Teflon		1	1
Personal Gear (Extra Supply)	File, mill, bastard	0060	*	*
	Head Lamp	0713	1	1
	Hard Hat	0109	1	1
	Goggles	1024	2	2
	Gloves		*	*
	First Aid Kit, individual	0067	1	1
	Fire Shirt		*	*
	Fire Shelter w/case and liner	0169	2	1
	Packsack	0744	2	1
	Batteries, headlamp (pkg)	0030	6	4
	Ear Plugs (pair)	1027	3	3
Radio	Portable		1	1
	Mobile		1	1
	Batteries (for portable radio)		2	2

Category	Item Description	NFES #	Type	Type
			3, 4, & 5	6
Hose	Booster (feet/reel)	1220	100	100
	Suction (length, 8' or 10')		2	2
	1" NPSH (feet)	0966	300	300
	1½" NH (feet)	0967	300	300
	¾" NH, garden (feet)	1016	300	300
	1½" NH, engine protection (feet)		20	20
	1½" NH, refill (feet)		15	15
Nozzle	Forester, 1" NPSH	0024	3	2
	Adjustable, 1" NPSH	0138	4	2
	Adjustable, 1½" NH	0137	5	3
	Adjustable, ¾" NH	0136	4	2
	Foam, ¾" NH	0627	1	1
	Foam 1½" NH	0628	1	1
	Mopup Wand	0720	2	1
	Tip, Mopup Wand	0735	4	2
	Tip, Forester, Nozzle, fog	0903	*	*
	Tip, Forester Nozzle, straight stream	0638	*	*
Wye	1" NPSH, Two-Way, Gated	0259	2	1
	1½" NH, Two-Way, Gated	0231	4	2
	¾" NH w/Ball Valve, Gated	0739	6	4
Adapter	1" NPSH-F to 1" HN-M	0003	*	*
	1" NH-F to 1" NPSH-M	0004	1	1
	1½" NPSH-F to 1 ½" NH-M	0007	1	1
	1½" NH-F to 1 ½" NPSH-M	0006	*	*
Increaser	¾" NH-F to 1" NPSH-M	2235	1	1
	1" NPSH-F to 1 ½" NH-M	0416	2	1
Coupling	1" NPSH, Double Female	0710	1	1
	1" NPSH, Double Male	0916	1	1
	1½" NH, Double Female	0857	2	2
	1½" NH, Double Male	0856	1	1
Reducer/ Adapter	1" NPSH-F to ¾" NH-M	0733	3	3
	1½" NH-F to 1 NPSH-M	0010	6	4
	2" NPSH-F to 1 ½" NH-M	0417	*	*
	2½" NPSH-F to 1 ½" NH-M	2229	*	*
Reducer	1½" NH-F to 1" NH-M	0009	1	1
	2½" NH-F to 1 ½" NH-M	2230	1	1
Tee	1" NPSH-F x 1" NPSH-M x 1" NPSH-M, w/cap	2240	2	2
	1½" NH-F x 1 ½" NH-M x 1" NPSH-M w/cap	0731	2	2
	1½" NH-F x 1 ½" NH-M x 1" NPSH-M w/valve	0230	2	2

Category	Item Description	NFES #	Type 3, 4, & 5	Type 6
Valve	1½" NH-F, Automatic Check and Bleeder	0228	1	1
	¾" NH, Shut Off	0738	5	5
	1" Shut Off	1201	1	1
	1½" Shut Off	1207	1	1
	Foot, w/strainer		1	1
Injector	1" NPSH x 1/12" NH, Jet Refill	7429	*	*
Wrench	Hydrant, adjustable, 8"	0688	1	1
	Spanner, 5", 1" to 1½" hose size	0234	4	1
	Spanner, 11", 1½" to 2 ½" hose size	0235	2	2
	Pipe, 14"	0934	1	1
	Pipe, 20"		1	1
Engine	*Wildland Fire Incident Management Field Guide* (PMS 210)	2943	1	1
	GPS Unit		1	1
	Belt Weather Kit	1050	1	1
	Binoculars		1	1
	Map Case w/ maps		1	1
	Inventory List		1	1
	Current *Interagency Standards for Fire and Fire Aviation Operations*		1	1

* No minimums – carried by engines as an option, within weight limitations

** One per seat belt

NPS – Additional or Differing Items Recommended by NPS

Category	Item Description	NFES #	Type 3, 4, & 5	Type 6
Fire Tools and Equip[1]	Flapper (NPS)		*	*
	Council Rake (NPS)	1807	*	*
	Leaf blower		*	*
	Shovel	0171	2	1
	Extra Quart, 2 cycle mix		2	1
	Portable Pump		1	*
General Supplies	Chock Blocks		1	1
	Tape, filament (roll)	0222	2	1
	Bolt Cutters		*	*
	Hose Clamp	0046	2	2
Safety	Reflector Set		1	1
	Oil, automotive, quart		2	1

Category	Item Description	NFES #	Type 3, 4, & 5	Type 6
Vehicle and Pump Support	Power steering Fluid		1	1
	Antifreeze (seasonal)		*	*
	Filter, air for engine and pump		*	*
Personal Gear (Extra Supply)	File, mill, bastard	0060	*	*
	Fire Shelter w/case and liner	0925/0975	1	1
	Packsack	0744	2	1
Radio	Batteries (for portable radio)		2	2
Hose	2½" Refill Hose, Water tender		*	*
Nozzle	Adjustable, 1 ½" NH	0137	3	3
Wyes	¾" NH w/Ball Valve, Gated	0739	6	2
Coupling	1" NPSH, Double Male	0916	2	1
	1" NH, Double Male	0856	2	2
Reducer/ Adapter	1" NPSH-F to ¾" NH-M	0733	3	2
	1½" NH-F to 1 NPSH-M	0010	6	3
Tee	1" NPSH-F x 1" NPSH-M x 1" NPSH-M, w/cap	2240	2	*
Valve	1½" NH-F, Automatic Check and Bleeder	0228	1	*
	¾" NH, Shut Off	0738	4	2
Wrench	Pipe, 20"		1	*
Engine	Accident Forms (Vehicle and Personnel)		1	1
	Compass		1	1

[1] A minimum of eight tools for type 3, 4, 5 engines and a minimum of five tools for type 6 engines is required. The listed numbers of tools in each box are required to be on the engine. Beyond that, the tools listed as optional or additional required tools can make up the rest of the minimum number required for engines.

* No minimums – carried by engines as an option, within weight limitations

(This page intentionally left blank.)

Appendix N
Wildland Fire Decision Support System Information

WFDSS Overview

The Wildland Fire Decision Support System (WFDSS) is an interagency, web-based application that helps agency administrators and fire managers make risk-informed decisions for all types of wildland fires, regardless of complexity. WFDSS integrates the various applications used to manage incidents into a single risk-informed, collaborative system to streamline the analysis and reporting processes, providing one decision documentation system tiered to Land and/or Resource Management Plans.

The application's home page can be accessed at https://WFDSS.usgs.gov.

WFDSS Account Information

The WFDSS application is intended for use by the US federal government for managing wildland fires.

Qualified users (Federal and Tribal Employees and non-Federal WFDSS partners) can request accounts on the WFDSS Production (for live incidents) or Training (training incidents only) login pages and a single account provides access to each system. Additional information about requesting an account can be found at https://wfdss.usgs.gov/wfdss_help/WFDSSHelp_request_acct.html.

Federal accounts are granted automatically, non-federal accounts are granted by Geographic Area Editor (GAE) or National Editors (NE), depending on the geographic area a user's account is associated with (Note: Each federal entity has different overlapping regions which may not coincide with geographic areas. A GAE from a perceived different geographic area may assist you as a result.).

Users work with GAEs, NEs, and the Customer Help Desk to manage locked accounts, disabled accounts and password resets. The help topics Requesting a Password Reset, Understanding Locked User Accounts and Re-enabling a Disabled Account provide additional information, they can be located in the WFDSS Online help available at https://wfdss.usgs.gov/wfdss_help/index.htm.

WFDSS User Roles

User Roles in WFDSS correspond to permissions which allow users to perform certain tasks within the application. Newly activated accounts are assigned a Viewer role but within the application, users can request Author, Dispatcher, Data Manager, or Fire Behavior Specialist roles as necessary. Various support roles exist as well, and include Geographic Area Editor, National Editor, Administrator and Help Desk. User role requests are granted by Geographic and National Editors, depending on the geographic area and role requested.

- Users assigned the Viewer role can view published content but can only engage in incident documentation if assigned incident privileges.
- The Author role is required for users to create and/or own incidents and manage the decision documentation process.
- The Dispatcher and Data Manager roles are typically designated at the local level to manage an Administrative Unit's incident information and spatial data.
- The Fire Behavior Specialist role can be requested/granted when a certain degree of fire behavior analysis training has been completed (training and experience culminating in S491 and S495).
- The Geographic Area Editor role is a primary support role for Authors, Dispatchers, Data Managers and Fire Behavior Specialists; users assigned this role have implicit ownership of incidents within their geographic area, regardless of agency. Additional information about GAE duties is included in the WFDSS Training and Support section.
- The National Editor role has maximum authority relative to WFDSS incident management; users assigned this role have implicit ownership of all incidents in WFDSS.

The WFDSS User Roles help topic provides additional information about user roles and can be found in the WFDSS online help available at https://wfdss.usgs.gov/wfdss_help/index.htm.

WFDSS Incident Privileges

Incident privileges are assigned and managed by incident owners at the time of (and are specific to) an incident. These privileges allow users to Own, Edit, Review, or Approve decision content. Users must be assigned the Author user role to own incidents, but users with any role can edit, review or approve decisions. If a change in incident privileges is necessary for an incident, contact the incident owner(s) to coordinate the change. Incident Privileges and Managing Incident Privileges are two topics that provide additional information; they can be searched for in the WFDSS help.

WFDSS Training and Support

A variety of WFDSS training and support materials are located on the WFDSS home page. Here you can access modeling and decision learning resources, videos and various white papers and supporting documents. The Hot Picks section provides links to annual refresher materials as well as the most common WFDSS-related offerings; it's a column located on the right side of the WFDSS home page. The Training and Related References sections of the WFDSS home page are available here, respectively:
https://wfdss.usgs.gov/wfdss/WFDSS_Training.shtml and
https://wfdss.usgs.gov/wfdss/WFDSS_Resources.shtml.

Within the WFDSS application, the online help is a comprehensive set of help topics that are mapped to corresponding pages in the application. Click the help icon in the upper right of any page to access specific help information for any page in the application. The online help can also be accessed here: https://wfdss.usgs.gov/wfdss_help/index.htm.

Geographic Area Editors Support of WFDSS Users, Incidents and Agencies

Geographic Area Editors (GAE) are another source of WFDSS training and support. Their primary role is to support WFDSS users and incidents within their Geographic Area (GA), serve as interagency technical experts, and Point of Contacts for their agency or bureau.

GAEs from various agencies are typically designated within each GA. GAEs work cooperatively for the benefit of all users within their GA and are both able and expected to assist any caller from any agency within their GA.

Geographic Area Editors WFDSS Duties

- Grants and removes user roles (Viewer, Author, Dispatcher, Fire Behavior Specialist, and Data Manager) in the Training and Production systems within their GA.
    - Serves as a WFDSS expert to support WFDSS users within their GA.
    - Assists or otherwise provides oversight in the development of decision content for WFDSS decisions.
    - Provides "WFDSS Point of Contact (POC)" technical help during off hours and weekends.
    - Provides training and answers technical "how to" questions.
- Provides incident support within their GAs as needed, and when an incident owner is unavailable. Geographic Area Editors can:
    - Edit any WFDSS incident within their GA, in coordination with incident owners, editors and/or Approving Official(s);
    - Develop and share filters (groups, incident, analysis, and intelligence);
    - Upload incident and/or analysis shapefiles;
    - Transfer/modify incident ownership;
    - Grant incident privileges; and
    - Edit jurisdictional point of origin (in coordination with local unit and incident).
- Serves as Geographic Area POC for their agency or bureau:
    - Facilitates interagency cooperation and coordination in support of multijurisdictional incidents and field users.
    - Consults fire and resource management staff and agency leadership as needed on WFDSS decision content.
    - Coordinates with and provides backup to other GAEs within their GA.
    - Disables agency/bureau user accounts within their GA.
    - Disseminates technical information such as upgrades to the WFDSS system, "how to" guidance and training materials/announcements.

- Participates in GAE calls to keep up to date on system changes or other relevant information to be shared with field units.
- Verifies completion of security training for non-federal account requests.
- Assists with the reactivation of disabled accounts within their GA. When a user with a disabled account contacts a GA editor, the GA can assign the user a role in WFDSS Production and it automatically syncs with the user's Training account. The user can then contact the Help Desk to reset their password and unlock the account.

Geographic Area Editors WFDSS Limitations

- Cannot reset passwords (users must contact the help desk to reset their password and unlock their account).
- Do not have privileges specific to Fire Behavior Specialist, Administrator or Helpdesk.
- Cannot view disabled accounts for users in other GAs.

Fire Behavior Analysis

Fire behavior analysis is incorporated into WFDSS, in the form of the Fire Spread Probability model (FSPro), Basic Fire Behavior (Basic), Short Term Fire Behavior (STFB) and Near Term Fire Behavior (NTFB). A comparison of these models (as well as FlamMap and FARSITE) can be found on the WFDSS homepage under the Training menu option (https://wfdss.usgs.gov/wfdss/WFDSS_Training.shtml), Modeling Learning Resources section.

WFDSS users assigned the Fire Behavior Specialist (FBS) role are responsible for fulfilling analysis needs for incidents. FBSs can be local; assigned to incident management teams in the form of LTANs, FBANs or GSANs; or provide assistance remotely. It's helpful to identify local FBSs pre-season to understand the local capacity for analysis assistance.

