



DEPT. OF ENVIRONMENT AND ENERGY

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: Well Pump, Well House, Distribution Main and Water Meters
APPLICANT: City of Hay Springs, Nebraska
COUNTY: Sheridan County
POPULATION: 570
DWSRF PROJECT NUMBER: D311653
TOTAL PROJECT AMOUNT: \$377,300
PROPOSED DWSRF LOAN AMOUNT: \$301,840
PROPOSED DWSRF FORGIVENESS AMOUNT: \$75,460

The City of Hay Springs 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 Hay Springs ranked as a low priority and is included on the Planning List in the DWSRF State Fiscal Year 2021 Intended Use Plan. Funding can be provided to the Hay Springs in accordance with the Intended Use Plan's bypass criteria, as the January 1, 2021 bypass date has passed.

Hay Springs is located in Sheridan County in northwest Nebraska, twenty miles southeast of Chadron at the junction of State Highways 20 and 87. The community has a population of 570 according to the 2010 census. Hay Springs 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 January 2011, a Preliminary Engineering Report completed by the City's engineer evaluated the City's current needs for water supply and distribution system improvements. The PWS currently consists of three municipal supply wells (Nos. 2011-1, 92-1, & 94-1), a 100,000 gallon capacity water tower, and a distribution system.

The purpose for the project is to address the pumping capacity of the existing municipal supply wells. Well No. 2011-1 was installed and placed into service in 2013 to replace a failed backup well and provide sufficient pumping capacity to meet peak demands. Well No. 2011-1 did not develop sufficiently to produce water at the design rate of 200 gallons per minute (gpm) following construction. Rather, production from Well No. 2011-1 is 75 gallons per minute. The proposed project will include construction of a new transmission main from the distribution system to a well drilled in the early 1990s. This well did not produce design flows following construction and has remained unused, but recent test pumping of the well indicates satisfactory production. Construction will include a well pump, well house, and replacement of water meters that are nearly 30 years old. The drinking water source will be able to meet the maximum day demand with the largest well out of service. The improvements will assure that the City can provide an adequate supply of safe drinking water to Hay Springs' residents on a continuous basis, a requirement of DHHS regulations.

The proposed project was reviewed by numerous Federal and State agencies for environmental impacts. Nebraska Game and Parks Commission (NGPC) stated that the project, as described, is unlikely to have an adverse impact on resources within the agency's areas of concern, including state-listed threatened and endangered species, fish and wildlife resources and their habitats, or NGPC properties. Nebraska State Historic Preservation Office issued a 'no historic properties affected' determination. Nebraska Department of Natural Resources (NeDNR) indicated no existing or proposed jurisdictional dams, registered groundwater wells, stream gages, or surface water rights within the proposed project area. NeDNR did indicate the proposed project is located within a regulated floodplain and/or floodway. The Nebraska Natural Resources Conservation Service responded with no comment on the project.

The City is eligible for a 30-year loan with interest and fee rates of 0.0 % and 20% forgiveness assistance. The revenues from Hay Springs' water utility will be dedicated to repay the loan. The projected annual DWSRF Debt Service (including 10% coverage) is \$11,067. From a review of estimate costs, it is estimated that monthly water rates may need to be raised \$2.79. The typical monthly residential water bill would increase to approximately \$41.29 per month based on 5,000 gallons of water use, based on current rates.

A Public Hearing was held on October 13, 2020 by the City on the proposed project, with 41 days advanced posted notice. A presentation was made by the Engineer's project manager on the scope of the project. There were no comments noted in the hearing minutes from City residents and there was discussion from the Council.

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.). Consequently, a preliminary decision has been made that an Environmental Impact Statement will not be prepared.

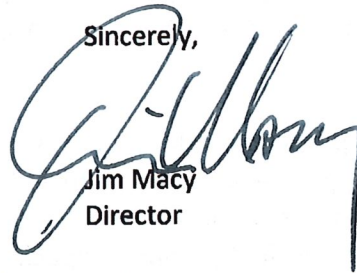
The system last underwent a routine sanitary survey by DHHS in May of 2019, wherein two significant deficiencies and several minor deficiencies were identified. The significant deficiencies

identified in the May 2019 sanitary survey were corrected within three months and the minor deficiencies corrected as of May 2020. 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, below the allowable 11 per issued U.S. Environmental Protection Agency guidance.

This action is taken on the basis of a careful review of the Environmental Assessment, the Funding Project 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 Cyril Martinmaas at 402 471-0513 or email cyril.martinmaas@nebraska.gov of DHHS, or Sarah Frey at 402 471-4266 or email sarah.frey@nebraska.gov of the Planning and Aid Division of NDEE.

