DECISION NOTICE
and
FINDING OF NO SIGNIFICANT IMPACT

USDA Forest Service R-8
Ozark National Forest
Pleasant Hill Ranger District
Johnson, Madison, and Newton Counties, Arkansas
Compartments 279, 304, 305, 492, and 605

Lynn Hollow

DECISION NOTICE (DN)

Based on an Environmental Assessment (EA) prepared by an interdisciplinary team of Forest Service specialists, decisions regarding management actions for forest health, ecosystem restoration and wildlife habitat over the next several years have been made for the Lynn Hollow project. Decisions have been made for hardwood and pine forest stand management and the connected actions of site preparation for regeneration, release, and timber stand improvement (TSI). Road work to access areas for timber management along with road closures and decommissioning is also addressed. In addition, decisions for wildlife habitat improvements consisting of wildlife ponds and opening construction, wildlife stand improvement thinning, and hazardous fuel reduction prescribed burning have been made. Furthermore, decisions which improve recreation potential of the area by reducing hazards to the public, limiting excessive illegal-OHV use, and cleaning up a collection of culverts have been made.

These actions are planned to implement the Ozark-St. Francis Land and Resource Management Plan (LRMP) goals and objectives for the timber, recreation, and wildlife resources within the project area. In general, the objectives for management in the project area are to restore ecosystem health and sustainable conditions, increase plant and wildlife diversity, reduce forest fuel loading through restoring a more frequent fire return interval, reduce conflicts between motorized vehicles and other resource values, increase forest visitor safety, and provide forest products to the public. The management actions designed to meet these objectives address issues and concerns expressed by the public and interdisciplinary team.

The Lynn Hollow project area encompasses approximately 5,880 acres of National Forest land. The project area is located on the Ozark National Forest, Pleasant Hill Ranger District in northwest Arkansas. It is approximately 4 miles west of Fallsville, Arkansas in Johnson, Madison, and Newton Counties. The project is within compartments 279, 304, 305, 492, and 605; the legal description is T13N, R24W, Sections 2, 3, 10, 11, 14-18, 19-22, and 27-30. Based on the analysis documented in the EA, it is my decision to implement **Alternative 2** (see attached map). These actions will have some impact on National Forest lands from vegetation management and wildlife habitat improvement work.

Private lands may be involved in the completion of prescribed burning to restore ecosystem health and reduce forest fuel loading, but only with consent of private landowners and completion of applicable agreements.

Hardwood thinning of approximately 720 acres (20 stands) 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 ft^2 and spacing would depend on the average DBH of the stand.

Hardwood Thinning followed by TSI of approximately 376 acres (6 stands) would also be accomplished. The stands that would receive this treatment currently have dense midstories and understories of undesirable species. Thinning of these stands would release these undesirable species currently present in the mid and understories. The TSI treatment would be done with handtools and herbicides and would target undesirable species. This treatment would encourage oaks and other desirable species to become abundant in the mid and understories and would allow a regeneration harvest to be considered next entry.

Hardwood Shelterwood with Reserves followed by Site Prep Herbicide would occur on 476 acres. Currently, 7 stands (267 acres) have adequate advanced regeneration of desirable species that would dominate the site after harvest. After harvest, these stands would have herbicide applied to undesirable stems by the hack and squirt method. 5 stands (209 acres) currently do not have the amount of adequate desirable regeneration to stock a new stand or have adequate desirable regeneration but only a small proponent of this is oak species. The site prep should provide for adequate regeneration in the future. After harvest, these stands would have herbicide applied to undesirable stems by the hack and squirt and foliar methods.

A shelterwood harvest followed by site prep application of herbicides would be done to prepare the site for natural oak regeneration. The combination of stump sprouts from desirable species and natural oak seedlings would establish the new stand. 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 to help naturally regenerate the site. An average basal area of 20-40 ft^2 would be retained (average spacing between trees would depend on average DBH of stand) consisting primarily of red oak, white oak, and hickory which, combined with existing advanced regeneration and estimated stump sprouts, would provide an adequate seed source to establish the new stands.

Hardwood Shelterwood with Reserves with a pre-harvest TSI would occur on approximately 415 acres (11 stands). These stands have oaks in the understory that are

currently short in height and not in a competitive position to compete with undesirable regeneration. A TSI treatment 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 would be done. Objectives and basal areas are the same as listed above for Hardwood Shelterwood with Reserves.