If a local FBS is not available to provide analysis for an active incident, you can request assistance by selecting Fire Behavior Request from the Information tab of an Incident and submitting the request, contacting a Geographic Area Editor, or calling the Analysis & Decision Content Support number listed on the WFDSS home page (208-473-8107). Additional information about requesting assistance for an incident can be found on the Decision Support section of the Wildland Fire Management Research, Development and Application group home page at https://www.wfmrda.nwcg.gov/decision_support.php.

Relative Risk Assessment

The Relative Risk Assessment is required before publishing a Decision for an incident. Its purpose is to assist you in planning for, assessing, and managing your incidents. Incident Owners or Editors can perform the assessment, which

provides a quick but comprehensive assessment of the risk of the fire. This is a qualitative process that can be completed in less time than a quantitative long-term risk assessment. The Relative Risk Assessment chart uses three risk components:

- values
- hazard
- probability

Each of these components is assessed independently. As the graphs for each component are completed, you can document thoughts/reasons for inputs in accompanying text boxes. This text automatically populates in the WFDSS decision but the graphs themselves do not (they can be manually added if you choose). The three outputs are then evaluated in a final step that provides the Relative Risk rating for the fire. From the Relative Risk rating, guidance is provided within the system to assist the Owner/Author in determining the level of analysis needed, considerations for the incident and documentation of the Decision. The help topics About Relative Risk and Calculating Relative Risk provide additional information and can be located in the WFDSS online help available at https://wfdss.usgs.gov/wfdss_help/index.htm.

Organization Assessment

The Organization Assessment (OA) is required to publish a Decision for an incident. It guides Agency Administrators in their incident management organization selection, both in escalating and moderating situations (i.e., this process can be used to expand or contract organizations). The OA is based on Relative Risk, implementation difficulty, and socio-political concerns. The final part of the OA combines these variables to allow users to select the level of incident management needed. The help topics Organization Assessment Reference provides additional information and can be located in the WFDSS online help at https://wfdss.usgs.gov/wfdss_help/index.htm.

Incident KMZ (left menu)

Incident KMZ files can be downloaded to include all of the incident spatial data and completed analyses from the Published Decision(s). The spatial data is composed of incident and analysis shapes found in the Incident and Analysis map layers on the Situation map. Shapes include planning areas, fire perimeters, management action points, incident objective shapes, analysis outputs and analysis ignition files. If a decision is pending, only spatial information available to all users will be provided in the KMZ.

WFDSS Suggested Refresher and Preseason Items

It's recommended that units provide annual WFDSS refreshers to all individuals that may be involved in incident decision-making and documentation. It's also important to identify individuals assigned the Fire Behavior Specialist role in

WFDSS to understand a unit's capacity for providing analysis products, and to identify future analysts for training and exposure come fire season.
WFDSS Refresher Training Recommendations are located in the Line Officer Resources section of the WFM RD&A web page (https://www.wfmrda.nwcg.gov/line_officer_resources.php). Additional refresher information can be found on the WFDSS home page (Training and Related References menu options, annual refresher documents in Hot Picks) and from GAEs. Suggested minimum duration for review is two hours.

It is suggested that the following items are covered in annual WFDSS refreshers:

- *Strategic Objectives and Requirements* – briefly review what is currently pre-loaded in WFDSS, discuss if there is conflicting information within the same Strategic Objective (SO) or FMU, and evaluate what fire management options can be utilized within each SO/FMU. Determine if edits are needed to update the information currently in WFDSS.
- *Relative Risk* – can be visited pre-season to define some local inputs.
- *Boundary Fires* – discuss, with interagency partners, how fires will be managed along boundaries. Utilize a fire scenario for this discussion if possible and work through the WFDSS process.
- *Unit Fire Planning* – review planning-related shapes associated to ensure they are still applicable and to identify potential needs for one or more Other Unit Shapes.
- *Fire Scenario* – utilize WFDSS Training to develop one or more fire scenarios and guide corresponding discussions. Utilize a fire scenario that is somewhat complex and includes interagency partners.
    - Planning Area – draw a planning area with dialogue around how to draw it and what to include within it.
    - Values Inventory – review the values inventory that's derived from drawing the planning area. Document missing values, if any, and determine if shapes are available to represent them.
    - Situation Map/Tab – review available map layers and the data they contain, and check system preferences to ensure that all applicable map layers are available for viewing.
    - Relative Risk and Organizational Assessment – complete this process making notes of what various elements were rated and why.
    - Incident Objectives / Incident Requirements – write them for the scenario. Review to ensure they address the what, when, where and why to communicate leader's intent and indicate priority.
    - Course of Action – develop a course of action that further explains leader's intent, the priorities for the incident, and as needed, what not to do.
    - Scenarios – as the above information is developed, discuss the potential scenarios and document those actions not taken in the assessment or rationale.

  - Rationale – draft the rationale to include "My decision is…" information. This is the executive summary of the document. Consider documenting what is allowed in the management plan, the probability of being successful, the expected duration, and what was considered but rejected. The Rationale section provides a list of items to consider addressing and discussing.
  - If interagency partners are not involved in the scenario, discuss who, when and how they would have been involved during an incident.
- *Fire Behavior Models*
  - Discuss the various models (FSPro, NTFB, STFB, Basic) and how any of them might be utilized to inform decision content.
  - Review the values at risk information provided by the models and how it varies from the values inventory.
  - Discuss how the models might be utilized to answer what types of questions (practice forming the questions first, and then determining which modeling tool would provide the best answer).
  - Review products previously utilized by the Unit to evaluate risk on a fire or assist with decision-making.

(This page intentionally left blank.)

Appendix O
Area Command (AC) Complexity Assessment
Guide for ACT Engagement

Incident: _____ **Date:** _____

Check all that apply. (Current date/time and expected over next 72-96 hours.)

FACTORS	YES	NO
Multiple incident management organizations (IMTs of varying types) are assigned on a single administrative unit or several adjoining units that can be combined into a single Area Command.		
Local resources and managers need incident management assistance for multi-jurisdictional incidents that may/will incur a unified command organization and/or cost share agreements; may be single incident with multiple IMTs.		
Response trends, and/or planning level, political, media, or public concerns are escalating from local to state/regional level and may rise to national levels (e.g., PLs, military activation, FEMA and/or FMAG involvement).		
Incident reporting or communication requirements are diverse, time-sensitive, and/or require consolidation and clarity.		
Incident personnel are having difficulty achieving objectives.		
Intricate local land and resource management objectives and constraints exist and require close oversight for compliance.		
Special circumstances that warrant additional management oversight and support (including, but not limited to, serious injuries, fatalities, equipment accidents, special non-fire events happening locally) are occurring/impacting agency oversight.		
Key unit leadership (AAs, LOs, Agency Reps, FMOs, etc.) is absent, operating beyond scope of training/experience, or multiple acting/detailed members are present/needed. Fatigue of these individuals is becoming a factor and will not improve for some time.		
Significant events (e.g., severe weather, large public events, substantial increase of initial attack) are predicted that will impact success.		
Complex, long-term or multiple incidents are exceeding acceptable agency administrator and fire program manager span of control.		

FACTORS	YES	NO
Multiple incidents and administrative units are competing for resources: Incident prioritization, allocation of scarce resources, coordinating the sharing of critical resources, and application and management of surge resources can reduce competition and facilitate more efficient operations.		
A *Theater of Operations* concept is present in the thinking, planning, and operational choices of decision makers: A greater commitment to long-term strategy/planning is warranted to better utilize resources and manage incidents.		
TOTAL		

0-2 YES	**3-6 YES**	**6+ YES**
ACT *may not* be required, but can be ordered if YES items are significant	**_Consider_ ordering ACT: if not, monitor indicators closely and reconsider if additional YES indicators are noted**	**ACT *recommended***

Index

600 Class Command Vehicle Procurement Standards (BLM) 42
7-Day Significant Fire Potential Outlook 225
AA Certification Program (FS) 123
AA Core Competencies (FS) 123
AA Guidelines (FS) 124
AA Roles and Responsibilities for Incident Management (FS) 123
AA Trainee, Evaluation Process (FS) 125
AA, Currency (FS) 126
Accident Investigation (AI) Process, Wildland Fire 369
Accident Investigation 24- and 72-Hour Reports 369
Accident Investigation Final Report 370
Accident Investigation Methodology 369
Accident Investigation Report Standard Contents 370
Accident Investigation, Notification 369
Accident Notification 387
Accident Review Board/Board of Review 368
Accident/Injury Reporting 186
Accident/Injury Reporting, Agency Reporting Requirements 187
Accident/Injury Reporting, OSHA Reporting Requirements 187
Acquisitions (BIA) 157
AD, Pay Plan for Prescribed Fire, Use of 352
Additional Mapped Avoidance Areas, Definition 270
Adjective Fire Danger Rating 217
Aerial Ignition 335
Aerial Ignition Devices 308
Aerial Supervision Module (ASM) 337
Aerial Supervision Module Program Training and Qualifications 338
Aerial Supervision Module, Operational Considerations 337
Aerial Supervision Module, Policy 338
Aerial Supervision Principles for ATGS, HLCO, ASM, and Leadplane 335
Aerial Supervision, Operational Procedures and Policy 336
After Action Reviews (AARs) 355
Agency Administrator Definition 248
Agency Administrator Roles (NPS) 73
Agency Administrator Roles, Chief, National Wildlife Refuge System (FWS) 95
Agency Administrator Roles, Director (FWS) 95
Agency Administrator Roles, Director (NPS) 73
Agency Administrator Roles, FWS 95
Agency Administrator Roles, Park Superintendent (NPS) 74
Agency Administrator Roles, Project Leader/Refuge Manager (FWS) 96
Agency Administrator Roles, Regional Chief and Refuge Supervisors 96
Agency Administrator Roles, Regional Director (FWS) 95
Agency Administrator Roles, Regional Director (NPS) 74
Agency Administrator's Roles (BIA) 136
Agency Planning Guidance, Fire Management Planning 212
Agency Superintendent (BIA) 139
Agreement for Fire Management, USDOI and USDA Interagency 189

Agreement Policy....195
Agreement, DOI, USDA, and DOD Interagency Agreement....189
Agreement, Elements of an....197
Agreements with Cooperators (Rangeland Fire Protection Association (RFPA) and Local Fire Department) (BLM)....32
Agreements, Inter-refuge (FWS)....108
Agreements, Local Interagency....196
Agreements, National Interagency....196
Agreements, Regional/State Interagency....196
Agreements, Types of....196
AI, Investigation Team Membership....369
Air Ambulance Coordination....174
Air Tactical Group Supervisor (ATGS)....336
Air Tactical Group Supervisor, Operational Considerations....337
Air Tactical Group Supervisor, Program Management....336
Air Tactical Group Supervisor, Training....336
Airspace Coordination....326
Airtanker Base Operations....341
Airtanker Base Personnel....342
Airtanker Rotation....339
Airtanker Types....339
Airtankers....338
Airtankers Payloads....341
Airtankers, Loading Operations....342
Airtankers, Rotation of State....341
Airtankers, Startup/Cutoff Time for Multi Engine....342
All Terrain Vehicles (ATV)/Utility Terrain Vehicles (UTV)....304
All-Hazard IMTs and Other Non-Wildland Fire IMTs....208
All-Hazards Coordination and Cooperation....201, 205
All-Hazards Guiding Principles and Doctrine (USFS)....206
Annual Fireline Safety Refresher Training....279
Annual Operating Plan, Fiscal Responsibility Elements of an....200
Annual Operating Plan, General Elements of an....197
Annual Operating Plans (AOPs)....197
Annual Safety Inspections, Scheduled Maintenance, and Daily Inspections, Vehicle (NPS)....90
Aquatic Invasive Species, Operational Guidelines for....254
Area Command....239
Assignment Extension....163
Assistant Director, Fire and Aviation (FA-100) (BLM)....15
Aviation Assets....332
Aviation Hazard....323
Aviation Operations and Resources....315
Aviation Program Goals (BIA)....154
Aviation Program, Agency/Field Office Level (BIA)....155
Aviation Program, Regional Office Level (BIA)....155
Aviation Safety (BIA)....156
Aviation Safety Assistance Team (ASAT)....322
Aviation Safety Assistance Team (ASAT) Reviews....356
Aviation Stand Downs....329

Aviation, How to Properly Refuse Risk 321
Aviation, Organizational Responsibilities 315
Aviation, Organizational Responsibilities (BLM)) 315
Aviation, Organizational Responsibilities, FS 316
Aviation, Organizational Responsibilities, Local Office 318
Aviation, Organizational Responsibilities, NPS 316
Aviation, Organizational Responsibilities, Office of Aviation Services (OAS) 315
Aviation, Organizational Responsibilities, State/Regional Office 317
Aviation, Purpose and Scope 315
BLM Fire Equipment Improvement/Deficiency Reporting System (BLM) 40
BLM Standards for Fire Training and Workforce Development 50
BLM Wildland Fire and Aviation Program Organization and Responsibilities, Introduction 13
Boot Standard, Wildland Fire 168
Branch Chief, Wildland Fire Management (BIA) 136
Branch of Wildland Fire Management Organization (BIA) 135
Briefings, Incident 172
Budget Management (BIA) 151
Bureau and Tribal NFDRS Weather Stations (BIA) 144
Burn Injuries, Required Treatment for 175
Burn Injury Criteria, ABA 176
Burn Injury Criteria, Severity Determination 176
Burned Area Emergency Response (BAER) Teams 259
Business Management and Administration (BIA) 156
Buying/Payment Teams 242
Cache Management 261
Camps and Plans to Remain in Place, Location of Fire 173
Casuals Hired as Drivers When Employed by BIA (BIA) 156
Cause Determination and Trespass Investigation, Fire 371
Cause Determination and Trespass Investigation, Fire, Introduction 371
Cause Determination and Trespass Investigation, Fire, Policy 372
Cause Determination and Trespass Investigation, Fire, Related Policy Documents 373
Cellular/Satellite Phone Communications 309
Certification of Non-Agency Personnel 278
Chainsaw Operators and Fallers 296
Chemical Avoidance Areas, Fire 335
Chocks 299
Closures, Unit/Area 253
Command Organizations 234
Command Organizations, On-site 235
Command Philosophy, Fire Operations 9
Communications 309
Communications on an Incident, Military 314
Communications, Policy 309
Complexity, Wildfire 233
Compliance, Definition 213
Concepts and Definitions, Fire Management Planning 213
Connection to Other Plans, Fire Management Planning 214
Contingency Resources, Activation of 352
Contracts, Agreements 196

