

Shawnee State Forest
Wildfire 2009
Forest Management / Timber Salvage Plan
(Preliminary Draft)



Ohio Department of Natural Resources
Division of Forestry
Southern District

Introduction

Between April 24th 2009 and April 30th 2009 a wildfire consumed approximately 2,900 acres of Shawnee State Forest. Department of Natural Resource crews and local volunteer firefighters battled the blaze around the clock for six days with over 150 people, a helicopter, and 11 bulldozers. The fire was contained with over 37 miles of dozer line being constructed, but areas of the forest suffered from high and moderate intensity burns.

This document will serve as a plan of action to properly guide the implementation of salvage practices within this wildfire area. It will provide direction in this endeavor and will outline the objectives for these salvage harvests. It is our intentions to properly collect and analyze the forest data needed, to create a plan of implementation, and to apply silvicultural expertise in managing these post-wildfire stands.

The document will also be living document; first highlighting the objectives, priorities, planned workflow, and overall concepts of conducting forest management within this wildfire area. Once the forest data has been collected and analyzed, specific stand prescriptions will be added with the proper adjustments also being made to the implementation schedule. *It should be noted that the current status of this plan is only an incomplete draft, which is meant to guide the workflow needed to begin work on the salvage operation. Once the wildfire area has been properly cruised and analyzed, the appropriate data will, at that time, be available to complete this plan.*

History

In 2003, a major ice storm impacted much of the Shawnee State Forest. This ice storm resulted in much downed woody debris. Many trees became uprooted and fell over, some snapped off at the trunk, and excessive amounts of limbs were broken from the tree tops. This weather event created a higher fuel loading on the forest floor, stressed living trees, and caused a reduction in growth and vigor, along with other impacts to the forested environment. The ice storm also introduced additional stress on the already declining white oak (*Quercus alba*) population. This white oak decline is a symptom of many different influences including root disease and years of stress introduced by several species of insect. The mortality in white oak has left large standing dead trees. The bark on these trees is now loose and dried, creating difficulties in wildfire suppression.

Definitions

Throughout this report, four burn intensity levels will be referred to and will reflect crown condition of the residual stands. First is a high intensity burn – this indicates that at least 95% of the overstory currently exhibits mortality or is expected to exhibit mortality within one growing season. Next is a moderately high intensity burn – these areas have at least 75% crown mortality, or it is expected to exhibit this amount of mortality within the first growing season. Moderate intensity burn refers to stands with 50% crown mortality. Last are the low intensity burn areas that exhibit less than 50% crown mortality.

Current Condition

In late April of 2009 an aerial survey of the burned area was completed. This survey mapped the various burn intensities throughout the fire area (see Exhibit 1).

The following compartments have been affected:
A-13, A-14, A-15, A-16, B-17, C-8, C-9, and C-10.

Goals and Objectives

- Determine priority areas that should be salvaged as soon as possible to ensure merchantability.
- Gather information on overstory conditions that will allow the Division of Forestry to extrapolate forest management decisions into the future. These decisions will focus on residual stand health and vigor.
- Monitor stands into the future to continue evaluation of overstory conditions and determine understory responses.
- Over the next five years, staff will continue to make decisions on proper management of the impacted areas, based on collected data.
- To sustain the integrity of soil and watershed quality by encouraging the growth of healthy and vigorous forests through accepted forest management practices.

