

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

February 29, 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 Lake City

County: Calhoun

State: Iowa

SRF Number: FS-13-23-DWSRF-068

Iowa DNR Project Number: W2023-0113

The City of Lake City, Iowa is planning an upgrade to their water supply system. 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 Lake City is located in Calhoun County, Iowa approximately 75 miles west-northwest of Ames, Iowa and approximately 99 miles east-southeast of Sioux City, Iowa. The population of Lake City according to the 2010 US Census was 1,731 people. Lake City also provides water through a consecutive connection to Lanesboro, Iowa. The population of Lanesboro in 202 was 119 people. The design population for the project is 1,922 people.

Currently, the City has two wells, Well No. 3 and Well No. 5. Well No. 5 has elevated levels of radionuclides including gross alpha, combined radium and uranium all above the maximum contaminant level (MCL). Due to this, the City's Water Supply Operation permit mandates a blend ration – Well No. 5 cannot be operated unless blended with Well No. 3 at a maximum of 25% being from Well no. 5. The capacity of Well No. 3 has been decreasing, which is affecting the gallon per minute (GPM) flow of water the wells can produce due to the blend ratio.

Well No. 3 is a 50-year old well with a vertical turbine pump that is very antiquated. In addition, if Well No. 3 were to fail, the City would not have a viable water source meeting the MCLs. This prevents the City from performing any maintenance on Well No. 3 without having to issue a Public Notice. The controls for the wells

are limited to start/stop/fail lights and are not tied to the chemical feed. The City also has no way to monitor the operations of either well without physically seeing the control panel and indicator lights.

The City of Lake City's water treatment plant was upgraded in 2015. From the wells, raw water enters the water treatment plant where it is metered, then goes to an aerator and into a 70,000 gallon standpipe for detention. After the standpipe there are two high service pumps on variable frequency drives (VFDs). The high service pumps take water to a 4-cell pressure filter with sand and anthracite media. After the filter, chlorine is injected with a peristaltic pump for disinfection prior to entering the distribution system. Since the 2015, the water treatment plant has been operating well. However, the raw water meter and the meter after the high service pumps were not replaced with the 2015 improvements. The City also does not have any way to monitor if the high service pumps are operating without directly observing their operation.

System storage and pressure are provided by one 500,000 gallon elevated storage tank. Work was performed in 2018 and there have been no notable deficiencies since. The tower level is measured with a pressure gauge at the water treatment plant, and there are high/low level lights on the panel in the water treatment plant. The City has no way to monitor the level in the tower without physically seeing the control panel and indicator lights.

The purpose of this project is to make improvements to water supply and the control system to enhance their reliability, provide redundancy to allow for maintenance, and to replace obsolete system to safely and reliably operate the City of Lake City's water supply system for at least the next 20 years. The project includes construction of two new wells (No. 6 & 7) along with associated controls and piping. Two meters within the existing water treatment plant are also proposed to be replaced as part of this project as well as updates to the control system for the wells, high service pumps, and tower level indicator to allow for alarms to communicate with phones. The aging well house for Well No. 3 will be demolished in order to properly plug Well No. 3.

Positive environmental effects will be improved water quality and quantity in the City of Lake City' water supply system. The new wells will bring the City into compliance with department requirements regarding redundancy and will better assist in the prevention of water supply contamination associated with inadequate pressures within the distribution system. 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. 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. 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 provided appropriate Water Use permits are obtained for Wells 6 and 7. No significant impact to surface water quality, fish, shellfish, wildlife, or their natural habitats is expected.

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. Please direct your comments to me at Jean.Mayne@dnr.iowa.gov or 515-491-7565.

Sincerely,

Jean Mayne
Environmental Specialist
502 E 9th St
Des Moines, IA 50319-0034

Enclosures: Environmental Assessment
Project Map

Distribution
List (email): ISG Inc.
Edward Boling, Council on Environmental Quality
Jake Hansen, Iowa Department of Agriculture and Land Stewardship
Ken Sharp, Iowa Department of Public Health
Sarah Petersen, Iowa Department of Public Health
Nichole Hansen, 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
Mickey Shields, Iowa League of Cities
Jane Clark, Sierra Club
Josh Mandelbaum, Environmental Law and Policy Center
Kate Sand, USDA Rural Development
Tokey Boswell, USDOL, National Park Service, Midwest Region
Kraig McPeck, Fish and Wildlife Service, Rock Island Field Office
Christopher Simmons, USEPA Region VII
Kelly Beard-Tittone, USEPA Region VII
Graphic-Advocate Newspaper

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IOWA STATE REVOLVING FUND
ENVIRONMENTAL ASSESSMENT DOCUMENT

PROJECT IDENTIFICATION

Applicant: City of Lake City
County: Calhoun
State: Iowa

SRF Number: FS-13-23-DWSRF-068
Iowa DNR Project Number: W2023-0113

COMMUNITY DESCRIPTION

Location: The City of Lake City is located in Calhoun County, Iowa approximately 75 miles west-northwest of Ames, Iowa and approximately 99 miles east-southeast of Sioux City, Iowa.

