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Forest Service



Mark Twain
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Region 9



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SCOPING REPORT

North Rock Creek Watershed and Ecosystem Enhancement Project

Project Number: 10203
Ava/Cassville/Willow Springs Ranger Districts
Mark Twain National Forest
Barry County, Missouri

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I. INTRODUCTION

This scoping report summarizes a proposal of the North Rock Creek Watershed and Ecosystem Enhancement Project. The purpose of this report is to inform interested and affected parties of the proposal and to solicit comments on the proposal.

II. LOCATION, SETTING AND BACKGROUND

The project area is approximately 12,651 acres located in T. 23N., R. 26W., Sections 31 and 32; T.22N., R. 26W., Sections 1 – 16; T. 22N., R. 25W., Sections 5 – 8, 17 and 18; Barry County, Missouri. Approximately 10,310 acres (16.1 square miles) are National Forest lands administered by the Mark Twain National Forest (MTNF) and 2,341 acres are in private ownership. The project area is bound by State Highway 76 to the north, State Highway 39 to the east and Rock Creek to the south. The project area comprises compartments 214, 215, 216, 218, and 219. The Mark Twain National Forest Land and Resource Management Plan (Forest Plan) identifies the area as being in Management Area (MA) 3.4-2. The project area represents approximately 63% of this MA.

The area lies within the White River Hills Subsection of the Ozark Highlands State Natural Divisions. Dolomite glade/oak woodland rugged hills and knobs represent the landtype association. Steep slopes, narrow ridges and narrow valley bottoms characterize the area. There is very little flat ground within the project area. Karst features such as caves and sinkholes are common. The high narrow ridges and knobs are underlain by very cherty limestones of the Burlington and other Mississippian formations. Soils in the area were formed by material weathered from Mississippian and Ordovician limestones and dolomites. Soil types range from deep cherty, loamy to clayey soils on ridges and side slopes to shallow clayey to loamy soils on glades and savannas.

The project area is in the Rock Creek section of the Beaver Reservoir portion (Hydrological unit 11010001080) of the White River of the Arkansas-White-Red-River Basin of the lower Mississippi River main stem. There are two major riparian corridors; East Fork of Rock Creek which drains into Rock Creek, which drains into Table Rock Lake approximately 2.5 miles to the south. There are approximately 1.5 miles of perennial stream and 56 miles of intermittent or ephemeral streams within the project area.

The project area contains a unique range of plant communities from cedar glades and savannas to heavily forested ridges of mixed oaks. The majority of the heavily forested areas are classified as dry-chert forest (34%), dry-mesic chert forest (24%) and dry limestone forest (19%). Representing the remaining areas are glades (3%), glade savannas (10%), dry-mesic limestone forest (7%) and bottomland forest (2%). White oak, red oak, hickory and scattered shortleaf pine dominate the overstory ridges and sideslopes. Understory species consist of dogwood, redbud, mulberry and hop hornbeam. The dryer forested sites such as open woodlands and savannas are comprised of post, blackjack and chinquapin oak, and eastern red cedar in the overstory with a diverse herbaceous understory of grasses, sedges and forbs. The dolomite glade communities support a wide variety of unique and endemic plants such as eastern red cedar, big bluestem, sideoats grama, yellow coneflower, and evening primrose. Fire suppression has allowed for the encroachment of eastern red cedar, which now dominates the once open glades.

Native American groups flourished in the area during the Woodland period (100 B.C. to 900 A.D.), as nomadic hunters and gathers. During the Mississippian period (A.D. 900 to 1200) Native Americans began to settle in larger villages and rely more on cultivated food. It was during this time

that many Native American groups left the Ozarks for more productive lands and larger settlements. Osage tribes used the area up to and during early European settlement, which began in the early 1800's. Early travelers and explorers in the early 1800's, such as Henry Schoolcraft who traversed the White River area described the uplands as a mosaic of grasslands; savannas; oak forest with open grass undergrowth and barrens (open, rocky glades). These plant communities were developed and maintained by a variety of man-caused and natural disturbances such as fire, grazing by native herbivores, and climatic events such as drought and tornados. During the period of 1880's to the 1920's, significant land use changes occurred. Extensive logging and burning of woodlands for domestic livestock grazing and expansion of crop lands onto marginally productive land on valley slopes and uplands occurred. Many productive valley bottoms were cleared of bottomland hardwoods for pasture and croplands. Many of existing roads in the project area were established during this period.

