



File Code: 1950

Date: September 7, 2010

Dear Reader,

The Pleasant Hill Ranger District of the Ozark National Forest is proposing to maintain forest health and manage vegetation through regeneration harvests and thinning. The actions we are proposing also include enhancing wildlife & fish habitat, decommissioning roads (some by gating) while improving others, reducing the build-up of hazardous fuels through prescribed burning, and managing mineral exploration. The project area, which includes a total of 6,248 acres, has been defined and includes compartments 334, 337, 340, and 674. Approximately 2,108 acres are privately owned. The legal description is T12N R25W Sections: 24-26; T11N R25W Section: 1; T12N R24W Sections: 17, 19-22, 27-34; and T11N R24W Sections: 4-6. The project area is bounded by Mulberry River Road (Hwy. 215) on the north, Highway 103 on the west, Forest roads 4432C and 1425 on the east, and JO4290 and Forest road 1435 on the south. We are asking for suggestions or ideas you may have that will help us make the best decisions on managing your public lands in this area. The proposed action will be called the "**Cougar**" project.

Pine and hardwood stands are recommended for regeneration cutting to perpetuate this forest type and to create a variety of age classes, thereby, promoting diversity; thinning other forest stands is proposed to promote vigor and thriftiness of the remaining trees. Prescribed burning and herbicide/handtool treatments would follow harvesting/thinning of hardwood and pine to: prepare the ground for seedfall or planting, and stimulate wildlife benefits. Timber products in the form of sawlogs, small roundwood, and firewood would be generated by these actions in the near term as well as providing for a future sustainable supply of timber products. Habitat diversity for animals and plants, including threatened, endangered, and/or sensitive species would be maintained or improved by the effects of the timber, wildlife, recreation, and access management. Reduction of wildfire risk by prescribed burning is also proposed as well as closing roads no longer needed for land management. This proposal would maintain or improve the plant and animal diversity to meet overall multiple-use objectives as described in the Revised Land and Resource Management Plan.

All work being proposed is on National Forest lands only. **No work would occur on privately-owned land.** However, the Forest Service would solicit cooperation with private landowners via Wyden/Stevens agreements, which allow the Forest Service to carry out prescribed burn treatments on private lands surrounded by or adjacent to federal land.

Vegetation Management

Hardwood Thinning followed by Timber Stand Improvement (TSI) would be accomplished. The objective of hardwood thinning would be to reduce density, increase growth of residual trees, reduce the susceptibility of the stand to insect and diseases, improve habitat for wildlife by increasing vigor of residual hard-mast-producing trees, and create light conditions that promote advanced oak regeneration. Trees that are suppressed or that have poor form would be targeted for removal as well as mature trees that may be lost due to mortality. Trees of good form, more desirable species, and/or trees close to the correct spacing would be favored over trees that are simply of larger size. Removing approximately 40% of stand density would allow adequate light levels to promote advanced oak regeneration and put these stands in a condition that would ensure sustainability of these forest types. The target basal area would range from 60-80 ft² and spacing would depend on the average **DBH** (diameter of tree at breast height) of the stand.

Approximately 21 acres (1 stand) would be thinned. The stand that would receive this treatment currently has a dense midstory and understory of undesirable species. Thinning this stand would release these undesirable species to become more dominant in the stand. To combat this proliferation of undesirables, a Timber Stand Improvement (TSI) treatment (consisting of herbicide/handtool and Rx burning) would be done after harvest to encourage oaks and other desirable species to become abundant in the mid and



understories and help perpetuate oaks on this site. Also, this would allow desirable species to grow free of competition and to enable the stand to be considered for a regeneration harvest next entry.

Hardwood Shelterwood with Reserves followed by Site Prep Herbicide & Burning would occur on 49 acres. Currently, two stands have adequate advanced regeneration of desirable species that will dominate the site after harvest. Unfortunately, most of the desirable regeneration is not oak. After harvest, these stands will have herbicide applied to undesirable stems by the hack and squirt and foliar methods, and controlled burned.

The combination of stump/root sprouts from oak species and the other existing desirable seedlings will establish the new stands. This treatment would sustain long term forest health, provide for the succession of early seral habitat, and contribute to providing a sustainable forest. The objective of a shelterwood with reserves is to open up the stand allowing sunlight to reach the forest floor while leaving an adequate amount of trees to provide seed. An average basal area of 20-40 ft² would be retained.

