

Why You Should Read This: The document below reviews the environmental impact likely from a project. This project is planned to be federally funded through your tax dollars; therefore, you are entitled to take part in its review. If you have concerns about the environmental impact of this project, raise them now. We encourage public input in this decision making process.



IOWA STATE REVOLVING FUND
ENVIRONMENTAL INFORMATION DOCUMENT

PROJECT IDENTIFICATION

Applicant: City of Earlham
County: Madison
State: Iowa

SRF Number: CS1921055 01
Iowa DNR Project Number: S2020-0448A

COMMUNITY DESCRIPTION

Location: The City of Earlham is located in Madison County, Iowa approximately 30 miles west of Des Moines, Iowa and 100 miles east-northeast of Omaha, Nebraska.

Population: The population of Earlham according to the 2020 US Census was 1,410. The design population equivalent for the year 2040 is 1,600.

Current Waste Treatment: The wastewater treatment facility for the City of Earlham, Iowa is a three-celled aerated lagoon. The lagoon was last modified in 2001. In September 2019, Earlham received a new National Pollutant Discharge Elimination System (NPDES) discharge permit for the lagoons that included new limits for year-round ammonia treatment and disinfection. The existing treatment system is unable to comply with these new requirements on a reliable basis.

PROJECT DESCRIPTION

Purpose: The purpose of this project is to make improvements to the wastewater treatment facilities to enhance their reliability of treatment for permitted parameters and maintain or increase capacity to continue to safely and reliably operate the City of Earlham's wastewater system for at least the next 20 years.

Proposed Improvements: The project includes several improvements to the existing wastewater treatment facility including a Moving Bed Biofilm Reactor (MBBR), a settling lagoon cell, a flow splitting chamber, settling lagoon improvements, UV disinfection, spiral screen equipment, and various other site improvements.

Receiving Stream: The treated wastewater from the proposed facility will discharge to an Unnamed Creek, tributary to an Unnamed Creek, tributary to South Branch Bear Creek. It has a use stream designation of A2, B(WW-2). The outfall location will not change for this project.

ALTERNATIVES CONSIDERED

Alternatives Considered: Eight options were developed for ammonia treatment and three options were developed for disinfection.

Reasons for Selection of Proposed Alternative: The No-Action alternative is not viable due to the new discharge permit requirements. The selected treatment combination was selected on the basis of budgetary estimates of capital cost, operations and maintenance costs, ability to meet the new discharge limits year-round, permitting requirements, operator license, flexibility and necessary footprint.

MEASURES TAKEN TO ASSESS IMPACT

Coordination and Documentation with Other Agencies and Special Interest Groups:

The following Federal, state and local agencies were asked to comment on the proposed project to better assess the potential impact to the environment:

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- State Historical Society of Iowa (State Historical Preservation Office)
- Iowa DNR Conservation and Recreation Division
- Iowa DNR Flood Plain Management Section
- Citizen Band Potawatomi Indian Tribe
- Flandreau Santee Sioux
- Ho-Chunk Nation
- Iowa Tribe of Kansas and Nebraska
- Iowa Tribe of Oklahoma
- Kickapoo Tribe in Kansas
- Kickapoo Tribe of Oklahoma
- Lower Sioux Indian Community Council
- Miami Tribe of Oklahoma
- Omaha Tribal Council
- Osage Tribal Council
- Otoe-Missouria Tribe
- Pawnee Nation of Oklahoma

Peoria Tribe of Indians of Oklahoma
Ponca Tribe of Indians of Oklahoma
Ponca Tribe of Nebraska
Prairie Band Potawatomi Nation
Prairie Island Indian Community
Sac & Fox Nation of Mississippi in Iowa
Sac & Fox Nation of Missouri
Sac & Fox Nation of Oklahoma
Santee Sioux Nation
Shakopee Mdewakanton Sioux Community
Sisseton-Wahpeton Oyate
Spirit Lake Tribal Council
Three Affiliated Tribes Mandan, Hidatsa & Arikara Nations
Upper Sioux Tribe
Winnebago Tribal Council
Yankton Sioux Tribal Business and Claims Committee
Madison County Historic Preservation Commission

No adverse comments were received from any agencies. Conditions placed on the applicant by the above agencies in order to assure no significant impact are included in the Summary of Reasons for Concluding No Significant Impact section.

ENVIRONMENTAL IMPACT SUMMARY

Construction: Traffic patterns within the community may be disrupted and above normal noise levels in the vicinity of the construction equipment can be anticipated during construction and should be a temporary problem. Adverse environmental impacts on noise quality will be handled by limited hours of contractor work time during the day. Other adverse environmental effects from construction activities will be minimized by proper construction practices, inspection, prompt cleanup, and other appropriate measures. Areas temporarily disturbed by the construction will be restored. Solid wastes resulting from the construction project will be regularly cleared away with substantial efforts made to minimize inconvenience to area residents.