Population: The population of Lake City according to the 2010 US Census was 1,731 people. Lake City also provides water through a consecutive connection to Lanesboro, Iowa. The population of Lanesboro in 202 was 119 people. The design population for the project is 1,922 people.

Project Background: Currently, the City has two wells, Well No. 3 and Well No. 5. Well No. 5 has elevated levels of radionuclides including gross alpha, combined radium and uranium all above the maximum contaminant level (MCL). Due to this, the City's Water Supply Operation permit mandates a blend ration – Well No. 5 cannot be operated unless blended with Well No. 3 at a maximum of 25% being from Well no. 5. The capacity of Well No. 3 has been decreasing, which is affecting the gallon per minute (GPM) flow of water the wells can produce due to the blend ratio.

Well No. 3 is a 50-year old well with a vertical turbine pump that is very antiquated. In addition, if Well No. 3 were to fail, the City would not have a viable water source meeting the MCLs. This prevents the City from performing any maintenance on Well No. 3 without having to issue a Public Notice. The controls for the wells are limited to start/stop/fail lights and are not tied to the chemical feed. The City also has no way to monitor the operations of either well without physically seeing the control panel and indicator lights.

The City of Lake City's water treatment plant was upgraded in 2015. From the wells, raw water enters the water treatment plant where it is metered, then goes to an aerator and into a 70,000 gallon standpipe for detention. After the standpipe there are two high service pumps on variable frequency drives (VFDs). The high service pumps take water to a 4-cell pressure filter with sand and anthracite media. After the filter,

chlorine is injected with a peristaltic pump for disinfection prior to entering the distribution system. Since the 2015, the water treatment plant has been operating well. However the raw water meter and the meter after the high service pumps were not replaced with the 2015 improvements. The City also does not have any way to monitor if the high service pumps are operating without directly observing their operation.

System storage and pressure are provided by one 500,000 gallon elevated storage tank. Work was performed in 2018 and there have been no notable deficiencies since. The tower level is measured with a pressure gauge at the water treatment plant, and there are high/low level lights on the panel in the water treatment plant. The City has no way to monitor the level in the tower without physically seeing the control panel and indicator lights.

PROJECT DESCRIPTION

Purpose: The purpose of this project is to make improvements to water supply and the control system to enhance their reliability, provide redundancy to allow for maintenance, and to replace obsolete system to safely and reliably operate the City of Lake City's water supply system for at least the next 20 years.

Proposed Improvements: The project includes construction of two new wells (No. 6 & 7) along with associated controls and piping. Two meters within the existing water treatment plant are also proposed to be replaced as part of this project as well as updates to the control system for the wells, high service pumps, and tower level indicator to allow for alarms to communicate with phones. The aging well house for Well No. 3 will be demolished in order to properly plug Well No. 3.

ALTERNATIVES CONSIDERED

Alternatives Considered: Construction of one or two new wells to provide the City with adequate and redundant water supply were considered. Retention or decommissioning of Well No. 3 were considered options.

Reasons for Selection of Proposed Alternative: The No-Action alternative is not viable to the slow decline of Well No. 3's productivity and it's necessity for blending with Well No. 5's water. Construction of two new wells and all appropriate control upgrades was deemed to be the most prudent long-term solution. Due to the age and deterioration of Well No. 3, it was decided to properly close this well. The project site was selected for the availability of land, proximity to existing water infrastructure, expected water production, and other engineering criteria as well as minimization of the impacts to the environment.

MEASURES TAKEN TO ASSESS IMPACT

Public Involvement: A public hearing was held on November 6, 2023 at 5:00PM at the City's regular council meeting. The public notice of this hearing was published in the Graphic-Advocate newspaper on September 27, 2023 and October 18, 2023. 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
Calhoun County Historic 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. 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#230813386), that this undertaking will result in “no historic properties affected” 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. 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 provided appropriate Water Use permits are obtained for Wells 6 and 7. 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. 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 improved water quality and quantity in the City of Lake City' water supply system. The new wells will bring the City into compliance with department requirements regarding redundancy and will better assist in the prevention of water supply contamination associated with inadequate pressures within the distribution system. 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. 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 provided appropriate Water Use permits are obtained for Wells 6 and 7. .
- No significant impact to surface water quality, fish, shellfish, wildlife, or their natural habitats is expected.