Connected Treatments for all Hardwood Shelterwood stands: If natural seeding combined with advanced regeneration fail to adequately establish a new stand, **planting** would be required (possibly 891 acres). **Release** using handtools and/or herbicide would be used, if necessary to reduce competing vegetation and release desirable hardwood species approximately 5-7 years after the new stand has been established (891 acres).

Oak Woodland Restoration would occur on 66 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 ft^2 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.

Pine Thinning would occur on 96 acres (4 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 ft^2/acre. Trees that are suppressed or that have poor form would be targeted for removal. 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.

Pine Woodland Restoration would occur on 24 acres (1 stand). This treatment is generally done on lower productivity sites. This stand would be commercially thinned to a target basal area of 40-50 ft^2. Pine 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. Pine woodland restoration would benefit a variety of game and non-game wildlife species. The purpose of this treatment is to reduce the number of trees to levels common in pine woodlands in pre-European times.

Timber Stand Improvement with the use of handtools would occur on 441 acres (18 stands) of hardwood stands. This is a non-commercial treatment used on younger stands not feasible to commercially harvest. The purpose of TSI would be to cut small and/or unmerchentable trees competing with desired hardwood species. The trees that would be cut in this treatment would be left in the stand. This treatment would allow for the selection of the best trees with the best form to be left and free them of competition.

Timber Stand Improvement with the use of herbicides and handtools would occur on 319 acres (9 stands) of hardwood stands. These stands are mature and have a dense midstory and understory of undesirable species. A TSI to remove these undesirable species will allow oak and other desirable species currently underneath the midstory to be released and become competitive. The TSI treatment would be done to encourage oaks and other desirable species to become abundant in the mid and understories and would help perpetuate oaks on this site and would allow a regeneration harvest to be considered next entry.

Wildlife Stand Improvement (WSI) would occur on 359 acres (10 stands) of hardwood stands. This treatment is similar to oak woodland restoration (done on low productivity sites and have a target basal area of 40 ft^2) but, it is usually done non-commercially. However, there is potential for a market for this material and a commercial operation could become feasible. If a commercial operation becomes feasible, logging equipment would be used and the timber would be removed from the site. Herbicides may be used after the harvest was finished. If done non-commercially this treatment would be accomplished by use of chainsaw felling, use of tree shear, girdling and application of herbicides through hack and squirt and foliar and trees would be left on site or would be utilized as fire wood. WSI would benefit a variety of game and non-game wildlife species.

Construction of 2.3 miles of roads is proposed to access timber stands for harvest. Roads constructed would average less than ten percent slope, with some short sections slightly greater than 10 percent. The newly constructed roads would be built or maintained to a Level D standard (lowest Forest Service standard). These roads would be closed with a mound or gate after logging and corresponding silvicultural activities and could be used for administrative purposes in the future. Roads or portions of roads proposed for construction are 94305A (2 segments), 94605H, 94605D, and 94605G.

Reconstruction/realignment is proposed on 0.7 miles of road. Most of this work would consist of replacing culverts and stabilizing drain crossings by adding gravel on existing roads. This will help improve watershed conditions by reducing erosion and sediment that reaches streams. Roads proposed for reconstruction/realignment are portions of 94304C, 94605B and 94605G.

Maintenance on approximately 23.3 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. Several maintenance level 1 and 2 roads that were previously closed would be re-closed with gates or mounds to reduce erosion caused from vehicle traffic and improve wildlife resources. The Forest Service Manual states that level 1 roads are to be closed to motorized traffic when management activities are complete.

Maintenance/Closure of approximately 10.6 miles of roads is proposed. These roads would be maintained for and during the timber sale and the silvicultural activity that follows the sale and then closed with a gate or mound. When administrative activities are complete and a forest system road is no longer needed for one or more years, they are closed for resource protection and improvement of watershed integrity. Closure denotes storage for future use; the road

remains on the forest development transportation system and periodic maintenance may be required. Closing these roads would improve watershed conditions by reducing erosion and sediment in streams. The closure of these roads would also improve wildlife and wildlife habitat by reducing disturbance from vehicles.

Approximately 2.9 miles of existing roads no longer needed for management or access are proposed for **decommissioning**. Decommissioning roads involves 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. These activities are designed to eliminate the roadbed by restoring natural conditions. Unnamed and illegally accessed OHV trails that are present in the project area may be closed using debris, rocks, earthen mounds, or gates. The roads or portions of roads to be decommissioned are 94279G, 94278A, 94279I, 94605F, and 94492A.

Approximately 4.0 miles of **temporary roads** 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 inteded to be included as part of the forest road atlas, as they are managed for projects or activities and decommissioned after use.