The Forest Service began to acquire land in the area starting in 1935. Since that time, there have been numerous management activities that have occurred on federal lands. These activities have included timber harvest, tree planting, timber stand improvements, prescribed fire, roads construction and maintenance of wildlife openings. The last timber sale to occur within the project area was in the early 1980's. There are two prescribed fire project areas, Rock Creek (240 acres) and the East Fork of Rock Creek (300 acres) prescribed burns. Rock Creek has been burned five times since 1986, and the East Fork of Rock Creek has been burned three times since 1990. These prescribed fires have resulted in a dramatic increase in the variety and amount of native grasses, sedges and forbs that are endemic to White River glade complex.

In 1999, a Watershed Assessment for the East Fork of Rock Creek was completed to assess the primary issue of stream sedimentation and degradation of aquatic ecosystems. The assessment focused on factors that were affecting the overall water quality of the East Fork of Rock Creek. These factors include: road and trail density, unauthorized off-road recreation vehicle (ORV) and all-terrain vehicle (ATV) use, condition of the riparian habitats, and roads and user-defined trails located on environmentally sensitive areas such as stream channels, steep slopes and highly erosive soils. The assessment concluded that the main cause of degradation to water quality and aquatic ecosystems were poor road location, undeveloped system roads and unauthorized user-defined trails created by ATVs.

III. PURPOSE AND NEED AND THE PROPOSED ACTION

The Ava/Cassville/Willow Springs Ranger District is proposing this action for the purposes of improving watershed conditions, enhancing wildlife habitats and provide for healthy, resilient forest and native plant communities. This project is needed due to poor watershed conditions caused by deteriorating system and non-system Forest Service roads and unauthorized, user-defined roads that are contributing sediment and gravel to Rock Creek and its tributaries. In addition, diverse plant communities that provide a variety of habitat conditions utilized by wildlife have changed in its historic structure and composition and do not meet the desired future condition (DFC) as described in the Forest Plan. A loss in plant diversity and structure is a result of past management practices, including the suppression of wildfires.

The Role of the Forest Plan

The Forest Plan, approved in 1986, provides a programmatic framework regarding allocation of land and the measures necessary to protect National Forest resources. It describes how different areas of the MTNF should be managed and what resources should be provided by these lands now and in the future. The Forest Plan Final Environmental Impact Statement (FEIS) displays the forest-wide

effects of activities such as timber harvest, wildlife habitat management, recreation management and visual resource management. Site-specific effects of those practices to this project are not part of the Forest Plan (FEIS). An environmental assessment will be prepared to analyze site-specific effects of management activities for this project.

The Forest Plan gives management prescriptions designed to accomplish a Desired Future Condition (DFC). The Forest Plan identifies the area in which this project is to occur as Management Area 3.4. The emphasis of Management Area 3.4 is to manage for wildlife habitat diversity to maintain and enhance populations of native and naturalized vertebrates (page IV-115 to IV-124).

The Forest Plan also provides guidelines for conserving biological diversity on National Forest lands. Vertical diversity of plant and animal communities are maintained by managing for natural communities in varying stages of development. These stages, or habitat conditions, help provide diverse habitats and ecosystems necessary to sustain healthy populations of plants and animals for the North Rock Creek Project Area.

