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*SCOPING LETTER FOR LAND
BETWEEN THE LAKES NATIONAL
RECREATION AREA
Devil's Backbone EA*

Dear Friend of Land Between The Lakes:

The USDA Forest Service at Land Between The Lakes National Recreation Area (LBL) is seeking more input for the restoration of the shortleaf pine vegetative community within the Devil's Backbone Project Area.

Background

On May 30, 2008, a scoping letter and map was issued for the Devil's Backbone Project, and is available on the website at <http://www.lbl.org/LRMPPProjects.html>. In this initial scoping letter, the proposed actions were identified as:

- A combination of dormant and growing season prescribed burns of the project area multiple times over the next 20 years.
- Regeneration harvest on approximately 218 acres, consisting of currently closed canopy shortleaf-oak mixed forest types.
- The application of a selective herbicide, using either imazapyr or glyphosate for shortleaf pine site preparation. This treatment will control the advanced hardwood regeneration present in the understory and midstory levels on approximately 100 acres.
- Intermediate thinning on approximately 236 acres of shortleaf pine and shortleaf-oak mixed forest types.
- Non-commercial midstory and release treatment with the use of chainsaws and other brush cutting devices on approximately 221 acres.
- Monitoring and control of existing non-native invasive plant species (NNIS), including the use of herbicides, along the project boundary and within the roads and trails enclosed by the project area on approximately 100 acres.
- Partnership with a local high school to enhance learning opportunities in a science class (Research of Forestry units possibly) by providing two fall field trips annually.
- Creation of three trail re-routes within the project area (two associated with Artillery and one on Telegraph) in order to improve trail sustainability and decrease resource degradation.



- Decommissioning of the Shortleaf trail in order to reduce maintenance cost, eliminate a parallel trail to both Devil's Backbone and Artillery trail systems, and create a larger loop system within the Fort Henry trail system as a whole.
- Creation of a trailhead at the intersection of Telegraph Trail and FS RD 400 in order to provide users with a safe and designated parking area with better trail accessibility.

Since the May 30, 2008, scoping letter and the above mentioned proposed actions, some additional considerations have developed and I decided to request input on these additional items. Through the interdisciplinary team analysis, it has been determined that there is a need to amend the 2004 Land Resource Management Plan (LRMP). This step is necessary in order to take into account the increased size of the Devil's Backbone State Natural Area (SNA) as agreed upon between the USDA Forest Service (USFS) and the Tennessee State Department of Environment and Conservation (TDEC). This second scoping period is also an opportunity to further describe the proposed herbicide use as well as the NNIS found in further detail. The proposed amendment to the 2004 LRMP and further description of the proposed herbicide use are in addition to the proposed actions cited in the May 30, 2008, scoping letter and not part of a new project.

Purpose and Need for the Plan Amendment

The cooperative agreement between the USFS and TDEC increased the official designated area from 160 acres to 1,386 acres in 2008; however, this increase was not accounted for in the 2004 LRMP. The most recent forest stand exam survey, conducted in the summer of 2007, revealed that the area of degrading shortleaf pine community was more widespread than accounted for in the 2004 LRMP prescription area map (located in Appendix 7 of the LRMP). Through the interdisciplinary team analysis, it was also realized that the original 160 acres SNA had no natural or man-made fire break boundaries, adequate enough to support the needed periodic prescribed fire over the project area. The proposed increased SNA (1,386 acres) would allow the use of existing trails, old roads, and streams as fire breaks thus enhancing firefighter safety, limiting mechanical ground disturbance, and decreasing the risk and costs associated with a prescribed burn.

The Final Environmental Impact Statement (FEIS) for the 2004 LRMP disclosed the optimal benchmarks for sustaining diversity of plant and animal communities and viability of associated species on LBL. Table 3.2.4A on page 99 of the FEIS puts the optimum amount of shortleaf pine-oak forest at 1% of forest acreage or approximately 1,600 acres. Page 100 also mentions that there is a potential to restore up to 1,300-1,600 acres of this forest type.