Contracts, Radio....309
Conversions, Equipment (BLM)....43
Cooperative Agreements, National Wildland Fire....189
Cooperative Agreements, Standards for....195
Cooperator Aircraft....344
Coordination & Cooperation, Interagency....189
Cost Effective Fire Operations....11
Cost Management....260
Critical Incident Stress Management (CISM)....188
Days Off....162
Declared Wildfire Reviews....359
Definitions....6
Definitions (FS)....126
Definitions, Reviews and Investigations....360
Definitions, Safety and Risk Management....160
Delegation for District Fire Management Officers (DFMO) (BLM)....29
Delegation for Regional Fire Management Officers (NPS)....87
Delegation for State Fire Management Officers (SFMO) (BLM)....29
Delegation of Authority (BLM)....29
Delegation of Authority, FWS....107
Delegation of Authority, NPS....87
Delegation of Authority, Regional Fire Management Coordinator (FWS)....107
Delegation of Authority, Zone Fire Management Officer (ZFMO), FWS....107
Delegation of Authority. Dispatch/Coordination Center Manager....380
Department of Interior (DOI), Agency Planning Guidance....212
Director (BIA)....136
Director, Office of Trust Services (BIA)....136
Dispatch and Coordination System....375
Dispatch and Coordination System, Introduction....375
Dispatch and Coordination System, Organization....376
Dispatch Center Functional Responsibilities, Local....385
Dispatch Centers, Local....377
Dispatch Recording Devices....309
Dispatch/Coordination Center Administration....379
Dispatch/Coordination Center Administration, Continuity of Operations Plan (COOP)380
Dispatch/Coordination Center Administration, MOU....379
Dispatch/Coordination Center Administration, Service and Supply Plans....380
Dispatch/Coordination Center Reference Material....388
Dispatch/Coordination Center, Facilities and Equipment....388
Dispatch/Coordination Center, Training....388
Dispatch/Coordination System, National....194
Division Chief, Forestry and Wildland Fire Management (BIA)....136
DOI WFDSS Approval Process in Alaska....247
Dozer/Tractor Plow Operational Procedures....303
Dozer/Tractor Plow Physical Fitness Standards....303
Dozer/Tractor Plow Training and Qualifications....303
Dozers/Tractor Plows....303
Drawdown Levels, Establishing....378
Drawdown, Local and Geographic Area....194, 378
Driver Requirements, Engine (BLM)....62

Driver Training for Regular Drivers of Fire Equipment (BLM) 52
Driving Standard 164, 299
Dump and Spill Sites 179
Emergency Assistance 196
Emergency Equipment Rental Agreements (EERA) (BIA) 157
Emergency Light Use 300
Emergency Management Planning and Services, Incident 253
Emergency Management Planning, Incident 387
Emergency Management Planning, Incident Medical 173
Emergency Medical Response, Public 257
Emergency Notification and Contact Information (BLM) 37
Emergency Support Function (ESF) Annexes 203
Employee Advocacy (BLM) 38
Employee Conduct (BLM) 14
Employee Conduct (NPS) 73
Employee Safety and Health Program Responsibility (BLM) 36
Endangered Species Act (ESA) Emergency Consultation 272
Engine Inventories 302
Engine Module Standards (NPS) 88
Engine Modules 288
Engine Operating Standards (NPS) 88
Engine Ordering (BLM) 60
Engine Staffing, Fire 302
Engine Typing 301
Engine Use Report (EUR) (BLM) 40
Engine/Tactical Water Tender Water Reserve 299
Engines (BLM) 60
Engines, Firefighting 301
Engines, Operational Procedures 301
Equipment Bulletins and Equipment Alerts (NPS) 44, 90
Equipment Development (BLM) 40
Establishing or Converting IHC (BLM) 57
Evaluation, Team 253
Explosives, Munitions, and Unexploded Ordinance 177
Explosives, Munitions, and Unexploded Ordinance, Notifications 178
Explosives/Munitions/UXO Associated with Former Defense Sites, Discovery of 178
Extended Attack Incident, Definition 7
Extended Attack, Definition 7
Eye and Face Protection 169
Factual Report 368
Federal Agencies Assistance 351
Federal Fire Policy Council (FFPC) 190
Federal Wildland Fire Management Policy Overview 1
Federal Wildland Fire Management Policy, Elements of 3
Field Attire, Wildland Fire 167
Final Wildland Fire Record (FWS) 109
Fire and Aviation Directorate (BLM) 15
Fire and Aviation Management (FAM) Duty Officer (FS) 129
Fire and Aviation Management Credential Program (NPS) 92
Fire and Aviation Safety Team (FAST) Reviews 355

Fire Chemicals, Aerial Delivery of Long-Term Retardant on USDA Forest Service Lands, Exceptions for 271
Fire Chemicals, Exceptions for All Other Agencies and All Other 271
Fire Chemicals, Guidance for Pilots 270
Fire Chemicals, Interagency Policy for Aerial and Ground Delivery of Wildland Fire Chemicals Near Waterways and Other Avoidance Areas 269
Fire Chemicals, Policy for Use of 267
Fire Chemicals, Reporting Requirements of Aerially Delivered Wildland Fire Chemicals Into Waterways, Waterway Buffer Areas and Mapped Avoidance Areas 271
Fire Chemicals, Safety Information 268
Fire Chemicals, Types of 267
Fire Danger Operating Plan 217
Fire Danger PocketCard for Firefighter Safety 223
Fire Danger Rating 216
Fire Danger, Communication of 217
Fire Engine and Command Vehicle Identifier Standards (BLM) 40
Fire Equipment Committees (BLM) 39
Fire Equipment Maintenance and Inspections 300
Fire Equipment Maintenance and Procedure Record (FEMPR) (BLM) 43
Fire Equipment Standardization (BLM) 40
Fire Equipment Status Report (FES) (BLM) 40
Fire Executive Council (FEC) 191
Fire Extinguisher 299
Fire Facility Construction and Maintenance Activity (BIA) 149
Fire Leadership Team (BIA) 138
Fire Management Administration (BIA) 141
Fire Management in Wilderness 253
Fire Management Leadership Board (NPS) 84
Fire Management Plan, Definition 213
Fire Management Planning, Purpose 211
Fire Management Policy (BIA) 135
Fire Management Position Requirements (FS) 130
Fire Management Position Titles and Fire Department Cooperator Equivalencies (BLM) 31
Fire Management Unit, Definition 213
Fire Occurrence Data and Reporting (BIA) 143
Fire Operations Doctrine 8
Fire Prevention/Mitigation Plans 221
Fire Reporting (FWS) 108
Fire Severity Funding (FWS) 108
Fire Shelters 168
Fire Suppression Action, Principles of 10
Fire Suppression Modules (BLM) 59
Fire Type, Definition 6
Fire Vehicle Operation Standards 167
Fire Weather/RAWS (BIA) 143
FireCode Business Rules (BIA) 146
Firefighter Training and Qualifications 275
Firefighter Training and Qualifications, Introduction 275
Firefighters (BLM) 46

Firefighters, Introduction (BLM) 46
Firefighters, Mobilization of (BLM) 46
Firefighting Engine/Water Tender Common Standards 299
Firefighting Equipment 299
Firefighting Equipment, Introduction 299
Firefighting Equipment, Policy 299
First Aid Kit 300
Fitness Challenge, BLM National Fire Operations 53
Fitness Level – Wildland Firefighter Medical Standards Program (DOI/MSP), Arduous 281
Fitness Levels, Medical Exam Process for Light and Moderate 283
Fixed Ownership Rates (FORs), NPS 90
Flagging, Standard Safety 173
Flight and Duty Limitations Implementation, Interim 330
Flight and Duty Limitations, Phase 1 – Standard Flight and Duty Limitations 330
Flight and Duty Limitations, Phase 2 – Interim Duty Limitations 331
Flight and Duty Limitations, Phase 3 – Interim Duty Limitations 331
Flight Operations, Congested Area 325
Flight Operations, Low-level 324
Flight Operations, Low-level, Operational Procedures 324
Flight Request and Approval 327
Flight Request and Approval (BIA) 156
Flight-Following All Aircraft 329
Foam, Fire Suppressant 267
Foundational Doctrine (FS) 113
Foundational Doctrine, Leadership and Accountability (FS) 115
Foundational Doctrine, Mission (FS) 114
Foundational Doctrine, Operations (FS) 115
Foundational Doctrine, The Operational Environment (FS) 115
Foundational Doctrine, Wildland Fire Response Principles (FS) 114
Frequencies, Government-wide Area Common User 313
Frequencies, National Interagency Air Tactics 312
Frequencies, National Interagency Fire Tactical 313
Frequencies, Pre-assigned National 311
Frequency Management, Aviation Operations 311
Frequency Management, Daily Operational 310
Frequency Management, Incident 310
Frequency Management, Mutual Aid 310
Frequency Management, Radio 310
Frequency, National Air Guard 311
Frequency, National Flight Following 312
Frequency, National Interagency Airtanker Base 312
Frequency, Smokejumper and Rappel/RADS Air to Ground 312
Fuel and Fire Behavior Advisories 225
Fuels Management 347
Fuels Management Accomplishments, Reporting 348
Fuels Management Activities, Non-fire 352
Fuels Management, Introduction 347
Fuels Management, Planning & Implementation (BIA) 158
Fuels Treatment Effectiveness Monitoring (FTEM), Reporting 348

Funded Program Procedures (BIA) 152
Funding, Nonstandard Equipment (BLM) 41
Funding, Preparedness (BLM) 47
Funding, Suppression (BLM) 47
General Driving Policy 164
Geographic Area Coordination Center Functional Responsibilities 383
Goal, Safety and Risk Management 160
GPS Datum and Coordinate Format Standard (BLM) 71
GPS Datum and Coordinate Format Standard (FWS) 111
Gross Vehicle Weight (GVW) 300
Ground Ignition Devices and Transporting/Dispensing Fuel 308
Guidance on the Selection of Coaches (FS) 126
Guiding Principles (BIA) 141
Guiding Principles of the Federal Wildland Fire Management Policy 1
Guiding Principles, Safety and Risk Management 159
Hand Crew Standards (all crew types), BLM 54
Hand Crew Standards by Type (BLM) 54
Hand Crews (BLM) 54
Hand Crews, Other 291
Hand Crews, Other, Policy 291
Hazard Pay/Environmental Differential for Prescribed Fire Implementation 351
Hazardous Duty Assignments on Federal Incidents, Minimum Age Requirements for 288
Hazardous Materials Exposure, Industrial and Naturally Occurring 178
Hazardous Materials Response 179
Head Protection 169
Health Screen Questionnaire (HSQ) 284
Hearing Protection 170
Helicopter Locations, BLM Exclusive Use 67
Helicopter Modules 288
Helicopters 343
Helitack 332
Helitack Crew Qualifications and Composition, Target Exclusive Use (BLM) 67
Helitack Crews, Exclusive Use (BLM) 66
Helitack, Communication 333
Helitack, Operational Procedures 333
Helitack, Organization – Crew Size 332
Helitack, Training and Experience Requirements 333
Helitack, Transportation 333
Homeland Security Act 202
Homeland Security Presidential Directive-5 202
Home-to-Work Transportation (BLM) 44
Honor Guard, Interagency Standards for Fire and Fire Aviation Operations 38
IHC Annual Crew Mobilization (BLM) 57
IHC Annual Crew Pre-Mobilization Process 290
IHC Availability Periods 290
IHC Certification 290
IHC Communications 291
IHC Decertification and Recertification (BLM) 57
IHC Locations (BLM) 56
IHC Organization 290

IHC Policy 289
IHC Readiness Review, Annual 290
IHC Size (BLM) 58
IHC Status Reporting System (BLM) 58
IHC Status Reporting System, National 291
IHC, Training and Qualification Requirements (BLM) 59
Incident Action Plan 251
Incident Business (BLM) 31
Incident Business Management 260
Incident Characteristics 236
Incident Characteristics, Type 1 238
Incident Characteristics, Type 2 238
Incident Characteristics, Type 3 236
Incident Characteristics, Type 4 236
Incident Characteristics, Type 5 236
Incident Command 234
Incident Command System (ICS) 233
Incident Command, Type 1 239
Incident Command, Type 2 238
Incident Command, Type 3 237
Incident History and Financial Records 251
Incident Management & Response 233
Incident Management Team Extensions 164
Incident Management Teams 239
Incident Management Teams and Other Non-Wildland Fire IMTs, All-Hazard 241
Incident Management Teams, Release of 252
Incident Management Teams, Type 1 240
Incident Management Teams, Type 2 241
Incident Operations Driving 166
Incident Qualification Card 278
Incident Qualification Card Expiration Dates 279
Incident Qualifications and Certification System (IQCS) 277
Incident Remote Automated Weather Stations 307
Incident Status Reporting 251
Incident, Managing the 248
Incident, Managing the, AA Representative Responsibilities 249
Incident, Managing the, Agency Administrator Responsibilities 248
Incident, Managing the, Resource Advisor Responsibilities 250
Incident, Managing the, Use of Trainees 251
Incidents/Accidents, Aircraft 324
Individual Fire Report (FWS) 109
Individual Fire Reviews 357
Information Resources, Aviation 320
Inherently Federal Activities (BIA) 141
Initial Attack (IA), Definition 7
Initial Response, Definition 7
Initial Response/Pre-planned Dispatch Plans 221
Interagency Coordination & Cooperation, Introduction 189
Interagency Fire Program Management Standards (BLM) 53
Interagency Hotshot Crews (IHC) 289

