

Pike State Forest
Foresters: Hanna Tapley & Rusty Ahrndt
Management Cycle End Year: 2045

Compartment: 12
Date: 8/11/2025
Management Cycle Length: 20 years

Tract: 09
Acres: 192

Location

This tract, also referenced as 6311209, lies within Sections 14, 15, 22 and 23 of Township 2 South and Range 7 west in Marion Township in Pike County, Indiana. It is approximately 3.5 miles southeast of Winslow, Indiana.

General Description

Much of this tract consists of old mining spoils from past strip mining. A large portion of the area was cleared in 2024 in preparation for a high-wall reclamation project. Currently, the tract is a mix of naturally regenerated forest, reclaimed mine areas, pine plantings, hardwood plantings, wetlands and some open ground. This tract contains old mine roads as well as a couple of creeks or runoff areas from mines. The tract is a patchwork of forest types that vary in age, composition and origin.

History

- 2004 - The northeast portion of the tract was acquired by the state as part of 250 acres purchased from James C Ellis III and Yondell Bruce Embry for \$231,995. Deed 63-063-30.
- 2006 - Most of the tract (sections 14 and 15) was acquired by the state as part 550 acres purchased from James C Ellis III, Trustee, James C Ellis Estate Trust for \$54,573.50. Deed 63-064-30.
- 2007 - A small portion of the tract (sections 22 and 23) was acquired by the state as part of 798 acres purchased from James C Ellis III, Trustee, James C Ellis Estate Trust for \$831,500. Deed 63-068-30.
- 2021 - A forest inventory was conducted, and a total of 877,470 board feet were found, of which 223,660 board feet were identified as available for harvest.
- 2024 - A timber harvest combining portions of 6311208 and 6311209 was carried out in preparation for a high wall project, removing a combined total of 244,083 board feet of sawtimber and 382.7 pole cords. The sale was purchased by Jim Graber Logging in April for \$61,500.
- 2025 - Callery pear in the hardwood plantings was treated with a basal application of triclopyr.
- 2025 - An inventory was conducted by Hanna Tapley and Rusty Ahrndt of the southern portion of the tract not included in the high wall project. A total of 540,343 board feet were found, of which 221,770 board feet were identified as available for harvest.
- 2025 - A management guide was written by Hanna Tapley and Rusty Ahrndt and an improvement cut of between 75,000 and 150,000 board feet was recommended for the eastern half of the inventoried area.

Landscape Context

The landscape around this tract is entirely forested with varying topography. Most of the surrounding land is managed by the Division of Forestry (DoF). The only exception is the private inholding on the north border of the tract.

Topography, Geology and Hydrology

Terrain is highly variable with some very steep slopes and flat bottomland. Elevation ranges from 450 to 550 feet above sea level. Spoil piles from surface mining are found in the northern and central regions. The southeastern leg of the tract contains ridges that run generally north-south as well as mapped intermittent streams. The streams combine and flow to the south-east where they drain into a 1-mile watershed stream which flows north and joins the Patoka River.

Soils

Belknap silt loam (Bg); (17.7 acres) is a deep, somewhat poorly drained soil that is found in flood plains. The depth to a restrictive feature is more than 80 inches. The depth to the water table is about 6 to 24 inches. Permeability is moderate and water runoff capability is very low. It occurs on 0 to 2 percent slopes and has been found in creek bottoms and low areas in the western portion of this tract that are frequently flooded.

Fairpoint Bethesda complex (FbG); (45.8 acres) is a deep, somewhat excessively drained, moderately slowly permeable soil formed of regolith in surface-mined areas. It occurs on 25 to 70 percent slopes. The depth to a restrictive feature is more than 80 inches. The runoff potential is medium. The depth of the water table is more than 80 inches. This soil type is found running through the center of the tract.

