

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
FINDING OF NO SIGNIFICANT IMPACT

September 6, 2024

To: All Interested Citizens, Government Agencies, and Public Groups

An environmental review has been performed based on the procedures for implementing the National Environmental Policy Act (NEPA), for the proposed agency action below:

Applicant: City of Fort Dodge

SRF Number: FS-94-24-DWSRF-007

County: Webster

Iowa DNR Project Number: W2023-0267

State: Iowa

Fort Dodge Water Main Improvements - Northwest Regional Water Main Connection

The City of Fort Dodge, Iowa is planning an upgrade to their drinking water infrastructure. The city has applied for financial assistance through the State Revolving Fund (SRF) loan program to build the project. The State Revolving Loan Program is a program authorized by the Environmental Protection Agency (EPA) and administered by the Iowa Department of Natural Resources (DNR) in partnership with the Iowa Finance Authority.

The City of Fort Dodge (City) is located in Webster County, Iowa approximately 95 miles west of Waterloo, Iowa and 110 miles east of Sioux City, Iowa. The population of Fort Dodge according to the 2020 US Census was 24,871. The project will be designed in a way that meets Iowa DNR's Water Supply design standards.

The City obtains raw water from two, deep well, groundwater sources – the Jordan Aquifer, and the Mississippian Aquifer. The City has eight (8) functioning wells. Raw water quality is high in hardness, total dissolved solids, and iron. The City is able to meet the Maximum Contaminant Level (MCL) with Reverse Osmosis (RO) treatment. In 2021 the city started operations of a new reverse osmosis (RO) treatment facility to soften water and meet radium MCLs.

In 2023, the City updated its distribution system hydraulic model. To calibrate the model, hydrant flow and pressure tests were conducted throughout the City at 38 different locations. The results of the water model update and calibration indicated the existing distribution system was sufficient to maintain adequate pressure and fire flow without significant improvements. The City should continue its practice of replacing 4-inch water mains during street reconstruction projects to improve flows and pressures in those older, residential areas.

The City has a total storage volume of 11 million gallons (MG). Of this, 7.0 MG is elevated, and 2.0 MG is ground storage with adequate pumping and stand-by power, for a total effective storage of 9.0 MG. This effective storage amount is adequate to meet the current average day demand.

After a 3-year dramatic increase in water main breaks the City decided to implement a Capital Improvement Plan to address aging and deficient water distribution infrastructure. The City of Fort Dodge intends to make these improvements to their water distribution system and finance the improvements with the Drinking Water State Revolving Fund (DWSRF) Loan program.

These breaks can be attributed to a number of factors including aging mains, corrosive soils, and water hammers exacerbated by large elevation changes. There is also a growing list of valves that have become inoperable over the years. With valves down and an increasing number of breaks, water quality is directly affected.

The purpose of this project is to make improvements to the drinking infrastructure to enhance their reliability, increase capacity and to replace obsolete system to safely and reliably operate the City of Fort Dodge's drinking water system for the next 20 years.

The proposed project includes: replacement of defective or deficient water mains and installation of new water mains to alleviate pressure fluctuations at the Northwest Regional Water Main Connection location and all necessary connections and appurtenances. Both trenched and trenchless methods will be utilized.

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. The project will not impact wetlands. The project will not affect threatened and endangered species or their habitats provided that any tree cutting is conducted between October 1 and March 31 to avoid impacting endangered bats. 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 provided any necessary local floodplain development permits are obtained and the terms of which are abided by 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 an NPDES General Permit Number 2 (for storm water discharge associated with construction activities) is obtained and the terms of which are abided by.

Minimum separation distances will be maintained. Noise during construction will be maintained at tolerable levels through controls on construction activities. Any construction debris will be removed from the site for proper disposal. Adverse environmental effects from construction activities will be minimized with proper construction practices, inspection, prompt clean up and other appropriate measures. Areas temporarily disturbed by the construction will be restored.

It has been determined that the proposed action will result in no significant impacts to the surrounding environment. This determination is based on a careful review of the engineering report, the environmental assessment and other supporting data which are on file at the Department of Natural Resources' office in Des Moines, Iowa. These are available for public review upon request. A copy of the environmental assessment is attached. This Department will not take any administrative action on the project for at least thirty (30) calendar days from the above date. Persons disagreeing with the above environmental decision may submit comments to the department during this period. Your comments can be sent to SRF-PC@dnr.iowa.gov or directly to me at hailey.andersen@dnr.iowa.gov or (515) 321-7385.