Interagency Hotshot Crews (IHCs) (BLM) 56
Interagency Incident Business Management Handbook 195
Interagency Severity Funding Request Procedures (BIA) 150
Interagency Standards for Fire and Fire Aviation Operations, Purpose 1
Interagency Standards for Fire and Fire Aviation Operations, Scope 1
Interior Fire Executive Council (IFEC) 193
International Disasters Support 209
International Non-Wildland Fire Coordination and Cooperation 209
International Wildland Fire Coordination and Cooperation 208
Invasive Species. Operational Guidelines for 273
Inventory Management 262
Inventory Management, Accountability 262
Inventory Management, Cache Returns and Restock Procedures 264
Inventory Management, Consumable Items 262
Inventory Management, Durable Items 262
Inventory Management, Fire Loss Tolerance Reporting for Type 1 and 2 Incidents 263
Inventory Management, Incident Management and Environmental Sustainability 263
Inventory Management, Incident Replacement of Government Property 264
Inventory Management, Incident Supply and Equipment Return Procedures 264
Inventory Management, Incident-to-Incident Transfer of Supplies and Equipment 263
Inventory Management, System Implementation 262
Inventory Management, Trackable Items 262
Inventory, Engine Equipment (BLM) 43
Investigation Processes 362
Investigation Types and Requirements 361
Investigations 359
Investigations, Federal Interagency 343, 353
Job Hazard Analysis (JHA)/Risk Assessment (RA) 160
Land/Resource Management Plan, Definition 213
Large Fire Cost Reviews (FS) 357
LCES – A System for Operational Safety 172
Leadership, Fire 9
Leadplane 337
Leg Protection 170
Length of Assignment 161, 162
Length of Assignment, Assignment Definition 161
Lighting 300
Lights and Siren Response (BLM) 45
Lights and Siren Response (NPS) 89
Line Officer Team (LOT) (NPS) 107
Local Caches, Type 4 262
Maintenance and Care Standards, Fire Equipment (BLM) 43
Maintenance, Repairs and Replacement, Vehicle (NPS) 89
Management Actions for emote Automated Weather Stations (RAWS) 224
Management Board (FMB) 192
Management Controls to Mitigate Exposure 167
Management Evaluation Report 368
Management Structure, National Wildland Fire 190
Maximum Consecutive Days Worked – Home Unit 164
Medical Examinations and Work Capacity Tests 281, 284

Medical Planning and Services, Emergency 173
Medical Services, Incident Emergency 174
Military or National Guard Helicopters and Pilots 344
Misconduct, Examples of (BLM) 14
Mission (BIA) 135
Mission Flights 327
Mobile Attack (Pump and Roll) 301
Mobile Fire Equipment Policy (BLM) 39
Mobile Fire Equipment, Introduction (BLM) 39
Mobilization and Demobilization 166
Mobilization Guide/Dispatch Operating Plan, Local 377
Mobilization Guides 377
Modification/Retrofitting, Equipment (BLM) 42
Modular Airborne Fire Fighting System (MAFFS) 344
Module Mobilization, Fire Suppression (BLM) 60
Multi-Agency Coordinating (GMAC) Groups, Geographic Area 194
Multi-Agency Coordinating (NMAC) Group, National 194
Multi-Agency Coordination (MAC) 242
Multi-Agency Management and Coordination 194
National Aviation Program (BIA) 154
National Fire Equipment Program (NFEP) (BLM) 39
National Fire Leadership Team (FWS) 106
National Fire Operations Fitness Challenge (NPS) 91
National Fire Prevention Education Teams 222
National Incident Management Organization (NIMO) 240
National Incident Management System 233
National Incident Management System (NIMS) 202
National Interagency Support Caches, Type 1 and 2 261
National Model 52 Wildland Engine Program (BIA) 153
National Model 52 Wildland Engine Program, Administration (BIA) 153
National Model 52 Wildland Engine Program, Emergency Repairs (BIA) 154
National Model 52 Wildland Engine Program, Mission/Policy (BIA) 153
National Model 52 Wildland Engine Program, Non-Emergency/Non-Suppression Repairs (BIA) 154
National Model 52 Wildland Engine Program, Organization (BIA) 153
National Model 52 Wildland Engine Program, Replacement Guidelines (BIA) 153
National Oil and Hazardous Substances Pollution Contingency Plan 204
National Program Preparedness/Readiness Reviews (BIA) 146
National Ready Reserve (NRR) 194, 378
National Response Framework 202, 233
National Wildfire Coordinating Group (NWCG) 193
National Wildland Significant Fire Potential Outlook 225
Neck Protection 170
NICC Functional Responsibilities 380
Non-Incident Operations Driving 166
Non-NFDRS Weather Stations (BIA) 144
Nonskid Surfaces 299
Non-Wildland Fire Incidents, Responding to 255
NWCG Relationship to BLM 15

NWCG Role in Support, Coordination, and All-Hazards Response by Wildland Fire Agencies 205
Objectives, Wildfire Management....6
Office of Wildland Fire (OWF)....193
One-Time Funding (BIA)....152
Operations, Nature of Fire....8
Ordering, Mobile Fire Equipment (BLM)....41
Organization and Responsibilities, Wildland Fire and Aviation Program (FS)....113
Organization and Responsibilities, Wildland Fire and Aviation Program, Introduction (FS)....113
Other Resources, Agency Planning Guidance....213
Performance Requirements for Fire Operations, Agency Administrator Management....74
Performance Requirements for Fire Operations, Fire Management Staff (FWS) .103
Performance Requirements for Fire Operations, Fire Management Staff (NPS)....81
Performance Requirements for Fire Operations, Fire Staff (BLM)....26
Performance Requirements for Fire Operations, Management (BLM) 23
Performance Requirements for Fire Operations, Management (FWS)....96
Personal Protective Equipment (PPE) 167
Personal Protective Equipment (PPE), Specialized or Non-Standard 171
Physical Fitness and Conditioning 287
Physical Fitness and Conditioning (FWS)....110
Physical Fitness Standards, BLM Firefighter Mandatory....52
Physical Fitness Standards, Firefighter Target (NPS) 91
Point-to-Point Flights 327
Policy and Guidance, Mobile Fire Equipment (BLM) 39
Policy, Fire Management Planning 211
Policy, Fuels Management 347
Policy, Safety and Risk Management....159
Positions, Requirements for Fire Management (NPS)....85
Post Incident Review (BLM) 25
Post-Katrina Emergency Management Reform Act 204
Post-Wildfire Activities....257
Predictive Service Areas 224
Predictive Services Fire Potential Outlooks and Advisories, National....225
Preparedness....215
Preparedness Level Plans 219
Preparedness Overview....215
Preparedness Planning 215
Preparedness Reviews....355
Preparedness, Fire 8
Preposition Funding, National (BLM) 48
Preposition Funding, State Discretionary (BLM)....49
Preposition Strategy, National, Fire Operations Group National (BLM) 46
Prescribed Fire During Preparedness Levels 4 and 5 350
Prescribed Fire Implementation, Use of Contractors for 352
Prescribed Fire Review (BIA)....158
Prescribed Fire, Definition 8
Prescribed Fire, Non-NWCG Agency Personnel Use on 276, 352
Preseason Agreements, Contracts and Operating Plans (BIA)....145
Procedures for One-Time Funding Submission (BIA)....152

Professional Liability Insurance Reimbursement, Qualification for....232
Program Budget Annual Appropriations (BIA) 152
Program Operational Standards (BIA) 142
Program Organization and Responsibilities, Introduction (FWS) 95
Program Organization and Responsibilities, Introduction (NPS) 73
Program Planning (BIA) 142
Program Preparedness (BIA)....145
Protection, Definition....8
Qualification and Certification Process....276
Qualifications and Qualifications Exceptions, Specific (NPS)....93
Qualifications, Non-NWCG Agency Personnel....276
Qualifications, Specific (FWS) 111
Radio Communications....309
Radio Support, Incident....313
Radio Systems....389
Ram-Air Parachute System Management (BLM) 63
Rappel and Cargo Let-Down, Helicopter....334
Reconnaissance or Patrol Flights....338
Records Management for Fire Reports (BIA) 143
Regional Directors (BIA)....138
Remote Area Weather Station, Management Actions for 224
Remote Area Weather Station, Noncompliance Report 224
Remote Automatic Weather Stations (RAWS), Management Actions for Noncompliant (BLM)....68
Reporting Planned Fuels Treatments Burned in a Wildfire....349
Request for Funding Authorization (BIA)....157
Resource Management Objectives, Reporting of Wildfire Acres That Meet 349
Respiratory Protection....170
Response to Wildfire, Definition....7
Responsibilities for Fire Operations, Specific Fire Management Staff, Field Level (FS) 127
Responsibilities for Fire Operations, Specific Fire Management Staff, Field Level, Preparedness (FS) 127
Responsibilities for Fire Operations, Specific Fire Management Staff, Field Level, Prescribed Fire (FS)....129
Responsibilities for Fire Operations, Specific Fire Management Staff, Field Level, Safety (FS)....129
Responsibilities for Fire Operations, Specific Fire Management Staff, Field Level, Wildfire Response, (FS) 128
Responsibilities, Agency Administrator (AA), (BLM) 21
Responsibilities, Aviation Division Chief (FA-500) (BLM)....19
Responsibilities, Budget and Evaluation Division Chief (FA-400) (BLM)....19
Responsibilities, Deputy Assistant Director, F&A (FA-100) (BLM)....15
Responsibilities, District Fire Management Officer (DFMO) (BLM)....22
Responsibilities, District Manager (DM) (BLM) 21
Responsibilities, Duty Officer (DO), NPS 87
Responsibilities, Equal Employment Opportunity Manager (EEO) (FA-102) (BLM)....17
Responsibilities, External Affairs Division Chief (FA-700) (BLM) 20
Responsibilities, Fire Duty Officer (FWS)....108
Responsibilities, Fire Operations Division Chief (FA-300) (BLM)....18

Responsibilities, Fire Planning and Fuels Management Division Chief (FA-600) (BLM) 20
Responsibilities, Operational Duty Officer (ODO), BLM....30
Responsibilities, Program Manager (BLM) 15
Responsibilities, Safety and Occupational Health Program (BLM) 33
Responsibilities, State and National Duty Officers (BLM) 31
Responsibilities, State Director (BLM) 21
Responsibilities, State Fire Management Officer (SFMO) (BLM)....21
Responsibilities, Support Services Division Chief (FA-200) (BLM) 17
Retardant, Long-Term 267
Retesting, Smokejumper Fitness (BLM) 66
Reviews 353
Reviews and Investigations 353
Reviews and Investigations, Introduction 353
Reviews and Investigations, Multiagency Cooperation....353
Risk and Complexity Assessment, Wildfire 234
Risk Assessment and Risk Management, Aviation 321
Risk Management Process 160
Risk Management Protocol (FS) 116
Risk Management, Wildland Fire Operations 8
Risk, Right to Refuse 172
SAFECOM 323
SAFENET 185
Safety and Health Responsibilities for the Fire Program (BLM) 33
Safety and Risk Management 159
Safety and Risk Management (BIA) 156
Safety and Risk Management, Introduction 159
Safety Assistance Team (SAT) Visits 356
Safety Briefing, Aviation 323
Safety Support, Aviation 322
Safety, Aerial Applications of Wildland Fire Chemical 323
Safety, Aviation 320
Safety, Fireline 172
Sage Grouse Conservation Related to Wildland Fire (BLM) 69
SAI 24- and 72-Hour Reports 367
SAI Final Report 368
SAI Team (SAIT) Composition 366
SAI, Agency Administrator Responsibilities 365
SAI, Designating the Investigation Team Lead....366
SAI, Fire Director Responsibilities 365
SAI, Notification 365
Seasonal Tracking, Local Unit 226
Security, Document and Computer 252
Serious Accident Investigation (SAI) Process, Wildland Fire....362
Severity Funded Personnel, Labor Cost Coding For Fire....231
Severity Funding Charges and Activities, Appropriate Fire....229
Severity Funding Charges, Inappropriate Fire....230
Severity Funding Requests, Sequence of Action and Responsible Parties for 231
Severity Funding Reviews 232
Severity Funding, Authorization 228