Fairpoint Bethesda complex (FbC); (69.5 acres) occurs on slopes of 8 to 15 percent. The depth to a restrictive feature is more than 80 inches. It is well drained and has a medium water runoff potential. The depth to the water table is more than 80 inches. This soil type was found in the northern portion of the tract.

Gilpin silt loam (GnE); (37 acres) is a moderately deep, well drained, moderately permeable soil in the uplands. It occurs on slopes ranging from 15 to 30 percent. The depth to a restrictive feature is 20 to 40 inches to paralithic bedrock. The water runoff potential is high. The depth to the water table is more than 80 inches. This soil type was found in upland areas that were not formed from mine spoils.

Apalona-Zanesville silt loams (ZaC3); (4.6 acres) are moderately well drained. They occur on slopes of 6 to 12 percent. The depth to a restrictive feature is 16 to 27 inches to fragipan; 69 to 85 inches to paralithic bedrock. They have very high runoff potential. The depth of the water table is about 14 to 25 inches. This soil type is found on hillslopes.

Apalona-Zanesville silt loams (ZaB); (13 acres) are moderately well drained. They occur on slopes of 2 to 6 percent. The depth to a restrictive feature is 20 to 30 inches to fragipan; 75 to 93 inches to paralithic bedrock. They have a medium water runoff potential. The depth of the water table is about 17 to 28 inches. This soil type is found on ridges.

Wellston silt loam (WeE); (2.7 acres) is a deep, well drained, moderately permeable soil on

uplands. It occurs on slopes of 15 to 30 percent. The depth to a restrictive feature is 40 to 60 inches to paralithic bedrock. It has a high runoff potential. The depth of the water table is more than 80 inches. This soil was found in the northern portion of the tract.

Access

This tract has generally good access via County Road 650 and from fire lane 8.

Boundary

The tract boundary is almost entirely internal to Pike State Forest and is based upon geographic and artificial features. County Road 650 forms the western boundary, the southern boundary is delineated by fire lane 8 and the eastern boundary follows a mapped intermittent stream. The tract adjoins a private inholding to the north.

Ecological Considerations

Several deer were observed during the inventory as well as a fox, a coyote, various frogs and a vole. birds observed included turkey, red eyed vireo, woodpeckers, tufted titmouse and Acadian flycatcher.

The Division of Forestry has developed compartment-level guidelines for important wildlife structural habitat features such as snags and legacy trees. Snags are standing dead or nearly dead trees. Snags provide value to a stand in the form of habitat features for foraging activity, den sites, decomposers, bird perching, and bat roosting. Snags eventually contribute to the future pool of downed woody material, which provides habitat for many ground-dwelling species and contributes to healthy soils. Legacy trees are live trees of a certain species and diameter class that have potential future value to various wildlife species if retained in the stand.

In the compartment that includes this tract, inventory data indicate snag densities exceed DoF targets in all size classes. The largest size class (≥ 19 " dbh) inventory density exceeds even the "optimal" target. Legacy tree densities exceed DoF compartment-level targets; although, retaining large diameter oaks, hickories, and maples will help ensure these densities remain above target densities following timber harvest.

The invasive plant species identified were multiflora rose, Japanese honeysuckle, bush honeysuckle, Japanese stilt grass, and autumn olive. Most of the invasive plants were found along forest edges and in the western half of the inventoried area.

A formal ecological review process, which includes a search of Indiana's Natural Heritage Database, is part of the management planning process. If Rare, Threatened, or Endangered species or communities were found to be associated with this area, the activities prescribed in this guide will be conducted in a manner that will not threaten population viability of those species or communities.

Recreation

There are no designated trails in this tract. However, entry is relatively easy from County Road 650 and fire lane 8 which can provide access for walking/hiking, wildlife viewing, bird watching, hunting, and foraging for mushrooms.

Cultural

Cultural resources may be present, but their location(s) is protected. Adverse impacts to significant cultural resources will be avoided during any activities.