Gate installation- 9 gates would be constructed 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/wildlife viewing. Gates would be installed that close the following roads: 94279A, 94279D, 94279E, 94305A, 94492B, 94605A, 94605B (2 gates), and 94605I. Gating has proven to be an effective method of eliminating illegal motorized vehicle use.

Gully Stabilization- 7 acres of gully stabilization would be done in 3 different stands in the project area. A mixture of structural methods and bioengineering methods may be used to address the problem.

Prescribed Burning: 7,591 acres (if consent is given from all private landowners) would receive low to moderate intensity prescribed burns to reduce hazardous fuels and wildfire risk. Prescribed burning may be done on a 3-7 year rotation throughout the Lynn Hollow 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.

Non-native invasive species (NNIS) if found during project implementation would be controlled using the appropriate herbicides.

Wildlife Openings: 6 wildlife openings each 2 acres in size would be constructed using a dozer and would be maintained by mowing and herbicides. Many animals need forest openings to fulfill all or some of their habitat requirements during their life cycle.

Wildlife Opening Reconstruction: 1 existing wildlife opening (2 acres) would be reconstructed using a dozer and then maintained by mowing and herbicides. Many animals need forest openings to fulfill all or some of their habitat requirements during their life cycle.

Recreational Fish Ponds: 2 recreational fish ponds would be constructed (Comp 304 Stand 3 = 1-3 acres, and Comp 305 Stand 14 = 2-4 acres) using a dozer. This would supply a water source for wildlife as well as provide recreational opportunities.

Culvert Trash Cleanup: A collection of old, used culverts lying on the ground next to road 94304B would be cleaned up and hauled off.

Ozark Highlands Trail: Along the Ozark Highlands Trail within this project area, hazard trees may be removed to provide for public safety.

ENVIRONMENTAL EFFECTS:
Implementation of alternative 2 would have some effects on the environment. These effects are stated in Chapter 3 of the EA and are summarized in Table 2.2.1 in the EA. Environmental effects by various resource categories are briefly described as follows:

1. **Soil & Water** – The project area is located within a sub-watershed of the Upper Mulberry River. Some natural erosion occurs on the project lands in the watershed analysis area of 27,143 acres (public and private lands). Temporary loss of soil productivity will occur on approximately 197 acres (8% of the activity area) during the logging and other operations. The Land and Resources Management Plan (LRMP) says that a minimum of 85% of an activity area will be left in a condition in which vegetative productivity does not decrease following a soil-disturbing activity. Soil disturbance for this project would be well within the LRMP standard. Road work (including temporary roads), skid trails, and log landings would be highly disturbed and have some degree of compaction. In addition, off-trail log skidding operations would displace litter and disturb soils, but usually not compact them. The area of soil disturbance is directly related to on and off-site movement of soil and soil nutrients through erosion processes. Effects of disturbance would be mitigated following the timber sale by naturally revegetating and artificially fertilizing and seeding temporary roads, log landings, and skid trails. These artificial practices encourage natural recovery processes by replacing lost nutrients and enhancing rapid revegetation. Vegetative cover minimizes the erosion process and re-establishes the process of soil organic matter formation. The types of burns planned normally do not remove all litter down to bare soil and firelines would be seeded to promote quick revegetation. Areas burned should quickly revegetate with grass, sprouts, and forbs. Pond dams would be revegetated after construction and the openings will revegetate quickly. There should be no long-term cumulative effects as areas disturbed from this alternative should return to their former conditions within 3-5 years.

   Approved herbicides have the potential to be applied to 2,836 total acres for site preparation, TSI, wildlife stand improvement, noxious weed eradication, and wildlife opening creation. With use of mitigation measures, no significant long-term degradation or cumulative effects,

including state standards, on soils and water quality are anticipated from implementation of this alternative.

2. **Air** – Prescribed burning for wildlife forage production, ecosystem health, and hazardous fuel reduction would release approximately 18,750 tons of carbon dioxide along with lesser amounts of other emissions into the atmosphere for a short period of time. Burns would follow approved burning plans to manage the smoke and burning intensities. Mitigation measures would ensure compliance with federal, state and local clean air requirements, and no long-term cumulative effect is anticipated from implementation of this alternative.

3. **Road Work** – Construction of 2.3 miles of roads, reconstruction of 0.7 mile, maintenance of 23.3 miles, maintenance followed by road closure on 10.6 miles, and 2.9 miles of road decommission, would have some effect on soil erosion, water quality, wildlife habitat, vegetation and other resources. Use of mitigation measures, such as water diversion structures, low grades, use during dry periods, closure to traffic after use, and other measures would also lessen road impacts to acceptable levels. Long term cumulative effects of construction, reconstruction, maintenance, and rehabilitation are insignificant. The estimated amount of sediment is actually predicted to decrease under Alternative 2 as compared to the No Action alternative. This is due to road closures and decommissioning which would reduce current sediment levels.