Sincerely,

Hailey Andersen
Environmental Specialist
6200 Park Ave, Suite 200
Des Moines, IA 50321

Enclosures: Environmental Assessment
Project Map

Distribution

List (email): McClure
Edward Boling, Council on Environmental Quality
Jake Hansen, Iowa Department of Agriculture and Land Stewardship
Ken Sharp, Iowa Department of Health & Human Services
Mindy Wells, Iowa Department of Health & Human Services
Chad Sands, Iowa Economic Development Authority
Alicia Vasto, Iowa Environmental Council
Michael Schmidt, Iowa Environmental Council
Tracy Scebold, Iowa Finance Authority
Tony Toigo, Iowa Finance Authority
Lee Wagner, Iowa Finance Authority
Rick Andriano, Iowa Finance Authority
Mickey Shields, Iowa League of Cities
Jane Clark, Sierra Club
Josh Mandelbaum, Environmental Law and Policy Center
Kate Sand, USDA Rural Development
Tokey Boswell, USDO, National Park Service, Midwest Region
Kraig McPeck, Fish and Wildlife Service, Rock Island Field Office
Ann D'Alfonso, USEPA Region VII
Kelly Beard-Tittone, USEPA Region VII
The Messenger

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 ASSESSMENT DOCUMENT

PROJECT IDENTIFICATION

Applicant: City of Fort Dodge
County: Webster
State: Iowa

SRF Number: FS-94-24-DWSRF-007
Iowa DNR Project Number: W2023-0267

COMMUNITY DESCRIPTION

Location: The City of Fort Dodge (City) is located in Webster County, Iowa approximately 95 miles west of Waterloo, Iowa and 110 miles east of Sioux City, Iowa.

Population: The population of Fort Dodge according to the 2020 US Census was 24,871. The project will be designed in a way that meets Iowa DNR's Water Supply design standards.

Current Water Source, Treatment, and Quality: The City obtains raw water from two, deep well, groundwater sources – the Jordan Aquifer, and the Mississippian Aquifer. The City has eight (8) functioning wells. Raw water quality is high in hardness, total dissolved solids, and iron. The City is able to meet the Maximum Contaminant Level (MCL) with Reverse Osmosis (RO) treatment. In 2021 the city started operations of a new reverse osmosis (RO) treatment facility to soften water and meet radium MCLs.

Current Distribution System: In 2023, the City updated its distribution system hydraulic model. To calibrate the model, hydrant flow and pressure tests were conducted throughout the City at 38 different locations. The results of the water model update and calibration indicated the existing distribution system was sufficient to maintain adequate pressure and fire flow without significant improvements. The City should continue its practice of replacing 4-inch water mains during street reconstruction projects to improve flows and pressures in those older, residential areas.

The City has a total storage volume of 11 million gallons (MG). Of this, 7.0 MG is elevated, and 2.0 MG is ground storage with adequate pumping and stand-by power, for a total effective storage of 9.0 MG. This effective storage amount is adequate to meet the current average day demand.

After a 3-year dramatic increase in water main breaks the City decided to implement a Capital Improvement Plan to address aging and deficient water distribution infrastructure. The City of Fort Dodge intends to make these improvements to their water distribution system and finance the improvements with the Drinking Water State Revolving Fund (DWSRF) Loan program.

These breaks can be attributed to a number of factors including aging mains, corrosive soils, and water hammers exacerbated by large elevation changes. There is also a growing list of valves that have become inoperable over the years. With valves down and an increasing number of breaks, water quality is directly affected.

PROJECT DESCRIPTION

Purpose: The purpose of this project is to make improvements to the drinking infrastructure to enhance their reliability, increase capacity and to replace obsolete system to safely and reliably operate the City of Fort Dodge's drinking water system for the next 20 years.

Proposed Improvements: The proposed project includes: replacement of defective or deficient water mains and installation of new water mains to alleviate pressure fluctuations at the Northwest Regional Water Main Connection location and all necessary connections and appurtenances. Both trenched and trenchless methods will be utilized.

ALTERNATIVES CONSIDERED

Alternatives Considered: The City had an extensive assessment performed in 2023 which determined the areas of high risk where drinking water infrastructure was deteriorating and had a increased chance of failure due to age and the corrosive environment.

