



## DRINKING WATER STATE REVOLVING LOAN FUND PROGRAM FINDING OF NO SIGNIFICANT IMPACT

TO: All Interested Citizens, Government Agencies and Public Groups

In accordance with the Nebraska Drinking 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 Environment and Energy encourages public input in this decision-making process.

PROJECT NAME: Replace Water Treatment Plant and Upgrade Water Meters  
City of Wakefield, Nebraska  
DWSRF PROJECT NUMBER: D311657  
TOTAL PROJECT AMOUNT: \$6,364,000  
PROPOSED DWSRF LOAN AMOUNT: \$5,091,200  
PROPOSED DWSRF FORGIVENESS AMOUNT: \$1,272,800

The City of Wakefield has applied for funding for the above-referenced project through the Drinking Water State Revolving Fund (DWSRF) program jointly administered by the Nebraska Department of Health and Human Services (DHHS) and the Nebraska Department of Environment and Energy (NDEE). This project has Wakefield ranked as a low priority and is included on the Planning List in the DWSRF State Fiscal Year 2020 Intended Use Plan. Funding can be provided to the City in accordance with the Intended Use Plan's bypass criteria, as the January 1, 2020 bypass date has passed.

Wakefield is located in northeastern part of Nebraska, situated in Dixon County. The community has a population of 1,451 according to the 2010 census, which has slightly increased over the past decade. Wakefield has been issued a permit to operate a public water system (PWS) under the provisions of the Nebraska Safe Drinking Water Act and the Regulations Governing Public Water Supply Systems, Title 179.

In June 2020, a Water Treatment Facility Evaluation report of the proposed project was completed by the City's Engineer. The PWS consists of four municipal wells that pump to an iron/manganese treatment plant, an elevated 600,000 gallon water storage tower, and a distribution

system. Through regular monitoring it is documented that Wakefield's water supply is acceptable, presently meeting all drinking water standards. However, the water treatment plant (WTP) is approaching 80 years in age, and due to structural concerns noted in a recent sanitary survey, with the simple need to ensure an adequate supply of safe drinking water on a continuous basis, the City has determined the need to replace the WTP. In general, the same treatment methods to remove iron and manganese from the water supply will be used, aeration and filtration, including though current technologies to optimize chemical feed processes and improve backwashing controls. Lastly, the City is considering an upgrade of its water service meters to a radio-read system.

The proposed project was reviewed by numerous Federal and State agencies for environmental impacts. The responses received were that the project would have no affect or pose no adverse impact, and where required, the City would have to make application for all necessary permits.

The City is eligible for a 30-year loan at an interest rate of 1.5%, and 20% forgiveness. In addition to principal and interest payments, an administrative fee of 0.5% of the loan balance will be assessed each year. The revenues from Wakefield's water utility will be dedicated to repay the loan. The projected annual DWSRF Debt Service (including 10% coverage) is \$260,323. The revenues from City's water utility will be dedicated to repay the loan. From a review of estimated costs, it is possible that monthly water rates will be raised \$37, with estimates done for City being between \$30 and \$32. Based on current rates, the typical total residential user monthly water bill would possibly increase up to \$61 per month; however, following construction, Wakefield will make a final assessment of revenues and cost to determine what rate adjustments are necessary.

A Public Hearing was held on June 10, 2020 by the City on the proposed project, with 34 days advanced posted notice. A presentation was made by the Engineer's project manager on the scope of the project and likely impact to water rates. Two residents of the community in attendance spoke in favor of the projected water rate increases, and no other input was received from the public.

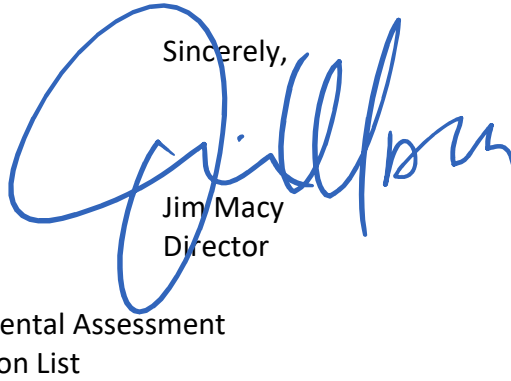
The system last underwent a routine sanitary survey by DHHS in April of 2017, wherein three deficiencies were noted, with all being addressed by November of that year. That completed survey is the first step of the Technical, Financial, and Managerial (TFM) program policy. The City will still be required to undergo an initial, and if necessary, a Final TFM Assessment by the DHHS, to ensure that their capabilities meet the requirements of the Safe Drinking Water Act. Also, their current Environmental Tracking Tool score is 0, well below the allowable 11 per issued U.S. Environmental Protection Agency guidance.

