

Chapter 17 Fuels Management

The Service Fire Management Handbook incorporates, by reference, all guidance in the [Interagency Standards for Fire and Fire Aviation Operations](#) (Redbook, NFES #2724) Chapter 17 in addition to the following Service specific clarifications:

Prescribed Fire and Fuels Management Projects

All FWS prescribed fires and fuels management projects will be planned, implemented, and managed in accordance with all applicable policy, guidance, and standards (see [Interagency Fuels Committee](#) and [Interagency Fire Planning Committee](#)) including:

- *National Cohesive Wildland Fire Management Strategy*
- *Guidance for Implementation of Federal Wildland Fire Policy (February 13, 2009).*
- *Review and Update of the 1995 Federal Wildland Fire Management Policy January 2001*
- *Federal Wildland Fire Management Policy and Program Review, Final Report, December 18, 1995.*
- *National Interagency Mobilization Guide (NFES 2092).*
- *National Incident Management System Wildland Fire Qualifications System Guide. (NWCG PMS 310-1).*
- *Prescribed Fire Complexity Rating System Guide (NWCG PMS 424, NFES 2474).*
- *Smoke Management Guide for Prescribed and Wildland Fire (NWCG PMS 420-2, NFES 1279).*
- *Interagency Prescribed Fire Planning and Implementation Procedures Reference Guide (the Rx Guide)(NWCG PMS 484)*

All prescribed fires and fuels management projects will be managed in adherence to the standards described in the [Interagency Standards for Fire and Fire Aviation Operations](#) and the guidance set forth in this Chapter.

Management

Prescribed Fire

Prescribed fires and fuels management will be funded in accordance with guidance in the most recent versions of the [FWS Fire Business Guide](#) and the [FWS Budget Allocation Handbook](#).

Additional management direction and business rules can be found in the most recent versions of the [Fuels Management Allocation and Accountability System \(FAAS\)](#) and [Fire Management Information System \(FMIS\)](#) user guides.

Memorandums of Understanding (MOU), agreements, cost shares or contracts must be in place prior to any on-the-ground implementation.

1

2 Planning**3 Prescribed Fire and Fuels Management Projects**

4 All fuels management projects need a plan that addresses management treatment
5 objectives. Plans should describe in clear, concise statements with specific
6 measurable resource and fuels/fire objectives for treatment implementation.

7 Objectives will be measurable and quantifiable so elements can be developed to
8 meet those objectives and aid in determination of project success following
9 implementation.

10 Fuels management treatments must be addressed in the applicable Fire
11 Management Plan. In addition, fuels projects must go through the appropriate
12 NEPA process and meet other applicable requirements (such as the NHPA,
13 ESA, etc.) (see FMH Chapter 9 and 555FW3) analysis or justification (see
14 Chapter 9 and 550 FW 3).

15 Fuels projects should 1) be planned on an interdisciplinary basis; 2) be
16 integrated as much as possible with other resource management activities; and
17 3) serve to implement the appropriate Comprehensive Conservation Plan or
18 other Land/Resource Management Plan.

19 Project File

20 Units will maintain a project file for each prescribed fire and fuels management
21 project. Project files will include:

- 22 ● Original copy of the implementation plan along with any amendments,
23 prescribed fire Go-No-Go checklists, and agency administrator ignition
24 authorization.
- 25 ● Environmental compliance documentation such as NEPA, ESA, and
26 cultural clearances, etc.;
- 27 ● Special documentation of planning requirements such as Wyden
28 Amendment, MOU's, or Interagency Agreement references, landowner
29 agreements, other private lands requirements, and any risk assessments
30 and mitigation plans.
- 31 ● List of persons contacted during the development and implementation
32 of the plan including Fish and Wildlife Service personnel, other agency
33 personnel, concessionaires, in-holders, special interest groups, refuge
34 neighbors, concerned publics, etc. The date of contact and comments
35 will be recorded as appropriate. Contact your local records
36 management contact for any additional regional or local requirements.
- 37 ● A short narrative of the results, including a critique of effectiveness,
38 future recommendation(s), and lessons learned.
- 39 ● All implementation documentation such as implementation
40 organization charts, logs, Incident Action Plans, weather forecasts,
41 weather observations, and fire behavior, and smoke dispersal
42 observations.