4. **Heritage Resources** – Fifteen sites were inventoried during the intensive survey of the project area. The project has been designed so that all sites that may be eligible for the National Register of Historic Places, or are of undermined eligibility, lie outside any of the project's areas of planned tree removal or other ground disturbing activity. The historic site areas, which contain no organic cultural material, would undergo prescribed burning. Past research has shown that sites such as these would not be affected by a low-intensity prescribed burn. Should any additional sites be found during project implementation, they would be examined by a professional Archaeologist, who would prescribe necessary mitigation measures. Based on these finding, all sites would be preserved intact and no significant effects would be produced upon significant historical or prehistoric sites that may be eligible for nomination to the National Register of Historic Places.

5. **Mineral Resources** – Currently, there are no existing leases in the project area. Requests for potential surface occupancy through an APD to withdraw minerals within the project area would need to be approved. Locations of potential gas wells would be sited according to environmental concerns. The acreage for each new site normally does not exceed five (5) acres of new ground disturbance. This includes any new construction of roads, the pad area, the pit area, and any other areas that are cleared of vegetation. The rehabilitation of areas shall be done in a timely manner with direction given individually for each site. Rehabilitation measures could include restoration to original conditions, maintenance as a wildlife opening, or as a dispersed recreation area.

6. **Vegetation**– Hardwood forest types occupy about 96% of the public land area and are mostly suitable for timber management within the project area. Pine types occupy about 4%. Of the 5,880 acres of total public lands in the project area for which vegetation was

analyzed, 4,865 acres are suitable for timber management. Implementing the selected alternative would create about 1,521 acres of within-stand diversity change and 891 acres between-stand diversity change from timber harvesting and connected actions. Some additional diversity would be introduced by the planned stand mid-story control and site preparation, release and TSI actions, as well as prescribed burns, wildlife pond and opening construction, and wildlife thinning and burning. No conversions between forest types would occur. With the project area containing timber that is from 70 years or older on 87% of the area, the impact of planned harvests, road reconstruction, maintenance, wildlife pond construction, and prescribed burning would not have negative effects on the overall, long term vegetation diversity. About 1,015 acres of steep, rocky areas are in classifications other than suitable for timber management and would develop into old-growth conditions. Overall, old-growth would not be significantly affected.

7. **Wildlife** – With implementation of alternative two, 891 acres in the 70+ age class would be converted to the 0-10 year age class. Browse and early successional forest habitat would be provided on these areas for a variety of wildlife species. Viability of disturbance-dependent avian species would be enhanced. Avian species requiring both large and small areas of early successional vegetation and forest edge would benefit.

   Implementation of this alternative will result in a 15% reduction of interior forest habitat, which is greater than 70 years old (within project area compartments). Following implementation of this alternative, 71% (4,194 acres) of the forested land base within the project area compartments would remain in the 70+ year age classes. Fragmentation of interior forest habitat is not anticipated.

   The 2 recreational fish ponds to be constructed would supply better distribution of available water and provide recreational opportunities within the project area. The wildlife opening to be reconstructed would assist in maintaining the long-term early seral vegetation if maintained on a regular basis. The construction of 6 short-term, early seral stage wildlife openings would provide necessary habitat for several wildlife species including neotropical migratory birds. Wildlife stand improvement thinning completed in twenty units on a total of 359 acres would create indirect positive impacts to wildlife through increasing herbaceous and shrub understory vegetation and increasing hard and soft mast production.

   The 7,591 acres of prescribed burning in conjunction with planned timber harvest would extend early seral habitat benefits, especially for wild turkey and deer, for several years. Hard mast would remain abundant of all species in the short term; the long term would be ensured with implementation of vegetation management practices. Effects of vegetation management to Management Indicator Species (MIS) are disclosed in the EA. Additive cumulative effects could occur with this alternative when it is considered in terms of the trend of increasing late seral stage habitat and decreasing early seral stage habitat across the Forest. Cumulatively, habitat for this species, and therefore, this species population, would be expected to decline when considering the current amount of vegetation manipulation that occurs across the Forest in relation to natural succession of forest vegetation. Populations of turkey (MIS for both early and late seral habitat) in the project area would be expected to remain stable or increase in the short term and in the long term with maintenance and