Harvest Plan Implementation Guidelines

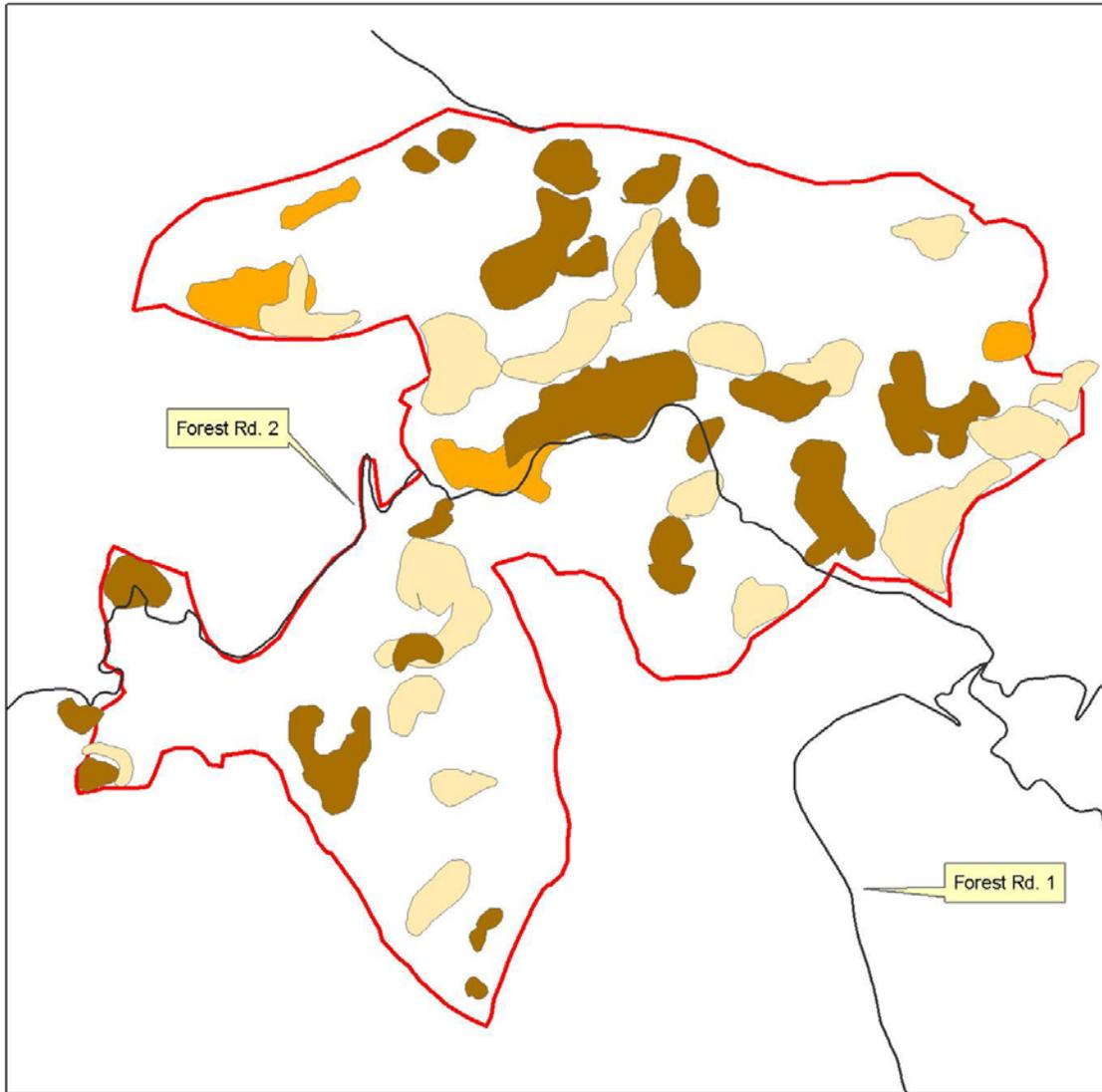
1. Collect information from the Natural Heritage database and consult with ODNR-Division of Wildlife concerning threatened and endangered species. This will assist in evaluations during field inventories and with the timber sale planning.
2. Based on flight mapping and remote sensing, perform a volume cruise in the high and moderately high burn areas and evaluate these areas for potential salvage.
3. Begin a baseline inventory by cruising approximately 2,000+ acres in the areas not previously identified for salvage.
4. As time permits, a direct seeding project will be implemented on an identified area of roughly 30 acres. State Forest Crews will collect viable acorns and plant them on the identified area(s) this fall.
5. Additional inventory work will be developed as various stands reinitiate and/or develop.

Implementation Progress as of July 28,2009

Exhibit 2 represents the inventory plot locations that have been identified. Inventory intensity is 1 plot for each 5 acres in the high and moderate intensity burn areas and 1 plot for each 7 acres in the low intensity areas. As stated previously, the high intensity burn areas will receive an overstory volume cruise only and all other areas will be evaluated using a modified inventory procedure - all standard data will be evaluated with the addition of scorch height and percent of crown mortality on all overstory trees.