- 1 • Final perimeter and/or treatment map

2 **Prescribed Fire**

3 Planned ignitions, including debris burning and “administrative units,” (around
4 Service buildings and infrastructure, on fish hatcheries, etc.) must have an
5 approved prescribed fire plan.

6 At a minimum, prescribed fire plans shall be prepared and reviewed per
7 requirements in the most recent version of the Rx Guide. FWS has additional
8 requirements/guidance to the Rx Guide that include:

- 9 • Prescribed fire plans will identify the organization(s) (including
10 qualifications and skill levels) that are required to safely implement the
11 plan based upon the final prescribed fire complexity analysis and a risk
12 management assessment. Plans should identify minimum organizations
13 for the various phases of implementation (blacklining, ground ignition,
14 aerial ignition, holding, patrol).
- 15 • Prescribed fire plans may have multiple complexity analyses to address
16 different stages of implementation (Burn Boss qualifications and/or
17 organization’s). Refer to the Rx Guide for specific guidance.
- 18 • Programmatic Prescribed Fire Plans
- 19 ▪ Low Complexity
- 20 ○ Limited to where potential for escape is negligible
21 to nonexistent.
- 22 ○ Limited to single complexity analysis.
- 23 ▪ Moderate/High Complexity
- 24 ○ All ignition units site specific information must be
25 included in the programmatic plan and go through
26 technical review
- 27 ▪ Programmatic Prescribed Fire Plans
- 28 • The final complexity rating is used as a basis for determining
29 prescribed fire organization, Prescribed Fire Burn Boss level,
30 and mitigation measures.

31 The Service interprets low complexity prescribed fire plans to be limited to
32 those with the possibility of spread or spotting outside the project area is
33 negligible to nonexistent and that the potential for escape of a prescribed burn is
34 low, as defined in the Prescribed Fire Complexity Rating System Guide ([NWCG](#)
35 [PMS 424](#), NFES 2474).

36 Prescribed fire plans will identify contingency resources (and required
37 qualifications and fitness levels) and minimum response times for use if the fire
38 exceeds prescription parameters and the capability of planned on-site holding
39 forces. Please see the Rx Guide for further information on contingency planning.

40 In addition to the Rx Guide and bureau requirements, regions and/or local units
41 may have additional requirements for prescribed fire plans.

1
2 During prescribed fire planning and operations, all federal agencies will accept
3 each other's standards for qualifications. The minimum qualifications standard
4 is National Incident Management Wildland Fire Qualifications System Guide
5 ([NWCG PMS 310-1](#)) and/or the Federal Wildland Fire Qualifications
6 Supplement – unless local agreements specify otherwise.

7 State, local cooperators and contractors working on federal agency prescribed
8 fires must meet the minimum qualification requirements in the National Incident
9 Management System Wildland Fire Qualifications Guide ([NWCG PMS 310-1](#))
10 unless local agreements and/or contracts specify otherwise.

11 Prescribed fire plans will assess and mitigate potential smoke impacts, and be
12 coordinated with appropriate air quality specialists and Federal, State, Tribal, air
13 pollution control district or county regulatory authorities to ensure compliance
14 with their regulations (see Chapter 11).

15 An agreement will be required when any non-Service lands are being considered
16 for use as contingency.

17

18 **Project Review and Approval**

19 **Prescribed Fire and Fuels Management Projects**

20 Fuels management plans must have an agency administrator approval.

21 Agency Administrators are responsible for ensuring fuels and prescribed fire
22 plans receive adequate review and are approved according to Service direction.

23 Agency Administrators may delegate authorities to an acting Agency
24 Administrator after considering the complexity of the project and the training,
25 qualifications, experience, and demonstrated ability of the individual.

26 The Agency Administrator is responsible for ensuring fuels projects are in
27 compliance with the CCP, FMP, and Regional Guidance

28 **Prescribed Fire**

29 Prescribed fire plans must be technically reviewed and approved following the
30 process identified in the Rx Guide before they can be implemented.

31 The Agency Administrator is responsible for signing the Agency Administrators
32 Ignition Authorization for any prescribed fire projects under their authority.

33 **Prescribed Fire Implementation**

34 Prescribed fires must meet the Rx Guide requirements. Assigned staffing must
35 meet qualification requirements and will be adequate to safely implement the
36 approved prescribed fire plan.