Goals Directed by the Forest Plan

1. Emphasize wildlife habitat diversity by maintaining and enhancing populations of native and naturalized vertebrates and the habitat for management indicator species (MIS).
2. Provide for moderate to high production of other resources such as timber production, recreation and forage.
3. Manage wildlife habitat intensively where standards and guidelines permit cost effective habitat improvement.
4. Move habitat conditions toward steady-state objectives (or desired future conditions) as individual management area opportunities permit.
5. Recognize and provide for off-road vehicle use in a manner that protects the resource and complements other management activities.
6. Close unnecessary roads

Forest Plan Standards and Guidelines to be applied

1. Provide habitat for native and naturalized fish and wildlife species common to the area. Enhance habitat for management indicator species groups. Emphasize habitat for those species most sought by the public.
2. Vegetation species and materials used in restoration work will be those that permit the achievement of the restoration objective at the least cost.
3. Horizontal and vertical plant and animal diversity will be the result of achieving habitat objectives by wildlife habitat associations within State Natural Division categories.
4. Permanent water sources will be developed as necessary to meet optimum habitat for management indicator species. Existing water holes will be maintained.

5. Provide on the average up to 2 miles of National Forest System roads per square mile of National Forest System land. Public motorized use of this road network will be managed to complement wildlife resource management objectives.
6. Designated Off-road vehicle areas will not be developed within Management Area 3.4.

Forest Plan Revision

The Mark Twain National Forest is in the process of revising the existing Land and Resource Management Plan (Forest Plan) for the National Forest. A Notice of Intent to revise the Forest Plan was issued in 2002. As part of this process, various inventories and evaluations are occurring. Additionally, the Forest is in the process of developing alternative land management scenarios that could change the desired future conditions for areas on the Forest or could change the standards and guidelines for managing specific areas. A Draft Environmental Impact Statement (DEIS) will be published in the near future that will disclose the consequences of the different land management direction scenarios considered in detail.

As a result of the Forest Plan revision effort, the Forest has new and additional information beyond that used to develop the existing Forest Plan. This information will be used where appropriate in the analysis of this project to disclose the effects of the proposed activities and any alternatives developed in detail.

The decisions associated with the analysis of this project will be consistent with the existing Forest Plan for the Mark Twain National Forest. Under regulations of the National Environmental Policy Act (40 CFR 1506.1), the Forest Service can take actions while work on a Forest Plan revision is in progress because a programmatic Environmental Impact Statement for the existing Forest Plan already covers the actions. Additionally, the decisions on this project will not prejudice the ultimate decision of the Forest Plan revision effort. The impacts of the Forest Plan revision in this project area will be disclosed in the assessment for this project.

Project Objectives

A. Improve Watershed Health

The 1999 East Fork of Rock Creek Watershed Assessment found that unauthorized off-road recreation vehicle (ORV) and all-terrain vehicle (ATV) use, along with road and recreation trail location in environmentally sensitive areas are a major contributor to soil erosion and degradation of riparian habitats. This project will address the use of ORVs, ATVs, and the location of roads and trail and the impacts they have on the watershed. Management recommendations identified in the watershed analysis that will be addressed in this project include:

1. Reduce road density within the watershed.
2. Clearly define and distinguish Forest Developed Road system roads from non-system roads.
3. Incorporate existing road, user-defined trails, and fireline locations into road relocations, where feasible.
4. Comply with current Forest-wide management direction to prohibit use of off-road vehicles on National Forest System lands other than on designated Off-road (ORV) trails.
5. Increase the percentage of woodland habitat in the 0 to 9-year age class.
6. Increase the percentage of open and semi-open habitats.

7. Develop mountain bike/equestrian trails within the watershed.
8. Limit use of motorized vehicles on designated stream crossings.

