

RX-340 Prescribed Fire Planning Training Course Framework

Target Audience: Personnel responsible of prescribed fire plan development, review, and approval.

Course objectives:

- Understand Prescribed Fire Plan format, elements, and element relationships
- Understand the roles and responsibilities of the plan preparer, technical reviewer, and approval personnel.
- Demonstrate the ability to develop a Prescribed Fire Plan either independently or interactively

Prescribed Fire Plan Elements

Due to the variety of information required by individual agencies, a standard prescribed fire plan form has not been developed. However, an individual plan is required for all prescribed fire applications. These plans must include the following minimum elements:

Description of the Prescribed Fire Area, including map, using the Maximum Manageable Area concept.

Goals and Objectives: Identification of the purpose of the burn, resource management goals stated in the land management plan, and specific objectives of the fire, stated in measurable terms.

Range of acceptable results expected, expressed in quantifiable terms.

Project Assessment.

Complexity: Identification of the level of complexity of the prescribed fire.

Risk Assessment. A risk assessment that portrays an indication of the probabilities of success and consequences of failure for this prescribed fire. As a minimum, consider all risk and complexity elements described in the NWCG Complexity Guidebook as well as planned mitigation measures.

Prescribed Fire Implementation Actions.

Pre-burn Considerations, on- and off-site: Define line to be built, snags to be felled or protected, equipment to be pre-positioned, special features to be protected, warning signs to be placed, weather recording and monitoring needs, etc. Include responsibility and timeframes.

Briefing: Identify and analyze the safety hazards unique to the individual prescribed fire project and specify personnel safety and emergency procedures. Include requirements for use of personal protective equipment. If aerial ignition devices will be used, include an Aerial Ignition Operation Hazard Analysis and Aviation Operating Plan including firing map and primary/secondary aircraft landing sites.

Test Fire: Provisions for a test fire and recording the results. The test fire must be ignited in a representative location within the prescribed fire area to test key fire behavior characteristics prescribed to meet management objectives. In many

applications, analysis of the initial ignitions may provide adequate test fire results. On multiple-day projects, evaluation of current fire behavior may provide a comparative basis for continuing. When in doubt, initiate a separate test fire and evaluate results. Prescribed Fire Prescription: A prescribed fire prescription containing those key parameters needed to achieve desired results. Prior to ignition, compare prescription elements, both individually and collectively, against local weather forecasts and any other predicted conditions. Any changes to prescriptive parameters must be approved by the same level of authority required for plan approval.

Special Conditions, Public and Personnel Safety: Describe public and personnel safety and emergency procedures. Specify that all personnel who are within the active burn area will have personal protective equipment. Identify safety hazards on the burn, measures taken to reduce those hazards, and EMS personnel on the burn. Specify emergency medical procedures, evacuation routes, and emergency facilities to be used.

Burn Organization: List required management personnel, and positions they will fill. Specify the number of crew personnel that are needed. No less than the organization described in the approved plan shall be used to execute the burn.

Ignition Plan: Describe necessary ignition operation including firing techniques and patterns. Maps showing firing patterns may be included. Necessary resources, personnel qualifications, equipment, and supplies must be listed.

Holding Plan: Provision for holding actions to maintain the prescribed fire within prescription. Firing, holding, patrol and mop up procedures are required. If actions needed to keep the fire within project boundaries exceeds predetermined definition of holding actions, suppression action will be taken. However, when the necessary holding action exceeds the capability of the on-site contingency resources or poses significant threats to life, property, or high value resources, a new strategy is determined through a Wildland Fire Situation Analysis.

Reliability Checks

- Implementation Risk Determination (line officer)

- Go/No-Go decision (checklist) - day of ignition

- Periodic Reevaluation (multi-period fires)

Cooperation: Provisions for interagency and intra-agency pre-burn coordination and, where applicable, public involvement and burn day notification to appropriate individuals, agencies and the public.

Contingency Plan: Identification of contingency actions to be taken if the fire exceeds prescription parameters and/or line holding capabilities and cannot be returned to prescription. Use the Wildland Fire Situation Analysis (WFSA) process to determine appropriate strategy.

Funding: The source of funding and estimated costs.

Smoke Management and Air Quality: Smoke management requirements. Describe how the project will comply with County, State, Tribal, and Federal air quality regulations. Include modeling outputs and mitigation measures to reduce the impacts of smoke production, if taken.

Monitoring: Provisions for post-burn evaluation to enable resource managers and the Agency Administrator to determine if project objectives have been met. Document burn day conditions, fire behavior, smoke dispersal, first order fire effects, and cost per acre of

treatment. Specify the weather information (forecast and observed) required during all phases of the project, the procedures for acquiring it, including when and by whom, and if spot weather and smoke dispersal forecasts need to be requested. In addition to short-term monitoring to document the results of a burn, long-term monitoring is strongly recommended. Permanent photo points, transects, or plots which are revisited in years following a burn will provide information on successional trends which result from the burn. Longer term monitoring may be necessary to determine if objectives were met.

Post-burn Activities: Provisions for post-burn evaluations.

Monitoring data, including weather, fire behavior, and fire effects observations

Weather forecasts, spot, short- and long-term

Smoke dispersal information

3. Agency individual fire occurrence form Monitoring data, including weather, fire behavior, and fire effects observations

Weather forecasts, spot, short- and long-term

Smoke dispersal information