1 **Prescribed Fire during Geographic Area or National Preparedness Levels 4**
2 **and 5**

3
4 Geographic Area Preparedness Levels 4 & 5 and National Preparedness Level 4:

- 5 • Written concurrence from Regional Fire Management must be obtained
6 prior to implementing a prescribed fire.
- 7 • Optional Geographic Area Preparedness Level 4 and 5 and National
8 Preparedness Level 4 concurrence forms are located on the [USFWS](#)
9 [Fuels SharePoint site](#).

10
11 National Preparedness Level 5:

12 In addition to information found in the Redbook Chapter 17, the following
13 applies to FWS when at National Preparedness Level 5:

- 14 • Agency Administrators are responsible for submitting a written,
15 approved concurrence request for a new prescribed fire to Regional
16 Fire Management.
- 17 • Regions are responsible for submitting a written concurrence request
18 for new prescribed fires to the Branch of Fire Management.
- 19 • The Branch of Fire Management will provide written concurrence/non-
20 concurrence to the Region for documentation.
- 21 • The applicable FWS Preparedness Level 5 Prescribed Fire Concurrence
22 Form is located on the [USFWS Fuels SharePoint site](#).

23
24 **Supporting Prescribed Fire Operations during National Preparedness**
25 **Level 5**

26
27 Service personnel may participate in non-Service prescribed fire operations
28 National PL5 without RFMC or National approval when:

- 29 • Participation is approved by their local unit, and
- 30 • Participation does not negatively impact local unit operations.
- 31 • Participation does not negatively impact resource availability for
32 national priorities.

33 **After Action Reviews and Reporting**

34 An After Action Review (AAR) will be conducted upon completion of fuels
35 projects and prescribed fires. Prescribed fires and fuels management treatments
36 must be documented including:

- 37 • Treatment completion should be entered into Fire Management
38 Information System (FMIS) within 15 days of declared out or
39 completion.
- 40 • Accomplishment report entered into NFPORS within 15 days (fire-
41 funded fuels projects only) of declared out date (prescribed fire) or
42 project completion (fuels management treatments).
- 43 • Non-NFP accomplishment (Non-Fuels or Fire funded) activities such
44 as habitat objective prescribed fires, mechanical treatments, forestry

1 activities, etc., must be entered in FMIS by the annual memorandum
2 reporting date

3

4 **Wildfire Declaration**

5 The 2017 Rx Guide states: *A prescribed fire, or a portion or segment of a*
6 *prescribed fire, must be declared a wildfire by those identified in the plan with*
7 *the authority to do so, when either or both of the following criteria are met:*

- 8 • *Prescription parameters are exceeded and holding and contingency*
9 *actions cannot secure the fire by the end of the next burning period, or,*
- 10 • *The fire has spread outside the project area or is likely to do so, and*
11 *the associated contingency actions have failed or are likely to fail and*
12 *the fire cannot be contained by the end of the next burning period.*

13 A prescribed fire can be declared a wildfire for reasons other than those
14 identified above, if events cannot be mitigated as determined by the burn boss
15 and agency administrator.

16 The Service identifies a wildland fire as either a prescribed fire or wildfire. A
17 single fire cannot be both. Service interprets a prescribed fire to be singular and
18 personnel can declare a portion or segment of the prescribed fire as a wildfire
19 resulting in two separate fires. Once a prescribed fire is declared a wildfire, it
20 cannot be converted back to prescribed fire status.

21 The prescribed fire plan acres accomplished and meeting the objectives, as
22 identified in the prescribed fire plan, during the prescribed fire are reported as
23 prescribed fire acres. The area that is declared a wildfire, even if still in the
24 prescribed fire plan area, cannot be identified as a prescribed fire
25 accomplishment. The wildfire area is identified and reported as wildfire acres.
26 Acres cannot be double counted in reporting databases.

27 Prescribed fires burning off Federal lands onto non-Federal lands without an
28 existing agreement with the landowner(s) must be declared a wildfire
29 immediately.

30 All declared fires will be suppressed and will not be managed for resource
31 benefits with the understanding that confine and contain are suppression
32 strategies.

33

34 **Declared Wildfire Reviews**

35 If a prescribed fire is declared a wildfire, the procedures described in the
36 prescribed fire plan Agency Administrator Ignition Authorization, [Declared](#)
37 [Wildfire Review Facilitation Guide, and Template](#) will be followed.

