



CLEAN WATER STATE REVOLVING LOAN FUND PROGRAM

FINDING OF NO SIGNIFICANT IMPACT (FNSI)

TO: All Interested Citizens, Government Agencies and Public Groups

In accordance with the Nebraska Clean Water State Revolving Fund (CWSRF) environmental review process, which is based on the National Environmental Policy Act, an environmental review has been performed on the proposed agency action below.

This information 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, please provide them at this time. The Nebraska Department of Environment and Energy (NDEE) encourages public input in this decision-making process.

PROJECT NAME: Waste Stabilization Pond Expansion with a New Lift Station and Force Main
APPLICANT: Village of Doniphan, NE
COUNTY: Hall County
POPULATION: 829 (2010 Census)
CWSRF PROJECT NUMBER: C318037
TOTAL PROJECT AMOUNT: \$2,239,665
PROPOSED SMALL TOWN GRANT: \$250,000
PROPOSED CWSRF PRINCIPAL LOAN AMOUNT: \$1,989,665

The Village of Doniphan is located in southeastern Nebraska, off of U.S. Highway 34. It is about 12 miles south of Grand Island and 13 miles north of Hastings. The community has maintained a steady population over the past decade with a 2010 Census population of 829 and an estimated 2019 population of 830.

Doniphan's existing wastewater infrastructure consists of a centralized sanitary sewer collection system and three lift stations that transfer raw wastewater to a three-cell, controlled-discharge facultative lagoon system northeast of town. Cell No. 1 is 2.15 acres, Cell No. 2 is 2.06 acres, and Cell No. 3 is 7.10 acres, for a total existing cell acreage of 11.31 acres. Following treatment, the effluent is discharged as needed to an undesignated tributary of the Platte River (Segment MP2-10000 of the Middle Platte River Basin). This Village currently has a NPDES permit authorizing the discharge of this treated effluent.

On April 1, 2021, four and one-half years after the date of the current permit (October 1, 2016), the ammonia permit limits were lowered. To comply with these lower limits, the transition from a controlled-discharge lagoon system to a complete retention lagoon system is proposed. To transition to a complete retention lagoon system, a total of approximately 30.75 acres are required. Thus, two new lagoon cells are proposed with a total area of approximately 19.4 acres. The addition of these lagoons will be on adjacent land south of the existing lagoons. Two geotechnical explorations have been completed in this area and have determined that the existing soils are viable for liner material. However,

the native soils have very low seepage rates, and, if unaltered, would require a very large lagoon system. Thus, the soils will be treated with lime-based materials to increase the permeability of the soil column. The seepage rate of the altered soils will still meet Title 123 requirements and will be below the maximum seepage rate of 1/8-inch per day.

A number of federal, state and local agencies were asked to review the project for environmental impacts. The majority of the agencies responding indicated that there would be no adverse impact, have no effect, or posed no concern. It is not anticipated that fill material will be placed in Waters of the U.S. for this project. The proposed complete retention lagoon system is not in the 100-year floodplain. The Nebraska State Historic Preservation Office review noted that the referenced project should not impact historic properties. The Pawnee Nation Office of Historic Preservation noted that the proposed project lies within a cultural travel corridor, but should not affect the cultural landscape of the Pawnee Nation. Approximately 21 acres of existing agricultural land will be taken from production. The proposed site was designated as prime farmland by the Natural Resources Conservation Service. Conservation measures will be implemented in order to avoid adverse impacts to the northern long-eared bat. A requirement to comply with the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act will be included in the project specifications. Temporary impacts that may be caused by construction include noise and dust and a limited potential for soil erosion and fuel and oil spills. No wastewater bypasses are expected during construction.