Hardwood Shelterwood with Reserves with a pre-harvest TSI would occur on approximately 6 stands (107 acres). These stands have oaks in the understory that are currently short in height and not in a position to compete with undesirable regeneration. A TSI treatment (herbicide/handtools) would remove the undesirable mid and understories and allow desired species to grow in height which would allow them to compete once the shelterwood harvest is done. Objectives and basal areas are the same as listed above for Hardwood Shelterwood with Reserves-SP Herb/Burn. A post-harvest treatment (herbicide/handtools) may be necessary along with a controlled burn to further reduce undesirable species and to augment wildlife benefits.

Connected Treatments for all Hardwood Shelterwood stands: If desired species fail to adequately establish a new stand, **planting & release** of oak species (possibly 156 acres) will be required, using handtools/herbicide and burning, if necessary, to reduce competing vegetation and release desirable hardwood species within 3-5 years after harvest.

The mature hardwood left over from the shelterwood harvests will remain until the new stands receive their first thinning.

Oak Woodland Restoration would occur on 37 acres (2 stands). This treatment is generally done on lower productivity sites with the objective of reducing density of the stand to a level that was common in oak woodlands in pre-European times. Oak woodland restoration would allow more sunlight to reach the forest floor (thereby increasing herbaceous species diversity) and promote more mast (nut and fruit) production from the remaining trees. This is not a regeneration treatment aimed at creating a new stand. These stands would have a grassy understory and the overstory would be managed to keep a 40 ft² basal area (until these trees reached over 140 years old). Oak woodland restoration would benefit a variety of game and non-game wildlife species. This treatment would generally leave a lower basal area than a thinning but more than a shelterwood.

Hardwood Pre-commercial Thinning (PCT) with Handtools would occur on 1 stand (23 acres). This is a non-commercial treatment used in one younger stand not feasible to commercially harvest. The purpose of PCT would be to cut small, unmerchantable trees competing with desired hardwood species. This treatment would allow for the selection of the trees with the best form to remain and to free them of competition.

Hardwood TSI – Midstory Treatment with Handtools is recommended in another stand, about 2 acres. This stand is about 70 years old, but is on a low-quality site adjacent to a good road. It can be thinned for firewood, with benefits similar to the treatment above.

Hardwood TSI- Midstory Treatment for Herbicide would occur on 227 acres (11 stands). These stands are mostly immature sawtimber but do have a component of mature trees; they have a dense midstory and understory of undesirable species. Removal of these undesirable species will allow oak and other desirable species currently in and underneath the midstory to be released and become competitive. The success of this treatment would allow a regeneration harvest to be considered next entry.

Pine Thinning would occur on 712 acres (23 stands). Thinning would increase growth of residual trees, reduce the susceptibility of the stand to insect and disease, and improve habitat for wildlife. The pine stands would be thinned to a target basal area of 60-70 ft²/acre. Trees that are suppressed or that have poor form would be removed. Trees of good form and/or close to the correct spacing would be favored over trees that are simply of larger size. The target pine spacing would depend on the average DBH of the stand. Prescribed burning following thinning would provide beneficial effects for wildlife.

Pine Seedtree harvests are proposed on 12 units that total approximately 360 acres. This type of regeneration harvest would remove 90% of the overstory (BA=20). Site preparation will be done with herbicide treatments and with a prescribed burn in order to prepare a proper seed bed. Adequate natural regeneration should be present to re-stock the stands with an average 300 trees/acre; however, planting may be necessary if stocking levels are not met through natural means. Following the establishment of the regenerated stand, release treatments with herbicide may be needed to promote "free-to-grow" conditions. The remaining mature overstory trees would be harvested when the new stand is ready for its first thinning.

Pine Shelterwood with Reserves harvests are recommended. Ten stands totaling about 192 acres would be treated. Shelterwood cutting would reduce the current density from about 130 trees per acre to 25-35 trees per acre (BA=30-40), allowing more sunlight to reach the forest floor and provide for the growth of new trees underneath the overstory. As the name implies, several trees would be left in the overstory to give shelter to the developing seedlings on the ground. These stands are mature; growth has slowed and the trees are beginning to decline. Removing some of the larger trees would open up the area and allow young productive trees to become established. Subsequent herbicide and prescribed burn treatments (site preparation) would follow to prepare a good bed for seed fall. Natural regeneration adequate to re-stock the stands with an average of 300 trees/acre should be present; however, planting may be necessary if stocking levels are not met. Following the establishment of the regenerated stand, release treatments with herbicide may be needed to promote "free-to-grow" conditions. The remaining mature overstory trees would be harvested when the new stand is ready for its first thinning.

Connected Treatments for all Pine Shelterwood & Seedtree stands: if natural seeding fails to adequately establish a new stand within 3-5 years after harvest, **planting & release** of Shortleaf pine (possibly 552 acres) will be required. Handtools/herbicide and burning, if necessary, will be used to control competing vegetation and release the pine seedlings.

