

RESOURCE MANAGEMENT GUIDE

FORESTER'S NARRATIVE

*DRAFT*

**Jackson-Washington State Forest  
Compartment 05 Tract 04  
Data: July, 2007**

Tract 04 is located 1 mile east of Starve Hollow Lake, and ¼ mile south of Starve Hollow Road. Tract 04 is 88.6 acres ranging from a flat river bottom to steep inaccessible slopes. Slope aspects are almost all north facing, with east and west aspect exceptions. The tract is bordered on the east and west by private landowners and by the state on the north and south sides.

Access to the tract is fair. Fire-access road #320 from Starve Hollow Road to the south along the edge of the tract.

**History**

The creation of tract 04 resulted from two larger land purchases of 178.3 acres from Artie C. Leffler and Freda G. Leffler on June 13th, 1939, and 40 acres from Nellie Peters on October 23<sup>rd</sup>, 1963.

In 1971, an inventory was conducted in this area. Inventory numbers indicate that there was about 2,558 bd. ft. per acre.

**Soils**

There are six (6) soil types present: Berks channery silt loam (BeG), Coolville silt loam (CoD), Gilpin silt loam (GnF), Kurtz silt loam (KtF), Steff silt loam (Sg), and Stonehead silt loam (SsC2). Each soil type present should support harvesting equipment with certain locations being avoided due to topography limitations. GnF, BeG, and KtF are listed with severe equipment limitations due to slopes up to 75 percent. Skid trails should run on contours and/or gentle slopes. See map for soil type locations. Site Index ranges from 66 to 90 with an average of 75.

**Wildlife**

Wildlife<sup>1</sup> present includes, but not restricted to, the following: white-tailed deer, wild turkey, gray and fox squirrels, chipmunks, raccoons, Cooper's Hawk, Pileated woodpecker, Wood thrush, and other song birds. An improvement harvest in this tract should benefit both game and non-game species through the creation of additional foraging and nest habitat. Using both single tree and group selection provides habitat for early-, mid- and late-successional wildlife species.

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<sup>1</sup> Wildlife listed as present is a result of visual sightings, tracks, fecal matter, etc. by forestry personnel or other qualified individuals.

## Indiana Bat Management Guidelines

The following present values were determined from the inventory:

	Live trees:	Present	Goal	Available for Removal
Minimum	11" +dbh	1710*	801 *	909
	20" +dbh	205*	267 *	-62
	Snags:	Present	Goal	
Minimum	9" +dbh	164	267	-103
	19" +dbh	0	45	-45

\* The present and goal only include the following Desired Live Tree Species: AME, BIH, BLA, BLL, COT, CRA, REO, POO, REE, SAS, SHH, ZSH, SHO, SIM, WHA, WHO

The minimum count for all snags and the largest live tree size classes are below the goal; these numbers can be increased through TSI by deadening the appropriate numbers to increase the snag goals, and by encouraging specific species regeneration by using appropriate silviculture techniques.

The nature of improvement cuttings lends itself to the known Indiana bat habitat. Removal of single trees will permit light and crown space for the residual trees. This temporary opening in the forest canopy lends itself to ease in movement for bats during flight as they capture their prey. Trees opened up to increased sunlight are able to capture the increased warmth for bats under the exfoliating bark. Regeneration openings also provide pockets within the forest canopy for bats to obtain prey while in flight. It has also been discussed that bats frequently use skid roads and haul roads as flight paths in capturing food and travel routes.

A natural heritage database search was completed on July 12, 2007. No species or communities of concern were noted within or immediately adjacent to this tract.

## Recreation

Recreational use of the entire area is minimal. Hunting is the major recreational activity conducted in and around tract 04. During spring and fall hunters seek deer, turkey, squirrel, raccoon, grouse and mushrooms. Management activities conducted in tract 04 will alter the hunting areas during the harvest operations. Signs will be posted to educate the public about current management activities and list areas that are closed to public access. The tract will reopen once the timber harvest has been completed. Signs to warn of safety concerns related to any TSI work completed on the tract will also need to be posted. These policies are administered to address safety issues.