The proposed project is determined by DHHS to help the City maintain compliance with the Nebraska Safe Drinking Water Act. No significant environmental impacts have been identified that would result from the proposed action. All necessary permits for construction will be obtained from the appropriate agencies (i.e., NDEE, etc.), if needed. Consequently, a preliminary decision has been made that an Environmental Impact Statement will not be prepared.

This action is taken on the basis of a careful review of the Environmental Assessment, the Water Treatment Facility Evaluation Report and other supporting data that are on file with NDEE. The latter are available for public review upon request and the Environmental Assessment is attached. The NDEE will not take any administrative action for at least 30 calendar days from the date shown below. Persons having a comment on this determination are encouraged to submit directly to Steve McNulty at 402 471-1006 or email [steve.mcnulty@nebraska.gov](mailto:steve.mcnulty@nebraska.gov) of DHHS, or Burton Pflueger at 402 471-1883 or email [burton.pflueger@nebraska.gov](mailto:burton.pflueger@nebraska.gov) of the Water Permits Division of NDEE.

Signed this 23<sup>rd</sup> day of June, 2020.

Sincerely,



Jim Macy  
Director

Attachments:            Environmental Assessment  
                                 Distribution List  
                                 Map

## ENVIRONMENTAL ASSESSMENT DOCUMENT

### A. Project Identification:

**Applicant:** City of Wakefield  
**Project No.:** D311657  
**City:** Wakefield **County:** Dixon **State:** NE  
**Estimated Project Cost:** \$6,364,000

### B. Community Description:

**Location and Population:** Wakefield is located in northeastern Nebraska, on State Highway 35. The population of Wakefield is 1,451 according to the 2010 census, which has slightly increased over the past decade.

**Current Water System Facilities:** The PWS consists of four municipal wells that pump to an iron/manganese treatment plant, an elevated 600,000 gallon water storage tower, and a distribution system. Through regular monitoring it is documented that Wakefield's water supply is acceptable, presently meeting all drinking water standards.

**C. Project Description:** In June 2020, a Water Treatment Facility Evaluation report of the proposed project was completed by the City's Engineer. However, the water treatment plant (WTP) is approaching 80 years in age, and due to structural concerns noted in a recent sanitary survey, with the simple need to ensure an adequate supply of safe drinking water on a continuous basis, a requirement of DHHS regulations, the City has determined the need to replace the WTP. In general, the same treatment methods to remove iron and manganese from the water supply will be used, aeration and filtration, including though current technologies to optimize chemical feed processes and improve backwashing controls. Lastly, the City is considering an upgrade of its water service meters to a radio-read system.

### D. Alternatives Considered:

Three alternatives were considered, including:

1. Treatment with pressure filters to remove iron and manganese, at four different sites; or
2. Treatment with gravity filters, at three different sites; and
3. Whether water service meters need to be upgraded.

**Evaluation and Selection of the Alternative:** Alternative 1, replace the existing WTP with a similar treatment process, aeration and pressure filtration. This option will allow the City to increase its water treatment capacity and operate the process more efficiently. This will include optimizing the chemical feed systems and filter backwashing improvements to significantly

reduce the current wasting by the current direct discharge process. Alternative 2, switching to a gravity filter treatment process was evaluated, but it was determined that the City's system layout is not advantageous, and would result in the need of a second storage basin, underground. As a result, at 3 of the 4 proposed WTP sites evaluated, it was estimated to be more expensive. Thus, Alternative 1 was recommended for the City at Site No. 3.

Alternative 3, upgrade to radio-read water service meters. The City currently replaces water meters when they cease to function, with approximately 20 to 25 replaced annually. It was evaluated whether a system changeover to radio read meters should be completed. There is increased capital cost with a changeover, but operation costs are significantly reduced in the reading of meters remotely. This alternative will be further evaluated, as Wakefield proceeds in constructing Alternative 1.

## **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. Review and approval for a construction permit will be required from the Engineering Services Program of the DHHS.

**Environmental:** The construction contracts will require that the contractors return the area to its original or better condition. The new WTP will occupy a relatively small area of land (~6,000 square feet) and will have little, if any effect on area species as all infrastructure improvements are within the jurisdictional limits of Wakefield, situated in areas previously disturbed. Based on a review of the available mapping, the WTP is proposed in an area protected from flooding by a levee. Repairs to that levee will be made in the fall of 2020, and the process for a levee reclassification or it being re-accredited will subsequently be made with the U.S. Army Corps of Engineers. As part of the final design, it will be assessed whether the proposed WTP will need to be raised 3 feet following those efforts.