The mature pine left over from the shelterwood/seedtree harvests will remain until the new stands receive their first thinning.

Pine Pre-commercial Thinning (PCT) Followed by Planting is proposed for one stand, about 98 net acres. This stand was harvested of all of its marketable pine timber about fifteen years ago, after which it was acquired by the Forest Service. Hardwood is becoming more dominant. It needs to be restored to pine using herbicide means, then inter-planted to Shortleaf pine. Rx burning may also be employed to further control the hardwood species.

Pine Pre-commercial Thinning is recommended in another stand on about 30 acres. It, also, was acquired about 15 years ago after it had been harvested of all its merchantable pine. However, adequate young pine pole timber and saplings exist; they are in need of release from hardwood brush and sapling competition. This can be accomplished by herbicide means and burning.

Pine TSI- Midstory Treatment with Rx Burning/Herbicide is proposed in two stands, around 52 acres. This stand was thinned 10-15 years ago but has not accumulated any pine regeneration to be adequately stocked. The stand is approaching maturity and needs more pine seedlings on the ground to be prepared for final harvest in the next entry. Hardwood competition needs to be controlled by herbicide treatments and the seed bed prepared by Rx burning for natural seedfall.

The following road work would be done to access timber stands, improve/maintain watershed and riparian conditions, and protect/enhance wildlife habitat:

Reconstruction/realignment is proposed on approximately 0.25 mile of road. Most of this work would consist of replacing a culvert and stabilizing drain crossings by adding gravel on existing roads. Some blasting of bedrock may be needed in one particular spot to further stabilize the road. This will help improve watershed conditions by reducing erosion and sediment that reaches streams. The road proposed for reconstruction/realignment is a segment of 4432A.

Maintenance on approximately 22 miles of open and closed roads would be performed in this project in order to obtain a suitable road condition for hauling timber. County roads that would be used are regularly maintained by their respective counties, along with Forest Service assistance. Closed roads are temporarily opened during the timber/silvicultural activities, then re-closed after activities are completed with gates or mounds to reduce erosion caused from vehicle traffic and to protect wildlife habitat.

Decommissioning on approximately 5 miles of existing roads no longer needed for management or access are proposed. This entails restoring roads to a more natural state. Activities used to decommission a road can include, but are not limited to, the following: reestablishing former drainage patterns, stabilizing slopes, restoring vegetation, blocking the entrance to the road, installing water bars (earthen mounds), and removing culverts. Unnamed and illegally accessed OHV trails that are present in the project area may be closed using debris, rocks, earthen mounds, or gates.

Temporary roads, approximately 6 miles would be needed to access timber stands. These roads would be blocked following completion of use and rehabilitated with seeding and/or natural re-vegetation. Temporary roads are not intended to be included as part of the forest transportation system as they are managed for projects or activities, then decommissioned after use.

Gate installation- Five gates would be erected to improve/maintain watershed conditions and wildlife habitat by reducing disturbance from vehicles and providing recreational experiences to forest users by limiting areas to walk-in hunting and wildlife viewing.

Wildlife Habitat Improvement

Wildlife Opening Reconstruction

Eight existing wildlife openings would be expanded by at least 1 acre. Methods used to accomplish this would be dozing, blasting stumps, herbicide use, disking, and seeding. One existing wildlife opening (compartment 334, stand 22) would be reconstructed by removing encroaching trees around edges, brush-hogging and seeding. The size of this opening will not be increased.

New Wildlife Opening Construction

Three new wildlife openings approximately 2 acres in size would be constructed. Size may be less than 2 acres if terrain, slope, etc. doesn't allow for this size. Methods used to accomplish construction of these wildlife openings would include dozing, blasting stumps, herbicide use, disking and seeding.

Wildlife Pond Reconstruction/Improvement

One existing wildlife pond would be reconstructed. This pond is located in compartment 337, stand 30 and is ¼ acre in size. The pond is currently silted in and would be dozed out and sealed with bentonite.

KV funds will be used to improve a 1.5 acre fish pond (Bear Branch Pond) in compartment 334, stand 4. Additional actions include adding fish structures to pond, improving access to the pond on 94334D, and improving the parking area at the pond.

Wildlife Stand Improvements (WSI)

WSI is proposed on two ridges in compartment 334, stand 5 on approximately 20 acres. These stands would be thinned to a basal area of 40. Methods used would include hand-felling, use of a tree shear, cut-surface herbicide application, and foliar herbicide application.

