ENVIRONMENTAL ASSESSMENT FOR SCOTT COUNTY PHASE III EAST 80 JAMES FORK REGIONAL WATER DISTRICT

I. INTRODUCTION

A. DOCUMENT STRUCTURE

EDM Consultants has prepared this document in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This Environmental Assessment discloses the direct, indirect and cumulative environmental impacts that would result from the proposed action and alternatives. The document is organized into four parts.

1. Introduction: The section includes the purpose and need for the project and the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the public of the proposal and how the public responded.
2. Alternatives, including the Proposed Action: This section provides a more detailed description of the agency's proposed action as well as alternative methods for achieving the stated purpose. The alternatives were developed based on issues raised by the public and other agencies. This discussion also includes possible mitigation measures.
3. Environmental Consequences: This section describes the environmental effects of implementing the proposed action and other alternatives. This analysis is organized by resource area.
4. Consultation and Coordination: This section provides a list of preparers and agencies consulted during the development of the environmental assessment.

B. PURPOSE AND NEED FOR ACTION

Scott County residents have been plagued for years with seasons of groundwater shortages and poor water quality due to mineral and organic contaminants. Surveys of domestic wells in Scott County were conducted by the Scott County Cooperative Extension service, which revealed a significant percentage of the wells tested contained high quantities of minerals. Iron and manganese were prevalent. Many of the wells would not pass Health Standards for potable water. As a general rule, the majority of the wells in Scott County would not be considered potable if subjected to the State Department of Health standards.

As early as the 1970's, efforts were made to develop a rural water system. These early efforts failed. Interest was renewed in 1990, when the County Judge appointed a steering committee to develop a plan for construction of a rural water system to serve all of Scott County outside the cities of Waldron and Mansfield. The committee held its first public meeting in March 1992 which resulted in the distribution of a petition to organize a legal entity which would have the power to borrow money and work with all the Federal and State agencies which would be involved. Over 600 signatures were collected (only 100 were required) requesting the formation of a Regional Water District to accomplish the task of constructing, operating, and maintaining a rural water system to serve Scott County.

In May 1992 a public meeting was held at the Scott County Fairgrounds and was well attended by local interests and Federal and State Representatives. Also, in May 1992, the petition to form a district was formally filed in the Scott County Circuit Court. The Arkansas Soil and Water Conservation Commission (ASWCC) held a public hearing in June, 1992 to obtain formal comments on the formation of the district. One statement was submitted in opposition and five were presented in support of the formation. Subsequently, the ASWCC filed its report on the hearing offering no objection to the formation of the district named Scott County Regional Water District. The Scott County Circuit Court Judge established the district on November 2, 1992 by Court Order and at the same time appointed four Directors to continue the work started by the steering committee.

The objective of the District, as stated in the Circuit Court Order, was to develop a plan, which would result in a rural water system to provide treated water to all rural residents in the County. There were approximately 2100 potential customers in Scott County at that time comprising approximately 6500 people. The Board of Directors began looking for a water supply. The first choice was the City of Waldron, but the Mayor at that time did not feel that the City had any surplus water to sell. The directors investigated the construction of a groundwater well field. This was eliminated because of cost, quantity, and quality factors. The Director met with the then South Sebastian County Water Users Association (currently the James Fork Regional Water District) to explore the possibility of buying water from them for resale in Scott County. As a result the James Fork Regional Water District agreed to serve the residents of Scott County. JFRWD currently serves 750 customers in the Phase I and Phase II projects in Scott County which were completed in 2007 and 2011 respectively.

Water for the new customers will come from James Fork Regional Water District's existing lake and water treatment plant. The lake and plant have a firm net yield and treatment plant capacity of 3.4 million gallons per day. The plant currently runs at approximately 50% of capacity serving over 4,000 residential meters.

Granting of a special use permit to JFRWD to construct the proposed waterline extension would provide water to approximately 80 new residents with a potential to serve over 100 residents.