38

- 1 Zone FMO will notify the RFMC and Agency Administrator will initiate a
2 Declared Wildfire Review. Refer to the Rx Guide for further guidance regarding
3 Declared Wildfire Reviews.
- 4 • The appropriate level of review will be determined by the appropriate
5 agency administrator in coordination with the RFMC or designee.
 - 6 • A copy of all Declared Wildfire Reviews in the approved format will
7 be sent to the Headquarters, Branch of Fire Management within 45
8 days of the fire being declared out.
 - 9 • The National Fuels Specialist will submit the final report to the
10 Wildland Fire Lessons Learned Center once approved by the Chief,
11 Branch of Fire Management.
- 12
- 13 If a significant event occurs other than a Declared Wildfire (deployment,
14 entrapment, fatality, near miss, etc.) refer to [240 FW 7](#) for reporting and
15 investigative requirements.
- 16

17 Fuels Management Monitoring

- 18 It is appropriate to use Fuels Management (FM) funding to facilitate adaptive
19 management when evaluating fuels management program and project
20 effectiveness, and to ensure that refuge resource management goals and
21 objectives are not compromised by the fuels management projects. The use of
22 FM funds is limited to monitoring the first order effects of fuel management
23 projects/treatments (prescribed fires and non-fire) on fuel and wildlife habitat
24 composition and structure, as recognized and well-described as measurable
25 objectives in the approved refuge Fire Management Plan and/or an approved
26 Habitat Management Plan.
- 27 Monitoring of specific resource protection objectives for values may be paid for
28 by FM funding only until best management process and techniques can be
29 established and proven successful. It is suggested to limit this type of monitoring
30 to those values that are most important.
- 31 Although funding wildlife population inventories or fire effects research or
32 management studies on wildlife is not an appropriate use of FM funds,
33 evaluating fuel management projects/treatment effects on wildlife habitat
34 composition and structure is intended to complement these inventories,
35 management studies and research projects.
- 36 Fuels management effectiveness monitoring requires an approved monitoring
37 plan. This plan can be a separate Fuels Treatment Monitoring Plan or part of a
38 holistic adaptive management program that integrates all refuge resource
39 monitoring activities. Whether separate or integrated the plan should contain:
- 40 • A full description of the fuel and wildlife habitat monitoring attributes,
41 monitoring objectives, approved monitoring protocol description in
42 sufficient detail that a successor can continue the monitoring, and the

- 1 approved refuge Fire Management Plan and/or Habitat Management
2 Plan reference identifying the monitoring need.
- 3 ● Description of management actions to be taken when monitored habitat
4 attributes reach established threshold levels.
 - 5 ● The refuge's commitment to implementing and completing the
6 monitoring and management actions.
- 7 Regional Fire Management Coordinators will assure that before any fuel
8 project/treatment monitoring (beyond the first order fire effects monitoring in
9 the Prescribed Fire Plan) is approved for funding:
- 10 ● The fuel and wildlife habitat monitoring activities are adequately
11 described in the approved Fire Management Plan and/or an approved
12 Comprehensive Conservation Plan or Habitat Management Plan.
 - 13 ● The monitoring protocols conform to regionally established fuel and
14 wildlife habitat monitoring protocols established under *Fulfilling the*
15 *Promise WH-10(1)* action item or the Service's *Fuel and Fire Effects*
16 *Monitoring Guide*.
 - 17 ● The regional fire ecologist and/or wildlife biologist will determine if
18 the proposed protocols are the most cost effective and statistically
19 defensible means of addressing monitoring objectives and will
20 independently review the plan.
 - 21 ● All stakeholders are aware of management changes that may result
22 from the monitoring results.

23 **Prescribed Fire Implementation on Non-Service Lands**

24 Use of Service Personnel under a Cooperative Agreement. Service personnel
25 planning or implementing prescribed fire projects on non-service lands under a
26 cooperative agreement must be in compliance with all applicable departmental,
27 Service, and regional fire management policies. Service personnel are not
28 involved with prescribed fire planning and/or implementation on projects funded
29 through a grant agreement.

30 The Service person in charge of fire operations must meet the Burn Boss
31 certification requirements appropriate for the complexity level of the burn as
32 derived from the NWCG *Prescribed Fire Complexity Rating System Guide*.
33 Based upon the outcome of the Complexity Analysis, the project officer
34 qualifications (RXB1, RXB2, or RXB3) will be assigned to oversee the
35 implementation of the project. The project must meet NEPA requirements prior
36 to ignition (621 FW 2, 4A(2)), and have all the necessary permits and approvals.
37 All Service personnel participating in prescribed fires must meet the appropriate
38 Service training and experience qualification requirements as detailed in the Fire
39 Management Handbook. Non-service lands prescribed fire projects planned
40 and/or implemented by the Service must have a written prescribed fire plan that
41 is prepared, reviewed, and approved according to Service and regional policies.