The current proposed action for the Devil's Backbone project would involve periodic prescribed fire across about 1,386 acres. Within the project area, a total of about 567 acres of harvest and thinning treatment is proposed. The stands where this vegetation management occurs can be expected to transition to the shortleaf pine-oak forest type more rapidly than those areas that are only burned; this supports the proposed amendment of 600 acres of shortleaf pine-oak maintained or restored this decade. In addition, as a result of periodic fire, much of the project area will have a variable response and some areas will move slowly toward a shortleaf pine-oak forest type. The objective for total shortleaf pine acreage as stated in the 2004 FEIS would result

in indicator levels and ratings of “poor” (FEIS pg. 130). However, the proposed LRMP amendment would shift indicator levels and ratings into the “very good” category.

The Proposed LRMP Amendment

For the reasons listed above, the Forest Service proposes, as part of the proposed action of the Devil’s Backbone Project, to amend Objective 5f on page 53 of the 2004 LBL LRMP.

The amended OBJ5f in the 2004 LRMP would read:

“Create and maintain at least 600 acres of shortleaf pine forest by developing desired mature open forest and woodland structural conditions over the first decade with a long-term objective of 1,400 acres of shortleaf pine.”

The most recent scoping map, available at: <http://www.lbl.org/LRMPPProjects.html>, illustrates the newly agreed upon boundary of the SNA.

Proposed Herbicide Use

This junction also provides an opportunity to share the most recent and detailed information available on the proposed herbicides to be used, the proposed location of their use, and the need for those specific herbicides. The proposed herbicide use is composed of two separate actions. The map located at: <http://www.lbl.org/LRMPPProjects.html> illustrates the proposed location of these two types of herbicide treatments.

First, there is the herbicide use for site preparation to facilitate shortleaf pine regeneration. Site preparation involves treating hardwood saplings and advanced regeneration that will shade out and diminish the resources needed to establish a sufficient new generation of shortleaf pines. The proposed method of herbicide application in the site preparation area is to use the “hack and squirt” injection method. Target species includes all hardwood stems over four feet tall and less than six inches in dbh (diameter at 4.5 feet from high side of the tree). This is done by partially girdling the saplings with a hatchet and then injecting the herbicide directly onto the cambium layer (inner bark consisting of a layer of living cells) of the tree. It is imperative to use herbicides for site preparation in this situation since it is highly likely that there are too many hardwood stems in the understory for fire alone to control. Fire and chainsaw treatments can kill the above ground portion of a hardwood tree, but it will continue to sprout because of the well established root system already in place. The herbicide will kill the root system so that no re-sprouting of target understory trees species will occur. The proposed locations of site preparation treatments include approximately 100 acres within the timber regeneration harvest areas.

The second half of the proposed herbicide use action was developed for treatment of non-native invasive species (NNIS) and targets invasive species located within trail, road and project boundary corridors (includes the road and trail surface and approximately 20 feet on each side of the trail, road or project area boundary). The proposal for NNIS herbicide control includes

treating concentrated patches, strips, and spots of NNIS that occur within these corridors and that may be found to occur through implementation in scattered locations within the project area on approximately 100 acres. The patches and strips are variable in size with one or more NNIS dominant for the entire area whereas spots are areas having individual NNIS scattered within an area approximately 3 to 30 feet across.

The “hack and squirt” method will also be used on the large woody invasive species, such as, *Albizia julibrissin* (Mimosa) or *Ligustrum spp.* (Privet). The smaller diameter woody and herbaceous species where the “hack and squirt” method would not be feasible will be treated by selective foliar spraying either using a backpack sprayer or a small tractor mounted tank where accessibility is not an issue to resource degradation. Additional fieldwork has identified the target NNIS in the project area. The table below lists the known and potential target NNIS proposed for herbicide control.

NNIS Known to Currently Occur Within the Project Area

Target Species Scientific Name	Target Species Common Name
<i>Albizia julibrissin</i>	Mimosa
<i>Daucus carota</i>	Queen Ann’s Lace
<i>Kummerowia stipulacea</i>	Korean clover
<i>Lespedeza bicolor</i>	Shrub lespedeza
<i>Lespedeza cuneata</i>	Sericea lespedeza
<i>Ligustrum sinense</i>	Chinese Privet
<i>Lonicera japonica</i>	Japanese honeysuckle
<i>Microstegium vimineum</i>	Japanese stiltgrass
<i>Miscanthus sinensis</i>	Chinese silvergrass
<i>Pinus teada</i>	Loblolly Pine
<i>Rosa multiflora</i>	Multiflora rose
<i>Schedonorus phoenix</i>	Tall fescue
<i>Setaria pumila</i>	Yellow foxtail
<i>Setaria viridis</i>	Green bristlegrass
<i>Sorgham halepense</i>	Johnson grass