The Alternative of No Action would leave the residents of rural Scott County Phase III East 80 with no public water supply.

C. PROPOSED ACTION

The proposed action is to grant JFRWD a special use permit to install a waterline and a water storage tank on National Forest land in Scott County, Arkansas. The proposed location is in sections 13, 15, and 25 of T3N R28W and sections 7, 8, 15, 16,17,18,19, 20, 21 & 30 of T3N R27W. Please see the map attached to this report for line and water tank location. The water tank will be set on a 100'x100' section of land and the line will be set on a 15' permanent easement. Affected compartments include 266, 267, 268, 269, 288, 289, 293, 295 and 296.

D. DECISION FRAMEWORK

The decision to be made is whether to implement the Proposed Action (alternative 1) or the No Action Alternative (Alternative 2). The Forest Supervisor of the Ouachita National Forest has the authority to make this decision. If a determination were made that the impact is not significant, then a "Finding of No Significant Impact" (FONSI) would be prepared. A Decision Notice would be the document of decision.

E. RELATED EIS/EA(S) THAT INFLUENCE THE SCOPE OF THIS ENVIRONMENTAL ASSESSMENT

This EA is tiered to the Final Environmental Impact Statement Revised Land and Resource Management Plan (RLRMP) Ouachita National Forest Arkansas and Oklahoma. This document can be viewed on line or at local U.S. Forest Service Offices.

F. PUBLIC INVOLVEMENT

Scoping for this project began with the mailing of the proposed action to adjacent landowners and interested citizens. EDM Consultants, Inc. sent letters during the month of January 2010, inviting comments on the proposed water distribution project. Included in this list were nine Native American Tribes. The letter discussed existing conditions and the desired conditions. Scoping package contained a description of the proposed action, a map depicting the proposed action and a comment form. The following submitted written comments to the letter:

- Arkansas Historic Preservation Program – Frances McSwain
- U.S. Corps of Engineers – Jim Ellis
- Natural Resources Conservation Service – Edgar P. Mersiovsky
- Arkansas State Parks – Anita Chouinard
- Department of Arkansas Heritage – Frances McSwain
- U.S. Department of Agriculture – Steven N. Cole

Over 80 residents have paid the hook-up fee and meter deposit; many more have attended the board meetings and the water sign-ups in support of this project. No negative public responses were received. A Public Hearing was held on September 12, 2012. During the meeting the attendees expressed their support for the project. There were no adverse written or spoken comments.

The responses from this scoping effort are shown in Appendix A of the Environmental Engineering report.

G. ISSUES

No significant issues were identified. The following is a summary of the Environmental Mitigation measures suggested. More detail and a copy of the original letters sent to the involved agencies can be found in the Environmental Engineering Report.

Section	Environmental Resource	Mitigation Measures Reported
3.1	Land Use, Important Farmland, Formally Classified Land	None
3.2	Flood Plains	5
3.3	Wetlands	3
3.4	Cultural Resources	1
3.5	Biological Resources	None
3.6	Water Quality	2
3.7	Coastal Resources	None
3.8	Socio-Economic/Environmental Justice	None
3.9	Miscellaneous	4

1 Project will avoid cultural resources
2 Best Management Practices
3 Crossings will be minimized, performed during dry or frozen conditions or eliminated.
4 Paint tank forest green and keep below tree line.
5 Surfaces will be returned to original contours and elevations

II. ALTERNATIVES INCLUDING THE PROPOSED ACTION

This chapter describes and compares the alternatives considered for the Scott County Phase III Extensions project. It includes descriptions of the alternatives considered.

A. ALTERNATIVES ELIMINATED FROM DETAILED STUDY

An alternative was considered that would include a section of water line to extend north on Cold Springs Road and east and west on HWY 248 to serve new customers. This alternative was eliminated from the detailed study due to the lack of demand of water in the pipe serving the extended service area. Extending the distribution piping to serve low demand, remote customers would compromise the water in the pipe, making it lose its benefits.

