NEBRASKA NATURAL RESOURCES COMMISSION

Water Sustainability Fund

Application for Funding

Section A.

ADMINISTRATIVE

PROJECT NAME: Nebraska Water Leaders Academy

SPONSOR'S *PRIMARY CONTACT INFORMATION* **(Not Consultant's)**

Sponsor Business Name: Nebraska State Irrigation Association

Sponsor Contact's Name: Lee Orton

Sponsor Contact's Address: 1233 Lincoln Mall, #201, Lincoln, NE 68508

Sponsor Contact's Phone: (402) 476-0162

Sponsor Contact's Email: lee@h2oboy.net

1. **Funding** amount requested from the Water Sustainability Fund:

   Grant amount requested. $ 100,000

   - If requesting less than 60% cost share, what %? 41.35% ($100,000/$241,846)

   If a loan is requested amount requested. $ N/A

   - How many years repayment period? Click here to enter text.
   - Supply a complete year-by-year repayment schedule. Click here to enter text.

2. **Neb. Rev. Stat. § 2-1507 (2)**

   Are you applying for a **combined sewer overflow project**? YES☐ NO☒

   If yes:

- Do you have a Long Term Control Plan that is currently approved by the Nebraska Department of Environmental Quality? YES☐ NO☐
- Attach a copy to your application.
- What is the population served by your project?
- Provide a demonstration of need.
- **Do not complete the remainder of the application.**

3. **Permits Required/Obtained** Attach a copy of each that has been obtained. For those needed, but not yet obtained (box **"NO"** checked), 1.) State when you will apply for the permit, 2.) When you anticipate receiving the permit, and 3.) Your estimated cost to obtain the permit.

(N/A = Not applicable/not asking for cost share to obtain)
(Yes = See attached)
(No = Might need, don't have & are asking for 60% cost share to obtain)

G&P - T&E consultation (required)	N/A☒	Obtained: YES☐	NO☐
DNR Surface Water Right	N/A☒	Obtained: YES☐	NO☐
USACE (e.g., 404/other Permit)	N/A☒	Obtained: YES☐	NO☐
FEMA (CLOMR)	N/A☒	Obtained: YES☐	NO☐
Local Zoning/Construction	N/A☒	Obtained: YES☐	NO☐
Cultural Resources Evaluation	N/A☒	Obtained: YES☐	NO☐
Other (provide explanation below)	N/A☒	Obtained: YES☐	NO☐

4. **Partnerships**

List each Partner / Co-sponsor, attach documentation of agreement:
Water Futures Partnership

Identify the roles and responsibilities of each Partner / Co-sponsor involved in the proposed project regardless of whether each is an additional funding source.

Water Futures Partnership is a non-profit organization that has been created to provide financial assistance to Water Leaders Academy (Academy) and other educational programs.

5. **Other Sources of Funding**

Identify the costs of the entire project, what costs each other source of funding will be applied to, and whether each of these other sources of funding is confirmed. If not, please identify those entities and list the date when confirmation is expected. Explain how you will implement the project if these sources are not obtained.

The total cost of the Academy is $117,400/year or a total of $234,400 for 2 years. Sources of funding include tuition ($3,000 per participant estimated to be 16/year for a total of $48,000/year.), Water Futures Partnership of $10,000/year and NSIA $ 12,923/year. Other than the number of participants the funding is confirmed from the other sources.

6. **Overview**

In 1,000 words *or less*, provide a brief description of your project including the nature/purpose of the project and its objectives. Do not exceed one page!

The Academy has fostered the development of 206 leaders in the state for over 13 years. Participants gain first-rate leadership skills through a year-long program. This training helps them build consensus and work collaboratively on complex water issues. Representatives from a wide variety of organizations (NRDs, state government, federal government, University of Nebraska, Irrigation Districts, and private companies), as well as individuals, have completed the yearlong course. The Academy consists of six classroom and hands-on field tours all across Nebraska, from Omaha to Scottsbluff, and multiple locations in between. Each session consists of presentations by experts in a variety of fields which are brought to life by real world experience through tours and hands-on experiences. The program provides comprehensive water resources management knowledge. Some specific topics include flood control, ground water contamination and means of addressing it, wildlife management concerns and tourism benefits, such as sandhill crane migration, storm water, waste water and drinking water management and issues and integrated management planning processes. Also, in addition to presentations on specific topics, time is devoted to skills development in leadership and collaboration. Networking opportunities allow early to mid-career professionals from various fields, fostering a network of individuals dedicated to solving Nebraska's water challenges. With an emphasis cooperative approaches and innovative solutions, participants leave the Academy prepared to tackle future challenges effectively. Each year, the class splits into groups and works on group projects, based upon a predetermined list of topics provided to the NSIA by stakeholders from across the state. Since the beginning of the Academy, many group projects have been

completed, many of which were used in real-life applications to benefit water management and sustainability.