NNIS that Have Potential to Invade the Project Area

Potential Target Species Scientific Name	Potential Target Species Common Name
<i>Dioscoria oppositifolia</i>	Chinese yam
<i>Elaeagnus angustifolia</i>	Russian olive
<i>Elaeagnus pungens</i>	Thorny olive
<i>Elaeagnus umbellate</i>	Autumn olive
<i>Kummerowia striatal</i>	Japanese clover
<i>Ligustrum japonicum</i>	Japanese Privet
<i>Ligustrum vulgare</i>	European Privet
<i>Melotis alba</i>	White sweet clover
<i>Melotis officinalis</i>	Yellow sweet clover
<i>Paulownia tomentosa</i>	Princess tree
<i>Schedonorus pratensis</i>	Meadow fescue
<i>Setaria faberi</i>	Japanese bristlegrass
<i>Setaria italica</i>	Foxtail bristlegrass
<i>Vicia sativa</i>	Garden vetch

When NNIS control through use of herbicide is necessary to prevent significant degradation of desirable ecosystems, the following guideline will be observed:

Guideline: At present, several chemicals (at specific analyzed rates) meet the 2004 LRMP standards and these chemicals would be available for use - either alone or in tank mix - against invasive plants and to prevent potential significant ecosystem degradation. The pesticides available for use and that are being considered for NNIS control are listed in the table below. The use of the pesticide would be selective to the species or group of species being treated and at the amount necessary in accordance with label requirements for control of NNIS. Vegetation condition such as height, site condition, presence and abundance of desirable vegetation and season will be considered in determining the pesticide to use and application method. The analysis of effects may include reference to an already published Forest Service Risk Assessment. The risk assessments can be found at: <http://www.fs.fed.us/foresthealth/pesticide/risk.shtml>

Herbicides Being Considered For NNIS Control

Herbicide Active Ingredient	
Imazapyr	Metsulfuron methyl
Glyphosate	Imazapic
Tryclopyr	

Project Area

The proposed project area is located in Stewart County, TN, west of The Trace, east of FS Road 230 known as Fort Henry Road, just north of Highway 79, and is entirely within the Land Between The Lakes NRA. Covering approximately 1,650 acres, the project area is located

within the Panther Creek Watershed and in the area of many trails including Telegraph, Shortleaf, and Artillery.

The project area is located within the Core Area designation in the 2004 LMRP. The Core Area prescription calls for the minimum management necessary to restore and maintain shortleaf pine. Minimal management in the Devil's Backbone State Natural Area as described in the core area prescription includes some evidence of fire and timber harvest on xeric and dry sites in order to restore and maintain native shortleaf pine forest. In order to minimize the long term visual effects of the needed vegetation treatments, such treatments should occur in one entry (maximum 5 year period) and not be spread over decades. This would require the project to move ahead with vegetation management for the entire project area to meet the optimum shortleaf pine management strategy. Periodic prescribed fire in the project area would continue into the future.

Public Involvement

No significant issues were identified from public scoping comments received to date. The concerns raised will be addressed in the analysis for the EA and are briefly addressed in the scoping comment response summary dated September 15, 2008. The comment response summary is available on the website at: <http://www.lbl.org/LRMPPProjects.html>.

We are requesting comments on the proposed plan amendment and the additional herbicide treatment information to determine alternatives to be considered and issues to be addressed in the project environmental assessment. Please send your comments to: Jaime Hernandez, Land Between The Lakes NRA, 100 Van Morgan Drive, Golden Pond, KY 42211; e-mail: comments-southern-land-between-lakes@fs.fed.us; telephone (270) 924-2073. To be most useful, your comments should be specific to this project, provide evidence to support your comments and be received by 21 November 2008.

Thank you for your interest in resource management at LBL.

Sincerely,

/s/ William P. Lisowsky

WILLIAM P. LISOWSKY
Area Supervisor

Enclosures