creation of habitat for this species. Additive cumulative effects could occur with implementation of this alternative when it is considered in terms of the trend of increasing late seral stage habitat and decreasing early seral stage habitat across the Forest. Cumulatively, habitat for this species, and therefore, this species population, would be expected to decline when considering the current amount of vegetation manipulation that occurs across the Forest in relation to natural succession of forest vegetation. Populations of pileated woodpecker (MIS for late seral habitat) in the project area would be expected to remain stable in the short term and remain stable or increase in the long term. Additive cumulative effects could occur with implementation of this alternative when it is considered in terms of the trend of increasing late seral stage habitat and decreasing early seral stage habitat across the Forest. Cumulatively, habitat for this species, and therefore, this species population, would be expected to increase. Overall, implementation of vegetation management associated with this proposal would allow for wildlife populations dependent upon oak ecosystems to remain stable or increase in the long term.

Fisheries – Activities planned will have minimal effect on water quality and fish habitat using the planned mitigation measures. Existing quality of fisheries should be maintained with a low risk of acute or chronic adverse effects to aquatic species from the planned actions.

8. **PETS (Potential Endangered, Threatened, or Sensitive Wildlife Species** – An extensive biological evaluation was conducted on the project area in all areas proposed for treatment on various dates in 1996, 2004, and 2005. Threatened/Endangered/Southern Region Sensitive (PETS/formerly TES), species were documented in field surveys of the project area. Four Forest Service Sensitive Species were documented within the project area. These include Ozark big-eared bat (*Corynorhinus townsendii ingens*), Ozark chinquapin *(Castanaea pumila var. ozarkensis),* Southern lady's slipper (*Cyprepedium kentuckiense*), and French's shooting star (*Dodecatheon frenchii*). Habitat that could support the occurrence of an additional 17 PETS species was documented in the project area. These species include; gray bat *(Myotis grisescens)*, Eastern small-footed bat (*Myotis leibii*), Indiana bat *(Myotis sodalis),* bald eagle (*Haliaeetus leucocephalus*), Ouachita leadplant (*Amorpha ouachitensis*), Bush's poppymallow *(Callirhoe bushii)*, Moore's larkspur *(Delphinium newtonianum),* Trelease's larkspur (*Delphinium treleasel*), Nuttall's cornsalad (*Valerianella nuttallii*), Ozark cornsalad (*Valerianella ozarkana*), Ozark spiderwort (*Tradescantia ozarkana*, an isopod (*Lirceus bicuspicatus*), a crayfish (*Orconectes williamsi*), small headed pipewort (*Eriocaulon koernickianum*), and ovate-leaf catchfly (*Silene ovata*). Habitat of two aquatic species located downstream of the project area was noted - Nearctic paduneillan caddisfly and longnose darter. The project area and surrounding area were surveyed for occurrence of the above listed PETS species utilizing a meander search methodology in which new habitat variations or unique areas are constantly being searched for in order to maximize floristic variation. PETS animal surveys consist of searching for individuals, signs of their presence (such as scat, tracks, calls, or nests), and/or potential habitat.

A "may effect - not likely to adversely affect" determination was made for all potential, threatened or endangered species utilizing the project area. Concurrence from the U.S. Fish

and Wildlife Service was obtained for these determinations. In addition, the biological evaluation for the project area determined that there are no foreseeable activities in the area that will directly or indirectly affect the viability of sensitive species found in the project area, or cause additive or synergistic adverse cumulative impacts in conjunction with the proposed projects. Planned actions would not have a negative effect on these sensitive plant species. Protection measures defined in the Land and Resources Management Plan and PETS management guides would be implemented and will provide protection for all known PETS species. Mitigation measures for herbicide use would provide for protection of current levels of the plant and animal species on the PETS list.

9. **Wetlands/Floodplains** – Adherence to Best Management practices and use of mitigation measures (page 31-33, EA), including buffer strips, employed to ensure protection of water quality in the streams will ensure no significant cumulative, long-term or short-term effects to these resources will occur due to implementation of vegetation management. Quality of riparian habitat and streamsides will be improved through creation of hardened stream crossings and limitations upon OHV use in the project area.