7. **Project Tasks and Timeline**

Identify what activities will be conducted to complete the project, and the anticipated completion date.
For multiyear projects please list (using the following example):

Tasks	Year 1$	Year 2$	Year 3$	Remaining	Total $ Amt.
Permits	$18,000				$18,000
Engineering		$96,000			$96,000
Construction		$87,000	$96,000		$183,000
Close-out				$8,000	$8,000
				TOTAL	$305,000

- What activities (Tasks) are to be completed.
- An estimate of each Tasks expenditures/cost per year.
- Activities in years 4 through project completion under a single column.

Each year six 2-day sessions are held beginning in January in Lincoln, then in Kearney in March, Omaha in May, Scottsbluff in July, Valentine in September and ending in Nebraska City in November.

	2026	**2027**
Income		
Tuition	16x3000= $48,000	16x3000= $48,000
WSF Grant	$50,000	$50,000
Funds from Water Future Partnership	$10,000	$10,000
Funds from NSIA	$12,923	$12,923
TOTAL	**$120,923**	**$120,923**
Expenses		
Room rentals; Meals; busses, etc.	$44,800	$44,800
Program management	$48,000	$48,000
UNL contract	$18,000	$18,000
Insurance; Student materials	$10,023	$10,023
TOTAL	**$120,923**	**$120,923**

8. **IMP**

Do you have an **Integrated Management Plan** in place, or have you initiated one? YES☐ NO☐ Sponsor is not an NRD☒

Section B.

DNR DIRECTOR'S FINDINGS

Prove Engineering & Technical Feasibility

(Applicant must demonstrate compliance with Title 261, CH 2 - 004)

1. Does your project include physical construction (defined as moving dirt, directing water, physically constructing something, or installing equipment)?
YES☐ NO☒

If you answered "YES" you must answer all questions in section 1.A.
If you answer "NO" you must answer all questions in section 1.B.

If "YES", it is considered mostly structural, so answer the following:

1.A.1 Insert a feasibility report to comply with Title 261, Chapter 2, including engineering and technical data;

1.A.2 Describe the plan of development (004.01 A);

1.A.3 Include a description of all field investigations made to substantiate the feasibility report (004.01 B);

1.A.4 Provide maps, drawings, charts, tables, etc., used as a basis for the feasibility report (004.01 C);

1.A.5 Describe any necessary water and/or land rights including pertinent water supply and water quality information (004.01 D);

1.A.6 Discuss each component of the final plan (004.01 E);

1.A.7 When applicable include the geologic investigation required for the project (004.01 E 1);

1.A.8 When applicable include the hydrologic data investigation required for the project (004.01 E 2);

1.A.9 When applicable include the criteria for final design including, but not limited to, soil mechanics, hydraulic, hydrologic, structural, embankments and foundation criteria (004.01 E 3).

If “NO”, it is considered mostly non-structural, so answer the following:

1.B.1 Insert data necessary to establish technical feasibility (004.02); The Academy program consists of six sessions lasting two days each. This structure ensures that participants can balance their professional responsibilities while engaging in comprehensive learning. The Academy has been conducted for over 13 years and has been able to graduate 206 participants during that time. The program features instructors from diverse backgrounds, including academics, policymakers, and industry experts. This approach ensures that participants receive high-quality, relevant education. Graduates have used the knowledge and skills gained through the program to provide leadership in their communities and organizations. The program, having been conducted successfully for so many years, has proven that it is technically feasible.

1.B.2 Discuss the plan of development (004.02 A); The plan of development is established by the NSIA, with significant support from faculty with UNL and will follow the prior years’ plans. Recruitment of participants is an ongoing process. Reservation of locations for the programs reoccur each year, although some changes occur as review of the prior year’s program is concluded. Securing presenters for the following year occurs mostly in December and January, again after review of the prior year’s program is concluded. The first session is held in Lincoln in January. Subsequent sessions are held in Kearney in March, in Omaha in May, in Scottsbluff in July, in Valentine in September and in Nebraska City in November. Program evaluation by the participants includes, among many items, assessments of leadership development, individual program presentations and intention for future community involvement by the participants.

1.B.3 Describe field or research investigations utilized to substantiate the project conception (004.02 B); The Academy utilize expertise of the University of Nebraska in the development of the elements contained in the Academy curriculum. Thus, to ensure that the Academy helps the participants develop leadership skills, components of the curriculum were carefully selected. The full curriculum is identified on page 4 of the 2024 Final Report for the Water Leaders Academy, prepared by the University of Nebraska December 31, 2024, identified as Open-File Report 259, available from the Conservation and Survey Division, School of Natural Resources. Some of the topics include transformational leadership, communication strategically, communicating across differences, communicating risk and creative collaboration exercises for natural resources management. Thus, extensive leadership curriculum is utilized to substantiate the objective of leadership development. In addition, scientifically based evaluation is conducted of the participants to determine the changes that

occurred as a result of the Academy. The results year after year reflect the enhancement of leadership skills as a result of participation in the Academy.