B. Enhance Wildlife Habitats and Provide for Healthy, Resilient Forests

Preliminary analysis of the area indicates that there is a lack of certain wildlife habitats, as well as a decline in the health of glades and savanna ecosystems. Wildlife habitats such as: early seral forest; open woodlands with a 20 to 30 percent grass, forbs and shrub component; woodland habitats in oak forest that are 50 years in age and have a dense understory; and old growth do not meet the DFC for MA 3.4-2. Specialized habitats such as glades and savannas are in decline due the encroachment of eastern red cedar. This is primarily due to the lack of fire in these ecosystems that maintained the diversity and viability of plant communities. This project would address the lack of certain wildlife habitats and health of the ecosystems

C. Improve Public Access and Recreational Opportunities

The project area receives a variety of different recreational activities such as ATV use, mountain biking, equestrian use, hunting, hiking and nature viewing. A majority of system roads in the project existed prior to Forest Service management and were not constructed to Forest Service specifications. As a result, many of the roads have deteriorated to the point that they are not accessible unless by foot or ATV. There are also no designated trails within the project area. This project would address public access and recreational opportunities for the public.

Proposed Actions

A. Improve Watershed Health

Existing and Desired Conditions

There are nearly 34 miles of National Forest system roads, resulting in a density of 2.1-miles/square mile of National Forest land. In addition, there are approximately 10 miles of non-system road within the project area. National Forest System roads are under the jurisdiction of the Forest Service and determined to be needed for long-term motor access. Non-system roads are roads on National Forest System land that are not managed as part of the Forest transportation system, such as unplanned roads, abandoned travel ways, and off-road vehicle tracks that have not been designated and managed as a trail. There are approximately 7 miles of National Forest System roads directly located within riparian corridors that are directly contributing to degraded watershed and riparian conditions. An additional 6 miles of non-system roads are located on steep slopes and erosive soils and are causing erosion, sedimentation and poor watershed conditions.

Proposed Action A1: We propose to decommission approximately 7 miles of system road and 6 miles of non-system road. Connected Actions: Included with this proposal is the installation of berms, boulders, waterbars, fertilization, seeding, re-contouring and closure signs.

System Road to Decommission		Non-system Roads to Decommission	
Road #	Distance (miles)	Road #	Distance (miles)
1064	1.6	1001A	0.6
1178	1.7	1002A	1.0
1002B	1.1	1175x	0.4
1195A	1.5	1178A	0.1
1001A	1.1	1189	0.2
		1190	0.2
		1194B	0.6
		14250	0.2
		14250A	0.1
		14351	0.5
		15000	1.8
		Decommission all non-system roads, unless under special use permit.	

Proposed Action A2: We propose to install four steel gates to limit motorized access on FR 1181, 1003 and 1063 to protect sensitive glade habitats. This area would be designated a turkey hunting walk-in area. Motorized access would be allowed during deer firearms hunting season. Connected Actions: This proposal would include the installation of walk-thru gates for equestrians, mountain biking, nature viewing and hiking. Seasonal closure signs would also be posted.

B. Enhance Wildlife Habitats and Provide for Healthy, Resilient Forests

Existing and Desired Conditions

The Forest Plan establishes various habitat objectives to maintain a wide variety of habitats as well as specific forest management objectives for Management Area 3.4 (Forest Plan, pages IV – 115 to 124). The following habitats are lacking in the project area:

1. **Woodland Habitats in early successional stages (0 to 9 year age class):** Early successional habitat is important for 5 of the 9 Management Indicator Species (MIS): White-tailed deer, Eastern wild turkey, Ruffed grouse, Bobcat, and Indigo bunting. There are also several neotropical migrant birds (NMB) such as Yellow-breasted chat, Prairie warbler, Rufous-sided towhee, Blue-wing warbler, and White-eyed vireo which require brushy conditions. Many of these species have declined significantly over the past 30-years due to habitat loss. The DFC for MA 3.4-2 for this habitat type ranges for 655 to 983 acres. There are currently 321 acres of this habitat type in MA 3.4-2, 210 acres of this is located in the project area., 147 acres were clear-cut under private ownership in 1997. Approximately 63 acres are being maintained in early successional habitat within the East Fork Prescribed Fire area. Approximately 182 acres of this habitat are needed for the project area to achieve the DFC.
2. **Woodland habitats in Oak, Oak-Pine and Pine with 40 to 50% sawtimber with a 20 to 30% forb, grass and shrub understory:** This habitat is important for several threatened and endangered (T&E), MIS, NMB and Regional Forester’s Sensitive Species (RFSS) such as Eastern wild turkey, White-tailed deer, Ovenbird, Bush’s poppy mallow and Indiana bat. The DFC for MA 3.4-2 for this habitat type ranges from 5,735 to 7,374 acres. There are currently only

144 acres within the MA, 116 acres of this is within the project area. Approximately 3,497 acres are needed for the project area to achieve the DFC.