10. **Human Health** – Risk of injury to forest workers performing the various tasks necessary to remove or manipulate the vegetation by using cutting tools (usually chainsaws) is possible. Manual application of handtools and herbicides using direct stem/leaf treatment for actions such as site preparation and creating wildlife openings provides opportunities for worker injuries from cutting tools and exposure to herbicide. Proper procedures for worker and public safety would be followed and the risk for on- and off-site health hazards would be very low. Mitigation measures for herbicides would be applied and monitoring would be implemented. Mitigation measures to be employed greatly reduce the chance of workers being exposed and ensure risks for any public exposure remain slight. Removal of dead and dying trees through harvest and thinning operations would make the area safer for forest visitors. No significant short-term, long-term, or cumulative effects to human health are anticipated.

11. **Economic/Social** – Gross timber sale receipts are estimated at $615,046. Annually, a portion of the gross National Forest receipts are returned to Arkansas to be distributed to the counties containing the public forests. An additional 10% of the gross receipts are also available to the Ozark National Forest to be used to improve watershed conditions at sites across the forest based on priority needs each year. Contracts for site preparation, wildlife habitat improvement, road work, and other treatments would also add benefits to the local economy. Implementation of the selected alternative would have a positive effect on the local economy in that it would provide revenue to the counties/schools and provide local jobs while at the same time improving ecosystem health in the project area. Long-term or cumulative effects on the social and economic factors are predicted to be non-significant.

12. **Management Areas, Aesthetics, and Recreation** – This alternative would move management areas toward their desired future conditions as listed in the EA.

    Visual distinctness of management treatments would be short-term (2-5 years). Timber harvesting and prescribed burning would improve aesthetics from Highway 16 by

improving sight distance. Prescribed fire would improve visual sighting distance underneath the tree canopy by reducing understory brush. This is expected to improve recreational experiences for users.

Planned activities would have some short-term effects on aesthetics and recreational users may suffer temporary inconveniences from the implementation of planned work. No significant long-term or cumulative effects on these aesthetic and recreation resources are anticipated. Implementation of the selected alternative would have no long term negative effects or cumulative negative effects on the High Bank Recreation Area and Mulberry Wild and Scenic River.

Other alternatives considered in detail were:

Alternative 1. No Action. Analysis of this alternative measured the effects of not implementing the proposed ecosystem restoration, wildlife and associated vegetation management actions on the physical, biological, human health, and economic and social components of the environment. Only custodial management such as road maintenance, fire control and law enforcement would occur. Implementation of this alternative would not allow for the restoration of ecosystem health and creating sustainable forest ecosystem conditions through thinning and regeneration treatments and restoration of the fire regime mimicking historic/natural fire return intervals. Implementation of this alternative would not increase plant and wildlife diversity. Habitat for early successional/disturbance dependent species would not be improved. Historic ecosystems of oak savannas and native, warm season grasses would not be restored for remnant vegetation. Implementation of this alternative would not reduce forest fuels and not reduce risk to forest ecosystems and private property. Implementation of this alternative would not reduce conflicts between motorized vehicle use and other resource values. Implementation of this alternative would not increase or improve recreational uses on the Forest. Implementation of this alternative would not improve Forest visitor safety. No direct revenues to the federal or county treasuries would occur from the sale of commodities and no employment opportunities would be generated. The objective of the LRMP for wildlife and timber would not be met.

Alternative 3. No Herbicide/Reduced Prescribed Burning
This alternative differs from Alternative 2 (the proposed action) by including less provision for the use of prescribed fire and no herbicide use. This alternative was developed in response to public comments which relate to the use of prescribed fire and herbicides, and its perceived effects upon the environment. Prescribed fire would be utilized for the purposes of fuel reduction, silvicultural treatment, and wildlife habitat improvement in stands previously identified for mechanical vegetation manipulation. Herbicides would not be used, but would be replaced by mechanical and/or hand-tool methods. Generally, hand-tools are not as effective for vegetation manipulation as herbicides; therefore, more applications would be required in this alternative.

Areas which would be prescribed burned include pine and hardwood thinning areas, hardwood shelterwood and oak and pine restoration areas, and TSI/WSI areas only. With implementation of Alternative 3, prescribed fire on Federal lands would be reduced by

approximately 2,588 acres. Because this alternative would not utilize natural barriers such as ephemeral/perennial streams and man-made barriers such as roads and pastures as fire-breaks, a significant amount of fire-line would have to be constructed around each treatment area. Approximately 32 miles of fire-line would have to be constructed in order to only burn within the proposed treatment areas which would produce additional erosion and sediment loads within the project area. The construction of such a large amount of fire-line would not be feasible for the Forest Service to build, would create additional erosion and sediment within the project area, and could potentially encourage the use of illegal-ATV use within the Lynn Hollow project area.