1.B.4 Describe any necessary water and/or land rights (004.02 C); N/A

1.B.5 Discuss the anticipated effects, if any, of the project upon the development and/or operation of existing or envisioned structural measures including a brief description of any such measure (004.02 D). The project is not anticipated to have any direct effect upon the development and/or operation of existing or envisioned structural measures. The Academy does not propose to construct or modify any structures.

Prove Economic Feasibility

(Applicant must demonstrate compliance with Title 261, CH 2 - 005)

2. Provide evidence that there are no known means of accomplishing the same purpose or purposes more economically, by describing the next best alternative. The Academy provides to a "class" of up to 20 individuals leadership training and background information on a wide range of water related topics at six different locations all over the state. By conducting this training to a group of people at one time, there is economy of scale and reduced costs through group discounts. The next best alternative would be to conduct this training one on one. It would be cost prohibitive and potentially not possible to get presenters to provide the same content up to 20 separate times. In addition to being costlier, it would be a waste of presenters' time and participants would miss out on interactions with other participants and presenters.

3. Document all sources and report all **costs** and **benefit data** using current data, (commodity prices, recreation benefit prices, and wildlife prices as prescribed by the Director) using both dollar values and other units of measurement when appropriate (environmental, social, cultural, data improvement, etc.). The period of analysis for economic feasibility studies is the project life. (Title 261, CH 2 - 005). Sources of cost data comes from the costs to conduct the Academy for the prior 13 years, especially the most recent year reflecting increased costs that rose dramatically recently. Thus, the costs for room rentals, food, UNL contract, bus rentals and costs of supplies are included. There is no know method for calculating the benefits, thus there is no benefit data that can be listed. Some of the known benefits include career advancement, skill development, network expansion and increased professional connections. Many alumni have reported about engagement in joint projects after completion of the class. The Academy benefits water management, as graduates are more effective in knowledge of

water quality, supply, and policy changes. Thus, the benefit of having individuals with enhanced leadership skills working in the area of water resource issues is extremely valuable. Water is considered necessary for life as well as a significant benefit to agriculture in the form of irrigation and supplies for livestock. Water is also extremely valuable for economic development such as for human consumption and industrial development such as ethanol plants. Thus, developing leadership capable of facing water supply challenges in necessary for our future.

3.A Describe any relevant cost information including, but not limited to the engineering and inspection costs, capital construction costs, annual operation and maintenance costs, and replacement costs. Cost information shall also include the estimated construction period as well as the estimated project life (005.01). The total cost of the project is $120,923/year for two years. There are no engineering and inspection costs, capital construction costs, annual operation and maintenance costs nor replacement costs. There will be no construction period and there is no estimated project life. The cost is based upon the expenses incurred in conducting the Academy over a two-year period. The costs are detailed in 3.C. It is important to note that almost all of the Academy speakers are volunteering their time and expenses.

3.B Only primary tangible benefits may be counted in providing the monetary benefit information and shall be displayed by year for the project life. In a multi-purpose project, estimate benefits for each purpose, by year, for the life of the project. Describe intangible or secondary benefits (if any) separately. In a case where there is no generally accepted method for calculation of primary tangible benefits describe how the project will increase water sustainability, in a way that justifies economic feasibility of the project such that the finding can be approved by the Director and the Commission (005.02). Economic feasibility can be justified on the basis that developing leaders in the water resources area leads to better recommendations and decisions being made. The results then are better outcomes for the state, and all of its citizens.

3.C Present all cost and benefit data in a table to indicate the annual cash flow for the life of the project (005.03).

	2026	2027
Income		
Tuition	16x3000= $48,000	16x3000= $48,000
WSF Grant	$50,000	$50,000
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UNL contract	$18,000	$18,000
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TOTAL	**$120,923**	**$120,923**

3.D In the case of projects for which there is no generally accepted method for calculation of primary tangible benefits and if the project will increase water sustainability, demonstrate the economic feasibility of such proposal by such method as the Director and the Commission deem appropriate (005.04). (For example, show costs of and describe the next best alternative.) There is no generally accepted method for calculating primary tangible benefits for The Water Leaders Academy. Although calculating tangible benefits of the Academy is challenging, it is known that alumni have reported practical skill development, enhanced decision-making, community impact, networking and collaboration, and policy influences as a result of their work after graduating. What is known is that many of the graduates are now in leadership and educational roles in Nebraska. Also, the reviews from the participants have overwhelmingly endorsed the Academy and identified its benefits. Thus, the primary benefits are being reflected in the best possible collaborations and decisions being made.

Prove Financial Feasibility

(Applicant must demonstrate compliance with Title 261, CH 2 - 006)

4. Provide evidence that sufficient funds are available to complete the proposal. Both NSIA and Water Futures Partnership have sufficient funds on hand to meet their share of the costs of the Academy for the 2-year period specified in this application.