Signed this 19th day of March, 2021

Sincerely,



Jim Macy
Director

Attachments: Environmental Assessment
 Distribution List
 Map

ENVIRONMENTAL ASSESSMENT DOCUMENT

A. Project Identification:

Applicant: City of Hay Springs

Project No.: D311648

City: Hay Springs **County:** Sheridan **State:** NE

Total Project and DWSRF Loan Amount: \$377,300

B. Community Description:

Location and Population: Hay Springs is located in Sheridan County in northwest Nebraska, twenty miles southeast of Chadron at the junction of State Highways 20 and 87. The community has a population of 570 according to the 2010 census.

Current Water System Facilities: In January 2011, a Preliminary Engineering Report completed by the City's engineer evaluated the City's current needs for water supply and distribution system improvements. The PWS currently consists of three municipal supply wells (Nos. 2011-1, 92-1, & 94-1), a 100,000 gallon capacity water tower, and a distribution system.

- C. Project Description:** The purpose for the project is to address the pumping capacity of the existing municipal supply wells. Based on the 2011 Preliminary Engineering Report, Well No. 2011-1 was constructed and placed into service in 2013 to replace a failed backup well, and provide sufficient pumping capacity to meet peak demands. Well No. 2011-1 did not develop sufficiently to produce water at the design rate of 200 gallons per minute (gpm). Rather, production from Well No. 2011-1 is closer to 75 gpm. The proposed project will include construction of a new transmission main from the distribution system to a well drilled by the City in the early 1990s. This well did not produce design capacity following construction and has remained unused, but recent redevelopment of the well has resulted in good production during test pumping (100 gpm). Additionally, construction will include a well pump, well house, and replacement of water meters that are nearly 30 years old. The drinking water source will be able to meet the maximum day demand with the largest well out of service. The improvements will assure that the City can provide an adequate supply of safe drinking water to Hay Springs' residents on a continuous basis, a requirement of DHHS regulations.

D. Alternatives Considered:

Two alternatives were considered to replace the lost production from the failed well in the 2011 preliminary engineering report, including:

1. Repair of the existing well; or

2. Construction of a new well in a new location.

Evaluation and Selection of the Alternative: Alternative 1, repair of the existing well, was evaluated following camera inspection of the well. Alternative 1 disadvantages included repair to a well in rather poor condition, reliance on the integrity of the original casing which could damage the replacement casing and screen if it fails catastrophically, and possible voids adjacent to the existing casing evidenced by pumped sand over the life of the well. A smaller drop pipe and pump would result in lower production. Alternative 1 cost was less than Alternative 2. Alternative 2, a new well in a new location, has the advantage of a well that meets current construction standards, maximizing the water yield and minimizing the amount of sand produced, as well as addressing any possible concerns with grouting of the existing well. Alternative 2 had the disadvantage of being more costly. Alternative 2 was selected, Well No. 2011-1 was constructed in 2013, and, as stated earlier, failed to produce the design rate of 200 gpm.

In 2018, the City's engineer began correspondence with the Department investigating the option of utilizing a well drilled in the 1990's to make up for the production not realized in Well No. 2011-1. The proposed well did not produce sufficient quantity following construction in the 1990's, but recent test pumping at 100 gpm for 24 hours did not result in any drawdown in the well. In 2019, in order to gain acceptance of the well construction in substantial conformance with regulation revisions since the well was constructed, a cement bonding log was completed to confirm the annular space around the well casing did not contain voids and a test hole was drilled near the well to verify the screen and well pack design. The cement bonding log did not indicate voids in the grout, the test hole formation samples confirmed the gravel pack and screen design were within recommended ranges, and screen entrance velocities were also within the recommended range for a design production of 150 gpm. Based on this data, the City has decided to go forward with connection to the well along with replacement of 30-year-old water meters within the City.

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. A well site inspection and well site approval is required from DHHS prior to construction of the well. A well site inspection in 2017 indicated a stock tank well within the 1,000 foot setback of the proposed well. The City's engineer will need to demonstrate that the stock well will not present a pollution hazard to the proposed well or interfere with the ability of the well to produce a consistent supply of potable water before a construction permit is issued. A full well scan for drinking water contaminants from the proposed well will be required prior to approval of plans

and specifications for the project. 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 well house and well will occupy a very small area of land (<2,000 square feet) and will have little, if any, effect on area species as all infrastructure improvements are along a right-of-way or on areas presently farmed.

The proposed project was reviewed by numerous Federal and State agencies for environmental impacts. Nebraska Game and Parks Commission (NGPC) stated that the project, as described, is unlikely to have an adverse impact on resources within the agency's areas of concern, including state-listed threatened and endangered species, fish and wildlife resources and their habitats, or NGPC properties. Nebraska State Historic Preservation Office issued a 'no historic properties affected' determination. Nebraska Department of Natural Resources (NeDNR) indicated no existing or proposed jurisdictional dams, registered groundwater wells, stream gages, or surface water rights within the proposed project area. NeDNR did indicate the proposed project is located within a regulated floodplain and/or floodway. The local floodplain administrator will be contacted regarding the construction. Construction will be required to be completed in accordance with requirements for upper terminal well construction requirements in regards to flood elevations. The Nebraska Natural Resources Conservation Service responded with no comment on the project.