3. **Woodland habitats in Old Growth condition:** This habitat is used by 87 terrestrial species (9 amphibians, 11 reptiles, 11 mammals and 56 birds). The DFC for MA 3.4-2 for this habitat type ranges from 1,639 to 2,458 acres. There are currently 530 acres in the MA, 489 of this is within the project area. Approximately 547 acres would need to be designated to meet the DFC for the project area.
4. **Woodland habitats in oak types, 50 years old with dense understories:** This habitat type is important to many species, such as the MIS species, wood thrush. The DFC for MA 3.4-2 for this habitat type ranges from 1,639 to 2,458 acres. There are currently only 156 acres of this type identified in MA 3.4-2, 88 acres occurs within the project area. Approximately 945 acres would be needed for designation to meet the DFC for the project area.
5. **Open and semi-open habitats (glade and savannas):** This habitat is important to a variety of species including 7 of the 9 MIS species. These areas provide a vegetation composition and structure that differs from predominately forested environments. The habitats include native cool-season pasture or openings as well as native warm-season dominated glades and savannas. The DFC for MA 3.4-2 ranges from 1,147 to 2,458 acres. There are currently 3,159 acres identified within the MA, 664 acres within the project area. Approximately 59 acres habitat is needed for the project area to meet the DFC.

Proposed Action B1: We propose to create approximately 232 acres early successional habitat by using a clear-cut method of timber harvest. The stands identified for clear-cutting activities are over-mature and/or in a state of decline due to insects or disease. Many of these stands are not regenerating. No clear-cut would exceed 40 acres in size and reserve areas will be retained within the clear-cuts. Approximately 127 acres of this brushy habitat would be maintained indefinitely by prescribed fire.

Proposed Action B2: We propose to do wildlife stand improvements (WSI) on 2,952 acres. There would be no commercial harvest on these stands. Trees would be dropped and scattered by hand crews. This action would consist of removing primarily eastern red cedar and black oak from the understory to open up the canopy to allow more sunlight to reach the forest floor. On south to southwest facing slopes and ridgetops this would allow for increases in the abundance and diversity of native forbs, grasses and shrubs. Approximately 1,789 acres identified for this activity are within the proposed prescribed fire area and would be burned every 3-5 years to maintain 20 to 30 % native ground cover. On north to northeast facing slopes a dense understory of shrubs is desired.

Proposed action B3: We propose to restore 125 acres of glade habitat by removing all encroaching eastern red cedar. Glades identified for this activity have lost much of their herbaceous understory and plant diversity due to increases in canopy cover. These glades would be burned once every 3 to 5 years.

Proposed Action B4: We propose to restore 1,643 acres of savannas. Stands identified for these activities have lost their historic stand structure and composition due to suppression of wildfire and encroachment of cedar. These stands would be thinned to a

30% basal area with large relic post and white oak identified for retention. These stands would be commercially harvested and followed up with prescribed fire once every 3 to 5 years.

Proposed Action B5: Using an uneven-aged management prescription we propose to commercially harvest 1,319 acres to improve forest health conditions. A significant component of these stands are trees that are mature and/or in decline which makes them more susceptible to infestation by insects and diseases. In nearly all these stands, at least 10% of the trees are already damaged. Harvesting would slow, and in some cases stop the spread. These stands would develop into woodland habitat with an herbaceous understory on the south and southwest slopes and into woodland habitat with a dense understory on the north and northeast slopes.