5. Provide evidence that sufficient annual revenue is available to repay the reimbursable costs and to cover OM&R (operate, maintain, and replace). N/A

6. If a loan is involved, provide sufficient documentation to prove that the loan can be repaid during the repayment life of the proposal. N/A

7. Describe how the plan of development minimizes impacts on the natural environment (i.e. timing vs nesting/migration, etc.). Some of the sessions are indoors and thereby will not impact the natural environment. Outdoor sessions are conducted so as to have minimal to no impact, such as canoeing on the Niobrara River or using multi-passenger vehicles for transportation to minimize hydrocarbon usage and emissions from motor vehicles.

8. Explain how you are qualified, responsible and legally capable of carrying out the project for which you are seeking funds. The project – The Water Leaders Academy – has been conducted and presented by the Nebraska State Irrigation Association (NSIA) for 13 years. This application seeks money to assist funding for two additional years. NSIA, as a result of this history of successfully conducting the Academy, has demonstrated that is responsible and legally capable of carrying out the project (the Academy). NSIA is qualified based upon the statutes permitting any entity to apply for funding and it is qualified to carry out the project because it is a non-profit organization that has as one of its purposes to promote the wise use of the state's water resources, which is one of the desired outcomes of the Academy.

9. Explain how your project considers plans and programs of the state and resources development plans of the political subdivisions of the state. The plans and programs of the state and the resources development plans of the political subdivisions of the state are addressed in a number of the sessions. Thus, one session is entitled "Opportunities to Improve Nebraska's Integrated Management Plans Process". Another session is titled "Creative Collaboration Exercises for Natural Resources Management". Also, a session is entitled "Water Resources Scenario Planning". Additionally, another session is entitled "Nebraska's Integrated Water Resource Management". Thus, a number of sessions are explicitly considering what are contained in the state's plans and programs and how to be involved in the ongoing evolution of the resources development plans of the local natural resources districts.

10. Are land rights necessary to complete your project? YES☐ NO☒

If yes:

10.A Provide a complete listing of all lands involved in the project.

10.B Attach proof of ownership for each easements, rights-of-way and fee title currently held.

10.C Provide assurance that you can hold or can acquire title to all lands not currently held.

11. Identify how you possess all necessary authority to undertake or participate in the project. The Academy was developed 13 years ago and has been conducted by NSIA ever since. NSIA, as the creator of the Academy, along with the participation of the University of Nebraska, has the experience, curriculum and determination to continue the Academy for the foreseeable future.

12. Identify the probable consequences (environmental and ecological) that may result if the project is or is not completed. The probable environmental and ecological consequences that may result from the project include improvements to the environment due to the leadership development that results from the Academy. Graduates from the Academy have played roles in the yearly review of Integrated Management Plans and the process of assuring that such plans include appropriate consideration of the environment. Moreover, graduates include four natural resources district managers, six assistant managers of natural resources districts, and a number of others within the Department of Natural Resources. Thus, as a result of participation in the Academy, these individuals have a broader perspective and are able to provide leadership in the review and revision to management plans so that they appropriately incorporate environmental and ecological improvements.

Section C.

NRC SCORING

In the NRC's scoring process, points will be given to each project in ranking the projects, with the total number of points determining the final project ranking list.

The following 15 criteria constitute the items for which points will be assigned. Point assignments will be 0 to 6 for items (1) - (9); and 0 to 3 for items (10) - (15). Two additional points will be awarded to projects which address issues determined by the NRC to be the result of a federal mandate.

Notes:

- The responses to one criterion ***will not*** be considered in the scoring of other criteria. Repeat references as needed to support documentation in each criterion as appropriate. The 15 categories are specified by statute and will be used to create scoring matrixes which will ultimately determine which projects receive funding.

- There is a total of 72 possible points, plus two bonus points. The potential number of points awarded for each criteria are noted above. Once points are assigned, they will be added to determine a final score. The scores will determine ranking.

- The Commission recommends providing the requested information and the requests are not intended to limit the information an applicant may provide. An applicant should include additional information that is believed will assist the Commission in understanding a proposal so that it can be awarded the points to which it is entitled.

Complete any of the following (15) criteria which apply to your project. Your response will be reviewed and scored by the NRC. Place an N/A (not applicable) in any that do not apply, an N/A will automatically be placed in any response fields left blank.

1. Remediates or mitigates threats to drinking water;

    - Describe the specific threats to drinking water the project will address.
    - Identify whose drinking water, how many people are affected, how will project remediate or mitigate.
    - Provide a history of issues and tried solutions.
    - Provide detail regarding long-range impacts if issues are not resolved.