Severity Funding, Aviation 229
Severity Funding, Documentation 232
Severity Funding, Fire 227
Severity Funding, Interagency Severity Requests 230
Severity Funding, Labor 229
Severity Funding, National-Level (BLM) 48
Severity Funding, National-Level Fire 228
Severity Funding, Prevention Activities 230
Severity Funding, Requesting Fire 230
Severity Funding, Travel and Per Diem 229
Severity Funding, Typical Uses 227
Severity Funding, Vehicles and Equipment 229
Severity Funding. State/Regional-Level Fire 228
Sexual Harassment, Harassment Non-Sexual and Illegal Discrimination (BLM) 13
SFMP Map Set, Definition 214
Short-haul, Emergency Medical 335
Short-Term Severity (State-Level Severity) (BLM) 47
Significant Wildland Fire Reviews (DOI) 357
Single Engine Airtanker (SEAT) Operations, Procedures, and Safety 342
Single Engine Airtanker Manager Position 342
Single Engine Airtanker, Operational Procedures 342
Single Engine Airtankers 342
Single Resource/Kind Extensions 164
Smoke and Carbon Monoxide 172
Smokejumper (SMKJ) Operations (BLM) 63
Smokejumper Aircraft (BLM) 64
Smokejumper Communications 288
Smokejumper Coordination and Dispatch (BLM) 63
Smokejumper Jump Proficiency Guideline (BLM) 65
Smokejumper Medical Standards 289
Smokejumper Mission (BLM) 63
Smokejumper Physical Fitness Standards 289
Smokejumper Physical Fitness Standards (BLM) 65
Smokejumper Pilots 343
Smokejumper Policy 288
Smokejumper Target Qualifications 289
Smokejumper Training 288
Smokejumper Training (BLM) BLM 64
Smokejumpers (BLM) 63
Smokejumpers (SMKJ) 288
Spatial Fire Management Plan (SFMP) Mapsheet, Definition 214
Spatial Fire Management Plan (SFMP), Definition 214
Specific Line Officer Responsibilities for Fire and Aviation at the Field Level (FS) 118
Specific Line Officer, Fuels (FS) 121
Specific Line Officer, Preparedness (FS) 119
Specific Line Officer, Prescribed Fire (FS) 121
Specific Line Officer, Responsibilities (FS) 118
Specific Line Officer, Responsibilities and Oversight (FS) 120
Specific Line Officer, Safety (FS) 121
Specific Line Officer, Wildfire Response (FS) 119

Speed Limits 300
Staff Roles, Fire Management (FWS) 102
Staff Roles, Fire Management (NPS) 80
Staff Roles, Fire Management, Fire Director (FWS) 102
Staff Roles, Fire Management, National Office (FWS) 102
Staff Roles, Fire Management, National Office (NPS) 80
Staff Roles, Fire Management, Park (NPS) 80
Staff Roles, Fire Management, Refuge (FWS) 102
Staff Roles, Fire Management, Refuge, Zone Fire Management Officer (ZFMO) (FWS) 102
Staff Roles, Fire Management, Regional Office (FWS) 102
Staff Roles, Fire Management, Regional Office (NPS) 80
Staff Roles, Fire Management, Regional Office, Regional Fire Management Coordinator (RFMC) (FWS) 102
Staffing Level 220
Staffing Requirements, Minimum, Engine (BLM) 60
Stafford Act Disaster Relief and Emergency Assistance 201
Standards, Firefighter Training and Qualifications 275
Station Identifiers (BIA) 145
Step-up/Staffing Plans 220
Sterile Cockpit All Aircraft 329
Structural Fire and Hazardous Materials Response (NPS) 86
Structural Fire Response Requirements (Including Vehicle, Trash, and Dumpster Fires), NPS 86
Structure Exposure Protection Principles (FS) 130
Structure Exposure Protection Principles, Cost (FS) 133
Structure Exposure Protection Principles, Local Government Role (FS) 133
Structure Exposure Protection Principles, Mission and Role (FS) 130
Structure Exposure Protection Principles, Strategic Principles (FS) 131
Structure Exposure Protection Principles, Tactical Operating Principles (FS) 133
Structure Exposure Protection Principles, USFS Role (FS) 131
Structure, Vehicle, Dumpster, Trash, and Landfill Fires 256
Support Caches, Type 3 261
Suppression Activity (BIA) 150
Suppression Chemicals & Delivery Systems 267
Suppression Operations, Principles of 10
Suppression, Definition 7
Suppression, Fire 9
Training (FWS) 110
Training (NPS) 85
Training and Qualification Requirements, Engine (BLM) 61
Training and Workforce Development Program, Fire (BLM) 50
Training and Workforce Development, Fire (BLM) 50
Training for Fire Management Officers (NPS) 85
Training Requirements, BLM Firefighters General Non-Fire 51
Training Requirements, BLM Firefighters General Non-fire, Administratively Determined (AD) and Emergency Firefighters (EFF) 51
Training Requirements, BLM Firefighters General Non-fire, Agency Permanent, Career Seasonal, and Temporary Firefighters 51
Training Requirements, Firefighter General (FWS) 111

Training Requirements, Firefighter General, AD & EFF Required Training (FWS) 111
Training Requirements, Firefighter General, Agency Permanent, Career Seasonal, & Temporary Firefighters (FWS) 111
Training Requirements, NPS Firefighters General.....85
Training Requirements, Universal.....279
Training, Agency Administrator (FWS).....110
Training, Zone Fire Management Officer (FWS).....111
Transfer of Command 252
Transfer/Replacement, Property (BLM).....42
Transportation 291
Tribal Contracts/Compacts (BIA) 141
Tribal Disaster Assistance (BIA).....146
Tribal Support for Emergency Support Function (ESF) (BIA) 146
Typing, Engine (BLM).....60
U.S. – Australia/New Zealand Wildland Fire Arrangement.....209
U.S. – Canada, Reciprocal Forest Firefighting Arrangement.....209
U.S. – Mexico Cross Border Cooperation on Wildland Fires 208
U.S. Forest Service (FS), Agency Planning Guidance 212
Unified Command.....241
Uniform Standards, Wildland Fire 91
Unmanned Aircraft Systems 325
Unmanned Aircraft Systems, Key Points.....326
Vehicle Color and Marking (NPS).....88
Vests, High Visibility.....171
Vision and Objectives for Fire Management.....113
Water Enhancer (Gel).....268
Water Tender Qualifications and Staffing Standards 302
Waterway Buffer, Definition.....270
Waterway, Definition.....270
Weather Data in WIMS, Managing.....223
Weather Module in Wildland Fire Management Information (WFMI) (BIA) 145
Weather Station Naming Conventions (BIA).....144
Website, BLM Fire Operations 15
Wet Water 268
WFDSS Approval Authorities by Agency 246
WFDSS Decision Approval and Publication.....245
WFDSS, New Decision.....245
WFDSS, Support.....247
WFDSS, Use of (BLM).....71
WFDSS, Use of (FWS) 109
WFDSS, Use of (NPS).....93
WFDSS, Wildland Fire Decision Support System 243
WFM Availability Periods 294
WFM Organization 294
WFM Policy.....293
WFM Types and Certification.....294
Wildland Fire Decision Support System (WFDSS) (BIA).....157
Wildland Fire Executive Council (WFEC) 190
Wildland Fire Leadership Council (WFLC).....190
Wildland Fire Management Funding (BIA) 149

Wildland Fire Modules (BLM) 60
Wildland Fire Modules (WFM) 293
Wildland Fire, Definition 6
Wildland Urban Interface 255
Work Capacity Test – Retesting 286
Work Capacity Test (WCT) Administration 285
Work Capacity Test (WCT) Categories 284
Work Capacity Test Categories 284
Work/Rest 161
Working Capital Fund, Equipment, Acquisition of 41

2018 Interagency Standards for Fire and Fire Aviation Operations
Executive Summary of Changes

Chapter 1 – Federal Wildland Fire Management Policy Overview

- Clarified BLM-specific text regarding Response to Wildfire.

Chapter 2 – BLM

- Inserted heading "Sexual Harassment, Harassment Non-Sexual and Illegal Discrimination" and associated text.
- Clarified text under heading "National Wildfire Coordinating Group (NWCG) Relationship to BLM."
- Under heading "Program Manager Responsibilities," subheading "Assistant Director, Fire and Aviation (FA-100) Deputy Assistant Director, Fire and Aviation (FA-100)":
  - Removed text regarding the Large Fire Cost Review process and inserted responsibilities associated with the Significant Wildland Fire Review process.
  - Removed text regarding supervises the Fire Management Specialist (Veterans Initiatives) and Senior Fire Advisor (Sage-Grouse) positions.
- Inserted text under subheading "Fire Operations Division Chief (FA-300) regarding supervises the Fire Management Specialist (Veterans Initiatives) position.
- Clarified "Program Manager Responsibilities" for State Director, District Manager, State Fire Management Officer and District Fire Management Officer.
- Inserted text regarding "Program Manager Responsibilities" for Agency Administrator.
- Inserted or clarified text in the "Management Performance Requirements for Fire Operations" tables regarding Authority and Assigned Program Responsibility for State Director, District Manager, Agency Administrator, State Fire Management Officer and District Fire Management Officer.
- Inserted or clarified text in the "Fire Staff Performance Requirements for Fire Operations" table regarding Assigned Program Responsibility for State Fire Management Officer and District Fire Management Officer.
- Clarified text under subheading "Delegation for State Fire Management Officers (SFMO)."
- Changed subheading from "Delegation for District/Zone/Field Office Fire Management Officers (FMO)" to "Delegation for District Fire Management Officers (DFMO)" and clarified text.
- Inserted heading "Agreements with Cooperators (Rangeland Fire Protection Association (RFPA) and Local Fire Department" and associated text.
- Removed text in table "Safety and Health Responsibilities for the Fire Program," block 9, regarding reference to 1112-2, Manual, Wildland Fire Incident Management Field Guide and inserted DOI Occupational Safety and Health Program – Field Manual.
- Moved heading "Employee Conduct" with clarified text forward in the chapter.
- Removed text under heading "BLM Firefighters General Non-Fire Training Requirements" under table "Agency Permanent, Career Seasonal, and Temporary Firefighters" regarding for a complete listing of safety and health training, refer to the BLM Manual Handbook 1112-2, Safety and Health for Field Operations.
- Revised Type 2IA sawyer qualifications from 3-FAL3 to 1-FAL2 and 2-FAL3 in the "BLM Hand Crew Standards by Type" table.
- Inserted text in footnote 2 of table under subheading "BLM Engine Minimum Staffing Requirements" regarding WCF class 669 non-tactical water tender operators will pass the moderate WCT and take BL-300/RT-301.
- Clarified text under subheading "BLM Smokejumper Mission" regarding a smokejumper spotter may coordinate smokejumper operations with on-scene aircraft over a fire until a qualified ATGS arrives.
- Clarified text under subheading "BLM Smokejumper Coordination and Dispatch" regarding "one-load" is 8 smokejumpers.

- Removed text under subheading "BLM Ram-Air Parachute System Management" regarding smokejumper reporting of incidents/accidents on the Interagency Smokejumper Mission Incident Worksheet.
- Removed text in "BLM Exclusive Use Helicopter Locations" table regarding Boise, ID has one Type 2 helicopter and inserted one Type 1.
- Changed heading from "Sage Grouse Conservation Related to Wildland Fire" to "Sagebrush Rangeland and Sage-Grouse Conservation Related to Wildland Fire" and clarified text.
- Moved text regarding BLM use of the WFDSS to Chapter 11.

Chapter 3 – NPS

- Inserted heading "Employee Conduct" and associated text.
- Removed and/or inserted text in table under heading "Agency Administrator Management Performance Requirements for Fire Operations" regarding:
  - 4. NPS Director, Regional Director and Park Superintendent – Where applicable, an Inter-park Agreement that specifies the reciprocal responsibilities of the Superintendent and Park Group FMO assigned Duty Officer, will be prepared.
  - 5. Park Superintendent – Fire Management Plans do not expire. They are considered valid until superseded by a new or revised Superintendent approved plan. Ensure applicable park unit resource management objectives are included in the Fire Management Plan (FMP). The comprehensive 7-year review of the FMP is no longer required. Annual updates are required. Then newly established FMP Update Checklist must be completed, signed by the Superintendent and uploaded in the Integrated Resource Management Application (IRMA) under the established park unit name. The new checklist can be found at https://irma.nps.gov/DataStore/Collection/Profile/3868. Ensure the FMP annual update is completed in advance of the fire season. The regions will determine specific deadlines. If the annual review is not completed by your regional deadline, an interdisciplinary team may need to be assembled to determine if the FMP is still adequate to support the park unit fire management program.
  - 21. Regional Director and Park Superintendent – Ensure park superintendents who have potential wildland fire response in their park, their designated acting superintendents, and supervisors of FMOs attain and maintain Agency Administrator (AADM) qualification in the IQCS and attained within two years of appointment to positions listed above.
  - 24. Park Superintendent – For fires requiring WFDSS decision in Chapter 11, the park superintendent will ensure local unit staff specialists are involved in development and all decisions are consistent with objectives and requirements contained in the Park's Fire Management Plan.
  - 26. Park superintendents or other designated approving officials will maintain WFDSS user profiles (as appropriate), allowing them to approve wildfire decisions in WFDSS.
  - 30. Regional Director and Park Superintendent – Serve as the Management Official (MO) within the DOI Wildland Firefighter Medical Standards Program.
- Inserted or clarified text in table under heading "Fire Management Staff Performance Requirements for Fire Operations" regarding:
  - 17. RFMO and FMO – For all fires identified as requiring a WFDSS decision in Chapter 11, ensure local unit staff specialists are involved in the development and that all decisions are consistent with the objectives and requirements contained in the Park's Fire Management Plan.
  - 36. FAM Chief, RFMO and FMO – Ensures compliance with DOI Wildland Firefighter Medical Standards processes to include Risk Mitigation/Waiver processes.
- Removed subheading "Training for Park Superintendents" and associated text.
- Clarified "Training for Fire Management Officers" is *Fire Program Management – An Overview* (M-581).
- Updated "Engine Operating Standards" Sharepoint site.
- Inserted text in table and table footnote under subheading "Engine Module Standards" regarding tactical water tender.
- Moved text associated with "NPS use of WFDSS" to Chapter 11.