Reasons for Selection of Proposed Alternative: The No-Action alternative is not viable due to the need to repair and maintain drinking water infrastructure to prevent failure and safely continue operation. The project site was selected for the proximity to existing infrastructure as well as minimization of the impacts to the environment.

MEASURES TAKEN TO ASSESS IMPACT

Public Involvement: A public hearing was held on September 5, 2024 at 7:00PM at the City's regular council meeting. The public notice of this hearing was made available by publication in the Messenger on July 19, 2024 and placed on the City website on July 15, 2024. The purpose of this hearing was to present the environmental and financial impacts of the proposed improvement project. No written or oral comments were received.

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
Fort Dodge Historic Preservation Commission

No adverse comments were received from any agencies or general public. 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 will disturb one or more acres of soil; therefore, the applicant is required to obtain an NPDES General Permit Number 2 (for storm water discharge associated with construction activities) and abide by its terms. 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”).

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#240794550), that this undertaking will result in “no adverse effect” to historic properties based on the scope of the project, the prior use of the project area, and the findings of the Phase I Archeological Survey conducted on the project property. 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. The U.S. Army Corps of Engineers concurs that the project will not impact 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 protected species or their habitats provided that any tree cutting is conducted between October 1 and March 31 to avoid impacting endangered bats. 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 provided any necessary local floodplain development permits are obtained and the terms of which are abided by. No adverse impacts are expected to result from this project, such as those to surface water quantity, or groundwater quality or quantity. Therefore, no significant impact to surface water quality, fish, shellfish, wildlife, or their natural habitats is expected.

Land Use and Trends: The project will not displace population nor will it alter the character of existing residential areas. The proposed project is within the present corporate limits of Fort Dodge in areas zoned residential, commercial, or industrial. 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.

Nondiscrimination: All programs, projects, and activities undertaken by DNR in the SRF programs are subject to federal anti-discrimination laws, including the Civil Rights Act of 1964, section 504 of the Rehabilitation Act of 1973, and section 13 of the Federal Water Pollution Control Amendments of 1972. These laws prohibit discrimination on the basis of race, color, national origin, sex, disability, or age.

POSITIVE ENVIRONMENTAL EFFECTS TO BE REALIZED FROM THE PROPOSED PROJECT

Positive environmental effects will be maintained water quality for the citizens of Fort Dodge. A catastrophic loss of water supply could result in City-wide health impacts due to a lack of sanitation and the use of other water sources that may not meet Federal drinking water standards.

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.
- The project will not impact wetlands.
- The project will not affect threatened and endangered species or their habitats provided that any tree cutting is conducted between October 1 and March 31 to avoid impacting endangered bats. 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 provided any necessary local floodplain development permits are obtained and the terms of which are abided by
- 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 an NPDES General Permit Number 2 (for storm water discharge associated with construction activities) is obtained and the terms of which are abided by.

THEREFORE:

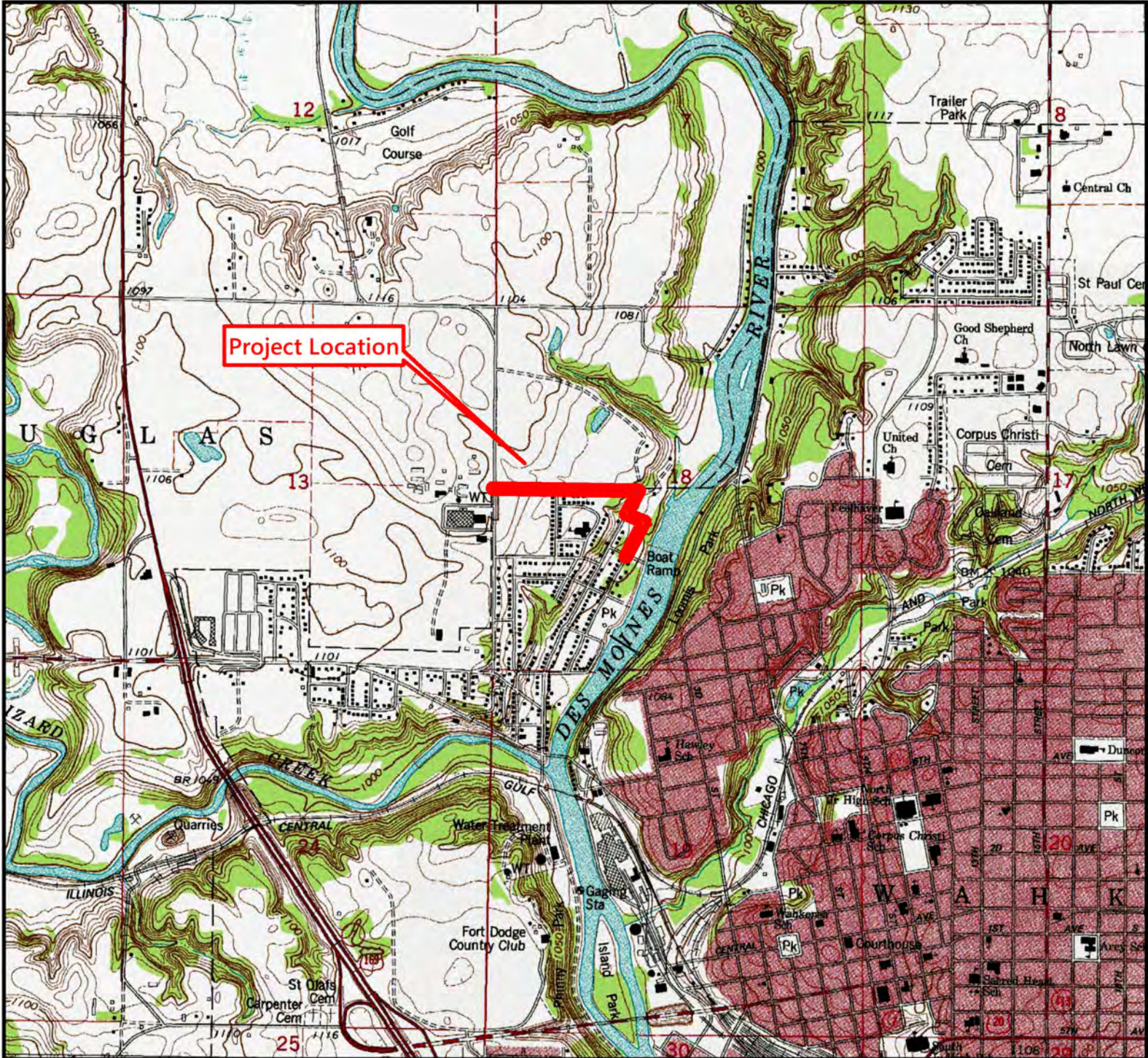
The above project conforms to the criteria in 567 Iowa Administrative Code 44.10(3) for drinking water relating to compliance with the National Environmental Policy Act of 1969. No adverse effect or significant environmental impact is foreseen at this time.

Hailey Andersen

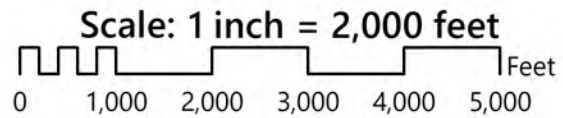
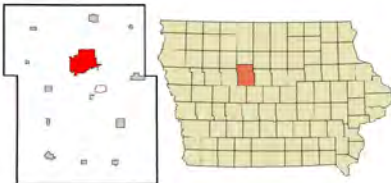
Environmental Review Specialist
State Revolving Fund
Iowa Department of Natural Resources



