



# 2021 Invitation for Source Water Grant Proposals

The Nebraska Department of Environment and Energy (NDEE) is inviting proposals for source water protection projects. Funding is authorized through section 1452 of the Safe Drinking Water Act as administered by the U.S. Environmental Protection Agency, the NDEE and the Nebraska Department of Health and Human Services.

These funds are a potential source of support for drinking water protection projects in Nebraska. Program overview, grant process, general program information, funding priority, project requirements and format are outlined in the attached guidance.

Project proposals will be reviewed by staff at NDEE, Nebraska Health and Human Services, and representatives of other organizations. Projects recommended by the reviewers will be forwarded to the Director of NDEE for approval.

Any questions you may have regarding this invitation may be submitted to the Source Water Coordinator at the address below. Questions will be answered directly and then immediately posted on the NDEE website for reference.

Proposals must be submitted to the NDEE office in Lincoln by 5:00 PM Wednesday July 14, 2021.

# **Table of Contents**

2021 Invitation for Source Water Grant Proposals	1
QUICK REFERENCES:	
SOURCE WATER GRANT PROGRAM OVERVIEW	
PROPOSAL FORMAT AND REQUIRED INFORMATION	
EXAMPLE BUDGET FOR NDEE SOURCE WATER PROTECTION GRANT PROJECT	
DRINKING WATER PROTECTION MANAGEMENT PLAN FACT SHEETS	
NDEE GUIDANCE FOR DRINKING WATER PROTECTION MANAGEMENT PLANS – EPA'S NINE ELEMENTS	12

# **QUICK REFERENCES:**

- EPA's 9 Elements required in a Drinking Water Protection Management Plan
  - https://www.epa.gov/sites/production/files/2015 09/documents/2008 04 18 nps watershed handbook handbook-2.pdf
- EPA's Subaward Policy
  - https://www.epa.gov/grants/grants-policy-issuance-gpi-16-01-epa-subaward-policy-epa-assistance-agreement-recipients
- Reimbursement request forms
  - http://dee.ne.gov/Publica.nsf/pages/WAT087
- Community-based planning process
  - http://dee.ne.gov/publica.nsf/pages/WAT120
- Required elements of a Wellhead Protection Plan
  - o <a href="http://dee.ne.gov/NDEQProg.nsf/OnWeb/WHPA">http://dee.ne.gov/NDEQProg.nsf/OnWeb/WHPA</a>
- NDEE Source Water Coordinator contact info
  - o Tatiana Davila, Hydrogeologist, Wellhead Protection Coordinator
  - o <u>tatiana.davila@nebraska.gov</u>
  - o 402-471-3376

# SOURCE WATER GRANT PROGRAM OVERVIEW

Funding under section 1452 of the Federal Safe Drinking Water Act

ESTIMATED ANNUAL FUNDS	\$100,000+		
ELIGIBLE APPLICANTS	Political subdivisions in Nebraska that operate a public water systems serving a population of 10,000 or less that can show financial hards.  Hardship eligibility criteria:  MHI (Median Household Income) of the political subdivision population must be less or equal to 120% of the statewide reported in the 2012-2016 ACS five-year estimate of \$54,330.  Applicants that don't meet the hardship eligibility may subfinancial hardship report to the Department for additional consideration justifying the grant request.  To obtain your MHI contact Tatiana Davila at 402-471-3376 or tatiana.davila@nebraska.gov		
GENERAL PROJECT REQUIREMENTS	<ul> <li>Projects must focus on the protection of Nebraska public drinking water sources, not operation and maintenance of the system or water treatment.</li> <li>Projects must include activities in one or more of the three categories: water quality, water quantity, and/or water public education.</li> <li>Projects must have a good potential for success (i.e., tasks must yield measurable improvement in water quality, reduction of water use, increased resource reliability, citizen knowledge and/or behaviors, etc.).</li> <li>Commitment must be demonstrated by the public water system and local government to develop, implement, support, and sustain a local protection program after funding is received.</li> <li>On-the-ground activities must take place within existing wellhead protection areas, source water protection areas, designated future wellhead protection areas, or the associated area served by the community Public Water Supply System.</li> <li>At least a 10% non-federal match to the total project cost is required. For example: a project totaling \$20,000 will receive \$18,000 in grant funds and would have a requirement of \$2,000 in match. Match can be in-kind and/or cash.</li> </ul>		

