

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

May 5, 2023

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 Oelwein

SRF Number: CS1921090 01

County: Fayette

Iowa DNR Project Number: W2023-0069A

State: Iowa

The City of Oelwein, Iowa is planning an upgrade to their wastewater 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 Oelwein is located in Fayette County, Iowa approximately 35 miles northeast miles of Waterloo, Iowa and 103 miles southwest of La Crosse, WI. The population of Oelwein according to the 2020 US Census was 5,920. The City does not anticipate a significant change in population in the near future.

The Oelwein Wastewater Treatment Plant (WWTP) operates an aerobic digestion process to treat and stabilize solids produced from the plant's sequencing batch reactor (SBR) activated sludge treatment process. Following treatment in the aerated sludge holding tank, solids are transferred to reed beds where further dewatering and biological degradation of the volatile organic matter occurs. The main benefit of reed beds is that, when properly established, they significantly reduce the amount of biosolids that must be stored and eventually disposed of by land application.

The purpose of this project is to make improvements to the wastewater treatment facilities to enhance their reliability, increase capacity and to reduce frequent hauling of solids to maintain adequate sludge storage capacity and reliably operate the City of Oelwein's wastewater system.

The wastewater treatment plant improvements project consists of the construction of additional reed beds adjacent to the existing reed beds. The new reed beds would consist of two cells with HDPE lined earthen berm walls. The total square footage of the two new reed beds would be approximately 24,300 square feet bringing the facility's total reed bed area to 54,300 square feet. This would provide a sludge storage capacity

of approximately 2.17 million gallons per year at a loading rate of 40 gallons per square foot per year and 2.44 million gallons per year at a loading rate of 45 gallons per square foot per year. Sludge feed and drain lines for the new reed beds would be connected to the existing feed and drain lines for the existing reed beds. The proposed project also includes replacement of the membrane liner in the existing equalization (EQ) basin and rehabilitation of the existing reed beds. No other modifications to the existing facility or aerobic sludge holding tank would be required.

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.

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 Nicole.Osborn@dnr.iowa.gov or 515-321-7601.

Sincerely,

Nicole Osborn
Environmental Specialist
502 E 9th St
Des Moines, IA 50319-0034

Enclosures: Environmental Assessment
Project Map

Distribution

List (email): Lance Aldrich, FOX Strand
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
Ingrid Gronstal, 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, USDO, 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
Oelwein Daily Register

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 Oelwein
County: Fayette
State: Iowa

SRF Number: CS1921090 01
Iowa DNR Project Number: W2023-0069A

COMMUNITY DESCRIPTION

Location: The City of Oelwein is located in Fayette County, Iowa approximately 35 miles northeast miles of Waterloo, Iowa and 103 miles southwest of La Crosse, WI.

Population: The population of Oelwein according to the 2020 US Census was 5,920. The City does not anticipate a significant change in population in the near future.

Current Waste Treatment: The Oelwein Wastewater Treatment Plant (WWTP) operates an aerobic digestion process to treat and stabilize solids produced from the plant's sequencing batch reactor (SBR) activated sludge treatment process. Following treatment in the aerated sludge holding tank, solids are transferred to reed beds where further dewatering and biological degradation of the volatile organic matter occurs. The main benefit of reed beds is that, when properly established, they significantly reduce the amount of biosolids that must be stored and eventually disposed of by land application.

PROJECT DESCRIPTION

Purpose: The purpose of this project is to make improvements to the wastewater treatment facilities to enhance their reliability, increase capacity and to reduce frequent hauling of solids to maintain adequate sludge storage capacity and reliably operate the City of Oelwein's wastewater system.

Proposed Improvements: The wastewater treatment plant improvements project consists of the construction of additional reed beds adjacent to the existing reed beds. The new reed beds would consist of two cells with HDPE lined earthen berm walls. The total square footage of the two new reed beds would be approximately 24,300 square feet bringing the

facility's total reed bed area to 54,300 square feet. This would provide a sludge storage capacity of approximately 2.17 million gallons per year at a loading rate of 40 gallons per square foot per year and 2.44 million gallons per year at a loading rate of 45 gallons per square foot per year. Sludge feed and drain lines for the new reed beds would be connected to the existing feed and drain lines for the existing reed beds. The proposed project also includes replacement of the membrane liner in the existing equalization (EQ) basin and rehabilitation of the existing reed beds. No other modifications to the existing facility or aerobic sludge holding tank would be required.

