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CLEAN WATER STATE REVOLVING LOAN FUND PROGRAM
(CWSRF)

FINDING OF NO SIGNIFICANT IMPACT

TO: All Interested Citizens, Government Agencies and Public Groups

In accordance with the Nebraska Clean Water State Revolving Fund 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 Environmental Quality encourages public input in this decision-making process.

PROJECT NAME:	Wastewater Treatment Facility
	Winside, Nebraska
APPLICANT:	Village of Winside
COUNTY:	Wayne County
POPULATION:	427
CWSRF PROJECT NUMBER:	C317827
TOTAL PROJECT AMOUNT:	\$1,300,000
ESTIMATED CWSRF LOAN AMOUNT:	\$1,060,000
ESTIMATED CWSRF PRINCIPAL FORGIVENESS:	\$0
ESTIMATED SMALL TOWN GRANT:	\$240,000

The Village of Winside, Nebraska, in Wayne County is planning an upgrade to their wastewater treatment facility. The Village has applied for financial assistance through the Clean Water State Revolving Fund (CWSRF) loan program to build the project.

Winside operates a two-cell lagoon system (WWTF), which was constructed in the 1960's. There is a main lift station. The existing lagoon system consists of two cells with a high water surface area of 4 acres total. The 2010 census population is 427. The proposed system is being designed for a population of 450 for 2035. A design flow of 60,000 gpd is used to size the system.

The existing system does not have sufficient area or volume to operate as a controlled discharge lagoon for once a year discharge in the fall. The spring discharges particularly have been unable to meet required treatment limits. The proposed system will meet required treatment limits.

Winside is proposing to construct a 3-cell controlled discharge lagoon system, for once a year discharge in the fall. This will be done by rehabilitating the two existing cells and adding a

third cell adjacent to the existing WWTF. The total system will have a surface area of 12.9 acres. The lift station will also be upgraded, and a surge tank for potable water treatment waste will be added.

The project is included in the 2015 Intended Use Plan. A CWSRF Loan of \$1,060,000 will be used to finance the project. The CWSRF loan will be assessed an effective interest rate of 2.50% for a 20-year term. The Village has also received a small town grant of \$240,000, but it will only be valid if the loan is signed within six months (mid-December 2014). Sewer use fees would be pledged to repay the loan. Residential customers now pay a flat rate of \$10.70 per month. The Village of Winside has 210 sewer connections. The projected monthly user charge is estimated to be \$40.40 a month. The debt service for the CWSRF loan will be about \$29.70 per month per user.

A public hearing to discuss the project was held on November 3, 2014. There was no opposition to the project expressed at the public hearing. Fifteen acres of land will be needed for the construction of the new lagoon. Part of this is prime farmland, but has been evaluated by USDA NRCS as cleared of prime farmland concerns. The United States Army Corps of Engineers commented that "Waters of the U.S." (wetlands) may be located within the project area and may potentially be impacted by the proposed project. If the project places fill into waters of the U.S., then a Section 404 permit will be needed. The U.S. Fish and Wildlife Service is concerned about depletion to the Lower Platte River if land application would be pursued. The Nebraska Dept. of Natural Resources noted the project is located within a mapped flood plain. Flood plain standards will need to be followed. The NDEQ Ground Water Section advised the current and proposed lagoons lie in the Winside wellhead protection area (WHPA), and the potential impact to ground water from the lagoon site is high due to the shallow depth to water and the location in the WHPA. The State Historical Society has not objected to the project. The project will have a positive impact on the environment. The project will protect the area groundwater.

The review did not indicate a significant environmental impact would result from the proposed action. No threatened or endangered species or recorded historical sites will be affected. Impacts to wildlife habitat will be minimal. The project specifications will include provisions that require compliance with the Migratory Bird Treaty Act in order to protect nesting migratory birds. The project will comply with the minimum standards of the flood plain regulations. The lagoon will be sealed and separated from groundwater according to NDEQ's Title 123 design standards. A construction storm water permit will be required by this Department since more than one acre of land is being disturbed. Prime farmlands are cleared of concerns. No significant increases in noise levels or odors are expected. The project has been planned to ensure that no segment of the community's population suffers disproportionately from human health or environmental 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 facility plan, the environmental information document, the environmental assessment, and other supporting data, which are on file in the office of the Nebraska Department of Environmental

Quality (NDEQ). These are available for public review upon request. A copy of the environmental assessment is attached. The NDEQ will not take any administrative action on the project for at least 30 calendar days from the date shown below. Persons disagreeing with the above environmental decision may submit comments to Susan Hoppel, P.E., Environmental Engineer, of the Technical Assistance Section of NDEQ, who can be reached at (402) 471-4697 or email: susan.hoppel@nebraska.gov during this period.