The specific threats to drinking water that are addressed include The Bazile Groundwater Management Program that is included as one of the sessions. Other groundwater threats to drinking water are included in the sessions that include The

Niobrara River Valley Geology and Ecology, The North Platte Basin Integrated Water System, the PMR NRD Flood Control and Water Quality Projects and Water, Climate and Health in Nebraska. The people whose drinking water are affected include those residents in the Bazile Groundwater Management area, the Niobrara River Valley, the North Platte River basin in Nebraska and residents within the Papio Missouri River NRD. The member of people affected would include those living in Omaha, Scottsbluff, North Platte and various other communities within the regions identified. The project will remediate or mitigate the issues through development of leaders willing to make the decisions necessary to address the problems. The history of groundwater contamination in Nebraska goes back to the application of fertilizers and herbicides without regard to the effect that those chemicals might have on others. Some NRDs have attempted to educate and encourage farmers to utilize these chemicals in a manner that minimizes impacts on other. Unfortunately, contamination of the groundwater has only increased in many areas. Solutions attempted have not generally been successful. What is needed includes leaders who know how to get solutions adopted and implemented. If solutions are not adopted, the long-range impacts will be continued increases in groundwater contamination and costly measures to treat contaminated water to make it safe for human consumption.

2. Meets the goals and objectives of an approved integrated management plan or ground water management plan;

    - Identify the specific plan that is being referenced including date, who issued it and whether it is an IMP or GW management plan.
    - Provide the history of work completed to achieve the goals of this plan.
    - List which goals and objectives of the management plan the project provides benefits for and how the project provides those benefits.

    As examples of plans impacted by the Academy, the North Platte NRD IMP was adopted on Aug 8, 2019. Studies showed that there were some excess flows that could be diverted for groundwater recharge. Groundwater wells were certified and metered. A consequence was the retirement of uses of groundwater and a moratorium on new uses. Goals included reducing uses so that the NRD became fully appropriated. Another goal was to remain in compliance with interstate agreements. These topics were covered in multiple Academy sessions. Likewise, the Papio Missouri River NRD adopted a groundwater management plan in February 2008. Its goal is to maintain the groundwater reservoir quality and quantity forever. To achieve this goal it uses education, irrigation management and provides cost share on water meters and requires annual reports. The Papio MRNRD program is the subject of a couple sessions, thus advancing the goal of education. By combining technical expertise, leadership skills, and a collaborative approach, alumni of the Academy are instrumental in advancing the goals and objectives of NRDs Integrated Management Plans, ultimately contributing to the sustainable management of Nebraska's water resources. Participants of the Academy have included several key personnel responsible for meeting the goals and objectives of integrated management plans, such as NRD

staff, NeDNR, water resources planners and engineers, community leaders, and water users. These participants are often in positions where they can influence water policy and regulations. The knowledge and skills gained from the Academy enable them to advocate for and implement policies that promote sustainable water management. The diversity of the classes, held across the state, allows participants who may only work within one specific aspect of water resources management to understand how other stakeholders operate across Nebraska.

3. Contributes to water sustainability goals by increasing aquifer recharge, reducing aquifer depletion, or increasing streamflow;

   List the following information that is applicable:

   - The location, area and amount of recharge;
   - The location, area and amount that aquifer depletion will be reduced;
   - The reach, amount and timing of increased streamflow. Describe how the project will meet these objectives and what the source of the water is;
   - Provide a detailed listing of cross basin benefits, if any.

   The Academy leadership training is focused on developing leaders who are capable of helping find solutions to water related issues. Each year, the Conservation & Survey Division of UNL publishes a report that includes a variety of ground water level maps. The Academy uses some information from that report to help the participants appreciate the need as well as the benefits of groundwater recharge. Visiting locations that benefit from groundwater recharge result in participants experiencing firsthand how recharge benefit wells as well as stream flows. The consequence is that graduates are sensitive to assuring that integrated management planning includes enhancements to groundwater recharge as well as including groundwater recharge in prospective future projects. Also maintaining existing recharge and the projects that create that recharge benefit from having leadership that has been exposed to the concept and then witness the benefits in the real-world setting. Hearing firsthand about the success of recharge projects from a diversity of water resource managers across the state has proven to open the eyes of participants.

4. Contributes to multiple water supply goals, including, but not limited to, flood control, agricultural use, municipal and industrial uses, recreational benefits, wildlife habitat, conservation of water resources, and preservation of water resources;

   - List the goals the project provides benefits.
   - Describe how the project will provide these benefits
   - Provide a long range forecast of the expected benefits this project could have versus continuing on current path.

The goals of the Academy have direct project benefits that include water supply goals of flood control, municipal and industrial uses, recreational benefits, wildlife habitat and conservation and preservation of water resources. The benefits will be provided as a result of the participants learning about explicit projects that relate to these goals, and then become informed and able to include what they learn in the Academy in their own circumstances. Thus, flood control is a topic covered through a presentation by the Papio Missouri River NRD, which provides hands-on knowledge of a successful project that can used as an example for other future water leaders across the state. Municipal and industrial uses are included in a couple of different sessions including Omaha's water supplies and the North Platte basin's integrated water uses including irrigation management. Recreational benefits are discussed in the Niobrara Scenic River topic as well as the crane migration session. The conservation and preservation of water resources is covered in several sessions covering integrated management as well as the discussion of compacts and decree. The long range forecast of the expected benefits of this project versus continuing on the current path include having leaders who understand the importance of farsighted water resources management so that benefits are actually realized and not merely words on a page. To actually achieve real benefits leaders are needed who can guide the decision-making process so that actual improvements can be made. The value of the Academy is in developing informed and motivated leaders.