No other modifications to the existing facility or aerobic sludge holding tank would be required.

ALTERNATIVES CONSIDERED

Alternatives Considered: A total of three alternatives were identified for potential improvements to the existing reed bed wastewater treatment. The two alternatives evaluated as part of the Facility Plan are as follows:

Alternative 1 – Construct Additional Reed Beds: This alternative would consist of the construction of additional reed beds adjacent to the existing reed beds. The new reed beds would consist of two cells with HDPE lined earthen berm walls. The total square footage of the two new reed beds would be approximately 24,300 square feet bringing the facility's total reed bed area to 54,300 square feet. This would provide a sludge storage capacity of approximately 2.17 million gallons per year at a loading rate of 40 gallons per square foot per year and 2.44 million gallons per year at a loading rate of 45 gallons per square foot per year. Sludge feed and drain lines for the new reed beds would be connected to the existing feed and drain lines for the existing reed beds. No other modifications to the existing facility or aerobic sludge holding tank would be required.

These improvements would allow the city to apply sludge to the reed beds within the recommended loading rates needed for the reeds to properly establish and optimize dewatering of the sludge. It is expected that with the additional reed beds, the sludge can be dewatered to approximately 35 percent solids and disposal frequency would be reduced to once every 8-10 years as originally intended.

Alternative 2 – New Liquid Sludge Storage and Utilize Existing Reed Beds: With this option the existing reed beds would continue to be utilized, in addition to new 500,000 gallon open top, concrete sludge storage tank. The new sludge storage tank would include a mixing system and sludge loadout station. The tank would include decant piping to allow some thickening of the stored solids. Pumps for the mixing system and loadout station would be located in an insulated and heated fiberglass enclosure located adjacent to the new sludge storage tank. This alternative would be a smaller footprint and would likely leave adequate space for plant expansion in the future.

Alternative 3 – No Improvements (Do Nothing) : With this option, minimal improvements to the existing sludge storage facilities would be performed. Improvements would include replacement of the upper sand layer of the existing reed beds and planting of new reeds.

The city would continue to operate the reed beds at higher than desired loading rates and it is expected that minimal dewatering and solids reduction would continue to occur. Over time, total reed mortality would occur as well as the possibility of septic conditions forming within the reed beds that would result in odor issues. Sludge disposal would be expected to continue at an increased frequency to maintain adequate sludge storage capacity.

Reasons for Selection of Proposed Alternative: The Alternative 2 - New Liquid Sludge Storage and Utilize Existing Reed Beds drawback is that it requires storage & disposal of both liquid and solids. This option would likely require the liquid sludge storage tank to be emptied out in spring and fall to provide enough storage capacity throughout the year. Although the Alternative 3 - No-Improvements would require minimal initial construction costs, it is expected to have the highest annual operating costs due to increasing sludge disposal costs. Therefore, Alternative 1 – Additional Reed Beds is the recommended design choice as it is cost effective and utilizes the intended reed bed expansion space.

MEASURES TAKEN TO ASSESS IMPACT

Public Involvement: A public hearing was held on April 10, 2023 at 6:00PM at the City's regular council meeting. The public notice of this hearing was published in the Oelwein Daily Register on March 3, 2023. The purpose of this hearing was to present the environmental and financial impacts of the proposed improvement project. Public questions regarding the design and functionality of the project were satisfactorily answered by the City's consultant during the public hearing.

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

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”).

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#230433881), 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.

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 Oelwein 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 Irrecoverable 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 treatment of wastewater from the City of Oelwein. The additional reed beds will bring the City of Oelwein into compliance with department requirements and will reduce the amount of biosolids that be disposed of by land application.

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.

THEREFORE:

The above project conforms to the criteria in 567 Iowa Administrative Code 44.10(3) *Drinking water or 567 Iowa Administrative Code 92.8(1)"b" for wastewater relating to compliance with the National Environmental Policy Act of 1969. No adverse effect or significant environmental impact is foreseen at this time.