Proposed Action B6: We propose to treat 167 acres with Improvement cuts. Like the stands in B5 above, these stands also have insect and disease problems. They are not as old. Improvement cuts would remove damaged trees while helping to develop an uneven-aged stand structure.

Proposed Action B7: We propose to treat 47 acres of declining red oak in one stand with a combination of thinning and salvage harvesting. Shortleaf pine makes up 25% of this stand. The dying red oak species would be removed. Thinning would be done through out the stand where needed to allow the remaining trees to maintain vigorous growth.

Proposed Action B8: There are 41 acres of non-native fescue pastureland recently acquired by the Forest Service that we propose to convert to native warm season grasses.

Proposed Action B9: There are 12 acres we propose to maintain in open conditions by brush hogging (mowing). This would also assist in the control of existing noxious weeds.

Proposed Action B10: There are 3 prescribed fire areas totaling 5,422 acres that have been identified for burning which represents 52% of the project area. This action will expand the already existing Rock Creek and East Fork prescribed burn areas. This action will further restore fire back into fire dependent ecosystems such as glades and savannas, and increase the vigor and diversity of native plants. Twenty miles of fireline would utilize existing roads and natural features such as creeks; 5 miles of fireline would be constructed with hand crews or a dozer.

Proposed Action B11: A noxious weed inventory has been completed in the project area. Numerous populations of sericea lespedeza, crown vetch and non-native thistles have been found. Crown vetch is of concern because it is growing vigorously in open glade habitat and will eventually take over. We propose to address noxious weeds using an integrated approach consisting of herbicide, hand pulling and mowing. Currently, eight populations of crown vetch, two populations of bull thistle and scattered populations of sericea lespedeza exist adjacent to roads. Total treatment area is approximately 45 acres. Future infestation of noxious weeds that are a result of management or recreational activities would be treated as needed.

Proposed Action B12: We propose to designate approximately 2,379 acres of old growth. Approximately 245 acres that currently meet old growth characteristic would be designated old growth. Another 2,134 acres have been identified as potential old growth.

These areas are in large contiguous blocks where the majority of the forests exhibit old growth characteristic such as large trees greater than 100 years old and understories having large amounts of dead and down woody debris. Much of the area identified for old growth is excessively steep and precludes timber management activities.

C. Improve Public Access and Recreational Opportunities

Existing and Desired Conditions

System and non-system roads established prior to Forest Service management and never engineered to Forest Service standards have deteriorated to a point that vehicle access is limited to ORVs and ATVs. Only two maintenance Level 2, maintain for high clearance vehicles, National Forest System roads have been formally constructed and maintained on a regular basis (FR 1170 and 1002). Most of the historic roads are poorly located and do not have proper grade, aggregate, or drainage features. As a result, many of the roads have severe erosion and are contributing sediment and gravel into nearby streams. This proposed action would also greatly benefit the watershed.

Proposed Action C1: Currently there are 24.6 miles of Forest Service system roads that do not meet Forest Service standards and are contributing gravel and sediment into the Rock Creek watershed. We propose to reconstruct these roads according to Forest Service specifications.

Road #	Distance (miles)
1001	1.4
1002	2.6
1003	3.6
1062	1.0
1063	1.0
1068	0.7
1172	0.3
1175	1.4
1180	1.2
1181	2.0
1189	0.3
1190	0.5
1192	0.6
1194	1.1
1195	3.7 (relocate 1 mile)
1002A	0.5
1003B	0.3
1171A	0.7
1180A	0.3
1181A	0.5
1194A	0.5
1194B	0.1
1194C	0.3

Proposed Action C2: We propose to convert 3.6 miles of non-system roads to National Forest System Roads in order to perform resource management activities. These roads would be reconstructed to Forest Service standards.

Road #	Approximate Distance (miles)
1001	1.0
1171	0.1
1063	0.4
1194C	0.3
15000	1.8

Proposed Action C3: We propose to convert approximately 1.2 miles of non-system roads to non-motorized trail.