Exhibit 3 depicts a map revealing areas that are being proposed for regeneration salvage harvests. This map will be periodically updated as additional data is collected and evaluated. All salvage or management sales will be sold through standard competitive bid stumpage sales.

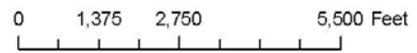
Exhibit 1 Burn Intensity



Legend

Aerial Damage Assessment

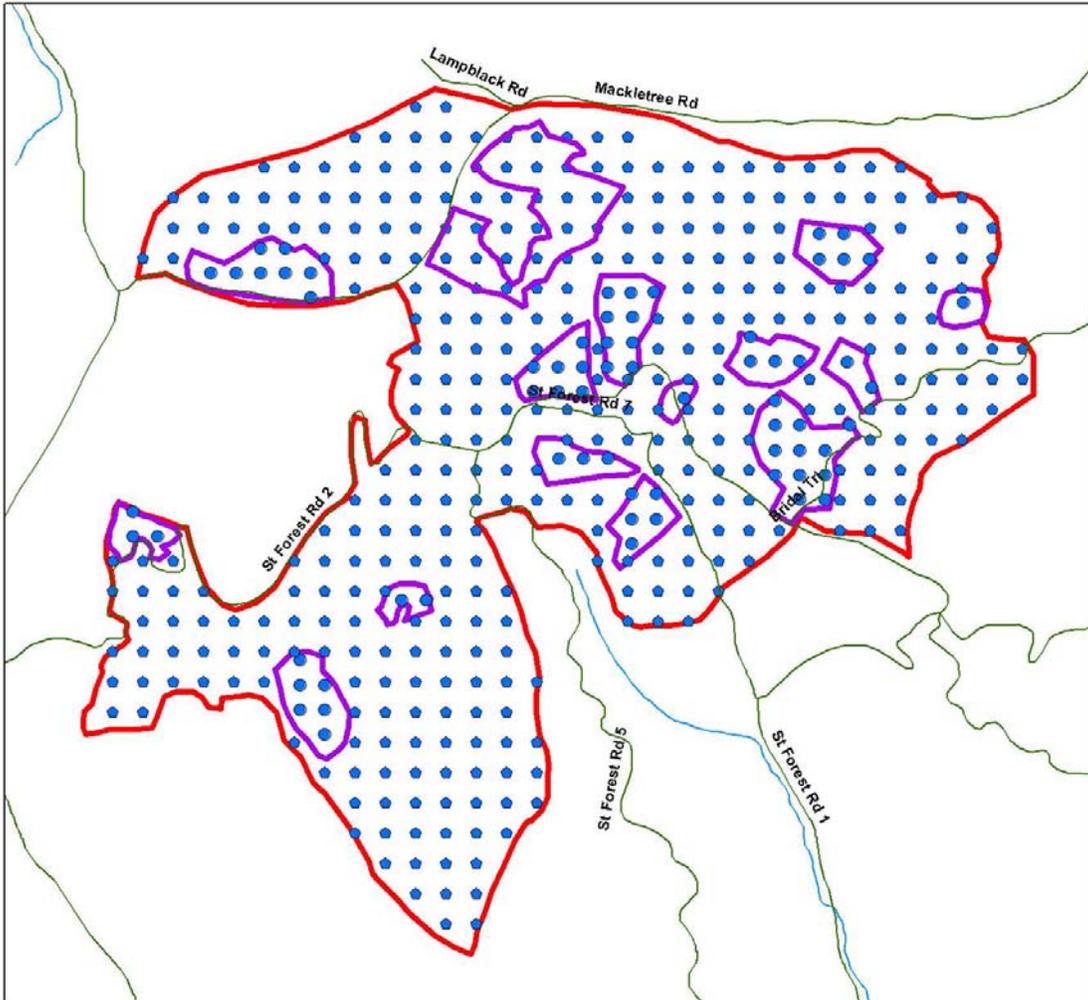
- High
- Moderate - High
- Moderate
- Fire Boundary