Signed this 18th day of November, 2014

Sincerely,


for Patrick W. Rice
Acting Director

PR/skh

Attachments: Environmental Assessment
Distribution List
Maps

ENVIRONMENTAL ASSESSMENT DOCUMENT

A. Project Identification:

Applicant: Village of Winside **Project No.** C317827
Village: Winside **County:** Wayne **State:** Nebraska
Total Project Amount: \$1,300,000
CWSRF Loan: \$1,060,000
POTENTIAL PRINCIPAL FORGIVENESS: \$0
Small Town Grant: \$240,000

B. Community Description:

Location: Winside is located in southwestern Wayne County near Highway 35, approximately sixteen miles northeast of Norfolk, Nebraska.

Population, Present and Projected, and Design Year: The 2010 census population of Winside is 427. The projected population for the design year of 2035 is 450 people.

Current Methods of Waste Treatment: The existing facility is a two-cell lagoon (WWTF). The collection system consists of about 40 manholes and approximately 16,700 linear feet of vitrified clay sewer main, with about 78% of the mains being 8-inch in diameter. The village also has a main lift station. The collection system may be experiencing some level of infiltration or inflow. A more detailed study would be needed to determine this. The collection system and the WWTF were constructed in the 1960's.

C. Project Description:

Purpose: The project will rehabilitate the existing two lagoons and add another lagoon. The three-cell lagoon system is designed as a controlled discharge lagoon system for once/year discharge in the fall.

Type: The water surface area at the high water level of the 3-cell lagoon system will be 12.9 acres. The surface area of the two primary cells will be 2 acres each, and the surface area of the storage cell is 8.9 acres. The primary cells will be 6 feet deep. The storage cell is 8 feet deep. All have 2 feet of freeboard. The slope of the dikes is 4:1.

Design Factors:

<u>Parameter</u>	<u>Design Loading</u>
Average Flow	60,000 gal/day
BOD	82 lbs/day
Suspended Solids	82 lbs/day

For the lagoon sizing factors, design seepage was estimated at 1/64 inch per day with

net evaporation over rainfall of 15 inches per year.

Reserve Capacity: The population of Winside has fluctuated. The average population over the last 25 years is 443. The 2010 population was 427. A population of 450 is used for design year 2035.

Receiving Stream: The lagoon discharges to South Logan Creek in Wayne County, Segment EL2-21000. This segment is unassessed due to insufficient data. However, starting at Wayne, South Logan Creek is impaired for Primary Contact Recreation use due to high E. coli. It is expected a once/year discharge can be timed outside the recreation season so it would not contribute to existing downstream impairment.

D. Alternatives Considered:

Types: The following alternatives were considered;

1. Do Nothing – Continue with existing operations
2. Potable water treatment surge tank to sanitary sewer
3. Existing wastewater treatment lagoon improvements
- 4A. Once per year controlled discharge lagoons
- 4B. Land application of lagoon effluent
- 4C. Complete retention lagoon facility
5. Collection system improvements
6. Lift station improvements
7. GIS mapping system

Reasons for Selection of Proposed Alternative: The village selected the controlled discharge lagoon, due to lack of availability of land needed for land application. Also included are existing lagoon improvements, lift station improvements, and potable water surge tank. Land application is still likely to have to be added in the future, as permit limits are expected to become more strict.

E. Environmental Impact Summary:

1. Primary

- a. Construction:** No significant impact is expected. Temporary impacts that may be caused by construction include dust and a limited potential for soil erosion and fuel and oil spills. No burning, blasting, herbicides or defoliantes will be permitted in clearing the site. There are no known historical or archaeological resources or threatened or endangered species at the site.
- b. Environmental:** Any negative impact due to disturbing the existing landform will be temporary. No wastewater bypasses are expected during construction. Positive impact should be gained in that the area groundwater will be protected.

