

Responses to the prompts on this work plan should be typed directly into this template

1. Describe the manner in which the proposal will be implemented to achieve ecological and community economic benefit, including capacity building to accomplish restoration.

The Ozark Highlands Ecosystem Restoration project landscape consists of 344,393 acres. This project will be implemented with a combination of contracts, stewardship agreements, and force account labor. The most significant restoration needs and actions on the landscape include the following:

- Thin dense stands to reduce basal area which would improve forest health and reduce insect/disease risk.
- Restore fire regime
- Restore oak and pine woodland habitat.
- Restore grasses, forbs, and shrubs for wildlife.
- Release and increase the vigor of mast producing hardwoods.
- Increase oak regeneration
- Improve watershed conditions through maintaining, closing and decommissioning roads, thus reducing sedimentation flow into stream channels.
- Improve fish passage by replacing stream/river crossings.
- Reduce fuel loads in order to protect forest ecosystems and private property that are at risk.

Ecological Benefit

The desired future condition for the project area will align with the Oak-Woodland Forest Land and Resource Management Plan prescriptions. The Mixed Forest and oak woodland areas will be characterized by a mosaic of woodland and forest. Oak woodlands are generally missing from the current landscape. Woodlands will occupy approximately 60% of the area on the more xeric and dry sites. Woodlands have open canopies, sparse midstories and well-developed understories that are typically dominated by grasses and forbs, but also may become shrubby between fires and have a significant woody component. Age classes of oak woodland patches are diverse and generally balanced from regenerating up to mature and old growth with overstory ages up to 140-200 years. The abundance of oak woodlands within this area provides optimal habitat conditions for many species including management indicator species prairie warbler and northern bobwhite, rare species and species in demand for hunting such as wild turkey and whitetail deer. Other desired outcomes include the improvement of aquatic habitat through a reduction in sedimentation from roads.

Community Economic Benefit

Timber sales are expected to generate 236,726 CCF over the lifetime of the project. The management activities will have a positive effect on the local economy in that it would provide revenue to schools and provide for local jobs through harvest and processing of forest products. This project will create 163 direct and 126 indirect and induced jobs for a total of 289 jobs in the area of timber/forestry. Economic benefits would also be realized through improvement of wildlife habitat and associated improvement to the Ozark Highland Trail. Benefits to the public would be realized through reduction of fire hazard and potential loss to personal property through implementation of fuels reduction burning. Reduction in fuel loading would serve to reduce potential wildfire spread and severity, thereby reducing costs associated with fire suppression, which far exceeds cost per acre for prescribed burning. Decommissioning and closure of roads would create social benefits by reducing erosion and sedimentation.

2. Anticipated unit treatment cost reduction over the life of the project:

Performance Measure Code	Average Historic Unit Cost	Cost Reduction per Unit	Assumptions
WTRSHD-RSTR-ANN	\$105/acre	80%	This work requires mechanical and chemical treatments for the initial restoration stage. Once the areas are in an advance restoration stage, prescribed fire will be used for maintenance treatments.
FOR-VEG-EST	\$140/acre		We do not anticipate cost reduction for this activity.
FOR-VEG-IMP	\$120/acre	10%	Silvicultural treatments and practices like site preparation will need to continue as we regenerate areas. Intermediate timbers stand improvement treatments will require less work.
INVPLT-NXWD-FED-AC	\$380/acre	40%	Leverage of CFLRP funds with appropriated and partner funds will allow for treatment of larger areas. Unit cost reduction will result from the treatment of smaller areas at a maintenance level.
INVSPE-TERR-FED-AC	\$70/acre	10%	Cost reduction depends on future volunteer agreements and support from collaborators.
S&W-RSRC-IMP	\$500/acre	30%	There will be no trail maintenance cost due to trail obliteration. There will be some maintenance cost associated to access control.
HBT-ENH-LAK	\$5,500/acre	60%	Sedimentation removal will reduce maintenance cost.
HBT-ENH-STRM	\$1,500/mile	40%	Initial treatment will last ten to fifteen years. There will be some maintenance cost.
HBT-ENH-TERR	\$190/acre	30%	Initial treatments of large areas will result in cost reduction for maintenance treatments.
RG-VEG-IM	\$200/acre	40%	Range fields in the project area have several noxious weeds. These fields will be converted to native warm season grasses. Unit cost will be lower after the initial herbicide treatments. Follow up treatments should consist of

