United States Department of Agriculture
Natural Resources Conservation Service

2010 Ranking Period 2

Plant Enhancement Activity – PLT04 – Forest stand improvement, prescribed burning

Credit: James H. Miller, USDA Forest Service, Bugwood.org

Enhancement Description
This enhancement is the controlled use of fire in a forest to restore native forest conditions with a focus on improving the condition of fire-adapted plants and wildlife habitat and reducing the risk of damage from intense, severe wildfires.

Land Use Applicability
Forestland

Benefits
Prescribed burning restores native forest communities that improve ecological conditions for plant health and vigor, reduced risk of wildfire hazard, and enhanced wildlife habitat. In order to safely apply a controlled burn, it may be necessary to pre-treat the vegetation and fuels. Prescribed burning may need to be a component of other practices or periodically repeated to fully achieve the intended results.

Criteria
This enhancement must be planned and applied in accordance with state and local regulations and NRCS policy. To properly plan a prescribed burn a thorough assessment of the existing fuel load must be made. The following references should be used to make this determination:

1. the degree of departure from reference condition vegetation, fuels and disturbance regimes using the *Fire Regime Fire Condition Class (FRCC) Guidebook*
2. the amount and distribution of live and dead fuels using the *Fire Fuel Protocol: Transect Measurements Field Guide*.

Pre-treatment of vegetation and fuels may be needed using associated and complementary practices such Fuel Break, Firebreak, and Forest Slash Treatment. If invasive plants are present, utilize methods and timing that will prevent or control their spread.

A written plan must be developed and all necessary approvals secured prior to conducting a prescribed burn. The plan will include the following components as a minimum:

1. The objectives of the burn and the expected post-burn conditions.
2. Maps, images and/or descriptions of the proposed burn area and any associated or adjacent smoke sensitive areas.
3. Inventory of available fuels.
4. Required weather and fuel conditions under which the burn will be conducted.
5. Firing sequence and methods.

6. List of equipment and personnel needed and job assignments.
7. Any pre-burn preparation needed to safely and effectively conduct the burn
8. List of appropriate authorities, agencies, departments, individuals, and facilities to be contacted and necessary signatures of approval.
9. Checklist for a post-burn evaluation.

Burning criteria

1. Follow all components of the burn plan.
2. A current fire weather forecast is required prior to conducting a prescribed burn. Collect weather parameters and other data that affect fire behavior for the day of the burn and monitor the appropriate weather parameters during the burn. Weather conditions outside those prescribed in the written plan will result in postponement or cessation of the burn.

Documentation Requirements

1. A copy of the written burn plan
2. Description of post-burn conditions with representative digital images of the treated area

This activity may be used with any other enhancements.

Potential duplicate practices:
338 - Prescribed burning, 666 - Forest stand improvement