B. DESCRIPTION OF ALTERNATIVE 1 (PROPOSED ACTION)

The proposed action involves granting JFRWD a special use permit to install a water line and a water storage tank in sections 13, 15, and 25 of T3N R28W and sections 7, 8, 15, 16, 17, 18, 19, 20, 21 & 30 of T3N R27W, compartments 266, 267, 268, 269, 288, 289, 293, 295 and 296.

Since the majority of this project area is within existing right-of-ways running along roads and existing corridors in the general Forest area (Management Area 14), all guidelines and requirements pertinent to this area will apply to this project per the Revised Forest Plan, page 108.

The water line would be installed in existing road or powerline right-of-ways. Some of these road right-of-ways have other utilities within the right-of-way. JFRWD would be required in their special use permit to keep a specified distance from these utilities lines.

A 20-foot right-of-way would be issued to JFRWD, totaling approximately 6.3 miles or 15.3 acres. This right-of-way would be reduced to 15-feet once the construction is completed, for a total of 11.5 acres. An additional 0.23 acres will be needed permanently for the 100x100 tank site for a total disturbed area of 15.5 acres.

The water line would be installed to a depth of 30-36 inches below grade using machinery such as trackhoe. The water tank will be painted a green-gray color as recommended by the Poteau/Cold Springs Ranger District Office.

Even though this waterline is proposed in existing right-of-ways, some additional clearing may be required to attain the desired right-of-way width. Merchantable trees in the right-of-way would be marked and sold to JFRWD. JFRWD would be required to chip, haul off or otherwise dispose of right-of-way clearing debris as

directed by Forest Service. Right-of-way clearings would be fertilized, seeded with native wildlife seed mixtures, and mulched to Forest Service standards.

JFRWD will be responsible for any associated tree mortality along the waterline corridor for a period of three years. This will include JFRWD felling or removing dead/dying trees as designated by the Forest Service as a safety hazard along the linear route.

C. DESCRIPTION OF ALTERNATIVE 2 (NO ACTION)

The special use permit would not be granted to JFRWD and the waterline would not be installed.

D. MITIGATION MEASURES

For each alternative, all applicable design criteria or standards in the latest Ouachita National Forest Land and Resources Management Plan and the Revised Forest Plan citation would be applied.

Best Management Practices (BMPs) for Water Quality Protection (Arkansas Forestry Commission) would also apply as standard mitigation measures for all proposed actions.

Below are specific mitigation measures for this project.

1) No work can be performed during inclement weather (rain, ice, snow or when roads and / or area being impacted are wet).

2) JFRWD will contact the Forest Service representative for prior approval of any tree removal needs that may come up.

3) Merchantable trees in the right-of-way will be marked and sold to JFRWD. JFRWD will be required to chip, haul off or otherwise dispose of right-of-way clearing debris or as directed by the Forest Service.

4) During construction involved with the project, JFRWD will utilize appropriate measures to minimize offsite movement of runoff water and erosion control from the project site. Hay bales, silt fences, seeding and fertilizing, and mulching will be required as specified by USFS. Seeding specifications included in the Special Use Permit will be followed to revegetate disturbed areas.

5) Areas where soil has been disturbed shall be reseeded within 30 days of project completion. The seeding includes cut-and-fill slopes, ditches (wing, lead-off, etc.) shoulders, and any other exposed areas created by the project.

6) Under the Clean Water Act, anyone who proposed an activity that will discharge dredged or fill material into waters of the United States is required to apply for a permit from the U.S. Corps of Engineers. It will be JFRWD's responsibility to pursue this matter with the U.S. Corps of Engineers.

7) JFRWD will be required to post signs along roads open to the public to notify road users of activity in the area.

8) JFRWD will be responsible for any associated tree mortality along the waterline corridor for a period of three years. This will include JFRWD felling or removing dead / dying trees as designated by the Forest Service as a safety hazard along the linear route.