ELIGIBLE ACTIVITIES	<ul> <li>Projects that provide long-term benefits to drinking water quality, quantity, and/or education.</li> <li>Contaminant source identification – research / investigation.</li> <li>Contaminant pathway removal – includes the closure of abandoned or unused wells.</li> <li>Contaminant removal – pollution prevention and waste reduction.</li> <li>Contaminant source management – implementation of best management practices (BMPs), ordinance development, and implementation of a Source Water or Wellhead Protection Plan.</li> <li>Information and education sharing – workshops, brochures, meetings, and media campaigns.</li> <li>Development of a Drinking Water Protection Management Plan which is an alternative to 9-element watershed management plans. These plans will focus on wellhead protection areas. Plans must address implementable groundwater best management practices. (For additional information please refer to the Fact Sheet below).</li> </ul>
INELIGIBLE ACTIVITIES	<ul> <li>Activities related to the operations and maintenance of drinking water systems including: treatment, transmission, distribution, consolidation or storage.</li> <li>Land purchases.</li> <li>Projects that only develop a traditional Source Water or Wellhead Protection Plan and do nothing toward implementation of the plan; these plans should not be confused with a Drinking Water Protection Management Plan.</li> <li>Projects requesting only personnel expenses.</li> <li>Projects geared towards the security aspect of Source Water, such as security fencing and cameras.</li> </ul>
FUNDING PRIORITY	<ul> <li>Prioritization will be given for the following status/activities:</li> <li>Developing phase one or two of a Drinking Water Protection Management Plan.</li> <li>Projects where activities will be sustained beyond the term of the grant.</li> <li>Projects implementing on-the-ground management activities.</li> <li>Projects addressing nitrate contamination/loading.</li> <li>Public Water Supply Systems that have a NDEE-approved Wellhead or Watershed Protection Plan and/or are a designated Groundwater Guardian.</li> </ul>

	<ul> <li>Projects that focus on community education and awareness about how to protect and improve the local drinking water source.</li> </ul>
DRINKING WATER PROTECTION MANAGEMENT PLANS	Drinking Water Protection Management Plans are an alternative to 9-element watershed management plans. These plans will be specific to Wellhead Protection Areas and/or defined future WHP areas and must develop implementable groundwater best management practices (BMPs). The purpose of this plan is to provide an analytic framework for managing efforts to restore and protect a community's drinking water. With the approval of this plan by EPA, communities will be eligible to apply for Clean Water Act section 319 Nonpoint Source Program grants to assist in the implementations of these management practices.  *Detailed information about DWPMPs can be found in Fact Sheet Below*
	Applicants that receive funding must adhere to EPA's Subaward Policy, CFR §200.320, which states that procurement of services or supplies of more than \$3,000 must obtain price or rate quotations from at least three qualified sources. It is <a href="https://www.epa.gov/grants/grants-policy-issuance-gpi-16-01-epa-subaward-policy-epa-assistance-agreement-recipients">https://www.epa.gov/grants/grants-policy-issuance-gpi-16-01-epa-subaward-policy-epa-assistance-agreement-recipients</a>
	<ul> <li>Project areas include:</li> <li>Wellhead protection areas - groundwater systems,</li> <li>Officially designated future wellhead protection areas, and</li> <li>Populations served by the community Public Water Supply System.</li> </ul>
REQUIRED MATCH	10% of Total Project Cost