			prescribed burn and haying.
RD-HC-MAIN	\$491/mile		We do not anticipate cost reduction for this activity.
RD-PC-MAIN	\$491/mile		We do not anticipate cost reduction for this activity.
RD-DECOM	\$1,500/mile	20%	Decommissioned roads will not need maintenance.
STRM-CROS-MTG-STD	\$55,000/structure	20%	New fish passages will reduce maintenance cost.
TL-MAINT-STD	\$1,500/mile	30%	Extra funding will increase our ability to maintain high priority trails.
TL-IMP-STD	\$7,143/mile	30%	Extra funding will increase our ability to maintain high priority trails.
TMBR-SALES-TRT-AC	\$131/acre		We do not anticipate cost reduction for this activity.
TMBR-VOL-SLD	\$36.16/CCF		We do not anticipate cost reduction for this activity.
FP-FUELS-NON-WUI	\$22.50/acre	10%	Some area will require mechanical treatments. Following maintenance cost should be less.
FP-FUELS-WUI	\$22.50/acre	10%	Some area will require mechanical treatments. Following maintenance cost should be less.

3. Anticipated costs for infrastructure needed to implement project:

Type of Infrastructure	Anticipated Cost	Funding Source (federal, private, etc)
Temporary roads	\$90,000	NFTM

4. Projected sustainability of the supply of woody biomass and small diameter trees removed in ecological restoration treatments:

Fiscal Year	Number of acres to be treated	Projected Green Tons Removed per Acre	Total Green Tons Available
2012	109	6.08	663
2013	91	7.22	657
2014			
2015			
2016			
2017			
2018			
2019			

5. Projected local economic benefits:

Anticipated CFLR Funds:

Type of projects	Direct jobs	Total jobs	Direct Labor Income	Total Labor Income ¹
Commercial Forest Products	48.7	101.9	\$2,445,909	\$4,913,742
Other Project Activities	31.7	41.0	\$1,018,098	\$1,328,561
TOTALS:	80.4	142.9	\$3,464,008	\$6,242,304

Anticipated Total Funds:

Type of projects	Direct jobs	Total jobs	Direct Labor Income	Total Labor Income ²
Commercial Forest Products	97.5	203.8	\$4,891,819	\$9,827,484
Other Project Activities	66.1	85.9	\$2,111,897	\$2,783,454
TOTALS:	163.5	289.7	\$7,003,716	\$12,610,938

6. Document the anticipated non-Federal investment in the priority landscape. These funds may be spent on or off National Forest system lands:

Source of Investment	Amount of Investment	Description of Use	Will these funds be used on NFS lands?
The National Wild Turkey Federation	\$194,000	Research between the NWTF, FS, and the University of Arkansas to monitor the effects of burning on turkey nest establishment and distribution. This funding will also be used for wildlife habitat improvement and watershed protection work. Stewardship agreement within the Bearcat Hollow project area.	Yes
Friends of Lake Wedington	\$82,000	Purchase of native plants and trees to plant in the recreation area of Lake Wedington. The rest of the funds will be in-kind services for trail construction, tree/plant restoration, trash clean ups, education, and interpretation outreach material.	Yes
Razorback Riders	\$82,000	To be spent evenly during the life of the project for Off Highway Vehicle (OHV) trail maintenance,	Yes

¹ Values obtained from Treatment for Restoration Economic Analysis Tool (TREAT) spreadsheet. See instruction document for more details.

² Values obtained from Treatment for Restoration Economic Analysis Tool (TREAT) spreadsheet. See instruction document for more details.

		supplies, and crossing/riparian improvement.	
Mulberry River Volunteers	\$32,000	Funding will be used to purchase supplies for river clean ups and riparian restoration.	Yes
Lee Creek River Volunteers	\$12,000	Funding will be used to purchase supplies for river clean ups and riparian restoration.	Yes
Arkansas State University	\$150,000	Compliance Indiana bat mist netting monitoring and for bat population monitoring. This work effectively monitors the response of bats to different forest vegetative management treatments.	Yes
Arkansas Cooperative Fish & Wildlife Research Unit	\$35,000	University of Arkansas will fund supplies, Ph.D. student and tuition to work on the Turkey Research project monitoring.	Yes
Rocky Mountain Elk Foundation	\$50,000	Wildlife habitat improvement projects.	Yes
National Forest Foundation	\$672,500	Habitat improvements in Bearcat Hollow and lake restoration in Brock Creek.	Yes
The Nature Conservancy	\$52,471	Monitoring effects of management activities with the use of plots.	Yes
Arkansas Wildlife Federation	\$16,000	Habitat improvement in Bearcat Hollow area.	Yes
Arkansas Game and Fish Commission	\$50,000	Habitat improvement in Bearcat Hollow area.	Yes

7. Plans to decommission any temporary roads established to carry out the proposal:

Projected accomplishment year (fiscal)	Number of Miles to be Decommissioned
2012	3.6
2013	1.5
2014	1.5
2015	1.5
2016	1.5
2017	1.5
2018	1.5
2019	1.5