42 As identified in Service Manual Chapter 645 FW1, personnel who are not
43 qualified as a NWCG Burn Boss may provide technical assistance regarding the

1 ecological benefits of conducting prescribed fire on non-Service lands.
2 Participation by Service personnel in the operational aspects of the prescribed
3 fire are limited to their current Red Card qualifications and will only work under
4 a NWCG Burn Boss. When the Service manages prescribed fire projects on non-
5 Service lands under a cooperative agreement, an “Agency Administrator” must
6 approve implementation. The Regional Director (RD) has this approval
7 authority. The RD may delegate the authority to the Regional or State
8 Coordinator for the Partners for Fish and Wildlife Program or Regional Coastal
9 Program Coordinator, or to a Refuge Manager/Refuge Complex Manager or
10 Ecological Services Project Leader, but not to the lead employee in the field.
11 The RD must meet the required elements in the “Management Performance
12 Requirements for Fire Operations” in Chapter 4 of the Redbook and ensure
13 anyone to whom he/she delegates this approval authority completes the required
14 training and is capable of approving the fire plan and completing the Agency
15 Administrator Ignition Authorization Approval Checklist.

16 **Cooperator and Contractor Involvement**

17 Under a cooperative agreement, when Service fire management personnel are
18 not writing the prescribed fire plan or implementing it, cooperators planning and
19 conducting the prescribed fire must employ qualified non-Service fire
20 practitioners. These practitioners must comply with existing tribal and state laws
21 that, in turn, require compliance with Federal, state, and local laws. The
22 practitioners do not have to comply with NWCG Federal qualification
23 requirements unless those requirements are in applicable state or local laws.

24 A cooperator or its contractor who plans and implements a prescribed fire on
25 non-Service lands must meet state qualification standards, obtain necessary
26 permits and authorizations, notify nearby residents and emergency response
27 agencies about the coming burn, and adhere to smoke management guidelines as
28 identified in the notice of award or private land owner agreement, when
29 applicable.

30 **Cooperative Agreement Support**

31 Local, State, Tribal and other Federal agencies and non-governmental agencies
32 could be the partner planning and/or implementing the prescribed fire on non-
33 Service lands. The NWCG recognizes the ability of cooperating agencies at the
34 local level to jointly define and accept each other’s qualifications for prescribed
35 fire. It is necessary to have this agreement approved by the Service’s Regional
36 Fire Management Coordinator prior to implementing support. Recognizing fire
37 management qualifications among cooperators also allows for Service
38 employees to participate in prescribed fire projects where the Service is in a
39 supporting role. NWCG PMS 310-1 identifies the minimum qualification
40 standards for interagency prescribed fire operations, unless otherwise specified
41 in a local agreement. Departmental policy requires all Service personnel
42 engaged in interagency operations to meet these standards.

43 **Grant Agreements**

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- 1 The Service must use a grant agreement to provide funds to cover allowable
2 grantee costs when there is no substantial Service involvement in award
3 projects. The Service is not responsible or liable for any damage to property or
4 any injury to people that may arise from, or be incident to, performance or
5 compliance with the grant agreement. Prescribed fire projects conducted by a
6 recipient, or their sub-recipient or contractor, on non-Service lands typically fall
7 under the jurisdiction of tribal, state, or local agencies/entities with fire
8 management authority and responsibility.
- 9 • The entity carrying out the prescribed fire planning and implementation
10 on non-Service lands under a grant award:
 - 11 ○ Must comply with existing Federal, tribal, state, and local
12 laws; and
 - 13 ○ Does not have to comply with NWCG Federal qualifications if
14 the NWCG requirements are not in the affected tribal, state, or
15 local laws.
 - 16 • A recipient who plans and implements a prescribed fire project must
17 meet state, tribal, and local qualification standards; obtain all necessary
18 permits and authorizations; notify nearby residents and emergency
19 response agencies about the coming burn; and adhere to smoke
20 management guidelines for prescribed burns as identified in the notice
21 of award or private land owner agreement, when applicable.