## Tract Area Prescriptions

**Area A** This area is a lowland site that stretches along a deep stream channel for the length of the track. It is characterized by abundant poplar with a heavy beech and pawpaw understory. Poor formed American sycamore and American beech are present especially on the eastern half of the track. Sugar maple, slippery elm and red elm are

growing also. Most of this area has little regeneration due to the thick understory. An intermediate cutting is recommended for portions of this track. Individually selecting mature and low quality stems for removal in an effort to improve overall vigor and health of the residual stand. This will provide space for the additional crop trees to continue growing into the next cutting cycle. TSI should follow the harvest to release any crop tree not released by the harvest.

**Area B** This area designates white oak stands of variable quality. The track contains several stands of poorly formed white oak along with some quality trees on the far western boundary and central section of the track. There is some advanced regeneration of white oak that could be released with proper treatments. Harvesting mature and defective trees is recommended in order to favor and nurture the advanced regeneration of white oak and remaining, maturing crop trees. An intense TSI project should accompany this harvest. Either pre- or post- TSI should release the oak species and any quality stems not released by the harvest.

**Area C** Old pine stands which have been crowded in by hardwoods dominate this area. In the eastern areas the conifers have been crowded with poplar and American beech. The pines are not competing well and thinning is suggested for the release of other species. The western areas are presiding with chestnut oak and black oak. Windthrow has seemed to cause many felled trees, producing regeneration of oak. To support the developing and established hardwoods the pine should be removed during harvest, and TSI would control the remaining stand after harvest has been completed.

**Area D** This track contains steep elevation relief causing a large portion of to be inaccessible. These areas marked are very steep slopes but there are many more hogback ridges with deep ravines and other trying terrain. Chestnut oak, sugar maple, and red maple are present on these sites, some at maturity, but the terrain here makes these areas excluded from harvesting with current techniques.

**Area E** At the top of the hill there is a road and an old log yard that is now growing back with thick blackberry, stilt grass and other plant and shrub species common to early successional stages. On the western north facing slope there is a large opening which seems to have been caused by windthrow damage. The regrowth is also largely blackberry and greenbrier. In this second area some chestnut oak and sassafras regeneration is present. TSI within this last opening would benefit the regeneration and speed up the time taken to regain merchantable timber.

**Area F** This is a mixed hardwoods region that covers most of the track. A mixture of sugar maple, pignut hickory, white ash, chestnut oak, black oak, poplar and American beech have a consistent distribution throughout the mid-level slopes of this track. Predominate regeneration is poplar and American beech but there are sites that contain good white ash, hickory and oak regeneration as well.

## **OVERALL**

The overall recommendation for this tract is to conduct a cutting to remove competing, defective, and mature trees. One or two openings might be made due to heavy concentrations of mature or poor quality timber, in order to manage for favorable regeneration. This harvest should take place within the next five years. TSI after the harvest is recommended to release younger more vigorous crop trees not successfully released during the harvest. The marking objective is to remove mature/over-mature stems, low quality stems and stems of less desire in an effort to improve the overall health, vigor and composition of the stand. The reduced stocking level will provide ample space for pre-selected crop trees to move forward into the next cutting cycle. A healthier, more vigorous stand with good species composition will be less susceptible to insect and disease infestation a common problem with unhealthy stands. These management techniques will improve the overall health, vigor and quality of the residual stand, while capitalizing on stems dropping out due to natural mortality from overstocking and maturity.