Other federal and state agency review produced the following comments. The United States Army Corps of Engineers commented that "Waters of the U.S." (wetlands) may be located within the project area and may potentially be impacted by the proposed project. If the project places fill into waters of the U.S., then a Section 404 permit will be needed. The U.S. Fish and Wildlife Service (USFWS) is concerned about depletion to the Lower Platte River if land application would be pursued. The Nebraska Dept. of Natural Resources noted the project is located within a mapped flood plain. Winside does not participate in the National Flood Insurance Program, therefore the project needs to comply with the Nebraska Minimum Standards for Floodplain Management, as well as Executive Order 11988 regarding use of funds for projects determined to be located in a floodplain or floodway. The NDEQ Ground Water section advised the current and proposed lagoons lie in the Winside wellhead protection area, and the potential impact to ground water from the lagoon site is high due to the shallow depth to water and the location in the WHPA. The State Historical Society has not objected to the project.

- c. **Financial:** The current household sewer user charge is \$10.70 per month. A CWSRF loan of \$1,060,000 will finance this project. The Village has received a Small Town Grant of \$240,000, but it will only be valid if the loan is signed within six months (mid-December 2014). The CWSRF loan will have an effective interest rate of 2.50% for a 20-year term. The estimated sewer rates to support this project are \$40.40/month/user.

2. Secondary

- a. **Population Impacts:** No impact is expected on the population density but the project would serve the existing population and the 20-year design population.
- b. **Land Use and Trends:** About 15 acres of existing agricultural land will be needed for the new lagoon. A portion of the land needed has been identified as prime farmlands. The rating system used by USDA NRCS has determined the project is cleared of prime farmland concerns.
- c. **Environmental:** No significant increases in noise levels or odors are expected.
- d. **Environmental Justice:** This project has been planned to ensure that no segment of the community's population suffers disproportionately from human health or environmental effects.

3. Mitigation measures necessary to eliminate adverse environmental effect:

The lagoon system will be sealed to meet State requirements of a maximum of 1/8 inch per day seepage. Estimated seepage is 1/64 inch per day by the engineer. A clay liner using on site soils is proposed. A minimum 4 feet separation from the bottom of

the lagoon liner and the top of high seasonal ground water will be maintained as required by NDEQ regulations. The interior dike slopes will be constructed at 4:1 slope. A construction storm water runoff permit and related erosion control provisions will be required by NDEQ for this project since more than one acre of land will be disturbed. If construction occurs during the primary nesting season of April 1 to July 15 then a field survey by a qualified biologist may be required if construction would result in the taking of nesting migratory birds with the results submitted to USFWS prior to construction. A requirement to comply with the Migratory Bird Treaty Act will be included in the project specifications

4. Irreversible and irretrievable commitment of resources: Resource commitment will be minor in construction materials and energy use due to the construction of the new lagoon.

F. Measure Taken to Insure Environmental Soundness:

1. **Public Involvement:** A public hearing was held on November 3, 2014 having the required 30-day advertised notice. Discussion was held on the project.
2. **Public Opposition or Opinions:** None
3. **Coordination and Documentation with Other Agencies and Special Interest Groups**
 - a. **Facilities Plan dated:** December 2013.
 - b. **Amendment to Facility Plan dated:** October 2014.

Prepared by: JEO Consulting Group, Norfolk, NE

c. Federal:

1. U.S. Fish & Wildlife Service,
2. United States Army Corps of Engineers.

d. State:

1. Nebraska Department of Aeronautics,
2. Nebraska Department of Natural Resources,
3. Nebraska State Historical Society,
4. Nebraska DEQ, Ground Water Section.

e. Local:

1. Lower Elkhorn Natural Resources District.

f. Consulting Engineers: JEO Consulting Group, Norfolk

g. Public Groups:

1. Village of Winside residents

G. Positive Environmental Effects to be Realized from the Proposed Project: The expanded lagoons will be constructed to satisfy current design standards. The area groundwater will be protected by sealing the lagoons.

H. Reasons for Concluding there will be no Significant Impacts: Review of the facility plan and supporting documents indicates that the proposed project will result in positive environmental effects and benefits. No threatened or endangered species or recorded historical or archaeological sites will be affected. Impacts to wildlife habitat will be minimal. Nesting migratory birds will be protected. No significant increases in noise levels or odors are expected. No potential recreation and open space opportunities exist. Floodplain requirements will be followed. Some change in land use will occur, as 15 acres of farmland will be taken out of production. There should be no adverse impact on ground water or community growth patterns.

Susan Hoppel, P.E.