The project is eligible for financing through the CWSRF and is included on the Priority Funding List in the State Fiscal Year 2022 Intended Use Plan. The total estimated project cost is \$2,239,665. The Village is eligible for a 30-year loan at an interest rate of 0.0 percent. In addition to principal and interest payments, an administrative fee of 0.0 percent of the principal balance will be assessed each year. Doniphan and the project qualify for CWSRF's Small Town Grant with a maximum eligibility of 23.51% of total CWSRF project cost, up to a maximum of \$250,000. With maximum Small Town Grant, the loan principal is estimated to be \$1,989,665. The revenues from Doniphan's wastewater utility will be dedicated to repaying the loan. The projected annual CWSRF Debt Service (including 10% coverage) for the project is \$72,955. For a typical residential connection, the current monthly rate is a flat fee of \$9.00. Based on 400 active service connections, monthly household rates may need to be raised \$15.20 to pay for the new debt service.

A public hearing was held June 14, 2021 at the Doniphan Area Event Center and convened at 6:30 PM. During the hearing, Doniphan's consulting engineer discussed details of the project, the expected project cost and impacts to user rates, and any mitigation measures required. A question was brought up regarding why there will be no liner in the lagoon. The engineer explained that the soil is packed tightly and the concern is that the seepage rate won't be fast enough. According to the engineer, if a liner were used, they would have to rely solely on evaporation, which would require the purchase of twice as much land for a larger lagoon. There were some concerns with seepage into the ground. However, the lagoons will be required to meet Title 123 requirements for seepage, and testing will be required to ensure the new lagoons meet this requirement. More information regarding this issue is included in the Environmental Assessment. The hearing was advertised 33 days in advance.

The review did not indicate a significant environmental impact will result from the proposed action. Water quality should improve for the Platte River since all pollutants will be eliminated from entering the Middle Platte River Basin. No adverse impacts are anticipated for wetlands, the floodplain, or historical resources. The project was planned to ensure that no segment of the community's population

is impacted disproportionately from related effects. Consequently, a preliminary decision has been made that an Environmental Impact Statement (EIS) will not be prepared.

This action is taken on the basis of a careful review of the engineering reports and other supporting data that are on file with NDEE. All are available for public review upon request. A copy of the environmental assessment is attached. The NDEE will not take any administrative action on the project for at least 30 calendar days from the date shown below. Persons having a comment on this determination are encouraged to submit directly to Hillary Stoll at (402) 471-4252 or email hillary.stoll@nebraska.gov of the Engineering Section of NDEE, or John Danforth at (402) 471-3373 or email john.danforth@nebraska.gov of the State Revolving Fund Section of NDEE.

Signed this 18th day of August, 2021.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Macy", is written over the printed name and title.

Jim Macy
Director

Attachments: Environmental Assessment
 Distribution List
 Map

ENVIRONMENTAL ASSESSMENT DOCUMENT

A. Project Identification:

Applicant: Village of Doniphan
Project No.: C318037
City: Village of Doniphan **County:** Hall County **State:** NE
Estimated Project Cost: \$2,239,665
Proposed Amount of Small Town Grant: \$250,000

B. Community Description:

Location: The Village of Doniphan is located in southeastern Nebraska, off of U.S. Highway 34. It is about 12 miles south of Grand Island and 13 miles north of Hastings.

Population: The community has maintained a steady population over the past decade with a 2010 Census population of 829 and an estimated 2019 population of 830.

Current Wastewater Facilities: Doniphan's existing wastewater infrastructure consists of a centralized sanitary sewer collection system and three lift stations that transfer raw wastewater to a three-cell, controlled discharge facultative lagoon system northeast of town. Cell No. 1 is 2.15 acres, Cell No. 2 is 2.06 acres, and Cell No. 3 is 7.10 acres, for a total existing cell acreage of 11.31 acres. Following treatment, the effluent is discharged as needed to an undesignated tributary of the Platte River (Segment MP2-10000 of the Middle Platte River Basin). The Village currently has a NPDES permit authorizing the discharge of this treated effluent.