THEREFORE:

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

Jean Mayne

Environmental Review Specialist

State Revolving Fund

Iowa Department of Natural Resources

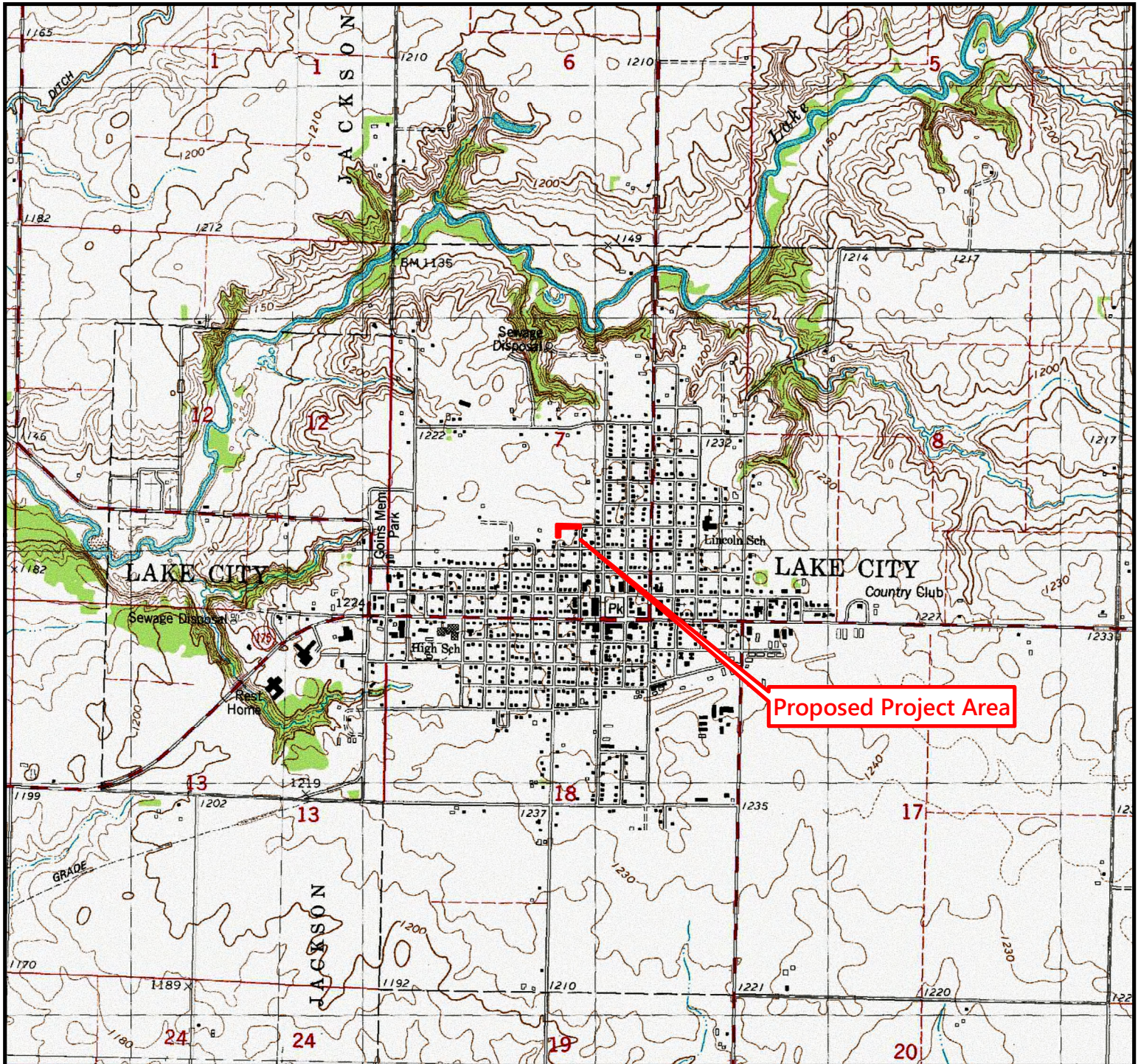
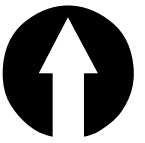


STATE
REVOLVING FUND
IOWA

USGS 7.5' Quad: Lake City

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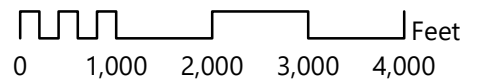
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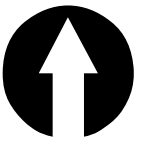