PARTNERSHIP WITH THE IOWA FINANCE AUTHORITY
AND THE IOWA DEPARTMENT OF NATURAL RESOURCES



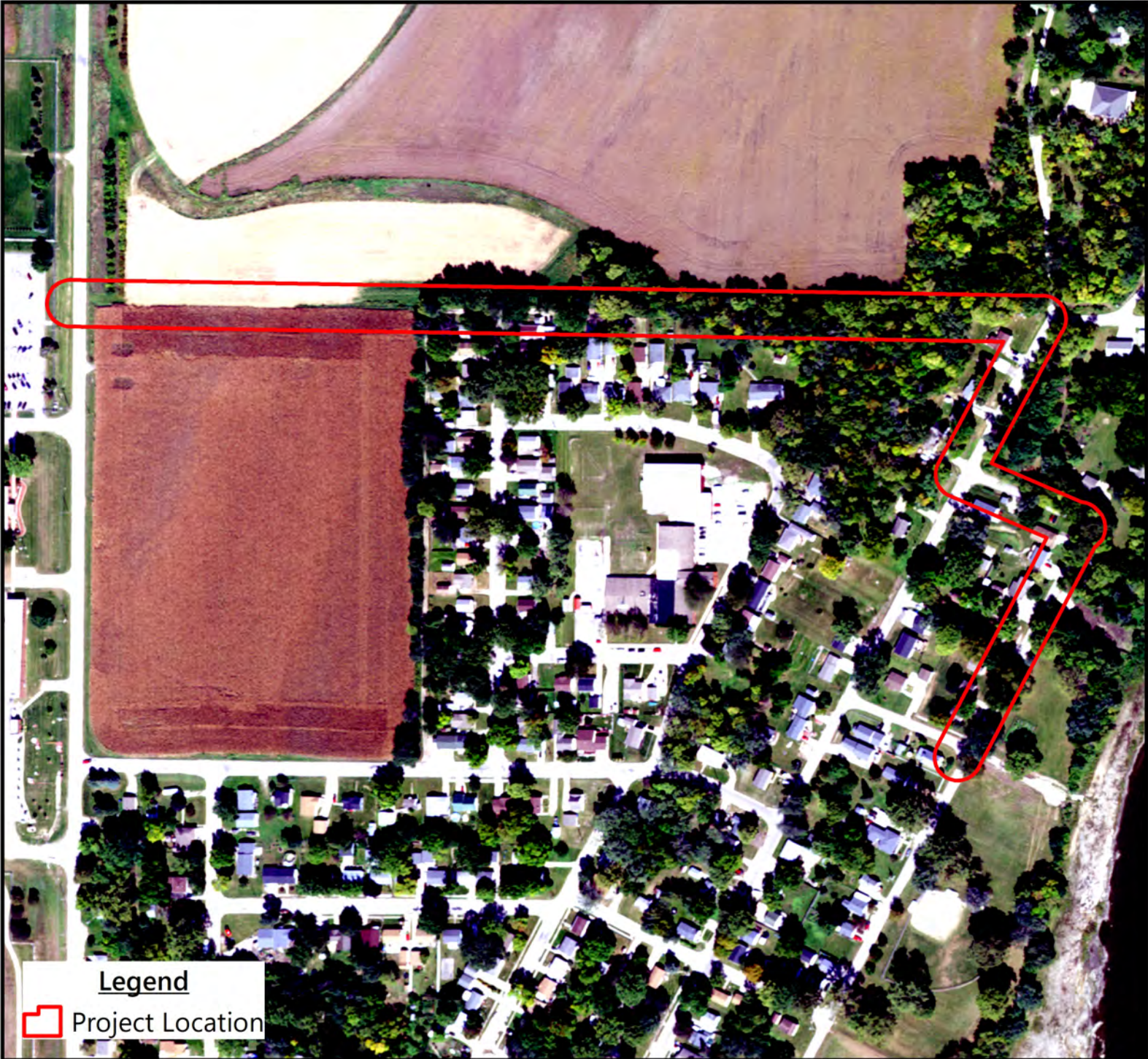
Water Main Improvements - Northwest Regional Water Main Connection Fort Dodge, Iowa




USGS 7.5 Minute Quadrangle: Fort Dodge North
Section: 18, Township: 89 N, Range: 28 W
Date: 1979



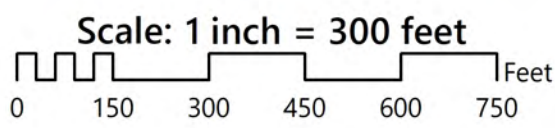
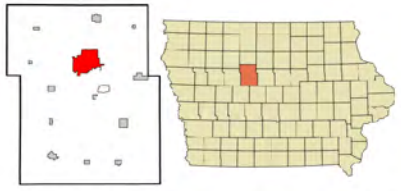
PARTNERSHIP WITH THE IOWA FINANCE AUTHORITY
AND THE IOWA DEPARTMENT OF NATURAL RESOURCES



Legend

 Project Location

Water Main Improvements - Northwest Regional Water Main Connection Fort Dodge, Iowa



USGS 7.5 Minute Quadrangle: Fort Dodge North
Section: 18, Township: 89 N, Range: 28 W
Date: 9.22.2021