Fish Habitat Improvements

Introduction of Large Woody Debris (LWD) to streams is proposed to improve fish habitat along certain

stretches of Washita Creek and Bull Creek. In addition to improving fish habitat in these streams, the introduction of LWD would also provide fish cover and would assist in the formation of creek pools. Chainsaw felling will be utilized to place trees into the creek channel.

Minerals Management

All of the Federal Lands in T 11N; R 25W, T 12N; R 25W, T 11N; R 24W, and T 12N; R 24W located within the project area are currently leased through the Bureau of Land Management (BLM) with the exception of Section 36 located in T 12N R 25W. However, Section 36 does have an existing producing gas well (minerals held in perpetuity) known as the Weiser-Brown "Cheapshot" well. The project area also contains three (3) other producing wells and one (1) separator compressor unit. There are also eight (8) plugged and abandoned wells that have occurred over the years. The federal lands in this area have proven to be moderately productive for gas well activity to date; although, with geologic formations identified such as the Fayetteville Shale, it is expected that the project area will receive an increase in gas production activity during the next ten years. This is based upon recent seismic testing in the vicinity of the project area along with the increased number of gas wells being drilled on adjacent districts and on private parcels within the boundaries of the Ozark National Forest. At this time, no formal applications have been received for gas well activities within the project area.

Hazardous Fuel Reduction Burning

All of the Forest Service land within the project area (4,140 acres) would potentially receive low to moderate intensity prescribed burns to reduce hazardous fuels and wildfire risk. Prescribed burning may be done on a 3-10 year rotation throughout the Cougar project area. Prescribed burning would provide associated benefits to wildlife through improvement in forest floor vegetation abundance and diversity. Fire would also benefit wildlife by improving hard-mast producing species (oak/hickory) in the seedling and sapling stage by reducing competition from fire-intolerant species.

The comment period for the Cougar project lasts for 30 days following publication in the Johnson County Graphic. If you can provide additional information that will help us make the best decision on the proposed project, please contact me or Mindi Lawson at (479) 754-2864; or mail to: District Ranger, Pleasant Hill Ranger District, 2591 Hwy 21, Clarksville, Arkansas, 72830. Our e-mail address is: comments-southern-ozark-stfrancis-pleasanthill@fs.fed.us