Topographic Map

Lake City - Wells 6 & 7
Lake City, Iowa (Calhoun County)

Scale: 1 inch = 2,000 feet

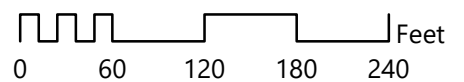


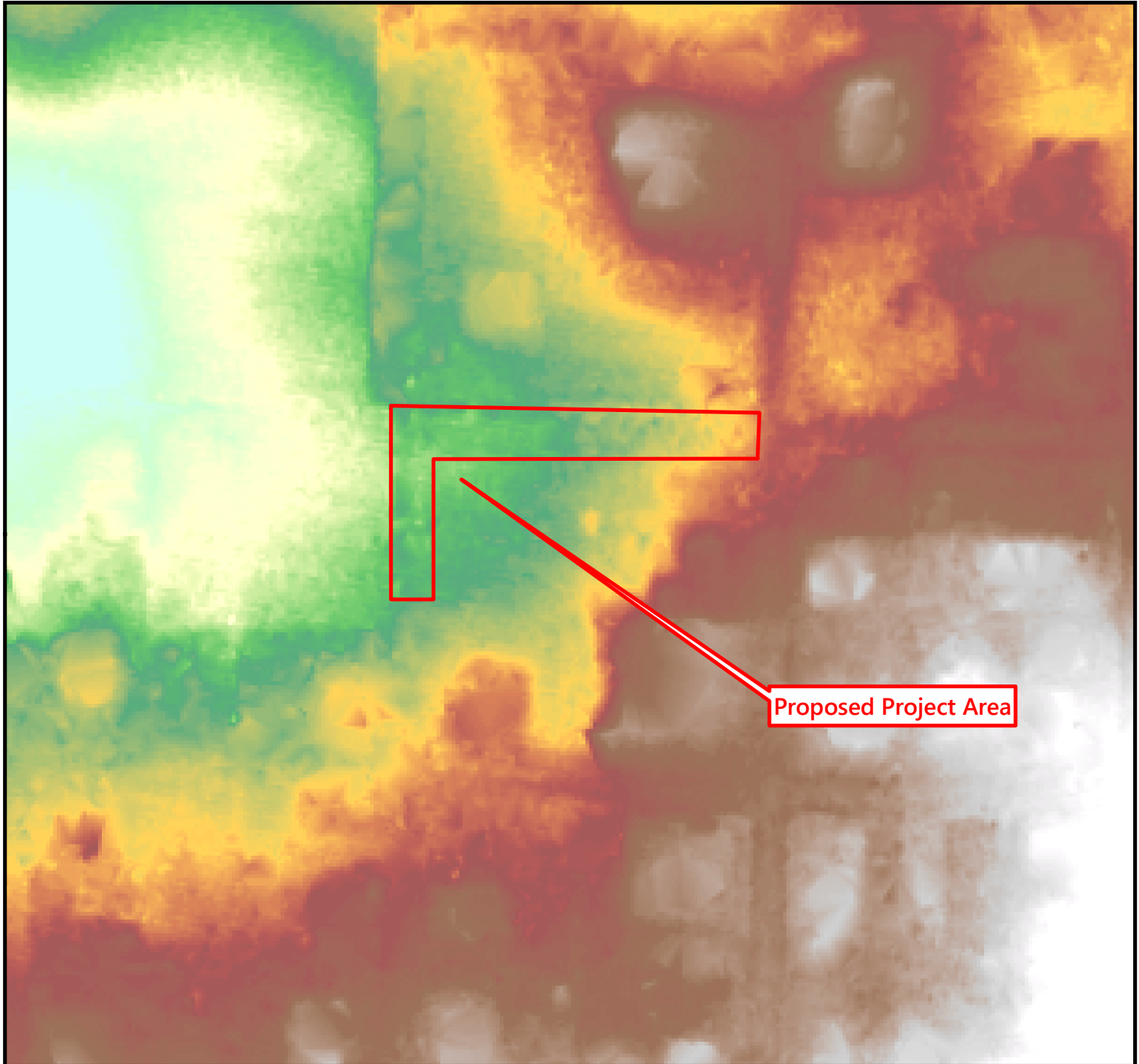
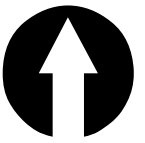


Aerial Photograph

Lake City - Wells 6 & 7
Lake City, Iowa (Calhoun County)

Scale: 1 inch = 125 feet





LiDAR

Lake City - Wells 6 & 7
Lake City, Iowa (Calhoun County)

Scale: 1 inch = 125 feet