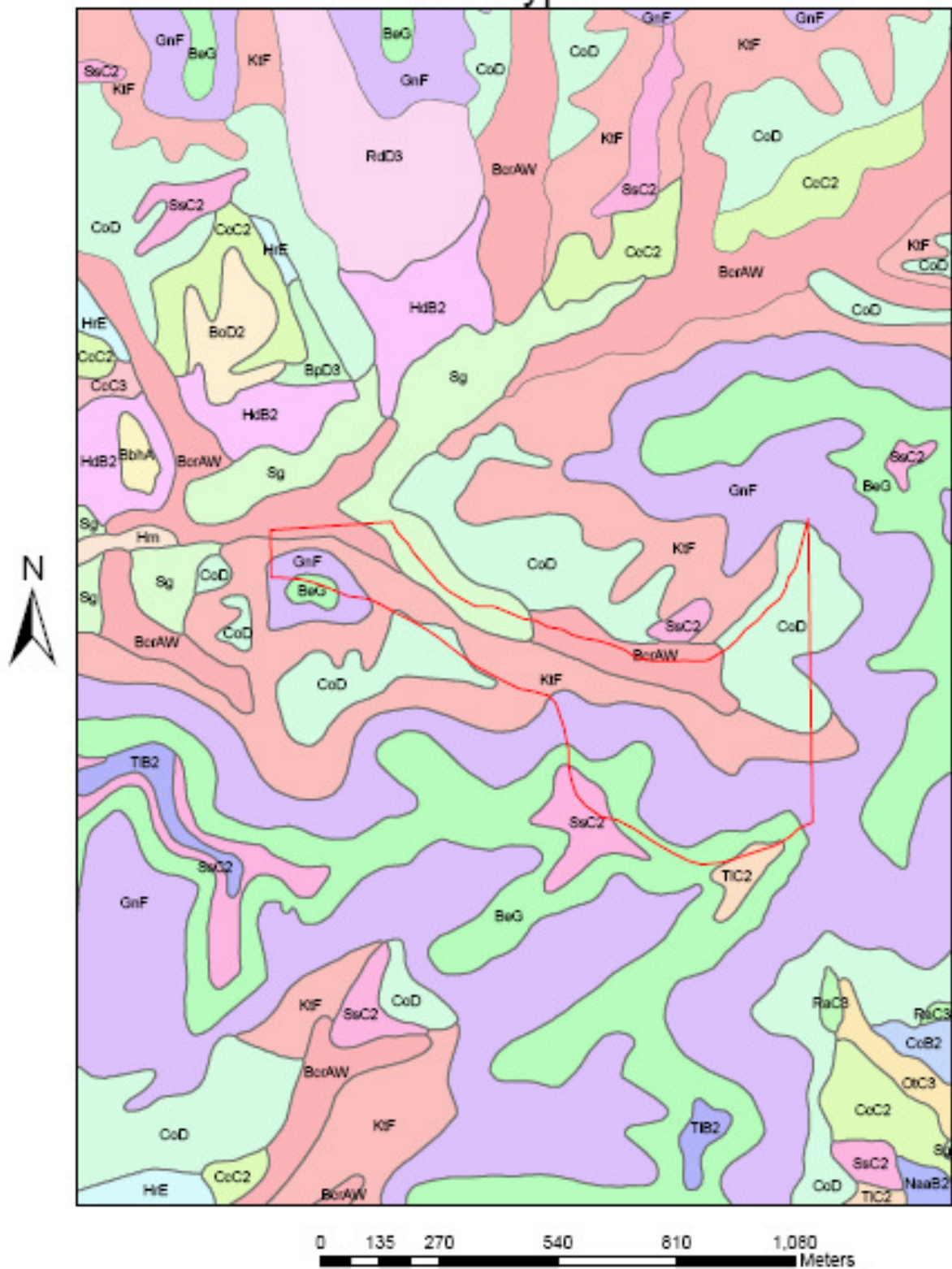
Wildlife will benefit from this harvest as well. Additional sunlight penetrating the forest floor will stimulate the development of new ground flora, subsequently increasing nesting and foraging habitat. This is essential for game and non-game species as well as continued forest development. TSI will increase snag per acre while diversifying diameter distributions of both snags and growing stock trees.