Tract Subdivision Description and Silvicultural Prescription

This tract is diverse with 11 acres of water in the southeast corner, 43 acres in the center as part of a current high-wall project with the Division of Reclamation's Abandoned Mine Land program, and about 27 acres of mine spoils in the northern portion of the tract. Oak-hickory, mixed hardwoods, and tree plantings make up the remainder of the tract.

Mesic Oak-Hickory – 35 acres

The oak-hickory cover type provides very significant wildlife and timber resource values. The retention of oak and hickory species are important to the division's long-term forest management objectives. At the time of the inventory, this cover type comprised roughly 33% of the area inventoried, or about 35 acres, and had a basal area of approximately 121.1 square feet per acre. The overstory was dominated by white oak, black oak, and northern red oak.

A single-tree selection harvest is recommended to reduce competition, remove poor-quality stems, and remove over-mature trees (especially black oak). Removing the declining overstory will release understory trees, reduce future deformities, and improve overall stand structure and quality. American beech and sugar maple make up much of the understory. Timber stand improvement (TSI) should focus on reducing beech and maple competition with less shade tolerant species and promoting the recruitment of oak and hickory into the overstory.

Mixed Hardwoods – 61 acres

This cover type comprised roughly 58% of the area inventoried, or about 61 acres, with a basal area of 90.5 square feet per acre. The most common species in the overstory was yellow poplar and the understory was dominated by American beech and sugar maple.

An improvement cut is recommended to release oak and hickory trees from competition with less valuable species. The goal is to provide more resources to preferred hardwood species like oak, hickory, walnut and other species important to wildlife. The harvest should focus on the removal of unhealthy, poorly formed or damaged trees, such as those with low forks, suppressed growth, epicormic sprouting, or decay. Post-harvest TSI is recommended to reduce beech and maple stocking and foster shade intolerant species.

Tree Planting – 15 acres

The tree plantings were found to be successful with good survival. No harvest or thinning is recommended in these areas at this time; however, they could benefit from further treatment of invasive plants such as autumn olive, honeysuckle, and multiflora rose.

The current forest resource inventory was completed on 8/11/25 by Foresters Hanna Tapley and Rusty Ahrndt. Summary of the estimated tract inventory results are located in the tables below.

Tract Summary Data (Trees > 11" DBH)

Category	Estimate
Tract Acres (Forested)	106
Gingrich Stocking Percent (%)	80
Trees Per Acre	160
Basal Area Per Acre (SQFT)	96.1
Volume Per Acre (BDFT)	5,163

Tract Summary Data (trees >11"DBH):

Species	# of Trees	Total Bdft
Yellow Poplar	1,489	158,900
White Oak	678	119,350
Black Oak	531	54,880
Northern Red Oak	239	43,850
Bitternut Hickory	332	35,160
Scarlet Oak	173	24,580
Sugar Maple	326	18,030
Pignut Hickory	178	16,140
Shagbark Hickory	114	16,060
American Beech	108	12,770
Red Maple	87	10,450
White Ash	128	4,870
Blackgum	69	5,840
Eastern White Pine	86	5,750
Black Walnut	65	3,090
Black Cherry	12	2,780
River Birch	74	2,000
Eastern Cottonwood	76	1,900
Sweetgum	94	1,700
Total:	4,859	538,100

Summary Tract Silvicultural Prescription and Proposed Activities

It is recommended that a timber harvest remove between 75,000 and 150,000 board feet from the southeast of the tract. The southwestern portion of the tract could be included when 6311406 and 6311407 are scheduled for a timber harvest. Single-tree selection will improve the vigor of the stand. The goal of the harvest should be to free the crowns of preferred trees (oak, hickory and others important for timber and wildlife) to improve overall vigor and health of the tract. The timber harvest should also focus on the removal of unhealthy or damaged trees such as those with low forks, suppressed growth, epicormic sprouting or decay. The long-term result of the harvest should be to increase timber and wildlife habitat. A shelterwood system should be considered if and where it is deemed appropriate at the time of marking. The tract could benefit

from the application of prescribed fire; however, the proximity of spoils from surface mining and the possibility of coal fires should be considered.