Care will be taken to maintain dirt to avoid erosion and runoff. The proposed project may disturb soils over an area greater than one acre; therefore, the applicant may be required to obtain an NPDES General Permit Number 2 (for storm water discharge associated with construction activities) and abide by its terms. If necessary, provided that this permit is obtained and the terms of which are abided by, no significant impact to surface water quality, fish, shellfish, wildlife, or their natural habitats is expected.

Temporary air quality degradation may occur due to dust and fumes from construction equipment. The applicant shall take reasonable precautions to prevent the discharge of

visible emissions of fugitive dusts beyond the lot line of the property during the proposed project (567 Iowa Administrative Code IAC 23.3(2)“c”).

This project may require the disposal of sewage sludge. It is the responsibility of the applicant to ensure that the disposal of any sewage sludge complies with applicable requirements found in 40 CFR Part 503 and 567 Iowa Administrative Code IAC 67.

Historical/Archaeological: The State Historical Preservation Office (SHPO), the Certified Local Government and various Native American tribes with an interest in the area were provided information regarding the project. The DNR has determined, and the SHPO has concurred (R&C#220361845), that this undertaking will result in “no historic properties affected” based on the scope of the project and the prior use and disturbance of the project area. However, if project activities uncover any item(s) that might be of archaeological, historical, or architectural interest, or if important new archaeological, historical, or architectural data should be encountered in the project APE, the applicant should make reasonable efforts to avoid further impacts to the property until an assessment can be made by an individual meeting the Secretary of the Interior’s professional qualifications standards (36 CFR Part 61).

Environmental: According to the Iowa DNR Conservation and Recreation Division, the proposed project will not interfere with any State-owned parks, recreational areas or open spaces. While the USACE has not yet commented on the project, the project is not anticipated to impact any wetlands. The project will not impact any wild and scenic rivers as none exist within the State of Iowa. The U.S. Fish & Wildlife Service Section 7 Technical Assistance website consultation determined, and Iowa DNR Conservation and Recreation Division agree, that the project will not impact threatened or endangered species or their habitats. However, if any State- or Federally-listed threatened or endangered species or communities are found during the planning or construction phases, additional studies and/or mitigation may be required. According to the Iowa DNR Flood Plain Management Section, this project will not impact the 100-year floodplain. No adverse impacts are expected to result from this project, such as those to surface water quantity, or groundwater quality or quantity.

Land Use and Trends: The project will not displace population nor will it alter the character of existing residential areas. No significant farmlands will be impacted. This project should not impact population trends as the presence or absence of existing water/sewer infrastructure is unlikely to induce significant alterations in the population growth or distribution given the myriad of factors that influence development in this region. Similarly, this project is unlikely to induce significant alterations in the pattern and type of land use.

Irreversible and Irretrievable Commitment of Resources: Fuels, materials, and various forms of energy will be utilized during construction.

POSITIVE ENVIRONMENTAL EFFECTS TO BE REALIZED FROM THE PROPOSED PROJECT

Positive environmental effects will be improved treatment of the wastewater from the City of Earlham, compliance with new effluent discharge permit limits, reduced discharge of the pollutants ammonia and E. coli to the receiving stream, and improved water quality in the receiving stream.

SUMMARY OF REASONS FOR CONCLUDING NO SIGNIFICANT IMPACT

- The project will not significantly affect the pattern and type of land use (industrial, commercial, agricultural, recreational, residential) or growth and distribution of population.
- The project will not conflict with local, regional or State land use plans or policies.
- While the USACE has not yet commented on the project, the project is not anticipated to impact any wetlands.
- The project will not affect threatened and endangered species or their habitats. If any State- or Federally-listed threatened or endangered species or communities are found during the planning or construction phases, additional studies and/or mitigation may be required.
- The project will not displace population, alter the character of existing residential areas, or convert significant farmlands to non-agricultural purposes.
- The project will not affect the 100-year flood plain.
- The project will not have effect on parklands, preserves, other public lands, or areas of recognized scenic or recreational value.
- No historic properties will be adversely affected by the proposed project. However, if project activities uncover any item(s) that might be of archaeological, historical, or architectural interest, or if important new archaeological, historical, or architectural data should be encountered in the project APE, the applicant should make reasonable efforts to avoid further impacts to the property until an assessment can be made by an individual meeting the Secretary of the Interior's professional qualifications standards (36 CFR Part 61).
- The project will not have a significant adverse effect upon local ambient air quality provided the applicant takes reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property during the proposed project (567 IAC 23.3(2)"c").
- The project will not have a significant adverse effect upon local ambient noise levels, surface water quantity, groundwater quality or quantity, or water supply.
- No significant impact to surface water quality, fish, shellfish, wildlife, or their natural habitats is expected provided that any necessary NPDES General Permit Number 2 (for storm water discharge associated with construction activities) is obtained and the terms of which are abided by.

The project description, scope, and anticipated environmental impacts detailed above are accurate and complete to the best to my knowledge.

Signature of the Mayor, City of Earlham

Date

Printed Name of the Mayor, City of Earlham