



U.S. Fish & Wildlife Service

Fire Management Handbook



[Personnel Quals.] [Ignitions] [Holding Actions] [Monitoring]
[Debris Disposal] [Complexity]

2.2 PRESCRIBED FIRE OPERATIONS

2.2.1 REQUIRED PERSONNEL QUALIFICATIONS

Home

All prescribed burns must be supervised by a qualified Prescribed Fire Burn Boss. Additionally, all positions on prescribed burns will meet all national FWS requirements for training and experience, as described in the section 1.5.

What's New

Prescribed Fire Burn Boss will be qualified to conduct prescribed burns by specific fuel groups.

Preparedness

Policy

FIREBASE

Prevention

Planning

Qualifications

Financial Mgt.

Info. Systems

Records &

Reports

The position qualifications may be supplemented by regional or refuge requirements; they may not be less than national standards. Depending upon specific regional or local concerns (smoke management, types of fuels, proximity to values to be protected, public concern, etc.), additional standards may be required. If such supplemental qualifications are developed, it will be the responsibility of the region to fund the additional training requirements and experience.

Prescribed Fire

Introduction

Operations

Personnel

Although the regionally designated agency administrator has final approval authority for the Prescribed Fire Plan, the Prescribed Fire Burn Boss along with the refuge manager has

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|-----------------|--|
| Quals. | the responsibility to make the on-site, tactical, "go-no-go" |
| Ignitions | decision. The Prescribed Fire Burn Boss ensures that all |
| Holding Actions | prescription, staffing, equipment, and other prescribed fire |
| Monitoring | requirements are met before and during the burn. Deviations |
| Debris Disposal | from the approved plan which result in an escape, injury, |
| Complexity | property damage or other consequence may result in personal |
| Smoke Mgt. | liability. |
| Wildland Fire | Thirteen Prescribed Fire Situations That Shout Watch Out! |
| Preparedness | (Exhibit 2-2-1) |
| Operations | |
| Fire Use | 2.2.2 IGNITIONS |
| WFSA | |
| Business Mgt. | The type and circumstances of ignition must be defined in the |
| Reviews | Prescribed Fire Plan. An unplanned ignition occurring within a |
| Fire Trespass | planned management ignited prescribed fire area can be |
| Investigations | managed as a prescribed fire only if such an ignition is |
| Cost | addressed in the Prescribed Fire Plan and all other prescribed |
| Determinations | conditions within the plan are met. If not, an appropriate |
| Civil Cases | suppression action must be initiated on all human caused |
| Criminal Cases | fires. |
| Glossary | 2.2.3 HOLDING ACTIONS |
| References | Holding actions must be defined in the Prescribed Fire Plan. |
| Rehabilitation | Policy allows the Prescribed Fire Burn Boss to take limited |
| | holding actions on fire outside of the planned perimeter. |
| | However, there must be defined limits on the amount and kind |
| | of holding that can be done before any fire is determined to |
| | have exceeded the approved plan and must be declared an |
| | unwanted and unplanned wildland fire. |

The limits of acceptable holding actions must be clearly stated in the Prescribed Fire Plan. These limits must be defined as specific actions that can be taken and not in broad general terms. These actions must be defined in advance in order to quantify the personnel requirements, describe locations, limit costs, and specify time constraints. An example is the construction of a specific amount of fire line to prevent a prescribed burn from leaving the prescribed, designated boundaries.

2.2.4 FUEL MANAGEMENT EFFECTIVENESS MONITORING

It is appropriate to use Hazard Fuel Reduction Operations and Wildland/Urban Interface (subactivity 9263 and 9264) funding to facilitate adaptive management when evaluating fuels management program and project effectiveness, and to ensure that refuge resource management goals and objectives are not compromised by the fuels management projects. The use of 9263 funds is limited to monitoring the first and second order effects of fuel management projects (prescribed fires, mechanical or chemical fuel treatments, etc.) on fuel and wildlife habitat composition and structure, as recognized and well-described as measurable objectives in the approved refuge Fire Management Plan and/or an approved refuge habitat management plan. Monitoring is limited to before and after treatment and at 1, 2, 5, 10, and 20 year after treatment intervals.

Although funding wildlife population inventories or fire effects research or management studies on wildlife is not an

appropriate use of 9263 funds, evaluating fuel management treatment effects on wildlife habitat composition and structure is intended to complement these inventories, management studies and research projects.

Fuels management effectiveness monitoring requires the preparation and approval of a monitoring plan. This plan can be a separate Fuels Treatment Monitoring Plan or part of a holistic adaptive management program that integrates all refuge resource monitoring activities. Whether separate or integrated the plan should contain:

- A full description of the fuel and wildlife habitat monitoring attributes, monitoring objectives, approved monitoring protocol
- Description of management actions to be taken when monitored habitat attributes reach established threshold levels.
- The refuge's commitment to implementing and completing the monitoring and management actions.

Regional Fire Management Coordinators will assure that before any fuel treatment monitoring (beyond the first order fire effects monitoring in the Prescribed Fire Plan) is approved for funding:

the most cost effective and statistically defensible means of addressing monitoring objectives.

- All stakeholders are aware of management changes that may result from the monitoring results.

2.2.5 DEBRIS DISPOSAL

Fire has been employed to remove various types of debris generated as well as to support many routine maintenance activities. Some of these fires have been conducted without proper planning or qualified personnel and have led to wildland fires with injuries, tort claims, damage to natural and cultural resources, and loss of structures.

Fire is used to remove small amounts of wildland fuels generated in maintenance activities, in the removal of hazardous trees, or during construction activities. Where permitted specifically by local regulations, discarded building and administrative materials are also burned. All such activities and all new debris burning projects will be reviewed for complexity by a fire management officer. Burning environmentally hazardous or degrading materials are not acceptable practices.

Contracts involving the generation or disposal of such fuels, will be developed and conducted in coordination and consultation with a fire management officer. All construction contracts/projects which produce vegetative debris will specify when and how the material will be disposed. If fire is a potential disposal method, the refuge or regional fire management officer must review and approve the contract stipulations related to debris burning. The project/contract must include funding for planning and conducting the debris

burning and identify the responsible individual(s).

2.2.6 PRESCRIBED FIRE COMPLEXITY ANALYSIS

A complexity analysis will be performed on all prescribed fires regardless of size. There are two purposes for this analysis:

- As a FIREBASE input for determining programmatic funding and staffing needs. The FIREBASE Complexity Analysis (Exhibit 2-2-2) is used for this purpose. The complexity score from the FIREBASE Complexity Analysis will be included on the Fire Report (DI-1202) in the "Remarks" section for this purpose. The individual scores are used to determine a summary complexity score and the "normal" prescribed fire year which is used in the FIREBASE budget analysis.
- As an evaluation tool for individual Prescribed Fire Plans to determine areas of concern and where plan modification may be appropriate. For this purpose the NWCG Prescribed Fire Complexity Rating System Guide, NFES 2474 is used.