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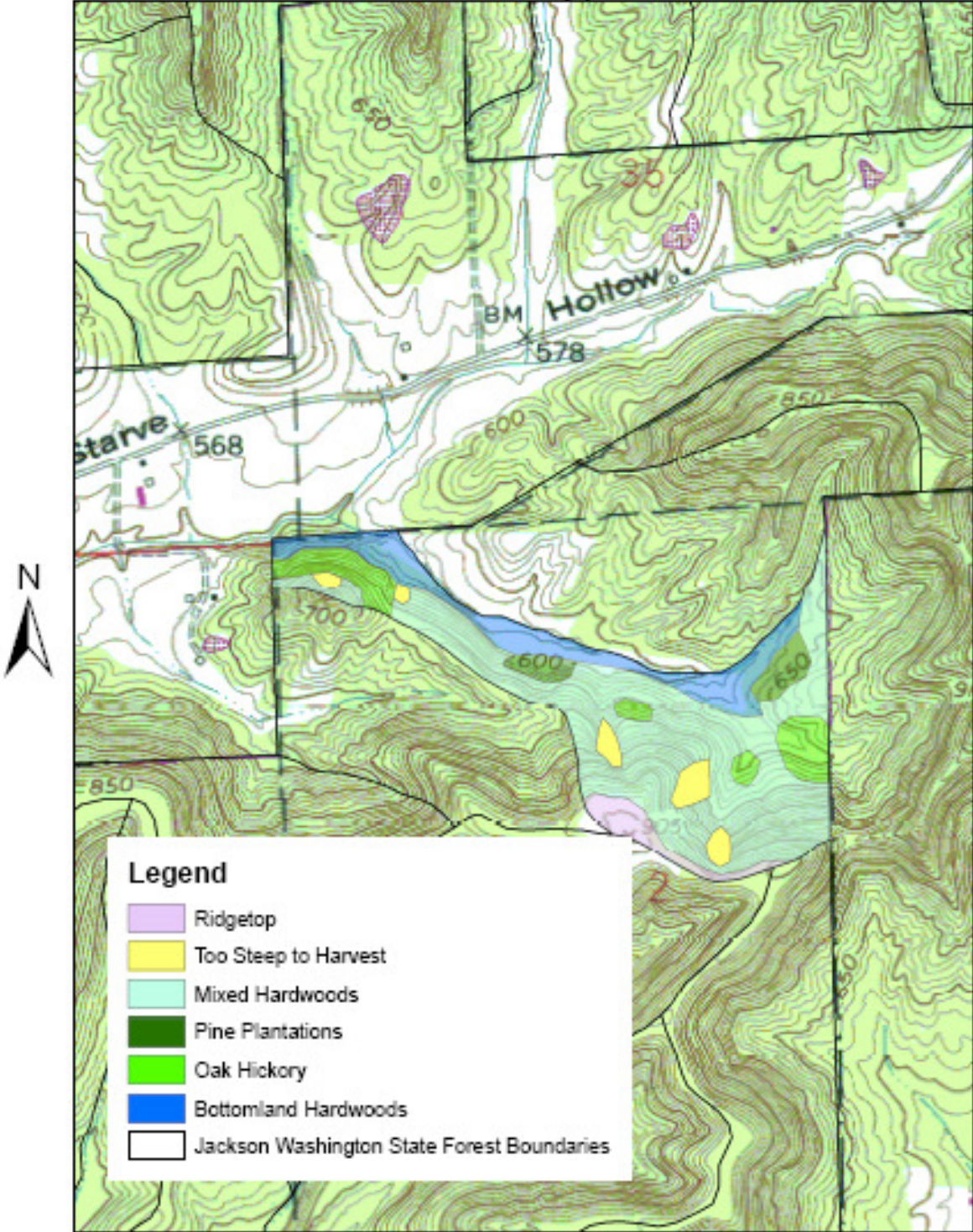
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# Compartment 5 Tract 4 Soil Types



# Compartment 5 Tract 4 Timber Types



0 135 270 540 810 1,080 Meters