9) JFRWD will be responsible for coordinating maintenance schedules of the right-of-way with any other permit holder in the same right-of-way.

10) Inspection of waterline installation shall be the responsibility of the operator through use of a third party hired to conduct the inspections, or by employee of operator self-certifying the installation. The self-certifications must be submitted to the Forest Service in writing and address all aspects, including depth of waterline. The Forest Service will complete random inspections at various times throughout the process.

11) Heritage resource sites that are determined eligible for the National Register of Historic Places and sites that have undetermined eligibility will be protected from any ground-disturbing activities associated with this project since according to the study performed by Flat Earth Archeology, all the archeological sites are outside of the areas of potential effects. If additional heritage resource sites are found during project implementation, they will be examined by the Forest or District Archeologist, and prescribed mitigation measures will be implemented.

12) A review of listings and locations of all known occurrences of proposed, endangered, threatened, or sensitive species (PETS) has been conducted. In addition, field surveys have been made on all stands to be impacted by each of the action alternatives. No critical or essential habitat for any PETS species was identified in the project area. If any additional PETS species are discovered prior to or during implementation, the project will be halted and a new biological evaluation will be made to determine the effects on the species and its habitat. A Biological Evaluation (BE) was prepared for this project and is part of the project file.

III. ENVIRONMENTAL CONSEQUENCES

This section summarizes the physical, biological, social, and economic environments of the affected project area and the potential changes to those environments due to implementation of the alternatives.

A. SOILS

Existing Condition

The analysis area for soils is the 15.3 acre waterline right-of-way area and 0.23 acre tank site.

The soil types traversed by the proposed water line route are as follows (Soil Survey of Scott County, Arkansas issued 1998)

Leadvale silt loam, 3 to 8 percent slopes
Endsaw stony loam, 20 to 35 percent slopes
Endsaw cobbly loam, 8 to 20 percent slopes
Endsaw gravelly loam, 3 to 8 percent slopes
Nella-Enders complex, 8 to 20 percent slopes 1/
Kenn-Ceda complex, frequently flooded 1/
Nella gravelly fine sandy loam, 3 to 8 percent slopes
Sallisaw silt loam, 3 to 8 percent slopes
Taft silt loam, 0 to 2 percent slopes

The soil types on the tank site are as follows (Soil Survey of Scott County, Arkansas issued 1998)

Endsaw cobbly loam, 8 to 20 percent slopes
Enders-Mountainburg complex, 20 to 40 percent slopes 1/

The waterline route is located along disturbed road and powerline right-of-way with normal erosion processes taking place. The tank site will be fenced and gravel will be placed on the ground around the tank.

These soils are well-drained soils with erosion potentials ranging from slight to moderate where the root mat is cut and the soil cover is removed.

Effects

Alternative 1

Approximately 15.5 acres of soil would have the potential to be disturbed within the right-of-way area. These 15.5 acres include the total right-of-way area but actual disturbed area could be less. Erosion will increase during the installation of

the waterline and during site preparation for the tank installation but will decrease when vegetation becomes established and the tank site is finished. Mitigation Measures #4 and #5 would help minimize erosion.

Alternative 2 (No Action)

Existing soil processes would continue.

B. WATER QUALITY

Existing Condition

The definition for perennial stream as defined in the LRMP is a feature that supports water flow, and / or water pools through the greater part of the year, or otherwise provide year-round aquatic organism habitat (LRMP, p J-1). These features have well defined stream channels and banks.

The definition for a defined channel is a feature that clearly exhibits most of the following characteristics: displays signs of water flow velocity sufficient to move soil material, litter, and fine debris; shows a defined bank and streambed; shows accumulated deposits of sands and gravels; and is continuously connected with other hydrologic features (LRMP, p. J-1). This includes channels that may only support water flow immediately following a precipitation event; bed forms that can include large, stable rock; and areas that possibly support riparian-dependent plants and animals. Furthermore, some defined channels will not support year-round aquatic organism habitat.