TIMELINE	July 14, 2021 Proposals, including a DUNS number, must be received at the NDEE Lincoln office by 4:00 PM of this due date.  August 2021 Proposals are reviewed by committee.  September 2021 Projects selected and sponsors notified. Funding is made available to begin projects pending approval of a final Work Plan and finalization of a funding agreement.  September 2021 Projects may start no earlier than September 1, 2021 as all project funding is dependent on NDEE's receipt of the EPA Capitalization Grant. Contracts will not be signed prior to NDEE receiving funds.			
APPLICATION DEADLINE	Wednesday, July 14, 2021 - 5:00pm			
SUBMITTAL PROCESS	Hand deliver, mail, or email a PDF to:  Email:  ndeq.records@nebraska.gov  Deliver:  245 Fallbrook Blvd Lincoln, NE 68521  Mail:  PO Box 98922 Lincoln, NE 68509-8922			

# PROPOSAL FORMAT AND REQUIRED INFORMATION

The following format and information is required for all proposals. Failure to use this format or to furnish the information requested may disqualify the proposal from funding consideration.

### **General Format**

- Not to exceed 10 pages (including Title Page, Project Description, and Project Area Map);
- Formatted for 8.5" X 11" paper
- Use 10 pt or larger type with single-spaced sentences, double spaced paragraphs, and 1" margins.
- Include DUNS number.

# 1) Title Page (one page)

- a) Project Title (if developing a Drinking Water Protection Management Plan, please incorporate into title).
- b) Project's Primary Sponsor: Organization name, address, telephone number, web-site (if applicable), DUNS number.
- c) Project Manager: Name of contact person, address if different from above, telephone number, and email address.
- d) Project's Co-sponsors: Names of co-sponsoring organizations (if applicable).
- e) Funds requested and match offered.
- f) Project Area.
- g) Project Period: Initial month/year final month/year (not to exceed 2 years).
- h) Signatory: The individual <a href="https://example.com/having-signatory-authorization-must">https://example.com/having-signatory-authorization-must</a> include a statement authorizing the project in the cover letter of the application. This can read as follows: I certify that the applicant has authority to undertake or participate in the proposed project.

### 2) Project Description

- a) Introduction/Background Information
  - i) Provide a brief historical perspective and justification for the project.
  - ii) Define the nature and extent of the need(s) to be addressed.
  - iii) Describe other activities ongoing or planned in the project area that relate to water quality, water quantity, and/or public education.

# b) Project Objectives

List objectives and describe what is expected to be accomplished during the period of the project.
 Objectives must relate to the identified water quality, quantity, or educational deficiencies and reflect progress in resolving those deficiencies.

# c) Project Tasks

- i) Describe specific source water protection actions proposed to be implemented within the scope of the grant. Tasks must be related to specific project objectives
- ii) Detail the information and education activities that are planned before, during, and after project implementation.
- iii) Include in the proposal how public and stakeholder participation is included in project planning, design, and implementation.
- iv) Describe the method of evaluation that will be used to determine project effectiveness. The evaluation approach must be tailored to the specific project and will be based on factors such as the project's size and objectives.
- v) \*\*If proposing to develop a Drinking Water Management Plan please include detail regarding how you will complete plan expectations described on attached "Drinking Water Management Plan Fact Sheet".

# d) Partnerships

 Identify the roles and responsibilities of organizations and groups involved in the proposed project regardless of funding source. The NDEE strongly recommends that a project team be assembled to involve the appropriate organizations and stakeholders in planning the project and preparing the project proposal.

# e) Project Costs/Funding Sources

i) Provide a detailed budget for each major task or work element of which requested grant funds or match funds will be allocated. Use the categories as listed in the attached example and blank budget forms. These forms are also available electronically at the NDEE website under the blank reimbursement request forms: http://dee.ne.gov/Publica.nsf/pages/WAT087

# 3) Project Area Map (one page)

a) Provide a map of the wellhead protection area. If unsure whether the map you have is the most current, contact NDEE at (402) 471-3376.