D. Summary of Proposed Actions

There are approximately 33 miles of Forest Service system roads and 10 miles of non-system roads within the project area. Approximately 24.6 miles (75%) of system roads have been identified for reconstruction. 1.7 miles of National Forest system roads would require maintenance. Approximately 7 miles of system roads and 6 miles of non-system roads have been identified for decommissioning. These road activities would reduce the road density in the project area to 1.9-miles/square mile.

The total vegetative management activities identified for this project would occur on approximately 6,890 acres (67%) of the National Forest System land (NFS) within the project area. Approximately 3,886 acres (38%) would involve commercial harvest; 3,005 acres (29%) would be non-commercial wildlife habitat and stand improvements and 3,417 acres (33%) would have no vegetative management. Approximately 5,421 acres (53%) of NFSL have been identified for prescribed fire. Approximately 2,386 acres (23%) of existing and potential old growth have been identified for old growth designation.

Proposed Actions	Measure (Estimated)
Watershed Improvements	
Decommission system roads	7.0 miles
Decommission non-system roads	5.7 miles
Limit motorized access-Install steel gates	4
Vegetative and Wildlife Habitat Management	
Clearcut Harvest	232 acres
Uneven-age Management	1,319 acres
Thin	268 acres
Glade Restoration	125 acres
Savanna Restoration	1,643 acres
Improvement Cuts	167 acres
Pre-commercial Thinning	64 acres
Salvage Red Oaks	33 acres
Prescribed Burn	6,285 acres
Wildlife Stand Improvements	1,789 acres
Native Warm Season Conversion	41 acres
Maintain existing open field by mowing	12 acres
Prescribed Fire	5,422 acres
Noxious Weed Control	45 acres
Designate Old Growth	2,379 acres
Wildlife Structural Improvements	
Maintain existing ponds	27

Proposed Actions	Measure (Estimated)
Improve Public Access and Provide Recreation Opportunities	
Road Reconstruction	24.6 miles
Convert Non-system road to System road	3.6 miles
Road Maintenance	1.7 miles
Connected Actions	
Fire line construction	4 to 6 miles
Hazard Tree Removal along FS system roads	As needed
Road Decommissioning Activities; waterbars, rock and earth berms, recontouring, revegetation (seeding, planting or fertilizing)	As needed
Signing of Forest Service System roads	As needed

IV. DECISION TO BE MADE

The District Ranger of the Ava/Cassville/Willow Springs Ranger District is the official responsible for making a decision for this project. The decision to be made from this analysis is whether or not to implement the project as proposed or an alternative, based on the ability of the alternative chosen to effectively address the watershed's concerns and wildlife habitat restoration in an environmentally and fiscally responsible manner and in response to issues and concerns generated internally or by the general public. The analysis will compare the alternatives and potential environmental impacts and the ability to limit impacts. Based on the analysis, the Deciding Official must decide whether or not to proceed with a specific action. If an action alternative is selected, the decision may include mitigation measures in addition to the Forest Plan Standards and Guidelines.

The decision is not one of land allocation, nor is the analysis intended to look at every possible combination of activities. The scope of the decision will be confined to a reasonable range of alternatives that will meet the project purpose and need.

V. ADDITIONAL INFORMATION

Information, photos and maps on the management activities described in this document is located on the Internet at: www.fs.fed.us/r9/marktwain/projects/project. We invite you to comment on this proposal before the analysis has been completed and a final decision has been made. Please provide site-specific comments that are useful in helping us analyze this proposed project. Substantive comments are required. These are comments that are within the scope of the proposed action, specific to the proposed action, have direct relationship to the proposed action and include supporting reasons why the comments should be considered. Individual and organizations desiring eligibility to appeal must provide the following information.

1. Name and address
2. Title of this project
3. Substantive comments on the proposed action, along with supporting reasons that should be considered in reaching a decision; and
4. Signature or other verification of identity upon request