Proposed Activities Listing

Proposed Management Activity

Vine and invasive species work

Timber harvest

Post-harvest TSI

Next forest inventory

Proposed Period

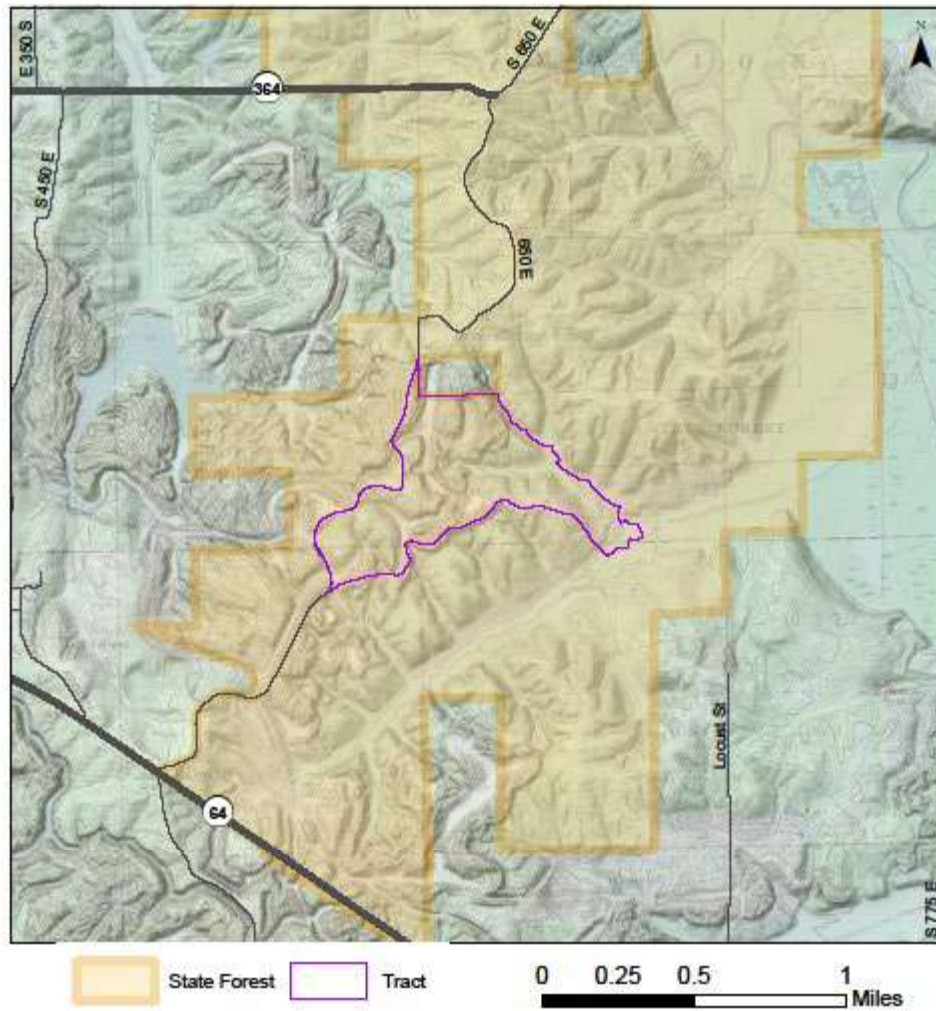
2025-2026

2026-2027