The proposed project was reviewed by numerous Federal and State agencies for environmental impacts. The only notable response was from the Nebraska Game and Parks Commission which stated it would be unlikely that the project as described would have an adverse impact. The U.S. Army Corps of Engineers noted that a Section 404 permit would be needed if there would be placement of fill in Waters of the U.S., but those issues can be avoided during project design.

**Financial:** An application and revised report for a DWSRF loan has been received for \$6,364,000 to fund the WTP and meter system improvements. The City qualifies for a 30-year loan with an interest rate of 1.5% plus an administrative fee of 0.5% on the outstanding principal balance assessed annually. The community is also eligible for 20%

forgiveness assistance. Therefore, with 80% of the borrowed amount needing to be repaid, the projected annual DWSRF Debt Service (including 10% coverage) is estimated at \$260,323. The revenues from City's water utility will be dedicated to repay the loan. From a review of estimated costs, it is possible that monthly water rates will be raised \$37, with estimates done for City being between \$30 and \$32. Based on current rates, the typical total residential user monthly water bill would possibly increase up to \$61 per month; however, following construction, Wakefield will make a final assessment of revenues and cost to determine what rate adjustments are necessary.

### **Secondary:**

**Population Impacts:** The purpose of the project is to replace a significantly aged WTP. While meeting maximum day demands at the design year, the new WTP will be reasonably sized for growth of its existing users.

**Land Use and Trends:** The new WTP will be located within the jurisdictional limits of Wakefield, situated in areas previously disturbed. All new water mains will be placed below ground at depths that will not interrupt any planned practices. The Nebraska State Historic Preservation Office indicated a determination of "no historic properties affected" is appropriate for the proposed project.

**Environmental:** The project will have no effect on the availability of water quantity in the area. The minimal amount of solid waste generated by the project will be disposed in a licensed landfill. No safety, vibration, noise or aesthetic considerations were identified other than the normal noise and disruptions associated with building and water main construction.

**Environmental Justice:** The project will not produce any environmental justice concerns. All structures will be placed in areas previously disturbed or on City owned property, and the services provided by the project will be available to everyone in Wakefield, equally. No segment of the community's population is 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. Traffic flow may be affected by construction when water main construction is being done along the City road right-of-ways; however, safety control measures (i.e., signs, etc.), if needed, will be implemented. A National Pollutant Discharge Elimination (NPDES) Construction Stormwater permit for runoff associated with construction activity and a Stormwater Pollution Prevention Plan will be required by NDEE for this project. The City can designate the General Contractor as the authorized representative on the stormwater permit notice of intent submitted to the NDEE. Authorization of stormwater runoff from the construction activity must be in place prior to commencing construction.

**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 Insure Environmental Soundness:**

**Public Involvement:** A Public Hearing was held on June 10, 2020 by the City on the proposed project, with 34 days advanced posted notice. A presentation was made by the Engineer's project manager on the scope of the project and likely impact to water rates.

**Public Opposition or Opinions:** Two residents of the community in attendance spoke in favor of the projected water rate increases, and no other input was received from the public.

**Coordination and Documentation with Other Agencies and Special Interest Groups:**

**Facility Planning:** Water Treatment Facility Evaluation, City of Wakefield, NE, Olsson Associates, Revised June, 2020

**Federal:** U.S. Department of the Army, Corps of Engineers, June 4, 2020, letter

**State:** Nebraska Department of Health and Human Services, May 2, 2017, letter  
Nebraska Game and Parks Commission, May 21, 2020, letter  
Nebraska State Historical Society, May 18, 2020, letter

**Local:** Lower Elkhorn Natural Resources District, May 7, 2020, email

**Consulting Engineers:** Olsson Associates, Lincoln, NE

**Public Groups:** City of Wakefield Residents

**G. Positive Effects to be Realized from the Proposed Project:** The project will allow Wakefield to maintain compliance with the Nebraska Safe Drinking Water Act and ensure future water availability. As such, the project is considered reasonable, not contrary to conservation or the public welfare and is a beneficial use of resources by the City of Wakefield.

**H. Reasons for Concluding there will be no Significant Impacts:** Review of the facility evaluation report and supporting information indicates that the project will result in no significant impact on the environment. State agencies reported no impact will result to threatened and endangered species or historical resources. All necessary permits for construction will be obtained from the appropriate agencies (i.e., NDEE, etc.), if necessary.



Reviewing Engineer

June 23, 2020

Date

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LOCAL NEWSPAPER  
(Public Information Only not for Public Notice)  
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