- Clarified text under heading "National Park Service Specific Qualifications and Qualifications Exceptions" regarding park superintendents who have potential wildland fire response in their park, their designated acting superintendents, and supervisors of fire management officers (FMOs) must attain and maintain the Agency Administrator (AADM) qualification in the Incident Qualifications and Certification System (IQCS). The qualification must be attained within two years of appointment to the positions listed above. Requirements for the AADM qualification may be found in the *Federal Wildland Fire Qualifications Supplement* hosted at https://www.nwcg.gov/publications/310-1.

Chapter 4 – FWS

- Inserted or clarified text in table under subheading "Management Performance Requirements for Fire Operations" regarding:
  - 5. Project Leader/Refuge Manager will provide a written Delegation of Authority to Zone Fire Management Officer (ZFMOs) giving an adequate level of operational authority. When applicable, develop an Inter-refuge Agreement specifying reciprocal responsibilities of the Project Leader/Refuge Manager and the Zone FMO.
  - 7. FWS Director, Regional Director, Regional Chief/Refuge Supervisor, Project Leader/Refuge Manager – Ensure investigations and reviews are conducted for incidents, accidents, escaped prescribed fires, and near misses as described in Chapter 17 of *Fire Management Handbook* and Chapter 18 of the *Interagency Standards for Fire and Fire Aviation Operations*.
  - 16. Project Leader/Refuge Manager will personally visit at least one wildland fire each year.
- Inserted new heading "Line Officer Team (LOT)" and associated text.
- Clarified text under heading "Fire Duty Officer" regarding FDOs will not fill Incident Command System (ICS) functions. If the FDO needs to fulfil an ICS function, they must re-assign the FDO duties.
- Inserted or clarified text under subheading "Agency Administrator Training" regarding:
  - Refuge Managers/Project Leaders with Service lands under their jurisdiction which require the development and maintenance of a Fire Management Plan must attend *Fire Program Management – An Overview* (M-581)), or may upon concurrence of the RFMC, attend the *Prescribed Fire Workshop for Agency Administrators* offered by the National Interagency Prescribed Fire Training Center.
  - Projects leaders/refuge managers who oversee or have the potential to oversee complex fire management programs should consult with their RFMC about attending *Fire Program Management – Leading Complex Programs* (M-582).
  - Field supervisors who may approve prescribed fire plans must attend *Fire Program Management – An Overview* (M-581), or may upon concurrence of the RFMC, attend the *Prescribed Fire Workshop for Agency Administrators* offered by the National Interagency Prescribed Fire Training Center.
- Clarified text under subheading "Zone Fire Management Officer Training" regarding all ZFMOs are required to attend M-581, *Fire Program Management – An Overview* course, either as a student or as a member of the instructor cadre. If attending as an instructor, the ZFMO must be present for the entire course. See IFPM requirements.
- Clarified text in table under subheading "FWS Firefighter General Training Requirements" for Agency Permanent, Career Seasonal, and Temporary Firefighters regarding Recurring Training for A-100, Basic Aviation Safety, is every two years.
- Clarified text under subheading "FWS Firefighter General Training Requirements" regarding AD and EFF are required to take defensive driving training every three years.

Chapter 5 – FS

- Reorganized the chapter as follows: Introduction, Vision and Objectives for Fire Management, Foundational Doctrine, Risk Management Protocol, Line Officer Responsibilities for Fire and Aviation at the Field Level, Agency Administrator Roles and Responsibilities for Incident Management, Specific Fire Management Staff Responsibilities for Fire Operations at the Field Level, Structure Exposure Protection Principles.

- Inserted heading "Vision and Objectives for Fire Management" and associated text.
- Clarified and inserted text under heading "Foundational Doctrine."
- Changed subheading "Risk Management Framework" to heading "Risk Management Protocol."
- Changed heading from "Specific Agency Administrator Responsibilities for Fire and Aviation at the Field Level" to "Specific Line Officer Responsibilities for Fire and Aviation at the Field Level."
- Under heading "Specific Line Officer Responsibilities for Fire and Aviation at the Field Level":
    - Preparedness – removed, "Identify resource management objectives to maintain a current Fire Management Plan (FMP) that identifies an accurate level of funding for personnel and equipment."
    - Preparedness – Inserted, "Ensure the plans contained in the Fire Management Reference System (FMRS) are based on resource objectives found in the LRMP."
    - Preparedness – Inserted, "Ensure budget requests and allocations reflect preparedness requirements from the program of work and support objectives from the LRMP."
    - Wildfire Response – Clarified that WFDSS will be used to approve and publish decisions on all fires. See Chapter 11 for the fire criteria that require a published decision.
    - Responsibilities and Oversight – clarified that line officers are responsible for all aspects of fire management.
    - Fuels – Inserted, "Plan and implement a hazardous fuels management and prescribed fire program applying principles and policy elements described in FSM 5100 and 5140 and guided by the goals described in the National Cohesive Wildland Fire Strategy."
    - Prescribed Fire – Removed, "Adhere to procedures for Regional and/or National level approvals for new and continued prescribed fire activities at national Preparedness Levels 4 and 5 as described in the *National Interagency Mobilization Guide*.
    - Prescribed Fire – Inserted, "Review and approve Prescribed Fire Plans."
    - Prescribed Fire – Clarified if more than one year has elapsed since a prescribed fire plan was last approved, the plan will be reviewed, updated as necessary, and re-approved before implementation.
    - Prescribed Fire – Inserted, "Authorize ignition of prescribed fire as delegated and adhere to procedures as described in 5140 for Regional and/or National level approvals for initiation of new and continued prescribed fire activities at National Preparedness levels 4 and 5 or when forecast National Fire Danger Rating System adjective ratings are at "Extreme" category. Report all instances of prescribed fires resulting in a wildfire declaration and/or air quality Notice-of-Violation as required in FSM 5140."
- Inserted or clarified text under heading "Agency Administrator Roles and Responsibilities for Incident Management" regarding:
    - Use the Learning Action Plan and Pathways Chart located in the *Line Officer Desk Reference for Fire Program Management* at https://wfmrda.nwcg.gov.
    - Training for "Working Level" is M-581 *Fire Program Management – An Overview*; or M-582 *Fire Program Management – Leading Complex Programs.*
    - Training for "Journey Level" is M-581 *Fire Program Management – An Overview*; or M-582 *Fire Program Management – Leading Complex Programs.*
    - Training for "Advanced Level" is M-582 *Fire Program Management – Leading Complex Programs.*
    - The purpose of the Learning Action Plan is to provide consistency for the Agency Administrator Coach/Evaluator to evaluate trainees and document their demonstrated abilities to achieve the core competencies, which will be used as a component to achieve the next level certification.
    - Every trainee will complete a Learning Action Plan for evaluation from an Agency Administrator/Agency Administrator Representative or coach using the Learning Action Plan form as identified in the *Line Officer Desk Reference for Fire Program Management*.
- Clarified and inserted text under heading "Specific Fire Management Staff Responsibilities for Fire Operations at the Field Level" regarding:

- Preparedness – Develop, maintain, and annually evaluate both the FMRS and Spatial Fire Planning in WFDSS to ensure accuracy and validity.
- Preparedness – Ensure budget requests and allocations reflect preparedness requirements from the program of work and support objectives from the LRMP.
- Inserted subheading "Fire and Aviation Management (FAM) Duty Officer" and associated text.

Chapter 6 – BIA

- Inserted or clarified text under heading "Agency Administrator's Roles" regarding:
  - Director, Bureau of Indian Affairs
    - Adopts and establishes wildfire prevention policies to protect Indian Lands and Indian natural resources from human-caused wildfires.
    - Ensures compliance and capacity to comply with statutes, regulations, IA policy, and Department of the Interior (DOI) policy applicable to the prevention of human-caused wildfires on Indian Lands.
  - Director, Office of Trust Services
    - Reviews and recommends national wildfire prevention policy for Indian Country.
    - Coordinates wildfire prevention activities among and between Office of Trust Services programs.
    - Coordinates with Division Directors to ensure consistent implementation of wildfire prevention policies.
  - Branch Chief, Wildland Fire Management
    - Oversees prevention policy development and evaluates impacts on other wildland fire programs.
    - Provides policy and procedural guidance to Regional Directors to achieve wildland fire prevention and education objectives.
    - Develops policies and standards for firefighter safety, equipment and training for the prevention, investigation, suppression and use of wildland fires on Indian trust and restricted lands.
  - Regional Directors
    - Ensures that wildfire prevention needs are met.
    - Ensures that activities and/or plans reflect a commitment to firefighter and public safety and the reduction of property loss.
    - Integrates wildland fire prevention program evaluations into fire readiness reviews conducted at Tribal and agency locations.
    - Ensures prevention needs are included in national long-term severity requests.
    - Oversees wildland fire prevention management programs within the region.
    - Develops regional directives for standards and additional procedural policy, as needed, for wildland fire prevention planning, operational implementation, evaluation and fiscal accountability.
    - Approves and certifies that agency and Tribal WFPP's meet or exceed the IA policy requirements for wildfire prevention.
    - Coordinates with the Office of Justice Services (OJS) Special Agent in Charge when criminal activity associated with wildfires occurs on Indian Lands.
  - Agency Superintendent (unless excepted in regional directives)
    - Manages personnel to ensure that prevention goals and objectives are being achieved.
    - Ensures that all escaped prescribed fire or any prescribed fire that results in resource or property damage are reviewed or investigated.
    - Ensures established wildfire investigation procedures and guidance are followed.
    - Coordinates with appropriate law enforcement agency when wildfire crimes are suspected and/or detected.
    - Coordinate the development of Published Decisions within WFDSS for all fires identified as requiring a decision and consistent with authority identified in Chapter 11.

    - Use prevention funding to implement the wildfire prevention actions in the agency or Tribal WFPP; ensuring that carryover is held to below the one-half of one percent.
- Changed subheading "Fire Weather" to "Fire Weather/RAWS" and inserted or clarified RAWS information.
- Inserted subheading "Weather Module in Wildland Fire Management Information (WFMI)" and associated text.
- Changed heading from "Program Preparedness/Readiness Reviews" to "Program Preparedness."
- Changed heading from "National Program Preparedness" to "National Program Preparedness/Readiness Reviews."
- Inserted subheading "Interagency Severity Funding Request Procedures" and associated text.
- Removed text under heading "Wildland Fire Decision Support System (WFDSS)" and inserted BIA follows interagency policy regarding use of WFDSS found in Chapter 11.
- Inserted subheading "Prescribed Fire Review" and associated text.

Chapter 7 – Safety and Risk Management

- Removed BLM-specific text under heading "Policy" regarding agency-specific safety policy document 1112-2 and inserted DOI Occupational Safety and Health Program – Field Manual.
- Clarified BLM, NPS, FWS and BIA-specific text under heading "Driving Standard" regarding employees under the age of 21 that possess a CDL may operate wildland fire vehicles under the following conditions:
    - Drivers under the age of 21 with a CDL may only drive within the state that issued the CDL and must comply with that state's special requirements and endorsement; and
    - Supervisors must annually establish and document that those drivers have a valid driver's license (i.e., that the license has not been suspended, revoked, canceled, or that he/she has not been otherwise disqualified from holding a license (485 DM 16.3D (1)), have the ability to operate the vehicle(s) safely in the operational environment assigned (485 DM 16.3B (2)), and review and validate the employee's driving record (485 DM 16.3D (4)).
- Under heading "Personal Protective Equipment (PPE)" regarding:
    - Required Fireline PPE – Inserted yellow is the recommended color for NFPA 1977 compliant long-sleeved flame resistant shirt.
    - Required Fireline PPE – Inserted flame resistant flight gloves or NFPA 1977 compliant Driving Gloves can be used by heavy equipment operators, drivers and fireline supervisors when not using fireline hand tools.
    - Wildland Fire Boot Standard – Clarified that the 8-inch height requirement is measured from the bottom of the boot's heel to the top of the boot.
    - Head Protection – Inserted BLM-specific text regrading helmets and hats used for protection from impact of falling and flying objects and from limited electric shock and burn must meet the specifications of American National Standards Institute Z89.1-2009. Equivalent hardhat meeting ANSI Z89.1-2009 Type 1, Class G or NFPA 1977.
    - Head Protection – Clarified that helmets consist of the shell and the suspension, which work together as a system. Both components require frequent inspection and maintenance. Detailed helmet inspection procedures and helmet service life can be found at https://www.nwcg.gov/committees/equipment-technology-committee/resources.
- Removed reference to NWCG memorandum EB-M-14-001 under subheading "Incident Medical Emergency Management Planning."
- Removed text under subheading "Incident Emergency Medical Services" regarding Interim NWCG Minimum Standards for Medical Units and inserted website for NWCG Incident Emergency Medical Subcommittee.
- Inserted text under subheading "Incident Emergency Medical Services" regarding home units that choose to utilize and support higher level medical responders to provide medical support for internal agency medical emergencies (beyond basic first aid/CPR) may do so; however, certification and credentialing must follow respective state laws and protocols unless there is other agency direction.

- Inserted or clarified text under heading "Required Treatment for Burn Injuries" regarding:
  - Special consideration should be given to referring a burned firefighter to a burn center if there is poor pain control during care at the medical facility.
  - ABA Burn Injury Criteria – Burn injury in someone who will require special social, emotional or rehabilitative intervention (PTSD, severe anxiety, etc.).
  - Percentage Total Body Surface Area (TBSA) – Rule of 9s (pictures included) or Rule of Palms.
  - Rule of 9s defined: The body is divided into sections of 9 percent, or multiples of 9 percent, each as per the drawing.
  - Rule of Palms defined: Patient's palm equals 1% of their body surface. Estimate how many times the patient's palm could be placed over the burned areas to estimate the percentage of body that has been burned.
  - A map and search engine of burn care facilities can be found at http://ameriburn.org/public-resources/find-a-burn-center/.
- Clarified FS-specific text under heading "Accident/Injury Reporting," subheading "Agency Reporting Requirements" regarding employees will use the eSafety system through the Forest Service Dashboard at http://fsweb.asc.fs.fed.us/HRM/owcp/WorkersComp_index.php//.
- Clarified BIA-specific text under heading "Accident/Injury Reporting," subheading "Agency Reporting Requirements" regarding in addition to reporting accidents using the Safety Management Information System (SMIS), Fire Management Officers will complete the Early Alert at https://www.bia.gov/bia/ots/dfwfm/bwfm/safety, and submit to Regional Fire Management Officers within 24 hours after the accident/injury.