# 4) Budget Summary Table (one page)

a) The cost of the entire project must be defined and broken out by grant funds and matching funds in the included budget table. When including matching funds, the value of the cash and in-kind match may be combined in the budget although other federal funds may not be used to meet the 10% required match. Indirect costs will not be allowed. See Below for example

# EXAMPLE BUDGET FOR NDEE SOURCE WATER PROTECTION GRANT PROJECT

Activity	Grant Funds	Matching Funds	Total
Personnel			
Water Operator	\$5,000	\$0	\$5,000
NRD Program Manager	\$0	\$3,000	\$3,000
Travel			
Transportation	\$0	\$300	\$300
Lodging	\$435	\$0	\$435
Meals	\$0	\$210	\$210
Material & Supplies			
Brochures	\$0	\$200	\$200
Equipment*			
Pump with control	\$5,500	\$0	\$5,500
Contractual			
Well Abandonment	\$2,000	\$0	\$2,000
Implementation			
Water conservation rebates	\$3,000	\$0	\$3,000
Other			
Conference registration	\$0	\$400	\$400
TOTAL	\$15,935 (~80%)	\$4,110 (~20%)	\$20,045

<sup>\*</sup>Equipment is defined as tangible, nonexpendable, personal property having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit.

# DRINKING WATER PROTECTION MANAGEMENT PLAN FACT SHEETS

# **Drinking Water Protection Management Plan Fact Sheet Part 1: Plan Requirements**

The following expectations will be required in order for the Drinking Water Protection Management Plan to be approved by NDEE:

- ✓ Meet EPA's alternative to a 9-element watershed management plan elements
  - o Identification of the causes or sources of water quality problem;
  - Wellhead Protection area goal(s) and explanation of how the proposed project(s) will achieve or make advancements towards achieving water quality goals;
  - Schedule and milestones to guide project implementation;
  - Proposed management measures such as activities which can reduce water contamination (including how the activities will be maintained) and explanation of how these measures will effectively address the water quality problems identified above.
     This would include strategically selected types and locations of implementable "on-theground" Best Management Practices; and
  - Monitoring component that will evaluate the effectiveness of the management practices. (e.g., soil sampling, vadose sampling, water sampling)

For a detailed scope of these criteria, refer to the *Handbook for Developing Watershed Plans to Restore and Protect Our Waters:* <a href="https://www.epa.gov/sites/production/files/2015-09/documents/2008-04-18">https://www.epa.gov/sites/production/files/2015-09/documents/2008-04-18</a> nps watershed handbook handbook-2.pdf

- ✓ Area to include the 50 year time-of-travel based on a three-dimensional groundwater model approved by NDEE-WHP program. Contact Tatiana Davila at (402) 471-3376 or tatiana.davila@nebraska.gov for requirements and approval procedures.
  - Complete a scoping meeting with stakeholders, project sponsors, and NDEE to ensure all the most accurate and current data is used in the modeling process.
- ✓ Community based planning process for the development of the plan is required. Please refer to Community-Based Watershed Management Planning Guidebook: http://dee.ne.gov/publica.nsf/pages/WAT120.
- ✓ Strong implementable Information and Education program.
- ✓ Must contain all required elements of WHP Plan to submit for state approved WHP Plan. http://dee.ne.gov/NDEQProg.nsf/OnWeb/WHPA for more information.
- ✓ Must meet NDEE approval criteria before final reimbursement
  - Complete draft plan submitted to NDEE for review at least two months prior to project completion and allow for one round of plan edits.

# **Drinking Water Protection Management Plan Fact Sheet Part 2: Plan Development**

# Using two Source Water Protection Grants to develop a Drinking Water Protection Management Plan

Because these plans include robust data collection, on-the-ground implementation goals, and community involvement, the scope of a Drinking Water Protection Management Plan (DWPMP) is more encompassing than most Source Water Grant projects. Developing a DWPMP plan is an intensive undertaking and is not appropriate for the needs of every community. NDEE will consider communities with a motivated stakeholder group and a thoroughly composed project implementation plan as the highest priority for Source Water Grant funding when considering DWPMPs. Listed below are the minimum criteria required for a DWPMP. Please note, each community's needs greatly vary and the project scope for each plan must reflect this. It is at the discretion of the stakeholder committee to decide which is most appropriate for that specific community.