5. Maximizes the beneficial use of Nebraska's water resources for the benefit of the state's residents;

   - Describe how the project will maximize the increased beneficial use of Nebraska's water resources.
   - Describe the beneficial uses that will be reduced, if any.
   - Describe how the project provides a beneficial impact to the state's residents.

   The project will maximize the increased beneficial use of Nebraska's water resources through the leadership developed as a result of the participants attending the Academy and completion of the group projects. Specifically, elements of the Academy focus on topics such as Nebraska Water Law, Geology, Climate, North Platte Basin Integrated Water System, Niobrara River Valley – Past, Present, Future. Utilizing information from these sessions and many others, the participants can assist in the development of planning and utilizing Nebraska's water resources through a variety of means. Thus, some participants are staff members with NRDs or the NeDNR and thereby can guide the integrated planning process so that plans are adopted that appropriately maximize the beneficial uses of Nebraska's water resources in non-consumptive and consumptive uses (such as hydropower, in-stream flows, recreation, surface water irrigation, groundwater recharge, groundwater discharge and groundwater irrigation). For example, one of the groups in 2023 completed a review of alternatives for improving Lake Babcock near Columbus in order to increase hydropower and more effectively utilize the flows of the Loup River. Afterward, a

WSF grant was awarded to the Loup Power District. The Academy class project is now being used to support the study and eventual restoration of the reservoir. Assuring the integrated use of water maximizes its beneficial uses across the state. No beneficial uses are known to be reduced. The project provides a beneficial impact on the state's residents through the development of informed and motivated graduates who have experienced leadership development in a positive environment which considers the interests of water users from the broadest perspective. This training impacts the state's residents by assuring their voices are taken into account as water use planning occurs and the best possible integrated plans are developed and implemented.

6. Is cost-effective;

   - List the estimated construction costs, O/M costs, land and water acquisition costs, alternative options, value of benefits gained.
   - Compare these costs to other methods of achieving the same benefits.
   - List the costs of the project.
   - Describe how it is a cost effective project or alternative.

   The project is highly cost effective for many reasons. There are no construction costs, no O/M costs, and no land and water acquisition costs. The alternative to the Academy is either to not train future leaders or to do the training on a one-on-one basis. Failing to train future leaders will result in poor results in the planning and adoption of plans and projects in the water resources arena. Attempting to replace the Academy by training individuals one on one is not practical because many of the presenters for the Academy are volunteers and they would not be willing to do their presentations over and over again for each participant. Moreover, the Academy is cost effective because of the value of the questions and answers that are generated by participants based upon the wide array of water resources knowledge that would be missing outside the group setting.

7. Helps the state meet its obligations under interstate compacts, decrees, or other state contracts or agreements or federal law;

   - Identify the interstate compact, decree, state contract or agreement or federal law.
   - Describe how the project will help the state meet its obligations under compacts, decrees, state contracts or agreements or federal law.
   - Describe current deficiencies and document how the project will reduce deficiencies.

   The state of Nebraska is a party to a compact with the States of Kansas and Colorado and the United States concerning the Republican River and a compact with Kansas and the United States concerning the Blue and Little Blue Rivers. Nebraska, Colorado and the United States are also parties to the South Platte River compact. Nebraska is also one of the parties to the Decree in Nebraska vs

Wyoming, Colorado and the United States. Nebraska is also a party to the Platte River Recovery Implementation Program along with Wyoming, Colorado and the U.S. Department of the Interior. The project will help the state meet its obligations under the compacts, decrees, state contracts or agreements or federal law in numerous ways. First, one of the sessions explicitly covers compacts, decrees and the agreement with Wyoming, Colorado and the federal government so that the participants learn what those agreements encompass. A first step in complying with such agreements is knowing what they include and what is necessary in order to be in compliance. Next, sessions cover the integrated nature of Nebraska water resources and others cover the North Platte basin integrated water system and another covers the Panhandle NRD projects and programs. These sessions thus demonstrate efforts to be in compliance with the interstate agreement and the relationship those programs have with other uses, such as those considered in a session on Panhandle Groundwater Modeling Projects. Another step is helping the state in meeting its obligations in assuring that the integrated management planning process takes into account the various state responsibilities that are inherent in these agreements. Given that many of the Academy participants are directly involved in the development, revision and review of the plans prepared as a part of the integrated management planning process, the training they receive in the Academy is utilized immediately in the planning process. Thus, many of the participants play a role in assuring that the state complies with its agreements. Deficiencies exist in the lack of appreciation in the breadth and depth of the integrated nature of much of Nebraska's water resources. Seeing the integrated nature of the system, especially in the North Platte River basin in Nebraska, makes real what can be learned from reading about topics. Utilizing additional senses, engaging in discussions and experiencing firsthand the integrated nature of Nebraska's water resources reduces the deficiencies in the current process for development of these documents.