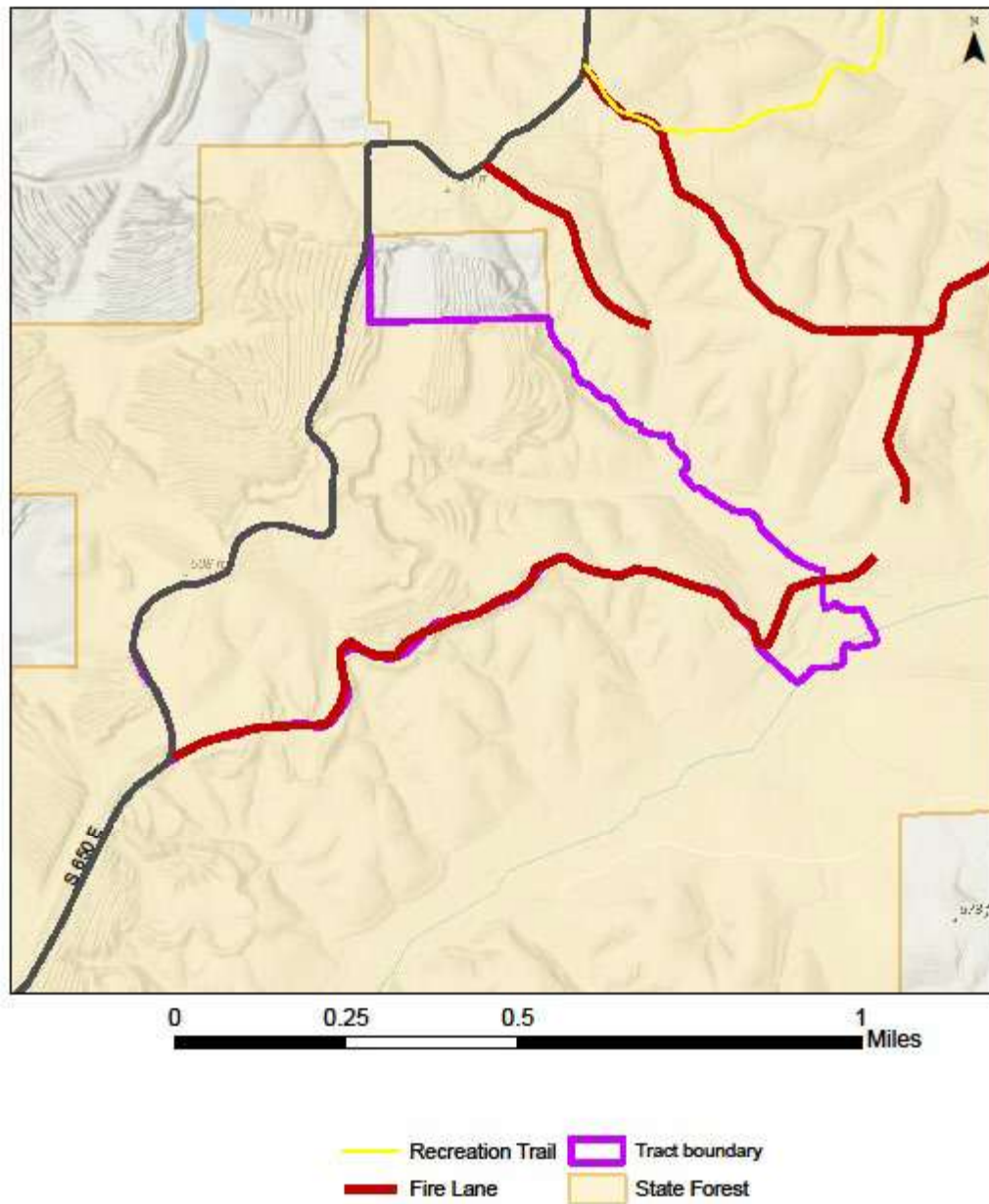
Within 2 years of harvest

2045

Pike State Forest
Location Map
Compartment 12 Tract 9



Pike State Forest
Compartment 12 Tract 9
Tract Map



Pike State Forest Compartment 12 Tract 9 Cover Types Map