My reasons for choosing **Alternative 2** were:

Overall, I viewed this proposal as the one best meeting the goals and objectives of the LRMP while still addressing the issues and concerns raised by the public, other agencies, and by the interdisciplinary team. Specifically, the reasons are:

1. The selected alternative, as mitigated, addressed the issue of immediate and cumulative effects from past, current, and proposed actions on soil erosion, soil nutrient/productivity loss, and sediment/storm runoff, and wildlife habitat in the project area. The analysis shows that at the harvest level of Alternative 2, some soil compaction, soil disturbance, slight increases in nutrient and erosion loss, some increased sedimentation and stormflow, and a possible change in water chemistry would occur. However, these changes are still below the threshold level of environmental concern. Also, after a short degradation of wildlife habitat from vegetation manipulation, the early seral habitat produced from the activities would provide for increased biological diversity and long-term wildlife benefits. There should be no long term or cumulative effects on the environment from the planned actions, and the effects should diminish in a few years.

2. The selected alternative sufficiently addresses the concern for visual diversity from Highway 16. I believe the aesthetics can remain intact even with thinning of timber stands within the viewshed of these vantage points. Thinning would not significantly affect the enjoyment of forest visitors as they view the passing landscape.

3. The issue of effects of past, present, and proposed activities on forest fragmentation, biological diversity, old growth, species viability and overall wildlife habitat is analyzed in the EA pp. 35-110. Effects for this alternative on fragmentation are minimal, since all areas to be worked would retain a forest canopy, except for road corridors, wildlife openings, and wildlife ponds. Implementation of this alternative would result in a 15% reduction of interior forest habitat which is greater than 71 years old (within project area compartments). Following implementation of this alternative, 72% of the forested land base within the project area compartments would remain in the 70+ year age classes, therefore, fragmentation of interior forest habitat is not anticipated. Early seral habitat would be improved beyond that expected with implementation of other alternatives. Early seral forest habitat and grass/forb habitat would be increased by 1340 acres in the project area providing for biological diversity and species viability. Determination of

effects to PETS species is disclosed in the EA. These determinations and concurrence from the U.S. Fish and Wildlife Service indicate viability of PETS species found in the project area will not be compromised. Wildlife habitat is affected by the planned activities of Alternative 2 in an overall positive manner.

4. Alternative 2 has the highest probability of success in responding to the current conditions of high oak mortality on the Forest caused by dense forest stands, red oak borer infestation, and oak decline syndrome. Regeneration in conjunction with thinning and restoration of fire as a disturbance factor, will provide the best opportunity to ensure that oak species - upon which so many wildlife species are dependent - are maintained as a significant ecosystem component. Minor short-term effects on resource values are more than offset by long-term benefits to forest ecosystem health.

5. Alternative 2 will provide acceptable economic benefits. This alternative will provide a positive effect on the local economy by providing forest products, government revenues, and job opportunities.

6. When implemented, alternative 2 will be monitored through timber sale inspections, regeneration surveys, herbicide water monitoring, and other measures listed in the EA.

FINDING OF NO SIGNIFICANT IMPACTS (FONSI):

Based on my review of the above analysis and from past experience, I have determined that the proposed actions are not a major Federal action either individually or cumulatively, and will not significantly affect the quality of the human environment. Therefore, an environmental impact statement is not necessary. This determination is based on the following factors (40 CFR 1508.27):

1. Both beneficial and adverse effects have been considered and this action will not have a significant effect on the quality of the human environment (EA, pp. 13-61).

2. The actions will not affect public health or safety (EA, pp. 51-53).

3. The project will not significantly affect any unique characteristics of the geographic area such as proximity to historic or cultural resources, wetlands, floodplains, ecologically critical areas, or wild and scenic rivers, (EA, pp. 32-33, 50-51, 55-58).

4. The effects on the quality of the human environment are not likely to be highly controversial (EA, pp. 13-61).

5. The actions do not involve highly uncertain, unique, or unknown environmental risks to the human environment (EA, pp. 13-61).

6. The actions in this decision will not establish a precedent for future actions with significant effects nor does it represent a decision in principle about a future consideration.

7. There will be no cumulatively significant impacts on the environment. The cumulative effects of the proposed actions have been analyzed with consideration of other similar activities on adjacent lands, in past actions, and in foreseeable future actions (EA, pp.13-61).

8. The actions will not affect any sites listed or eligible for listing, in the National Register of Historic Places nor will they cause loss or destruction of significant scientific, cultural, or historic resources (EA, pp. 32-33).

9. The actions are not likely to adversely affect endangered or threatened plant or animal species, or their critical habitat (EA, pp. 38-50).