Financial: An application for a DWSRF loan has been received for \$377,300 to fund the system improvements. The City is eligible for a 30-year loan with interest and fee rates of 0.0 % and 20% forgiveness assistance. The revenues from Hay Springs' water utility will be dedicated to repay the loan. The projected annual DWSRF Debt Service (including 10% coverage) is \$11,067. From a review of estimate costs, it is estimated that monthly water rates may need to be raised \$2.79. The typical monthly residential water bill would increase to approximately \$41.29 per month, based on 5,000 gallons of water use, based on current rates.

Secondary:

Population Impacts: The purpose of the project is to address the pumping capacity of the existing municipal supply wells. The new well will provide the City with sufficient groundwater source capacity to meet maximum day demand with its largest well out of service, in the event one of the existing wells is taken out of service. The capacity will meet the needs of the existing population of 570 residents and any reasonable growth in population.

Land Use and Trends: The well location is roughly 1,000 feet south of the City limits along Line Street. The transmission main will run along the street right-of-way and connect to the City's distribution system at South 3rd Street. The well site has been inspected by the DHHS and an unregistered stock well located 770 feet NNE of the well is within the 1,000 foot setback requirement. Funding of construction of the new well is contingent on approval of the well site by DHHS and an engineering evaluation of any impact the stock well may have on the proposed well will be required. All new water mains will be placed below ground at depths that will not interrupt any planned practices. The Natural Resources Conservation Service was contacted via mailing and responded stating they had no comment on the proposed project.

Environmental: The project should have no effect on the availability of water quantity in the area, as the existing well is being sited to meet NDNR and DHHS setback criteria with the exception of the unregistered stock well. It is unlikely that the engineering evaluation of the impact of the stock well, nearly 800 feet away, will find any adverse effect on the proposed well. 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 well 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 through farming or now on City owned property and the services provided by the project will be available to everyone in Hay Springs, 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 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 if more than one acre of land is disturbed. 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 Ensure Environmental Soundness:

Public Involvement: A Public Hearing was held on October 13, 2020 by the City Council on the proposed project, with 41 days advanced posted notice. A presentation was made by the Engineer's project manager on the scope of the project, likely impact to water rates, and results of the environmental consultation process.

Public Opposition or Opinions: There were no comments received from City residents in attendance and no other input was noted from the public.

Coordination and Documentation with Other Agencies and Special Interest Groups:

Facility Planning: Preliminary Engineering Report for the Hay Springs Water System, City of Hay Springs, NE, Baker & Associates, Consulting Engineers, January, 2011

Tech Memo, Village of Hay Springs, Nebraska – Hanks Well; Verification of Well Design, Baker & Associates, Consulting Engineers, July 2019

Federal: U.S. Department of the Army, Corps of Engineers, June 19, 2020, letter

U.S. Fish & Wildlife Service, June 19, 2020, letter

National Park Service, June 19, 2020, letter

Tribal: Fort Peck Tribal Executive Board, June 19, 2020, letter

State: Nebraska Department of Health and Human Services, June 19, 2020, letter

Nebraska Department of Natural Resources, June 19, 2020, letter

Nebraska Game and Parks Commission, June 19, 2020, letter

Nebraska State Historical Society, June 19, 2020, letter

Nebraska Natural Resources Conservation Service, June 19, 2020, letter

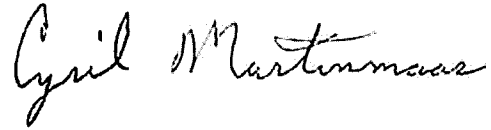
Consulting Engineers: Baker & Associates, Consulting Engineers, Scottsbluff, NE

Public Groups: City of Hay Springs Residents

G. Positive Effects to be Realized from the Proposed Project: The project will allow Hay Springs to maintain compliance with the Nebraska Safe Drinking Water Act and ensure future water availability. Test hole geological logs and cement bond logging results indicate that the existing well should meet all drinking water standards per Title 179, Regulations Governing Public Water Supply Systems. 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 Hay Springs.

H. Reasons for Concluding there will be no Significant Impacts: Review of the design summaries and supporting information indicates that the project will result in no

significant impact on the environment. Federal and State agencies reported no impact will result to threatened and endangered species, historical, farming, or groundwater resources. All necessary permits for construction will be obtained from the appropriate agencies (i.e., NDEE, etc.), if necessary.



Reviewing Engineer

March 16, 2021

Date

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Scottsbluff, NE 69361

LOCAL NEWSPAPER
(Public Information Only not for Public Notice)
Sheridan County Journal Star
400 N Main Street
Gordon, NE 69343

UPPER NIOBRARA-WHITE NATURAL RESOURCES
DISTRICT
Patrick O'Brien, Manager
530 E 2nd Street
Chadron, NE 69337-2433



HANKS WELL SITE
HAY SPRINGS, NEBRASKA
Not to Scale

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