#### Phase I

Timeframe - First Source Water Grant term [grant duration is 18 months to 2 years]

- Form a stakeholder committee, facilitate 2-3 stakeholder meetings
- Focus on data collection that would be needed for DWPMP (vadose sampling, installing monitoring wells, retrofitting wells for monitoring, etc.)
- Gauge and generate public interest for Source Water Protection
- Include a vulnerability assessment
- Final Product is an approvable Wellhead Protection Plan
- Stakeholders discuss interest on moving forward to develop a DWPMP

# Phase II

Timeframe – Second Source Water Grant term [grant duration is 18 months to 2 years]

- Groundwater modeling for a 50-year Wellhead Protection area map
- Conduct a Best Management Practices Workshop for local producers
- Continued public outreach with stakeholder committee formed during Phase I (at least 2 open house meetings throughout the duration of the Phase II project period)
- Draft and submit a DWPMP
  - Plan must include all elements of a Nine Element Watershed Plan. Details of each element are listed here: <a href="https://www.epa.gov/sites/production/files/2015-09/documents/2008-04-18">https://www.epa.gov/sites/production/files/2015-09/documents/2008-04-18</a> nps watershed handbook handbook-2.pdf

# NDEE GUIDANCE FOR DRINKING WATER PROTECTION MANAGEMENT PLANS – EPA'S NINE ELEMENTS

Since its inception in the 1990's, the NDEE Nonpoint Source Pollution (NPS) Program has prioritized the protection of groundwater but historically was not able to fund large groundwater projects with EPA funds without an approved Nonpoint Source Pollution Water Quality Plan. Nationally, the NPS/Section 319 program had always focused on surface water quality and funded large projects which qualified under an approved 9-element watershed plan. Starting in 2018, NDEE and EPA agreed to the development of Drinking Water Protection Management Plan (DWPMP)s as an alternative to a 9-element watershed plan. Since groundwater is almost exclusively the source of drinking water in the Nebraska, DWPMPs are primarily groundwater plans rather than surface water/watershed plans. Similar to 9-element plans, DWPMPs are reviewed by both NDEE and EPA R7 and if accepted, quality for large project funding through the Section 319 program. Because the plan is an alternative to a 9-element watershed plan and this is a unique, new opportunity for Nebraska and EPA R7, federal guidance documents do not yet include language that pertains to groundwater. However, all of the nine elements required for a Section 319 Watershed Plan must also be applied for groundwater projects (including calculation of load reductions required to meet water quality standards, load reductions expected from specific types and quantities of best management practices to reach those standards, and the expected timeline to reach goals, etc). The following guidance outline was taken from EPA's Handbook for Developing Watershed Plans to Restore and Protect Our Waters.

The entire document can be found here: <a href="https://www.epa.gov/sites/production/files/2015-09/documents/2008-04-18">https://www.epa.gov/sites/production/files/2015-09/documents/2008-04-18</a> nps watershed handbook handbook-2.pdf.

The handbook should be referred to during development of a DWPMP.

# Nine Minimum Elements to be Included in a Watershed Plan Using Section 319 Funds

a. Identification of causes of impairment and pollutant sources or groups of similar sources that need to be controlled to achieve needed load reductions, and any other goals identified in the watershed plan. Sources that need to be controlled should be identified at the significant subcategory level along with estimates of the extent to which they are present in the watershed (e.g., X number of dairy cattle feedlots needing upgrading, including a rough estimate of the number of cattle per facility; Y acres of row crops needing improved nutrient management or sediment control; or Z linear miles of eroded streambank needing remediation).

What does this mean?

Your DWPMP plan should include a map of the source water area that locates the major causes and sources of impairment. To address these impairments, you will set goals that will include (at a minimum) meeting the appropriate drinking water standards for pollutants that threaten or impair the public water system. This element will usually include an accounting of the significant point and nonpoint sources in addition to the natural background levels that make up the pollutant loads causing problems in the source water. The analytical methods may include mapping, modeling, monitoring, and field assessments to make the link between the sources of pollution and the extent to which they cause the water to exceed relevant drinking water standards.

b. An estimate of the load reductions expected from management measures.