8. Reduces threats to property damage or protects critical infrastructure that consists of the physical assets, systems, and networks vital to the state or the United States such that their incapacitation would have a debilitating effect on public security or public health and safety;

   - Identify the property that the project is intended to reduce threats to.
   - Describe and quantify reductions in threats to critical infrastructure provided by the project and how the infrastructure is vital to Nebraska or the United States.
   - Identify the potential value of cost savings resulting from completion of the project.
   - Describe the benefits for public security, public health and safety.

   Reducing threats of property damage or critical infrastructure is specifically covered in a variety of sessions. Thus, for example one session covers the PMRNRD flood control and water quality projects, which outlines the challenges

faced by a growing municipality and the accompanying increased runoff. Likewise, a session covers Nebraska's climate and weather, which includes high runoff events due to protracted rainfall or rapidly melting snow and ice. Another session covers the Missouri River, past, present and future, which includes years when extraordinary runoff for many months caused high water levels that impacted towns and cities alone the Missouri River in a variety of ways, from water intake structures for drinking water, flooded well fields and impacts to industries and the military. Because the Academy provides leadership training to those charged with developing resource development plans as well as others who have a direct stake in the outcome of those plans, the result can be enhanced plans to protect critical infrastructure such as Offutt Air Force Base, Ashland National Guard facility, drinking water for Blair & Peru, the NPPD Brownville nuclear power plant that uses cooling water from the Missouri River. Other critical infrastructure would include the cities of North Platte, Kearney and Grand Island that face flooding issues. There issues are addressed through the leadership training provided through the Academy. The potential value of the cost savings resulting from the project is immense. Providing flood mitigation protection to Offutt Air Force base for example not only protects the physical facilities but also the thousands of jobs that exist because of the base. Protecting just that one facility creates great value to Nebraska. Likewise protecting other infrastructure not only protects the physical facility but also the economy of the state which would be affected if the infrastructure was damaged. The benefits for public security, public health and safety include reduced damages, prevention of contamination of drinking water supplies, avoiding risks to individuals and communities from unmitigated high-water flows. The Academy helps its participants to understand these risks and work to mitigate them. Skillsets obtained through the Academy can significantly benefit flood risk reduction by understanding threats, successes of past projects, and learning how to work together to improve flood resiliency into the future. Participants learn about watershed dynamics and effective mitigation strategies. The tour of Omaha Wastewater Treatment Plant, after the 2019 floods, has provided participants a firsthand look at the threats from flooding of the Missouri River. Leadership training helps with crisis management skills and communication.

9. Improves water quality;

- Describe what quality issue(s) is/are to be improved.
- Describe and quantify how the project improves water quality, what is the target area, what is the population or acreage receiving benefits, what is the usage of the water: residential, industrial, agriculture or recreational.
- Describe other possible solutions to remedy this issue.
- Describe the history of the water quality issue including previous attempts to remedy the problem and the results obtained.

The Water Leaders Academy has several sessions that explicitly focus on water quality in the PMRNRD and the Bazile groundwater quality management

program. In addition to those two areas, water quality is mentioned in several other sessions as an issue to be addressed. Consequently, water quality is an important topic addressed in the Academy. The Academy addresses water quality as it affects agricultural and residential water uses. In addition to the Bazile and PMRNRD, the area addressed is state wide because of the focus in the Academy on water quality as an issue leaders need to address. Across the state, groundwater contamination has increased over the past 40 years. Attempts to address the issue through education and voluntary measures, in general, has not successfully reduced the level of a variety of chemicals. What is required is leadership that goes further in securing implementation of practices that will successfully result in changed behaviors that make a difference in reducing groundwater contamination. A goal of the Academy is to graduate leaders who will be equipped not only with knowledge but with skills and motivation to make a difference.

10. Has utilized all available funding resources of the local jurisdiction to support the program, project, or activity;

    - Identify the local jurisdiction that supports the project.
    - List current property tax levy, valuations, or other sources of revenue for the sponsoring entity.
    - List other funding sources for the project.

    The Academy has over the years received support at one time or another from a variety of local political subdivisions of the state. Thus, three natural resources districts, two public power districts, a public power and irrigation district, six irrigation districts have supported the Academy directly. The tax levy of each of those entities varies according to their revenue and their needs to operate. Funding sources include tuition from the participants, the Nebraska State Irrigation Association, Water Futures Partnership and contributions from various sources. In this instance the “local jurisdiction” is the project sponsor, the NSIA. It is a nonprofit organization funded through voluntary payments from irrigation districts, natural resources districts, a public power district, public power and irrigation districts and individuals. The Academy itself has been funded by NSIA, the Water Futures Partnership (a 501(c)(3) organization) and various sponsors. There is no property tax levy utilized in association with funding the Academy. The contributions received over the prior 13 years have not been from Nebraska taxpayers in contrast with every other state that sponsors a leadership academy related to water issues.

11. Has a local jurisdiction with plans in place that support sustainable water use;

    - List the local jurisdiction and identify specific plans being referenced that are in place to support sustainable water use.
    - Provide the history of work completed to achieve the goals of these plans.