10. None of the actions threaten to lead to violation of federal, state, or local laws imposed for the protection of the environment (EA, pp. 13-61).

For water quality management, state-approved Best Management Practices (BMPs), which are incorporated into the mitigation measures, will be used for this project (EA, p. 24). These BMPs are from the state water quality management plan and have been designed with the goal of producing water that meets state water quality standards. The project will be monitored to ensure BMPs are implemented. If implementing BMPs on a specific site results in effects significantly higher than anticipated because of unforeseen site factors or events, appropriate corrective measures will be considered and implemented.

Actions are also consistent with the Antiquities Act, Endangered Species Act, Clean Air Act, Clean Water Act, and all other applicable state and federal laws and regulations.

OTHER FINDINGS:

1. The actions of the project are consistent with the Ozark-St. Francis National Forests LRMP goals and objectives (Revised-2005). The majority of the actions associated with this project occur in Management Area 3.C – Mixed Forest. Other management areas included in this project are – Management Area 3.B. Oak Woodland and Management Area 3.I. – Riparian Corridors, Management Area 2A – Ozark Highlands Trail, and Management Area 1.H. - Scenic Byway. All of the planned actions associated with these projects are consistent with the management prescriptions and management practices for this Management Area. The actions are also consistent with the LRMP because mitigation measures for impacts shall be fully applied in implementation. The project is feasible and reasonable, restores ecosystem health, protects the environment while producing goods and services.

2. The actions of this project comply with the ecological, social, and economic requirements of 36 CFR 219.19 by following the Forest-wide standards and guides. These actions also meet the General Management requirements and Mitigation Measures in the ROD of the FEIS of the Vegetation Management in the Ozark/Ouachita Mountains. The requirements met are:

    1. The activities chosen are best suited for the multiple-use goals of the area.

    2. All practices prescribed for timber harvest areas will maintain adequate stocking for the area now and in the future. Areas selected for shelterwood and seedtree harvests are mature stands of trees, have good seed-producing qualities and are situated on suitable soils for natural regeneration.

    3. Alternative 2 was not selected primarily because it provided the greatest output of timber. Alternative 2 provides a positive effect on the local economy, forest health, recreation and wildlife and has only minimal short-term effects on other resources.

    4. The activities chosen will not adversely affect residual trees in adjacent stands.

    5. The activities chosen with mitigating measures avoid permanent impairment of site productivity and ensure conservation of soil and water resources.

    6. The activities provide for meeting LRMP objectives for all resources.

    7. The activities are practical in terms of transportation and harvesting and total cost of site preparation, logging, and administration.

IMPLEMENTATION:

This decision is subject to appeal pursuant to 36 CFR 215.7. A written Notice of Appeal must be postmarked or received within 45 days after the date this notice is published (September 9, 2009) in the **JOHNSON COUNTY GRAPHIC**, Clarksville, Arkansas. The Notice of Appeal should be sent to: Ozark – St. Francis National Forest, Forest Supervisor, 605 W. Main St. Russellville, AR 72801 or electronically at: appeals-southern-ozark-stfrancis@fs.fed.us.

Appeals must meet content requirements of 36 CFR 215.14. Only those who provided substantive comments by July 30, 2009 would be eligible to appeal. For further information on this decision, contact me at: Pleasant Hill Ranger District, 2591 Highway 21, Clarksville, AR 72830.

If no appeal is received, implementation of this decision may occur in, but not less than, 5 business days after the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 days following the date of appeal disposition.

9-2-2009

PAT KOWALEWYCZ
District Ranger

Date

Map 2- Lynn Hollow Proposed Action

Timber Activities

- Hwd Thin
- Hwd Thin/ TSI (H&S&F)
- Hwd Shelterwood- SP -H&S
- Hwd Shelterwood SP-H&S&F
- TSI (Cut Stump)/Hwd Shelterwood
- Oak Woodland Restoration
- Pine Thin
- Pine Woodland Restoration
- TSI (herbicide)
- TSI(handtools)
- WSI-Woodland

Legend

ROADS

- Construction
- Reconstruction
- Maintenance
- Maintenance/Closure
- Decommission
- Existing

- * Wildlife Opening Reconstruction
- # Wildlife Opening
- k Gates
- ! Recreational Fish Ponds
- Culvert Trash Cleanup
- C Gully Stabilization
- Private Land
- OzarkHighlands Trail
- Compartment Boundary
- Prescribe Burn Boundary

2

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Created by T.O. (8/9/09)

OZARK NATIONAL FOREST

T13N, R 24W

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