Reviewing NDEQ Engineer

11-7-14

Date

FINDING OF NO SIGNIFICANT IMPACT DISTRIBUTION LIST

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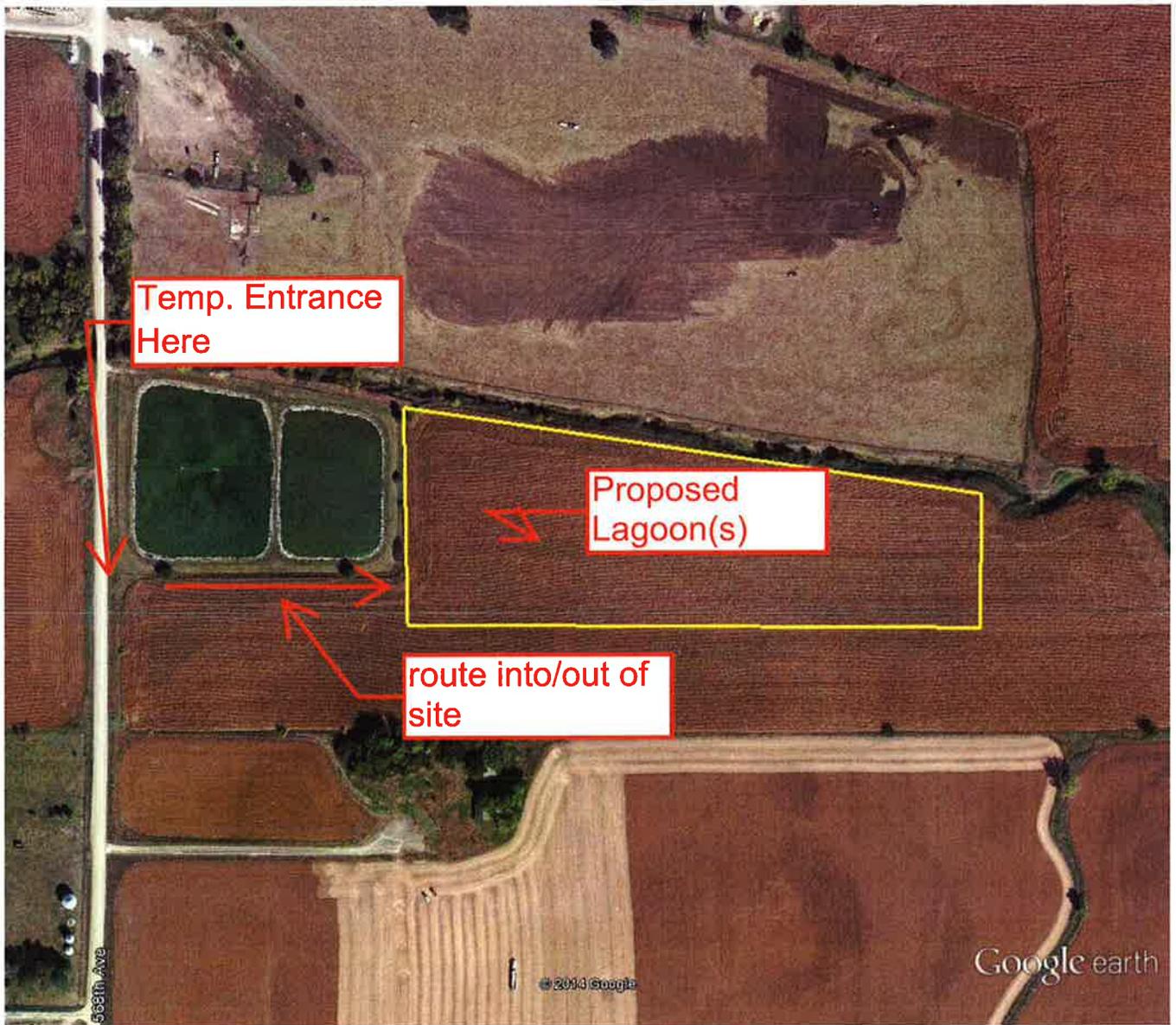
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CONSULTING ENGINEER:
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JEO Consulting Group
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Norfolk, NE 68702-1424

LOCAL NEWSPAPER
(Public Information Only not for Public Notice)
The Wayne Herald
114 Main
Wayne, NE 68787

LOCAL NATURAL RESOURCE DISTRICT
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Norfolk, NE 68702-1204



Google earth



Figure 3-2: FEMA Floodplain