Several defined channels are present in the area. The proposed distribution lines will include stream crossing of Waldron Branch. Water quality degradation might occur during the time that the trench for the water line is open but will be back to original conditions once the water line is buried and the elevations returned to preconstruction conditions.

The activities associated with this project would occur in road or power line right-of-ways that have been previously disturbed. Erosion and runoff from these rights-of-ways are typical of those encountered in moderately to well-maintained roads in the Arkansas River Valley ecoregion.

There are no known wetlands located in the project area. All surfaces disturbed by the pipe line construction will be returned to original contours and elevations.

There are no designated Wild and Scenic Rivers within this analysis area.

Effects

Alternative 1

The direct and indirect impacts from this project are not expected to contribute to degradation of the current water quality. The most likely effect from this alternative, beyond current conditions, is a short-term increase in sediment that would result from storm runoff following waterline construction. Erosion control through revegetation of the disturbed ground would limit the expected erosion and runoff. Using mitigation measures like best management practices would minimize run-off and help to establish natural vegetation and would limit long-term concerns of the water quality.

Immediately during and after waterline construction, creek functioning may be temporarily impacted. As a result of mitigation measures, creek functioning should return to existing function over time. The disturbances from this project will not likely disrupt long-term functioning of this creek.

Alternative 2

There will be no direct effects from this alternative because no activities would be implemented from the selection of this alternative. The current trends and conditions are expected to continue.

C. AIR QUALITY

Existing Condition

The analysis area for air quality is the 15.5-acre waterline right-of-way area and tank site.

The Clean Air Act requires the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment: sulfur dioxide, nitrogen dioxide, ozone, particulate matter, lead, and carbon monoxide. Due to the nature of the project's construction activities, ozone and particle matter are the two of primary concern. Construction equipment and vehicles emit volatile organic compounds (VOCs) and nitrogen oxides (NOx), which can contribute to the formation of ground-level ozone. Construction equipment and vehicles may also produce dust during activities, which can add to fine particulate matters in the atmosphere.

In general, the air quality in the analysis area is good (U.S. Department of Agriculture, Forest Service 1999). Episodes of regional haze occur mainly in the spring and summer.

Effects

Alternative 1

No activities would result in violations of federal air quality standards. During project implementation, small amounts of dust would possibly arise from travel on roadways and from construction activities on the waterline. These fine particulate matters would be considered negligible.

Following the construction activities, emissions of dust are expected to be negligible and limited to infrequent vehicle traffic necessary to conduct waterline inspections and customary vehicular traffic through the project area.

Alternative 2

There would be no additional emissions or dust created from construction vehicles and equipment.

D. VISUAL QUALITY

Existing Condition

The analysis area for visual quality is the area viewable from HWY 80. This area is a rural area that is mostly forested land. The predominant tree species is shortleaf pines with eastern redcedar and hardwoods present.

Visual quality is defined as the degree of acceptable alteration to the characteristic landscape. Two of the five categories of Scenic Integrity Objectives (SIO) listed in the RLRMP page 263 occur in this project area. As shown on the Scenic Integrity map, the majority of the project lays in a medium scenic integrity value area. A portion of the project located on the east end lies in a high level value area.

Scenic integrity in the Medium category refers to landscapes where the valued landscape character “appears slightly altered.” Deviations are evident but do not dominate the valued landscape character being viewed. They borrow valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type changes, or architectural styles outside the landscape being viewed, but are also compatible to the character within.

Scenic integrity in the High category refers to landscapes where the valued landscape character “appears” intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.

Effects

Alternative 1

Short-term visual impacts from waterline construction activities in the road right-of-ways would be visible to the general public. This would fade over time as the area is reseeded and vegetation reclaims the road right-of-ways. No long-term visual impacts are expected. Both SIO's would be met for this project implementation.