What does this mean?

On the basis of the existing source loads estimated for element a, you will similarly determine the reductions needed to meet drinking water standards. You will then identify various management measures (see element c below) that will help to reduce the pollutant loads and estimate the load reductions expected as a result of these management measures to be implemented, recognizing the difficulty in precisely predicting the performance of management measures over time. Estimates should be provided at the same level as that required in the scale and scope component in paragraph a (e.g., the total load reduction expected for dairy cattle feedlots, row crops, or eroded streambanks). The estimate should account for reductions in pollutant loads from point and nonpoint sources as necessary to attain the applicable drinking water standards. (Chapters 8 and 9.)

c. A description of the nonpoint source management measures that will need to be implemented to achieve load reductions in paragraph 2, and a description of the critical areas in which those measures will be needed to implement this plan.

#### What does this mean?

The plan should describe the management measures that need to be implemented to achieve the load reductions estimated under element b, as well as to achieve any additional pollution prevention goals called out in the watershed plan (e.g., habitat conservation and protection). Pollutant loads will vary even within land use types, so the plan should also identify the critical areas in which those measures will be needed to implement the plan. This description should be detailed enough to guide implementation activities and can be greatly enhanced by identifying on a map priority areas and practices.

d. Estimate of the amounts of technical and financial assistance needed, associated costs, and/or the sources and authorities that will be relied upon to implement this plan.

# What does this mean?

You should estimate the financial and technical assistance needed to implement the entire plan. This includes implementation and long-term operation and maintenance of management measures, I/E activities, monitoring, and evaluation activities. You should also document which relevant authorities might play a role in implementing the plan. Plan sponsors should consider the use of federal, state, local, and private funds or resources that might be available to assist in implementing the plan. Shortfalls between needs and available resources should be identified and addressed in the plan.

e. An information and education (I/E) component used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the nonpoint source management measures that will be implemented.

## What does this mean?

The plan should include an I/E component that identifies the education and outreach activities or actions that will be used to implement the plan. These I/E activities may support the adoption and long-term operation and maintenance of management practices and support stakeholder involvement efforts.

f. Schedule for implementing the nonpoint source management measures identified in this plan that is reasonably expeditious.

## What does this mean?

You should include a schedule for implementing the management measures outlined in your plan. The schedule should reflect the milestones you are developing.

g. A description of interim measurable milestones for determining whether nonpoint source management measures or other control actions are being implemented. (Chapter 12.)

# What does this mean?

You'll develop interim, measurable milestones to measure progress in implementing the management measures for your plan. These milestones will measure the implementation of the management measures, such as whether they are being implemented on schedule, whereas element h (see below) will measure the effectiveness of the management measures, for example, by documenting improvements in water quality.

h. A set of criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made toward attaining drinking water standards.

### What does this mean?

As projects are implemented in the watershed, you will need water quality benchmarks to track progress. The criteria in element h (not to be confused with water quality criteria in state regulations) are the benchmarks or waypoints to measure against through monitoring. These interim targets can be direct measurements (e.g., nitrate concentrations in groundwater) or indirect indicators of load reduction (e.g. decreased violations, fewer incidences of a system being put on Administrative Order, etc.). You should also indicate how you'll determine whether your plan needs to be revised if interim targets are not met. These revisions could involve changing management practices, updating the loading analyses, and reassessing the time it takes for pollution concentrations to respond to treatment.

i. A monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the criteria established under item h immediately above.

### What does this mean?

The watershed plan should include a monitoring component to determine whether progress is being made toward attaining or maintaining the applicable drinking water standards. The monitoring program should be fully integrated with the established schedule and interim milestone criteria identified above. The monitoring component should be designed to determine whether loading reductions are being achieved over time and substantial progress in meeting drinking water standards is being made. Watershed-scale (or wellhead protection area) monitoring can be used to measure the effects of multiple programs, projects, and trends over time.