Chapter 8 – Interagency Coordination and Cooperation

- Inserted BLM-specific text under heading "Elements of an Agreement" regarding refer to Chapter 2, Agreements with Cooperators (Rangeland Fire Protection Association (RFPA) and Local Fire Department).
- Removed text under heading "Annual Operating Plans (AOPs)," subheading "General Elements of an Annual Operating Plan," bullet "Qualifications/Minimum Requirements" regarding NWCG memorandum *Qualification Standards During Initial Action, March 22, 2004* and inserted that the PMS 310-1 outlines the minimum requirements for training, experience, physical fitness level, and currency standards for wildland fire positions, which all participating agencies have agreed to meet for national mobilization.

Chapter 9 – Fire Management Planning
No substantial changes.

Chapter 10 – Preparedness

- Changed heading from "Fire Danger Operating Plan Rating" to "Fire Danger Operating Plan."
- Clarified or inserted text under heading "Fire Prevention/Mitigation Plans."
- Removed BLM-specific text under heading "Fire Prevention/Mitigation Plans" referencing the BLM Wildland Fire Prevention, Education and Mitigation Planning Guide available at https://www.blm.gov/nifc/st/en/prog/fire/fuelsmgmt/fire_prevention_and.html.
- Inserted subheading "National Fire Prevention Education Teams" and associated text.
- Clarified BLM-specific text under heading "Fire Danger PocketCard for Firefighter Safety" regarding all units will develop, maintain and ensure PocketCards are available to all personnel. Alaska is required to complete a Seasonal Trend Analysis in lieu of PocketCards. Final approval for PocketCards and Seasonal Trend Analyses will be obtained from the BLM representative to the NWCG Fire Danger Subcommittee (current contact information available at https://www.nwcg.gov/committees/fire-danger-subcommittee/roster).
- Clarified NPS-specific text under subheading "National-Level Fire Severity Funding" regarding National office approves all single or cumulative requests exceeding $100,000.

Chapter 11 – Incident Management and Response

- Inserted text under heading "Incident Management Teams," subheading "Area Command" regarding see Appendix O for Area Command (AC) Complexity Assessment.
- Consolidated all agency's direction for WFDSS under heading "Wildland Fire Decision Support System (WFDSS)" and inserted or clarified text.
- Changed subheading from "WFDSS Approval Requirements by Agency" to "WFDSS Approval Authorities by Agency" and clarified text.
- Changed table heading from "DOI WFDSS Approval Requirements (outside of Alaska)" to "DOI WFDSS Approval Authorities (outside of Alaska)."
- Clarified BLM-specific text in the "DOI WFDSS Approval Authorities (outside of Alaska)" table that WFDSS approval authority is with the BLM District Manager.
- Clarified NPS-specific text in the "DOI WFDSS Approval Authorities (outside of Alaska)" table that WFDSS approval authority is with the NPS Park Superintendent.
- Clarified footnote specific to NPS, FWS and BIA under table "DOI WFDSS Approval Authorities (outside of Alaska)" regarding cost estimate should be based on estimated final cost of the incident.
- Inserted BLM and NPS-specific footnote below table "DOI WFDSS Approval Authorities (outside of Alaska)" regarding cost notification requirements.
- Changed table heading from "USFS WFDSS Approval Requirements" to "USFS WFDSS Approval Authorities."
- Inserted table heading "DOI WFDSS Approval Process in Alaska" and associated table and text.
- Removed reference throughout the chapter regarding "IBA" and inserted "INBA."
- Removed text under subheading "Release of Incident Management Teams" regarding transition plan and inserted Transfer of Command Plan.
- Removed text under heading "Post-Wildfire Activities" regarding 620 DM 3 and inserted 620 DM 7.
- Clarified text under heading "Post-Wildfire Activities" regarding Rehabilitation – Efforts taken within five years following 21 days after the ignition date of a wildfire to repair or improve wildfire-damaged lands unlikely to recover naturally to management approved conditions, or to repair or replace minor assets damaged by wildfire. These efforts are documented in:
  - DOI – a separate Burned Area Rehabilitation Plan (BAR) or in combination with Burned Area Emergency Response Plan (BAER).
  - FS – a Burned Area Emergency Response Plan (BAER).
- Changed subheading from "Large Fire Cost Reviews" to "Large Fire Cost Review (FS)" and removed associated text. See Chapter 18 for Forest Service Large Fire Cost Review information.
- Inserted subheading "Significant Wildland Fire Review (DOI)." See Chapter 18 for information.

Chapter 12 – Suppression Chemicals and Delivery Systems

- Clarified text under heading "Endangered Species Act (ESA) Emergency Consultation" regarding procedures for emergency consultation are described in the *USFWS Endangered Species Consultation Handbook*, Chapter 8 (March, 1998).

Chapter 13 – Firefighter Training and Qualifications

- Inserted FS-specific text under heading "Medical Examinations" regarding see the USFS WCT Implementation Guide at www.fs.fed.us/fire/safety/wct/wct_index.html as well as the eMedical website at https://www.fs.fed.us/fire/safety/wct/MQP.index.html.
- Clarified text under subheading "Medical Exam Process for Light and Moderate Fitness Levels" regarding if any qualifying answer is indicated on the HSQ, a medical examination is required prior to the employee taking the WCT.
- Inserted FS-specific text under subheading "Medical Exam Process for Light and Moderate Fitness Levels" regarding medical exams will be paid from a Washington Office fund code.

Additional specialized testing other than the tests listed on the OF-178 will not be covered by the Forest Service.

- Clarified the approved OMB Health Screen Questionnaire (HSQ) may be found at https://www.fs.fed.us/fire/safety/wct/FS_5100_31%20exp2019_2.pdf.
- Inserted FS-specific text under subheading "Health Screen Questionnaire (HSQ)" regarding HSQ's are NOT to be done at the WCT site. They are to be completed at least 4 weeks before taking the WCT unless in an emergency hire situation. Further direction can be found in the USFS WCT Implementation Guide at www.fs.fed.us/fire/safety/wct/wct_index.html.
- Removed text under subheading "Work Capacity Test (WCT) Administration" regarding WCT Record available online as Appendix O. The WCT Record is only available online and is now Appendix Q. https://www.nifc.gov/policies/pol_ref_redbook.html
- Inserted FS-specific text under subheading "Work Capacity Test (WCT) Administration" regarding failed or not completed WCT attempts are to be entered into the eMedical system by the HSQ Coordinator.
- Inserted BIA to bullets under heading "Chainsaw Operators and Fallers" regarding use of NWCG position task books is required, and individual tasks required for completion of the FAL1 PTB must be evaluated by a qualified FAL1. The Final Evaluator's Verification for a FAL1 trainee must be completed by a qualified FAL1.
- Removed and clarified BIA-specific text under heading "Chainsaw Operators and Fallers."

Chapter 14 – Firefighting Equipment

- Inserted text under subheadings "Engine Typing" and "Water Tender Typing" referencing that engine and water tender typing and respective standards have been established by NWCG (reference the *Wildland Fire Incident Management Field Guide* (PMS 210), Chapter 4.
- Clarified "Fire Engine Staffing" for Type 4, 5, 6, and 7 engines regarding minimum staffing is two individuals, one of which is Engine Boss qualified.
- Removed FWS-specific text under subheading "Fire Engine Staffing" regarding minimum staffing for Type 6 and 7 engines (on Refuge lands) is one ENOP and one FFT2. A minimum of one ICT5 must be available on the engine crew.
- Clarified BLM-specific text regarding Water Tender (Non-Tactical) to refer to the *Federal Wildland Fire Qualifications Supplement*.
- Inserted or clarified NPS and FWS-specific text under subheading "Water Tender Qualifications and Staffing Standards," bullet "Water Tender (Tactical)" regarding Qualifications is ENGB and CDL (tank endorsement) and Staffing is one ENGB and one FFT2.
- Deleted, inserted or clarified text under heading "All-Terrain Vehicles (ATV)/Utility Terrain Vehicles (UTV)" regarding:
    - BLM-specific – Personnel will not use ATVs for any wildland fire management activity including preparedness, suppression, prescribed fire, hazardous fuels reduction, post-fire rehabilitation, and emergency stabilization and restoration, regardless of incident jurisdiction or project/activity location after January 1, 2018. Employees of cooperating agencies/entities may utilize ATVs on BLM incidents if allowed by their individual agency/entity policy.
    - BIA-specific – Effective immediately, all BIA programs will cease the procurement of ATVs used for wildland fire management activities (including preparedness, suppression, prescribed fire, hazardous fuels reduction, post-fire rehabilitation, and emergency stabilization and restoration). Any ATV currently in service may continue to be utilized for non-industrial wildland fire management activities/operations until January 1, 2019. After this date, BIA personnel will not utilize ATVs for any wildland fire management activities, regardless of incident jurisdiction or project/activity location.
    - BIA-specific – Programs may continue to procure and utilize other commercially available utility terrain vehicles (UTVs), provided the vehicle has manufactured-installed seat belts, a steering wheel, is a multi-seat or newly available single-seat model (e.g., Polaris Ace) and is equipped with a certified roll-over protection structure (ROPS) designed and installed by the original equipment manufacturer as standard equipment.

  - BLM-specific – Upon completion of agency-specific UTV training and operator certification requirements, Utility-Terrain Vehicle Operator (UTVO) will be placed on the employee's Incident Qualification and Certification (IQCS) Card (Red Card). IQCS Certifying Officials are responsible for verifying that UTV operator qualifications are current, and that the UTVO qualification is removed from the Red Card if agency-specific training, certification, or currency requirements lapse.
  - BIA-specific – Upon completion of agency-specific ATV/UTV training and operator certification requirements, All-Terrain Vehicle Operator (ATVO) will be placed on the employee's Incident Qualification and Certification (IQCS) Card (Red Card). IQCS Certifying Officials are responsible for verifying that ATV/UTV operator qualifications are current, and that the ATVO qualification is removed from the Red Card if agency-specific training, certification, or currency requirements lapse.
  - Required PPE –
    - ATV helmets must meet Snell SA2010, SA2015, or DOT certification. A ¾ face model meeting Snell SA2010, SA2015 certification is acceptable for use.
    - UTV helmets must meet DOT, ANSI Z90.1; or Snell SA2010, SA2015 certification unless certain conditions apply.
      - BLM-specific - A hard hat meeting NFPA 1977 or ANSI Z 89.1 2009 Type 1, Class G standards may be worn with chin straps secured in place under chin.
    - If operating ATV/UTV on the fireline, leather or leather/flame resistant combination gloves are required. Flame resistant flight gloves or NFPA 1977 compliant Driving Gloves can be used by heavy equipment operators, drivers and fireline supervisors when not using fireline hand tools.
    - Yellow is the recommended color for NFPA 1977 compliant long-sleeved flame resistant shirt.
    - BLM-specific – Removed BLM reference to Instruction Memorandum No. FA-IM-2016-022, *Procurement and Use of All-Terrain Vehicles (ATVs) by the Fire Program*.
- Moved BLM-specific text regarding a 10 lb. class BC fire extinguisher for UTVs equipped with a ground ignition device up under heading "Ground Ignition Devices and Transporting/Dispensing Fuel."
- Inserted text under heading "Ground Ignition Devices and Transporting/Dispensing Fuel" regarding for transporting and dispensing fuel, follow the *Interagency Transportation Guide for Gasoline, Mixed Gas, Drip-Torch Fuel, and Diesel* (PMS 442) or agency-specific guidance.

Chapter 15 – Communications

- Clarified text under subheading "National Air Guard Frequency (168.6250 MHz)" regarding a Continuous Tone Coded Squelch System (CTCSS) tone of 110.9 Hz must be used when transmitting on the National Air Guard Frequency.
- Clarified text under subheading "National Flight Following Frequency (168.6500 MHz)" regarding a CTCSS tone of 110.9 must be used when transmitting and receiving on the National Flight Following frequency.
- Clarified text under subheading "Smokejumper and Rappel/RADS Air-to-Ground Frequency (168.550 MHz)" regarding a CTCSS tone must be used when transmitting and receiving on the Smokejumper and Rappel/RADS Air-to-Ground Frequency. Smokejumpers use CTCSS tone 123.0; Rappel/RADS crews use CTCSS tone 110.9.
- Removed or inserted text under subheading "National Interagency Fire Tactical Frequencies (168.0500 MHz, 168.200 MHz, 168.6000 MHz, 168.2500 MHz, 166.7250 MHz, 166.7750 MHz)" regarding these frequencies are approved for ground tactical operations (line of sight) on incidents. Maximum transmitter output is 5 watts. Permission to use these frequencies requires prior approval from the NIFC CDO (or COMC when mobilized).
  - Not authorized for:
    - Air-to-air communications;
    - Air-to-ground communications; or
    - Radio transmitter power output more than 5 watts.