The tank (in the Medium ISO) will be painted a green-gray color to minimize contrast. The tank is 28' tall and will be below the tree line. Access to the tank will be through a 15' wide driveway. The SIO for this area will be met since the tank will not be visible from the highway and the deviation from the landscape character will not dominate the valued landscape character being viewed.

Alternative 2

No impact to visual quality would occur.

E. RECREATION

Existing Condition

The Recreation Opportunity Spectrum (ROS) provides a framework of defining classes of outdoor recreation opportunity environments (U.S.D.A. FS 1986). There are six ROS designations ranging from primitive to urban classifications. The analysis area contains one of these designations – roaded natural. Roaded natural settings are located within a half mile of a road and usually provide higher levels of development such as campgrounds, picnic area, and river access points.

Alternative 1

Waterline construction would temporarily increase traffic on these roads. Mitigation Measure #7 requires JFRWD to post signs to warn road users of traffic and activities in the area. Users of these roads may be inconvenienced during waterline construction activities.

Hunters in the area may be distracted by noise from construction. This would be temporary until activities are completed.

The ROS of Roaded Natural would be met.

Alternative 2

No impact to recreation would occur.

F. HERITAGE RESOURCES

Existing Condition

Comments from the Department of Arkansas Heritage were requested. Located within or adjacent to this project there are 11 known archaeological sites that may be affected by the proposed construction. The State Historic Preservation Officer has requested that a cultural resources survey be conducted. A copy of the Department comments is included in Exhibit 5. “Flat Earth Archeology, LLC” performed this work. The management summary was submitted and approved by the State Historic Preservation Officer. A copy of the Department comments and a copy of the report are included in Exhibit 5 of the Environmental Engineering Report. Also included in Exhibit 5 is a copy of the letters to affected Indian Tribes written by Rural Development. No Tribe has replied. Any comments received later from Tribes will be taken under review.

Site No.	Site Type	Eligibility	Recommendation
3SC93	Historic	Undetermined	Outside of APE
3SC148(*)	Historic	Eligible	Outside of APE
3SC237(*)	Prehistoric	Undetermined	Outside of APE
3SC238(*)	Historic	Undetermined	Outside of APE
3SC269(*)	Historic	Undetermined	Outside of APE
3SC361	Historic	Undetermined	Outside of APE
3SC368	Historic	Undetermined	Outside of APE
3SC783(*)	Historic	Undetermined	Outside of APE
3SC815(*)	Historic	Undetermined	Outside of APE
3SC1321	Historic	Undetermined	Outside of APE
3SC1937	Historic	Undetermined	Outside of APE

(*)Sites located on Forest Land.

Alternative 1

Based on the results form the study performed by Flat Earth Archeology there will be no effects to heritage resources. In areas were the path of the water line intersected a heritage site the waterline was relocated to the other side of the road that way any chance of disturbance to the site is eliminated.

Alternative 2

This alternative would have no effect on heritage resources.

G. VEGETATION

Existing Condition

The analysis area for vegetation is the 15.5 acres within the proposed waterline right-of-way and the tank site.

The proposed project is located in existing road or powerline right-of-way. The right-of-way is dominated by grasses and scattered low shrubs.

Some additional clearing may be required to attain the desired right-of-way width and tank site. This clearing would be done in forested areas. Vegetation in these areas is comprised primarily of shortleaf pine with scattered hardwoods including eastern redcedar. Midstory tree species include species such as oak, hickory, dogwood, persimmon, and red cedar. Common shrubs and vines along with grasses and other herbaceous vegetation are found in the understory. The Forest Service will be notified as to when and where this clearing is planned to take place.

Effects

Alternative 1

Vegetation along the right-of-way would be disturbed by machinery during waterline installation. Approximately 15.5 acres would be revegetated with a Forest Service approved native wildlife seed mixture. Within one growing season, the area would have returned to a grassy condition.

Areas within the forested area would become an open, grassy area after activities are completed and the area is revegetated.

Alternative 2

No vegetation would be disturbed.

H. WILDLIFE

Existing Condition

The analysis area for wildlife is the area covered by the 15.5-acre waterline right-of-way area and tank site. The majority of habitat disturbances will be restricted to the previously disturbed right-of-way. Some clearing may be required in forested areas.

In this area, the diversity of wildlife species is typical for managed forestlands in the mountainous region of west Arkansas. Populations of white-tailed deer, turkey, and bear, as well as, small game are considered above average for this part of the state.

Effects

Alternative 1

Short-term ground disturbance impacts would result from direct disruption of soils and vegetation, as well as from the presence of humans and vehicles in the construction areas. Most wildlife occupying the project area would be displaced during construction activities, but some species such as nesting birds and amphibians would be vulnerable to mortality from the physical disruption of soils and vegetation. These short-term ground disturbance impacts would result in temporary loss of habitat on approximately 15.5 acres.

Disturbed areas created by waterline construction along road and powerline right-of-ways would be re-vegetated and allowed to return to the previous grassy condition providing habitat and food sources for small mammals, insects, and reptiles. Deer, turkey, and quail would also benefit from this re-established grassy condition. Wooded areas would be converted to a grassy condition providing this same benefit.

Only 0.23 acres of forested land would be permanently lost by this project.

Long-term impacts to wildlife species could result from disturbance during periodic maintenance activities of the waterline; however these activities would occur infrequently and this type of disturbance is already occurring due to maintenance of these right-of-ways by other utilities companies.

Alternative 2 (No Action)

Under the No-Action alternative, the proposed activities would not be implemented. There would be no alteration to the lands or wildlife habitat; therefore, no additional impacts to wildlife resources would occur.
This habitat loss would have no measureable direct, indirect, or cumulative effect on any terrestrial MIS species. There would be no change brought about to Forest MIS population trends by this project.

I. FISHERIES

Existing Conditions

The analysis for fisheries is Waldron Branch.

The only stream to the proposed activities on National Forest land is Waldron Branch. The water line will actually cross the branch in the immediate vicinity of the intersection of roads Co Rd 814, State HWY 250, and HWY 80.

Streams are dynamic systems and are in a continuous state of change. Natural sedimentation would continue to occur from bank erosion and heavy rain events.

Effects

Alternative 1

There may be minimal increases in water yields during construction. Since the majority of the streams in the analysis area are defined channels, any minimal increase in water yield would provide at the most, very limited benefits to fish populations. Increased water yields, particularly during the summer and fall, can benefit the fish populations in these streams by providing more through-gravel flow, increased nutrients, and more available aquatic habitat. However, since any increases are expected to be minimal and short-term, due to the temporary disturbance period, there would not be any observable benefit to the fish population in the effected streams. Similarly, since any increase in yield would be small, there would not be any adverse effect from increased flow, such as increase in stream bank erosion and scouring. Sedimentation, turbidity and O2 levels might change during construction. Best Management practices will be used to minimize the amount.

Alternative 2

No activities are planned or implemented with this alternative; therefore, no change would occur in stream conditions that would be attributable to management actions proposed here. Natural sedimentation would continue to occur from bank erosion, from existing roads and trails, as well as heavy rain events.

There would be no measureable direct, indirect, or cumulative effect on any aquatic MIS species. There would be no change brought about to Forest MIS population trends by this project.

J. PROPOSED, ENDANGERED, THREATENED AND SENSITIVE SPECIES

Existing Condition

The analysis area for proposed, endangered, threatened, and sensitive species is the 15.5 acre right-of-way and tank site that would be disturbed by implementing this project. Only one named branch will be impacted by this project.

Comments were requested from the Arkansas Natural Heritage Commission and U.S. Fish and Wildlife Service. Comment letters are included in the Environmental Engineering report. Also included in the Environmental

Engineering report is a detailed BE prepared by The McDonald Company of the species considered and evaluated.