- C. Project Description:** On April 1, 2021, four and one-half years after the date of the current permit (October 1, 2016), the ammonia permit limits were lowered. To comply with these lower limits, the transition from a controlled-discharge lagoon system to a complete retention lagoon system is proposed. To transition to a complete retention lagoon system, a total of approximately 30.75 acres are required. Thus, two new lagoon cells are proposed with a total area of approximately 19.4 acres. The addition of these lagoons will be on adjacent land south of the existing lagoons. Two geotechnical explorations have been completed in this area and have determined that the existing soils are viable for liner material. However, the native soils have very low seepage rates, and, if unaltered, would require a very large lagoon system. Thus, the soils will be treated with lime-based materials to increase the permeability of the soil column. The seepage rate of the altered soils will still meet Title 123 requirements and be below the maximum seepage rate of 1/8-inch per day. In addition to the expansion of the lagoon system, a new lift station and force main will also be constructed.

D. Alternatives Considered:

Alternatives considered were:

1. No project, or
2. Connect to the City of Grand Island
3. Construct additional facultative lagoons for land application
4. Construct additional facultative lagoons for complete retention lagoon system

Evaluation and Selection of the Alternative: The existing wastewater treatment system is a three-cell, controlled-discharge facultative lagoon system. It is not able to meet the more stringent ammonia requirements included in the Village's NPDES permit. Their existing permit includes an ammonia compliance schedule that requires the Village to upgrade their wastewater treatment facility. Therefore, if the Village does nothing, they will not be able to maintain compliance with their NPDES permit. Because the Village must maintain compliance with their NPDES permit, no project is not a viable long-term option.

A cost-effectiveness analysis was completed for alternatives 2, 3, and 4. Alternative 2 was eliminated first due to the cost and potential for user rates to increase in the future. Although a facultative lagoon system with land application appears to be the most cost-effective option, securing agreements to land apply the lagoon effluent is challenging. Farmers adjacent to the facility were not interested in utilizing the wastewater for irrigation. Thus, the Village selected the complete retention lagoon system alternative.

E. Environmental Impact Summary:

Primary:

Construction: Temporary impacts caused by construction include noise and dust, a limited potential for soil erosion, and fuel/oil spills. All demolition, grading, and construction activities will comply with Fugitive Dust Title 129, Chapter 32 regulations. No wastewater bypasses are expected during construction. A construction permit will be obtained from the NDDE. The nearest public-use airport is the Central Nebraska Regional Airport, but it is over 12 miles away from the project, so the Nebraska Department of Transportation – Division of Aeronautics does not anticipate any impacts.

Environmental: The construction contracts will require that the contractors return the area to its original or better condition. Construction will occur on land that has been purchased by the Village that was previously agricultural land.

The proposed project was reviewed by numerous federal and state agencies for environmental impacts. The U.S. Army Corps of Engineers identified wetlands west of the project, but it is not anticipated that fill material will be placed into any Waters of the U.S. The Nebraska Department of Natural Resources reviewed the proposed project for potential impacts to jurisdictional dams, floodplain management, registered groundwater wells, stream gages, and surface water rights, and had no comments. The Nebraska State Historic Preservation Office review noted that the referenced project

should not impact historic properties. The Pawnee Nation Office of Historic Preservation noted that the proposed project lies within a cultural travel corridor, but should not affect the cultural landscape of the Pawnee Nation. If obscured cultural or human remains are discovered during the project, the Pawnee Nation Office of Historic Preservation and the Nebraska State Historic Preservation Office will be contacted immediately.

The Nebraska Game and Parks Commission (NGPC), Conservation and Environmental Review Tool (CERT) was used to generate an environmental review report. The results of the report indicated that conservation measures must be implemented in order to avoid adverse impacts to the northern long-eared bat. Thus, no removal of trees or removal of roosting structures will occur between June 1 and July 31. The NGPC CERT Report included guidance to ensure compliance with the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. A requirement to comply with the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act will be included in the project specifications. The USFWS reviewed the results of the NGPC CERT report and had no concerns.