Sincerely,

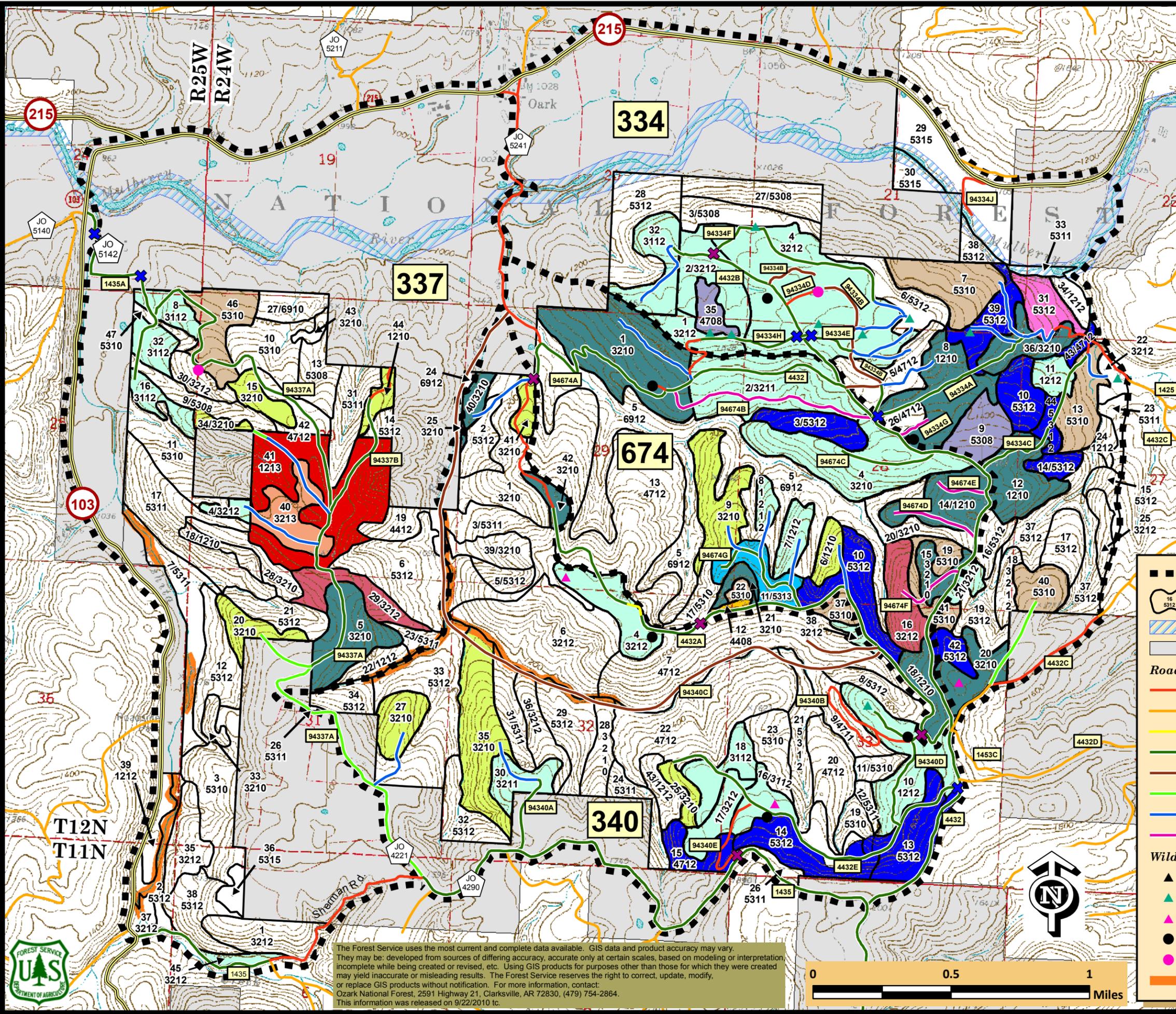
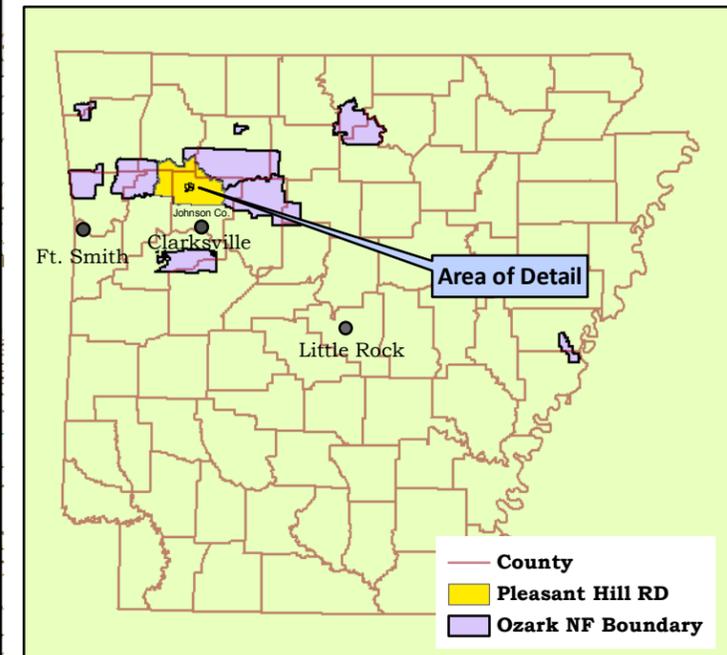
/s/ Pat Kowalewycz

PAT KOWALEWYCZ
District Ranger

enclosure:

Cougar

Proposed Actions



Compartment Boundary	334	Gates
Forest Stands		Existing
Mulberry W & S River Corridor		Proposed
Private Ownership		
Roadwork		Hardwood Harvest
Existing-within project area		Thinning
Existing-outside project area		Shelterwood
Reconstruction		Oak Woodland
Maintenance		Hardwood Treatments
Decommission		PCT-handtools
Needs R.O.W.		TSI-handtools
Temporary		TSI-herbicide
Temporary, then Decomm		Pine Harvest
Wildlife Habitat Improvements		Thinning
Existing Opening		Seedtree
Existing Opening-reconstruction		Shelterwood
Proposed New Opening		Pine Treatments
Existing Pond		PCT: herb & burn
Proposed New Pond		PCT: herb-burn-plant
Large Woody Debris Placement		TSI: herb & burn

The Forest Service uses the most current and complete data available. GIS data and product accuracy may vary. They may be developed from sources of differing accuracy, accurate only at certain scales, based on modeling or interpretation incomplete while being created or revised, etc. Using GIS products for purposes other than those for which they were created may yield inaccurate or misleading results. The Forest Service reserves the right to correct, update, modify, or replace GIS products without notification. For more information, contact: Ozark National Forest, 2591 Highway 21, Clarksville, AR 72830, (479) 754-2864. This information was released on 9/22/2010 to:

