



Asa Hutchinson  
Governor

# ARKANSAS DEPARTMENT OF AGRICULTURE

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(501) 225-1598



Wes Ward  
Secretary of Agriculture

February 21, 2021

## FINDING OF NO SIGNIFICANT IMPACT

TO ALL INTERESTED AGENCIES AND PUBLIC GROUPS:

As required by Title VI of the 1987 Amendments to the Clean Water Act and in accordance with the Arkansas Natural Resources Commission's (ANRC) "Environmental Review Process for Arkansas Revolving Loan Fund Projects," an environmental review has been performed on the proposed ANRC's Revolving Loan Fund project below:

City of Cave Springs, Arkansas  
Benton County  
Project Number: WRD-004-185

Total Project Cost: \$4,200,000.00  
Estimated RLF Loan Amount: \$4,200,000.00  
Principal Forgiveness Amount: \$0.00

Funding for the eligible costs of the above project was determined in accordance with the requirements of the Arkansas Revolving Loan Fund Priority System and List and Title XVI.

An analysis of the financial capability of Cave Spring has been performed based upon the latest applicable financial information. The project is affordable to the residents of Cave Springs.

Cave Springs is located approximately eight miles south of Bentonville in southern central Benton County. The existing Cave Springs Wastewater Treatment Plant (WWTP) needs improvements to eliminate persistent total suspended solids (TSS). The City has chosen to construct a combination of gravity and pumped sewer main from Cave Springs' existing facilities site to a 36-inch gravity sewer line in southwest Bentonville. The wastewater will eventually flow to the Northwest Arkansas Conservation Authority (NACA) treatment facility southwest of Bentonville and Cave Springs.

The existing facilities are not adequate to provide an effluent that meets NPDES permit limitations, as far as TSS are concerned. Other improvements include a pump station, abandonment of the existing WWTP, and associated linework for conveyance to NACA.

The City of Cave Springs' existing wastewater treatment plant is located along Osage Creek.

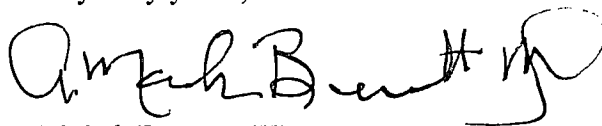
The existing treatment facilities of the NACA are also located near and discharges into Osage Creek. Osage Creek is a major tributary to the Illinois River. Cave Springs currently owns and operates an existing collection system, one pump station, and one force main.

Sewage is conveyed to two package wastewater treatment plants. The plants are adequate to handle the influent flow rates; however, excess TSS accumulation has led to numerous permit violations.

The environmental review process, which is documented by the enclosed Environmental Assessment, indicates that no significant adverse environmental impacts would result from the proposed action. Consequently, a preliminary decision not to prepare an Environmental Impact Statement (EIS) has been made. This decision is based on a careful review of the Facilities Plan, the Environmental Information Document, and other supporting data which are on file in the above office and available for public scrutiny upon request. Therefore, we are issuing this Finding of No Significant Impact.

Comments supporting or disagreeing with this decision may be submitted for consideration to the Environmental Program Manager, Water Resources Development Division, Arkansas Natural Resources Commission, 10461 W. Markham, Little Rock, Arkansas 72205. After evaluating the comments received, the Commission will make a final decision. However, no administrative action will be taken on the project for at least thirty (30) calendar days after release of this Finding of No Significant Impact.

Very truly yours,



A Mark Bennett, III  
Chief, Water Resources Development Division  
AMB/ks

Enclosure



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## ENVIRONMENTAL ASSESSMENT

FOR

THE CITY OF CAVE SPRINGS, BENTON COUNTY, ARKANSAS

PROJECT NUMBER: WRD-004-185

### BACKGROUND

The city of Cave Springs is in south central region of Benton County, in northwest Arkansas, approximately eight miles south of Bentonville. It is in close proximity to the Northwest Arkansas Regional Airport and U.S. Interstate 49 and is very accessible community in that area of the state, supporting robust growth and a strong business and vibrant community.

The cities of Bentonville, Elm Springs, Lowell and Highfill are located north, south, east, and west of Cave Springs, respectively. The Cave Springs is located in the Osage Creek watershed in the urbanized area of Fayetteville-Springdale-Rogers-Bentonville MSA. The area includes creek valleys, steep hillsides, and hill tops. (See Figure 1).

Most of the Northwest Arkansas region has experienced high growth in the past 10 years. The population of Benton County in 2010 was 221,339 people, with 1,729 people residing in Cave Springs. In 2019, the population of Cave Springs was estimated to be 5,276, representing an increase of 11.43 percent.

The City currently owns and operates an existing sewer collection system consisting of gravity lines, one pump station and one force main. Raw sewage is conveyed to two package wastewater treatment plants. Treated effluent is then discharged to 31 low drip zones located on The Creeks Golf Course, which is in the southwestern sector of the City. The existing plant is adequately sized to handle the influent flow and loadings received; however, excess Total Suspended Solids (TSS) accumulation has led to permit violations. Out of 22 instances of exceeding permit limits during the permit cycle, Cave Springs recorded 20 TSS violations. Facility staff have tried, but unsuccessfully, to rectify the problem but excess solids persist. Alternatives to rectify the wastewater treatment problems will be discussed later in this document.

**Geological Elements-** The project is situated in the Springfield Plateau region of Arkansas. Topography of the area consists of low mountains, hills, and deep valleys. The area is a combination of forested and pasture lands etched by Osage Creek and Little Osage Creek.

The planning area is located in is in the Illinois River Watershed. The watershed lies within the Water Quality Planning Segment 3J of the Arkansas River Basin in Northwest Arkansas crossing

into Oklahoma. Cave Springs is home to Cave Springs Cave, an ecologically sensitive area that host the largest known population of the rare Ozark cavefish. Much of the cave contains a perennial stream that discharges from the mouth of the cave into a small lake known as Partners Lake (formerly Lake Keith). This lake and the surrounding area have been developed into a watershed sanctuary and educational center by the Illinois River Watershed Partnership (IRWP). The Cave Springs Recharge Area encompasses lands that are included in Cave Springs, Rogers, Lowell, and Springdale and has a total recharge area of approximately 12,500 acres (20 square miles). The proposed project isn't located within the Cave Springs Recharge Area. (See Figure 2).

Cave Springs' existing wastewater treatment facility is located along Osage Creek. The existing wastewater treatment facilities of Northwest Arkansas Conservation Authority (NACA) are also located near and discharges into Osage Creek.

Portions of Osage Creek and Little Osage Creek are listed as Ecologically Sensitive Waterbodies in Arkansas. The surrounding numerous springs and tributaries support southern cavefish, Ozark cavefish, Arkansas darter, least darter, Oklahoma salamander, cave snails, cave crawfish and unique invertebrates.

The project area lies in the humid subtropical climate zone which is characteristic of summer temperatures ranging from the upper 60s to the upper 90s. Winter temperatures are characterized by highs in the 40s and 50s, and average lows in the 30s. The warmest month of the year is July with an average temperature of 77.7 degrees F. January is the coldest month of the year with an average temperature of 32.9 degrees F. The annual average high temperature is 68 degrees F. The annual average low temperature is 44 degrees F.

Precipitation in the area is relatively constant throughout the year. The annual average precipitation is about 45 inches. May is the wettest month, with an average rainfall of 5.7 inches, while January is the driest month, with an average rainfall of 2.6 inches.

There are native shrubs and many small tree species often encountered in the project area such as eastern red bud, common pawpaw, flowering dogwood, and black cheery. Other trees are oaks, mulberry, and elms. The Missouri bladderpod is a threatened plant species in or near the planning area. The Ozark trillium is a species of conservation concern close to the project area. The swamp milkweed, cluster sedge, Palmer's hawthorn and prairie June grass are other elements of special concern recorded within a mile radius of the planning area.

The project holds a variety of amphibians, reptiles, fish, and mammals such as woodchuck, white-tailed deer, eastern cottontail, opossum, and raccoons. There also a multitude of birds commonly found throughout Arkansas.

According to the U.S. Fish and Wildlife Service and the Arkansas Natural Heritage Commission, there are some endangered or threatened species in or near the planning area including Arkansas darter (*Etheostoma cragini*), least darter (*Etheostoma microperca*), sunburst darter (*Etheostoma*

mihileze), midget crayfish (*Faxonius nana*), redbot chub (*Nocomis asper*), Ozark cavefish (*Amblyopsis rosae*), isopod (*Caecidotea ancyla*), isopod (*Ligidium elrodii*), amphipod (*Stygobromus onondagaensis*), Ozark cave amphipod (*Stygobromus ozarkensis*), Meek's short pointed crayfish (*Faxonius meeki brevis*), Benton County cave crayfish (*Cambarus aculabrum*), ringed salamander (*Ambystoma annulatum*), eastern tiger salamander (*Ambystoma tigrinum*), grotto salamander (*Eurycea spelaea*), gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), Ozark big-eared bat (*Myotis townsendii ingens*), eastern black rail (*Laterallus jamaicensis jamaicensis*), piping plover (*Charadrius melodus*) and red knot (*Calidris canutus rufa*). Both, the USFWS and the ANHC have commented on the projects and are in approval with the proposed project with recommendations.

Cave Springs is near numerous outdoor recreation and hunting/fishing spots such as the Ozark National Forest, Hobbs State Park and Conservation Area, and Beaver Lake. There are no national natural landmarks or wild and scenic rivers in the planning area.

The Arkansas Historic Preservation Program (AHPP) recommended and reviewed an archaeological survey conducted by the entity; finding no historic properties would be affected pursuant to 36 CFR 800 .4(d)(1) for the proposed undertaking.

The planning area is mostly undeveloped, natural area with the exception of some residences. There are no existing structures that will be affected. Tribes that have expressed interest in the area and will therefore be consulted in accordance with 36 CFR § 800.2 (c) (2) are:

- Cherokee Nation
- Osage Nation
- Shawnee Tribe
- United Keetoowah Band of Cherokee Indians

No disproportionate adverse human health or environmental impacts relative to minority and low-income populations are expected.

### **Alternatives**

#### **Alternative 1: Expansion/Renovation of Existing Wastewater Facilities**

This alternative includes constructing an expansion/renovation of the Cave Springs wastewater treatment system in the general vicinity of the existing facilities. The existing facilities were constructed around 2006. They were not designed to meet the current limits for conventional pollutants (specifically TSS), and they are undersized.

#### **Alternative 2: Convey Wastewater to the city of Springdale's Treatment Facility**

This alternative includes conveying Cave Springs' wastewater to Springdale's wastewater collection and disposal system and treatment facility. Under this scenario, Cave Springs would no longer utilize or operate the existing wastewater treatment facilities.

Alternative 3: Convey Wastewater to the Northwest Arkansas Conservation Authority's (NACA) Treatment Facility:

This alternative includes conveying Cave Springs' wastewater to the Northwest Arkansas Conservation Authority's wastewater collection and disposal system. Under this scenario, Cave Springs would no longer utilize or operate the existing wastewater treatment facilities.

This alternative includes constructing a pump station and a combination of gravity and force main sewer lines that connect to Bentonville's existing wastewater collection system and flow to NACA's existing wastewater treatment facility. For this alternative, a sewage pump station and approximately two miles of force main are required.

Biosolids treatment and disposal applies to this alternative but would be the responsibility of NACA's facility. Disinfection and treatment methods would also be considered the responsibility of the NACA facility. NACA would provide treatment of Cave Springs' wastewater in return for service fees.

Selected Alternative- Alternative #3 is the selected alternative and chosen for Cave Springs and the details are discussed above. This alternative will allow the City to transfer wastewater to NACA.

Alternative 4: No Action

The no action alternative would maintain the existing wastewater facilities and capacity.

Advantages

- No additional capital construction costs
- No additional operation and maintenance costs
- No additional personnel or training required

Disadvantages

- Does not meet current and anticipated future discharge requirements and effluent limitations
- Could result in sanitary sewer overflows (SSOs) and unpermitted discharges into Osage Creek
- Will not include service to residents located west of Cave Springs
- Located within the 100-year floodplain
- Permit violations could lead to significant fines
- Will not meet future flow capacity and growth needs

An analysis of the financial capability of the City is being performed based upon the latest applicable financial information. The current monthly sewer bill for Cave Springs is \$54.12. The project appears to be affordable to the residents of Cave Springs. According to the 2000 U.S. Census Bureau, the Annual Median Household Income for Cave Springs is \$87,123.

## IMPACTS OF THE PROPOSED ACTION

Floodplains – The selected alternative does propose some construction in the 100-year floodplain due to the location of the existing collection system and treatment facilities. There is no practical alternative to construction in the floodplain. Proper mitigation should prove the construction to be a minor issue and an NPDES construction permit will be required.

### Short-term Impacts

Consideration of short-term impacts, and at least these mitigative measures to control them, will be included in the construction planning and operation:

- (a) Traffic Disruptions – No traffic disruptions are anticipated with this proposed project.
- (b) Construction noise – Construction equipment will increase the noise level of the area, however; this increase in noise is short term. Compliance with OSHA standards involving noise will be adhered to. No blasting should be required to construct this proposed project.
- (c) Dust control – Watering using hoses or sprinkler trucks will be required as needed.
- (d) Erosion and sedimentation – The proposed project will utilize BMP's, if necessary, but none is anticipated.
- (e) Loss of vegetation – Final disposal for soil and vegetative spoil resulting from the construction shall be in accordance with all local, state, and federal regulations.
- (f) Odor – Odor should not be an issue with the project.
- (g) Bypassing – Sewage will not be bypassed or released during construction of this project, however; treatment processes could occur during construction periods.
- (h) Aesthetic values – No structures of the proposed project will obstruct scenic views.

Socioeconomics and Environmental Justice (EJ) - Since the project will supply the public with improved wastewater treatment infrastructure, improvements to the public health and enhanced environmental protection will result from the project. There are no anticipated negative impacts which are considered disproportionate to any population based on ethnicity or income. Since the project is considered to have a beneficial impact upon the area environment, the project is an appropriate use of Federal funds.

### Long-term and Secondary Impacts

The project will not alter any streams or natural drainage patterns. The Osage Creek crossings will most likely be bored. There are no wetland areas identified within the project area. The project will affect approximately 2.5 acres of prime farmland; however, the effects to this land will be minimal.

### DOCUMENTATION, COORDINATION AND PUBLIC PARTICIPATION

All required coordination with reviewing State and Federal agencies has been undertaken and all comments were satisfactorily resolved. The proposed project is consistent with the EPA-approved Water Quality Management Plan and complies with State Water Quality Standards.

A public meeting was held on the possible environmental impacts to the proposed project on August 11, 2020 at the American Legion Building with approximately 6 people in attendance. Notice of the public meeting was published in the Arkansas Democrat Gazette (Northwest) on July 9, 2020. The general public within the region supports the construction of the project.

### RECOMMENDATIONS

Based upon a detailed review of the Environmental Information Document and other documentation, the proposed project is cost-effective and environmentally sound. Therefore, it is recommended that a Finding of No Significant Impact be issued.

### REFERENCES

Environmental Information Document (EID) Cave Springs Sewer Improvements – September 2020 – McClelland Consulting Engineers, Inc.

Facility Plan, Cave Springs Sewer Improvements, Facility Plan DRAFT, September 2020





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