Financial: An application for CWSRF loan assistance has been received for the project to fund the proposed improvements to allow for the construction of two additional lagoon cells to convert the existing three-cell, controlled-discharge lagoon system to a five-cell, complete retention lagoon system. The total estimated project cost is \$2,239,665. The Village is eligible for a 0.0 percent, 30-year loan, with an administrative fee of 0.0 percent on the principal balance that will be assessed each year. The Village is eligible for Small Town Grant funds, dependent on availability of funds, up to a maximum amount of \$250,000. If executed, the community will have an annual CWSRF debt service of \$72,955, which includes a ten percent coverage that is required on all loans. The revenues from Doniphan's wastewater utility will be dedicated to repay the loan. For a typical residential connection, the current monthly rate is a flat fee of \$9.00. Based on 400 active service connections, monthly household rates may need to be raised \$15.20 to pay for the new debt service. An assessment of costs and revenues will be conducted after completion of the project.

Secondary:

Population Impacts: The proposed wastewater improvements are not primarily needed for future growth, but to allow the Village to expand their existing lagoon system to maintain compliance since they can no longer meet the ammonia limits in their NPDES permit. The design for the proposed lagoon project has taken into consideration the population trends and a 15% growth factor has been selected.

Land Use and Trends: The location of the proposed wastewater improvements is the existing WWTF for the Village and adjacent land south of the facility. The existing WWTF is on the northeast edge of the Village. Minor impact is expected on the existing land use for the site of the proposed complete retention lagoon system. Approximately 21 acres of existing agricultural land will be taken from production. The proposed site was designated as prime farmland by the Natural Resources Conservation Service. Per the

request of the USDA-NRCS, the consultant completed a Farmland Conversion Impact Rating Form AD-1006 for ranking purposes that was submitted to NRCS on April 27, 2021. The form was not completed by NRCS and returned with comments. Based on what was completed by the consultant, the Part VI section of the assessment had a point total of 78, which is below the 160 points set as the minimum number of "Total Points" that triggers additional in-depth site reviews. The Nebraska State Fire Marshal Agency responded that they did not anticipate impacts from the project. A search of underground storage tanks (UST) for the Village was included with this response, but none appeared to be relevant to this project. The Nebraska State Historic Preservation Office review noted that the referenced project should not impact historic properties. The Pawnee Nation Office of Historic Preservation noted that the proposed project lies within a cultural travel corridor, but should not affect the cultural landscape of the Pawnee Nation. If obscured cultural or human remains are discovered during the project, the Pawnee Nation Office of Historic Preservation and the Nebraska State Historic Preservation Office will be contacted immediately.

Environmental: Minimal solid waste generated by the project will be disposed of in a licensed landfill or recycled. No safety, vibration, noise or aesthetic considerations were identified other than the normal noise and disruptions associated with sewer and lagoon construction.

Environmental Justice: The proposed project will not produce any environmental justice concerns. All structures will be placed in areas already disturbed through agriculture, and the services provided by the wastewater improvements will be available to everyone in the Village, equally. No segments of Doniphan's population are impacted disproportionately from related effects.

Mitigation measures necessary to eliminate adverse environmental effect: Proper construction techniques will be utilized to minimize soil erosion and other potential impacts of construction. An NPDES Construction Storm Water General Permit for stormwater runoff associated with construction activity and a Storm Water Pollution Prevention Plan will be required by NDEE since more than one acre of land will be disturbed. The community can designate the General Contractor as the authorized representative on the Storm Water Permit Notice of Intent submitted to the NDEE. Authorization of storm water runoff from the construction activities must be in place prior to commencing construction. To avoid or minimize impacts to migratory birds, the USFWS recommends that the project voluntarily avoid tree removal or impacts to vegetation during the primary nesting season of breeding birds (April 1 to July 15). A requirement to comply with the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act will be included in the project specifications. No removal of trees or removal of roosting structures will occur between June 1 and July to avoid adverse impacts to the northern long-eared bat.

Irreversible and irretrievable commitment of resources: The resources committed to the project include the equipment, materials, and energy used in construction.