Nicole Osborn

Environmental Review Specialist

State Revolving Fund

Iowa Department of Natural Resources

USGS 7.5 Minute Quadrangle: Oelwein
Section: 20, Township: 91 N, Range: 09 W
Section: 29, Township: 91 N, Range: 09 W
Date: 1981
Scale: 1 Inch = 2,000 Feet



North

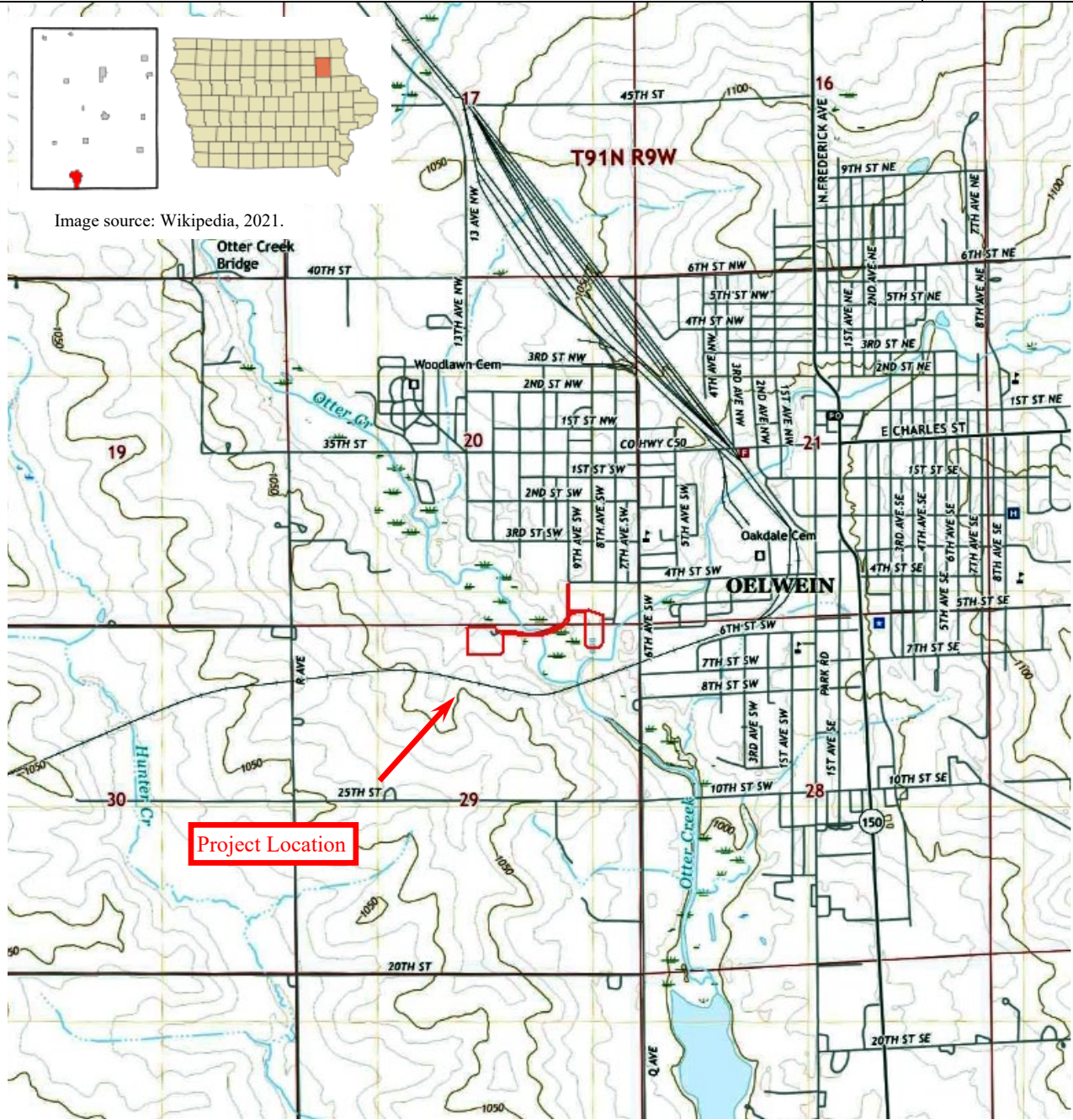


Image source: Wikipedia, 2021.

USGS Topographic Map

Reed Bed Expansion and EQ Liner Replacement
Oelwein, IA



State Revolving Fund
502 East 9th Street
Des Moines, IA 50319-0034

Location information provided by FOX Strand



North



Aerial Photograph

Reed Bed Expansion and EQ Liner Replacement
Oelwein, IA



State Revolving Fund
502 East 9th Street
Des Moines, IA 50319-0034