Sources of information used to complete the BE include the U.S. Fish and Wildlife Service, Forest Service Region 8 PETS list, Arkansas Natural Heritage Commission database, district field survey reports, state universities, the Arkansas Game and Fish Commission, and numerous reference documents.

All species listed on the Regional Forester's Sensitive Species list (2001) as well as current Federal listed species for Arkansas (July 7, 2001) were considered for this evaluation.

No critical habitat for any PETS species has been identified within the analysis area. For a complete description of each species needs and habitat conditions, reference the BE found in the project file for this project.

There are 79 species that are known to occur on the Ouachita National Forest. A total of 18 proposed, endangered, threatened, and sensitive species, or PETS were considered in the BE.

Sensitive Aquatic animal species data collected for the BE shows that none of the six species listed in the BE have been documented in stream sites in the activity area.

A copy of the BE was submitted to the FS for review in 2010. The completed BE is in the project file.

Effects

Alternative 1

The US Fish and Wildlife Service has determined that this project will not affect harperella, pink mucket, or the American burying beetle, and is not likely to adversely affect the red-cockaded woodpecker.

The Proposed actions may directly impact some individual sensitive species, but will not cause a listing of any species.

There are no foreseeable activities in the area that would indirectly affect any PETS species in a negative manner, or cause additive or synergistic adverse cumulative impact in conjunction with the proposed project

Alternative 2 (No Action)

Under the no action alternative, conditions would generally remain the same. No threatened, endangered, or sensitive species would be impacted. No habitat would be altered or removed.

K. HUMAN HEALTH FACTORS

Existing Condition

There are currently no housing or permanent structures on the proposed route of the water line that falls on National Forest land. Human interaction with this project area is temporary and due to the close proximity with roads.

Effects

Alternative 1

There would be a limited number of potential impacts to human health and safety. These risks include the physical risks associated with general construction practices, heavy equipment, excessive noise, dust, or other associated hazards.

Mitigation 7, JFRWD will be required to post signs along roads open to the public to notify road users of activity in the area, was designed to protect the general public during installation construction.

Dust emissions from the Proposed Action are discussed under Air Quality.

Clean, safe drinking water would be provided to JFRWD water users. People with unsafe wells would not be exposed to contaminated water.

Alternative 2

Under this alternative, conditions would remain the same.

L. SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

Existing Condition

There is no distinguishable collection of minorities in the project area or its immediate vicinity. Civil Rights Impact Analysis Certification shows that the socio-economic make-up or the land use of the area will not be affected by the completion of the project.

The following is the historical population of Scott County.

Population from Census Data

Year	Scott
1990	**10,205**
2000	**10,996**
2010	**11,233**

Scott County has experienced a growth of 7.75% from 1990 to 2000 and 2.15% from 2000 to 2010.

Effects

Alternative 1

Minor, short-term beneficial effects are expected under this alternative. The labor for the proposed activities would be provided by local and / or regional contractors, which may result in short-term, insignificant increases in the population of the area. Materials and other expenditures would mostly be obtained through merchants in the area, giving direct economic benefits. The proposed waterline would not be expected to increase burdens on local social resources. There would be no disproportionate effects to minority groups resulting from this alternative.

Alternative 2

Conditions would generally remain the same. There would be no additional jobs brought in the area and no economic benefits would be realized. There would be no disproportionate effects to minority groups resulting from this alternative.

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LIST OF PREPARERS

Mark A. Koch, PE
EDM Consultants, Inc.
P.O. Box 3290
Fort Smith, Arkansas 72913
Phone: (479)782-0474
Email: mkoch@edmconsultans.com

Chris Branam, RPA
Principal Investigator

Flat Earth Archeology, LLC
13 Valley Road
Cabot, AR 72023
Phone: (501)593-0609
Email: FlatEarthArcheology@gmail.com

Monte C. McDonald, President
3819 Big Springs Road
Maryville, TN 37801
Phone: (865)414-3585
Email: MonteMc@aol.com