F. Measures Taken to Ensure Environmental Soundness:

Public Involvement: A Public Hearing was held June 14, 2021 at the Doniphan Area Event Center and convened at 6:30 PM. During the Hearing, the Engineer discussed details of the project, the expected project cost and impacts to user rates, and any mitigation measures required. The hearing was advertised 33 days in advance.

Public Opposition or Opinions: A question was brought up regarding why there will be no liner in the lagoon. Doniphan's consulting engineer explained that the soil is packed tightly, and the concern is that the seepage rate will not be fast enough. According to the consulting engineer, if a liner were used, they would have to rely solely on evaporation, which would require the purchase of twice as much land for a larger lagoon. There were some concerns with seepage into the ground. However, the lagoons will be required to meet Title 123 requirements for seepage, and testing will be required to ensure the new lagoons meet this requirement.

Coordination and Documentation with Other Agencies and Special Interest Groups:

Facility Planning: Supplement Wastewater Facilities Evaluation, Miller & Associates, Consulting Engineers, P.C., 2018
Engineer's Opinion of Probable Construction Cost, Miller & Associates, Consulting Engineers, P.C., January 15, 2021
Geotechnical Engineering Report, ERDBAU, Inc, October 29, 2020;
Revised May 31, 2021

Federal: U.S. Army Corps of Engineers, Omaha District, May 3, 2021, email
U.S. Department of Agriculture, NRCS, April 21, 2021, email
U.S. Fish and Wildlife Service, April 23, 2021, Stamped NGPC CERT Report

State: NE Department of Environment and Energy, May 18, 2021, letter
NE Department of Natural Resources, May 5, 2021, letter
NE Department of Transportation – Division of Aeronautics, May 10, 2021, email
NE Game and Parks Commission, April 20, 2021, Conservation and Environmental Review Tool (CERT) Report
NE State Fire Marshal Agency, April 29, 2021, email
NE State Historic Preservation Office, April 27, 2021, letter

Tribal: Pawnee Nation Office of Historic Preservation, May 24, 2021, letter

Consulting Engineers: Miller & Associates, Consulting Engineers, P.C., Kearney, NE

Public Groups: Village of Doniphan Residents

G. Positive Effects to be Realized from the Proposed Project: The proposed project should improve the water quality of the Platte River, which would have a beneficial effect on fish and wildlife habitat. Recreational and agricultural use of the Middle Platte River Basin will benefit from improved water quality.

- H. **Reasons for Concluding there will be no Significant Impacts:** Review of the engineering reports and supporting information indicates that the proposed project will result in no significant impact to the environment. No adverse impacts are anticipated to wetlands, the floodplain, or historical resources. The Nebraska Game and Parks Commission, Conservation and Environmental Review Tool was used to generate an environmental review report. No removal of trees or removal of roosting structures will occur between June 1 and July 31 to protect the northern long-eared bat. Provisions included in the project specifications will protect migratory birds. Minor change in land use will occur, as 21 acres of prime farmland will be taken out of production. All necessary permits for construction have been or will be obtained from the appropriate agencies (i.e. NDEE, the Corps of Engineers, etc.), if necessary.



Reviewing Engineer

08/13/2021

Date

FINDING OF NO SIGNIFICANT IMPACT DISTRIBUTION LIST
DONIPHAN, NEBRASKA

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USDA RURAL DEVELOPMENT
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ENVIRONMENTAL PROTECTION AGENCY
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APPLICANT:
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CONSULTING ENGINEER:
Reed Miller, P.E.
Miller & Associates, Consulting Engineers, P.C.
1111 Central Avenue
Kearney, NE 68847

LOCAL NEWSPAPER:
The Grand Island Independent
422 West 1st Street
Grand Island, NE 68801

(Public Information Only not for Public Notice)

NATURAL RESOURCES DISTRICT:
Central Platte Natural Resources District
215 Kaufman Avenue
Grand Island, NE 68803

Map



Figure 1. Proposed Wastewater Lagoon Expansion and New Lift Station for the Village of Doniphan (Provided by Miller & Associates, Consulting Group, P.C.)