1 inch equals 2,300.838633 feet

July 28, 2009

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Exhibit 2



Legend

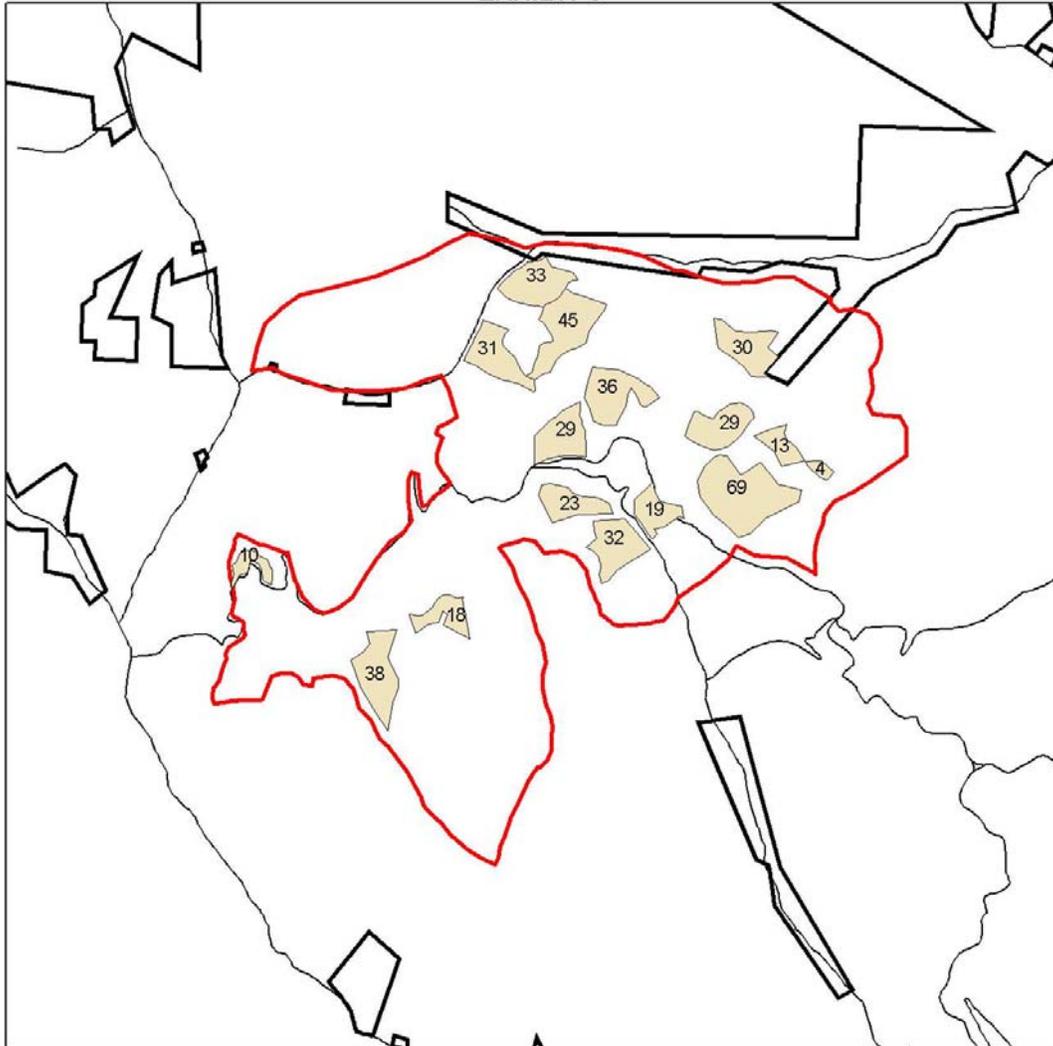
-  Local Roads
-  SHFIRE LI plots
-  SHFIRE HI plots
-  High-Moderate Damage
-  Fire Boundary

0 1,500 3,000 6,000 Feet

1 inch equals 2,451.841608 feet

July 28, 2009

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EXHIBIT 3



Legend

-  Proposed Salvage Harvests
-  Fire Boundary
-  Roads
-  Forest

0 2,050 4,100 8,200 Feet

1 inch equals 3,357 feet

Total Acres = 459
Individual acreage is listed inside each cutting section