Chapter 16 – Aviation Operations and Resources

- Removed text "Lead/ATCO" and inserted "Leadplane" throughout the chapter.
- Removed or inserted text under heading "Unmanned Aircraft Systems" and subheading "Key Points." Unmanned Aircraft Systems (UAS) operations shall be conducted under the provisions of the *Interagency Fire Unmanned Aircraft Systems Operations Guide* (PMS 515).
- Inserted text under subheading "Interim Flight and Duty Limitations Implementation" Phase 1 regarding two days off within any 14-day period.
- Removed text under heading "Aviation Assets" regarding "Lead" and inserted HLCO and Leadplane to the list of typical agency aviation assets.
- Changed heading from "Aerial Supervision Principles for ATGS, ASM and Lead" to "Aerial Supervision Principles for ATGS, HLCO, ASM and Leadplane."
- Removed text regarding Lead/ATCO throughout the chapter and inserted Leadplane qualified pilot (LEDP) and Air Tactical Supervisor (AITS).
- Inserted text under heading "Airtankers" regarding early-ups for large fire support can have a significant effect on the resource availability late in the day. NICC must be included in this discussion. The rationale for use of airtankers prior to normal start times for large fire support must include obtainable incident objectives in support of ground resources.
- Clarified text under subheading "Airtanker Types" regarding Very Large Air Tanker (VLAT) load capacity is 5,000 gallons or more and Type 1 load capacity is 3,000 to 5,000 gallons.
- Inserted heading "Airtanker Payloads" and associated text.
- Clarified text under heading "Airtanker Base Operations," subheading "Loading Operations" that Forest Service contracted airtankers, owned airtankers and Modular Airborne Firefighting System (MAFFS) airtankers shall be loaded using a Mass Flow Meter to measure the payload in pounds.
- Inserted heading "Helicopters" and associated text.

Chapter 17 – Fuels Management

- Changed heading from "Regarding Planned Fuels Treatments Burned in a Wildfire" to "Reporting Planned Fuels Treatments Burned in a Wildfire."
- Removed text referencing "DOI agencies" under heading "Reporting Planned Fuels Treatments Burned in a Wildfire" and inserted "NPS and FWS" regarding acres burned in a wildfire may only be reported in the NFPORS Hazardous Fuels Reduction Module as "Fire Use" if certain conditions are met.
- Inserted BLM-specific text under heading "Reporting Planned Fuels Treatments Burned in a Wildfire" regarding offices will report (using instructions from Attachment 1 of IM FA-2017-034) all acres burned in a naturally-caused wildfire (accomplishments of resource objectives for known human-caused fires will not be reported) that accomplish resource objectives in the HFR module of NFPORS when an interdisciplinary team approach is used to determine the specific burned acres where LUP resource objectives were met by wildfire; and an Agency Administrator approves the determination and notifies the State Fuels Lead/Specialist. Together they ensure appropriate reporting in NFPORS.
- Removed, inserted or clarified text under heading "Prescribed Fire During Preparedness Levels 4 and 5" regarding:
  - FWS-specific – During Geographic Area Preparedness Level 4 or 5, written concurrence from RFMC is required prior to ignition. During National Preparedness Level 5, concurrence from Headquarters, Branch of Fire Management must be obtained prior to implementing prescribed fires. Refer to FMH, Chapter 17 for additional information.
  - FS-specific – The Regional Forester will approve or disapprove new prescribed fires or continue existing prescribed fire at National Preparedness Levels 4 and 5 or if National Fire Danger Rating System forecasted adjective rating is "Extreme" for the county that the prescribed fire is located or any adjacent county. Reference FSM Interim Directive WO-ID-5140-2017-1.
  - BIA-specific – National Preparedness Levels 4 and 5, prescribed fire (Rx) applications can be initiated or continued if the proposed action is approved by an agency at the

Regional level. The approval must be based on an assessment of risk, impacts of the proposed actions on Area resources and activities, and include feedback from the GMAC. At National Preparedness Level 5, for Rx applications to be initiated or continued that require additional support of resources from outside the local unit or require resource ordering of an IMT, the Regional Fuels Specialist must prepare a written justification to request permission to implement a new prescribed fire and submit to the BIA Director of Fuels Management. A National MAC representative will assess risk and impacts of the proposed action(s) and present to NMAC for review prior to proceeding. The final decision to implement resides with the implementing agency.

- Inserted text under heading "Use of AD Pay Plan for Prescribed Fire" regarding the DOI AD Pay Plan does not allow for use of Casuals for mechanical or chemical treatment fuels reduction projects.

Chapter 18 – Reviews and Investigations

- Inserted text under heading "Reviews" regarding Large Fire Cost Reviews (FS) and Significant Wildland Fire Reviews (DOI).
- In table "Review Types and Requirements":
  - Clarified text regarding Large Fire Cost Review (FS) are conducted at Washington Office discretion and the Delegating or Authorizing Official is the Washington Office.
  - Inserted text regarding Significant Wildland Fire Review (DOI).
  - Inserted NPS and FS-specific text under "Lessons Learned Review" that FLA may be used.
- Clarified text under subheading "Large Fire Cost Reviews (FS)" regarding a Large Fire Cost Review may be conducted at the discretion of the Washington Office, at the request of the Regional Office, or when requested by multi-jurisdictional cooperators.
- Inserted subheading "Significant Wildland Fire Reviews (DOI)" and associated text.
  - BLM-specific – The Assistant Director, Fire and Aviation will initiate, facilitate, and provide oversight for the SWFR process. Upon determination of the need for a SWFR, the AD will coordinate with the appropriate state director and assemble a SWFR team, provide a Delegation of Authority, and initiate the SWFR using direction found at http://web.blm.gov/internal/fire/budget/Reports/Report_Menu_new.htm. The AD will provide briefings to the Bureau Director, as appropriate.
  - NPS-specific – Significant Wildland Fire Reviews (SWFR) will be conducted at Management discretion and the Delegating Official may be at the Local, Regional, or National level. See the Agency Administrator and Fire Management Performance Tables in Chapter 3 and the "Review Types and Requirements" table for further information.
- Inserted NPS-specific text under subheading "Lessons Learned Reviews (LLRs)" regarding Facilitated Learning Analysis (FLA) may be used for incidents meeting the AI criteria.
- Inserted FS-specific text under subheading "Lessons Learned Reviews (LLRs)" regarding Facilitated Learning Analysis (FLA) may be used for incidents meeting the AI criteria or if a CRP is not being utilized for an incident meeting SAI criteria. A guide for the FLA process is available at http://bit.ly/FLA_guide.
- Removed FS-specific text under subheading "Lessons Learned Reviews (LLRs)" regarding The Forest Service has combined the Accident Prevention Analysis (APA) with the Facilitated Learning Analysis (FLA). A guide for the FLA process is available at http://bit.ly/FLA_guide.
- Removed text under subheading "Rapid Lesson Sharing (RLS)" regarding, "…(usually within 24 hours)."
- Inserted BIA-specific text under subheading "Declared Wildfire Reviews" regarding refer *to Bureau of Indian Affairs Fuels Management Program Supplement to the Interagency Prescribed Fire Planning and Implementation Procedures Reference Guide* (December 2008), Chapter 3.
- Clarified text under subheading "Wildland Fire Incident and Accident Types and Definitions" regarding Fire Shelter Deployment definition which is the removing of a fire shelter from its case and unfolding it to use as protection against heat, smoke and burning embers.
- In table "Investigation Types and Requirements":

  - Inserted FS-specific text in row "Serious Wildland Fire Accident" and column "Investigation Types" regarding, "If CRP is not activated, then an FLA will be implemented using a Regional Delegation of Authority."
  - Inserted "Regional/State" in row "Entrapment/Burnover" and column "Management level that determines review type and authorizes review."
  - Inserted "Regional/State" in row "Fire Shelter Deployment" and column "Management level that determines review type and authorizes review."
  - Removed FS-specific text regarding FLAs are a type of Lessons Learned Review.
- Clarified text under heading "Wildland Fire Serious Accident Investigation (SAI) Process," subheading "Notification" that OSHA will be notified according to agency policy when an employee is killed on the job or suffers a work-related hospitalization, amputation, or loss of an eye. https://www.osha.gov/report.html. A fatality must be reported within **8 hours** and an in-patient hospitalization, amputation, or eye loss must be reported within **24 hours**.
- Removed BLM-specific text in table under heading "Related Policy Documents" regarding Manual 1112-2 and inserted DOI Occupational Safety and Health Program – Field Manual.

Chapter 19 – Dispatch and Coordination System

- Under heading "National Interagency Coordination Center (NICC) Functional Responsibilities," bullet "Management of National Aviation Resources":
  - Deleted text regarding Type 1 and 2 Call-When-Needed (CWN) helicopters and inserted Type 1 and 2 FS Exclusive Use/Call-When-Needed contracted helicopters.
  - Inserted text regarding GACCs hosting national Type 1 and 2 helicopters will coordinate with NICC prior to releasing flight crews for the day when those resources are not being used within the host area and could be utilized elsewhere for emerging or ongoing fire activity.
- Removed text under heading "Incident Emergency Management Planning" referencing Chapter 7 and NWCG Memorandum EB-M-14-001.

Appendices

- Appendix D – Removed IBA and inserted INBA in table under "Finance Section."
- Appendix G – Removed IBA and inserted INBA under subheading "Finance."
- Appendix I – Changed heading from "Interagency Incident Management Team Evaluation" to "Incident Management Team Performance Evaluation." Inserted text in block 10 regarding Large Fire Cost Review (FS)/Significant Wildland Fire Review (DOI).
- Appendix K
  - Changed heading from "Minimum Standards of Incident Emergency Medical Services" to "Recommendations for Incident Emergency Medical Services."
  - Removed the subheading "Interim NWCG Minimum Standards."
  - Removed table column heading "Incident Size" and inserted "Resources."
  - Inserted "People" to table columns containing "<250, 250 to 500, and >500.
  - In the "**NOTE**," removed "guidelines" and inserted "recommendations."
- Appendix N
  - Inserted text under heading "WFDSS Account Information" regarding federal accounts are granted automatically, non-federal accounts are granted by Geographic Area Editor (GAE) or National Editors (NE), depending on the geographic area a user's account is associated with. (Note: Each federal entity has different overlapping regions which may not coincide with geographic areas. A GAE from a perceived different geographic area may assist you as a result.).
  - Clarified text for "Geographic Area Editors WFDSS Duties" regarding participation in GAE calls to keep up to date on system changes or other relevant information to be shared with field units.
  - Inserted text under heading "Fire Behavior Analysis" regarding if a local FBS is not available to provide analysis for an active incident, you can request assistance by selecting Fire Behavior Request from the Information tab of an Incident and submitting the request, contacting a Geographic Area Editor, or…

- Appendix O – Removed "Work Capacity Test Record" (internet only) and inserted "Area Command (AC) Complexity Assessment."
- Appendix Q – Inserted Work Capacity Test Record (internet only).

Risk Management

Identify Hazards (Situation Awareness)

- Gather Information
  - □ Objective(s)
  - □ Communication
  - □ Who's in Charge
  - □ Previous Fire Behavior
  - □ Weather Forecast
  - □ Local Factors
- Scout the Fire

Assess Hazards

- Estimate Potential Fire Behavior Hazards
  - □ Look Up/Down/Around Indicators
- Identify Tactical Hazards
  - □ Watch Outs
- As conditions change, what other safety hazards are likely to exist?
- Consider probability versus severity?

Develop Controls and Make Risk Decisions

- Develop control measures that reduce risk:
  - □ Firefighting Orders ➔ LCES
    - Anchor Point
    - Downhill Checklist (if applicable)
  - □ What other controls are necessary?
    - Engineering/Administrative
    - PPE
    - Educational
    - Avoidance
  - □ Emergency Medevac Procedures/Plan
- Are controls in place to mitigate risk?
  - □ NO - Reassess situation
  - □ YES - Next question
- Are selected tactics based on expected fire behavior?
  - □ NO - Reassess situation
  - □ YES - Next question
- Have instructions been given and understood?
  - □ NO - Reassess situation
  - □ YES - Next question
- Consider risk versus gain

Implement Controls

- Ensure controls are in place and being implemented by personnel.
- Ensure controls are integrated operational plan and understood at all levels.

Supervise and Evaluate

- Are controls adequately mitigating the hazards?
  - □ NO – Reassess and consider:
    - Human Factors:
      - Low experience level?
      - Distracted from primary tasks?
      - Fatigue or stress reaction?
      - Unsafe attitude?
    - The Situation:
      - What is changing?
      - Are strategy and tactics working?

If situation changes significantly, restart Risk Management Process at the appropriate step.

Standard Firefighting Orders

1. Keep informed on fire weather conditions and forecasts.
2. Know what your fire is doing at all times.
3. Base all actions on current and expected behavior of the fire.
4. Identify escape routes and safety zones and make them known.
5. Post lookouts when there is possible danger.
6. Be alert. Keep calm. Think clearly. Act decisively.
7. Maintain prompt communications with your forces, your supervisor and adjoining forces.
8. Give clear instructions and insure they are understood.
9. Maintain control of your forces at all times.
10. Fight fire aggressively, having provided for safety first.

Watch Out Situations

1. Fire not scouted and sized up.
2. In country not seen in daylight.
3. Safety zones and escape routes not identified.
4. Unfamiliar with weather and local factors influencing fire behavior.
5. Uninformed on strategy, tactics, and hazards.
6. Instructions and assignments not clear.
7. No communication link with crew members/supervisor.
8. Constructing fireline without safe anchor point.
9. Building fireline downhill with fire below.
10. Attempting frontal assault on fire.
11. Unburned fuel between you and fire.
12. Cannot see main fire, not in contact with anyone who can.
13. On a hillside where rolling material can ignite fuel below.
14. Weather is getting hotter and drier.
15. Wind increases and/or changes direction.
16. Getting frequent spot fires across line.
17. Terrain and fuels make escape to safety zones difficult.
18. Taking nap near fireline.