- List which goals and objectives this project will provide benefits for and how this project supports or contributes to those plans.
- Describe and quantify how the project supports sustainable water use, what is the target area, what is the population or acreage receiving benefits, what is the usage of the water: residential, industrial, agriculture or recreational.
- List all stakeholders involved in project.
- Identify who benefits from this project.

A large number of Academy participants are responsible for implementing plans to support sustainable water use, including Integrated Management Plans, Groundwater Management Plans, water allocation and conservation planning, drought plans, and flood management plans. Effective leadership is critical to properly and effectively implement the goals and objectives of all these plans. Collectively, citizens across the state of Nebraska benefit through the increase in public awareness and support for water policies to support sustainable water use.

12. Addresses a statewide problem or issue;

- List the issues or problems addressed by the project and why they should be considered statewide.
- Describe how the project will address each issue and/or problem.
- Describe the total number of people and/or total number of acres that would receive benefits.
- Identify the benefit, to the state, this project would provide.

The issues or problems addressed by the Academy include addressing the aging leadership in water resources organizations and groundwater contamination. The Academy addresses the problem of aging leadership by providing critical training to the younger generation of water leaders. As our current leaders age, it is essential to pass along the institutional knowledge and create new connections as the state's leadership evolves. Giving individuals who graduate from the Academy the background and leadership skills to take on greater and greater responsibility in organizations that are focused on water resources issues, such as groundwater contamination. Alumni of the Academy have been elected to multiple natural resources district boards. Other graduates include a special advisor to the Secretary of the U.S. Department of Agriculture, State Executive Director, U.S. Department of Agriculture, Assistant State Conservationist, U.S. Department of Agriculture, General Manager of Natural Resources Districts (4), General Manager of Irrigation Districts (4), Assistant Manager of Natural Resources Districts (6), Division Head, Department of Natural Resources (2), Director of a nature preserve, and many others. The number of people that would receive benefits cannot be calculated precisely. However, given the variety of high-level leadership positions that are held by Academy graduates, potentially one way or another all citizens of Nebraska may benefit. The benefit to the state from this project is the development of leadership in the water resources area at

a time when many of the current leaders are at or past retirement age. It is important that these people be replaced by individuals who have a breadth of background, so that issues can be considered in a proper context, and training that equips them with the necessary skills to effectively lead.

13. Contributes to the state's ability to leverage state dollars with local or federal government partners or other partners to maximize the use of its resources;

    - List other funding sources or other partners, and the amount each will contribute, in a funding matrix.
    - Describe how each source of funding is made available if the project is funded.
    - Provide a copy or evidence of each commitment, for each separate source, of match dollars and funding partners.
    - Describe how you will proceed if other funding sources do not come through.

    Funding for the project (the Academy) comes from a variety sources. The participants, through their employer, pay $3,000 each. The Water Futures Partnership as a 501(c)(3) organization receives tax deductible donations from businesses and individuals. It then in turn it uses a portion of its income to support the Academy. Over the years support has been provided by Diamond Plastics Corporation, Lindsay Corporation, Reinke Manufacturing, Valmont Industries, Inc, three natural resources districts, six irrigation districts, two public power districts, a public power and irrigation district and a variety of individuals. Funding comes to NSIA so that the expenses are paid on a timely basis. NSIA and Water Futures Partnership have conducted fund raising over the years and have sufficient funds available together with the grant from the Water Sustainability Fund to present the Academy for the two years for which the grant is being sought. At this time NSIA and the Water Futures Partnership continue to fund raise to assure that the Academy can continue for the foreseeable future.

14. Contributes to watershed health and function;

    - Describe how the project will contribute to watershed health and function in detail and list all of the watersheds affected.

    The Academy contributes to watershed health and function by focusing on the leadership necessary for the development of integrated water management plans and their ongoing review and revision. Alumni are skilled in engaging with diverse stakeholders, including local communities, government agencies, and environmental organizations. This collaborative approach can benefit the implementation of projects and plans that improve streamflow, groundwater recharge, water quality improvements, and other similar watershed functions. Leadership skillsets provided will promote increased engagement in public awareness, stakeholder interaction, and policy development. Continued education provided by the diverse set of stakeholders includes many involved

with watershed health, such as the Platte River Recovery Implementation Program. Thus, one session concentrates on Nebraska's Integrated Water Resource Management. Another session focuses on the Panhandle NRD Projects and Programs and another focuses on the North Platte Basin Integrated Water System. The Niobrara River valley is the focus of three sessions and the Republican River basin is the topic for two sessions. Thus, all participants are given an in-depth background on watershed health and function and the leadership skills necessary to identify, plan and implement those measures which contribute to watershed health and function. Specifically, the watersheds considered include the Lower Platte River Basin, the North Platte River basin, the Republican River basin, the Niobrara River basin and the Missouri River.

15. Uses objectives described in the annual report and plan of work for the state water planning and review process issued by the department.

- Identify the date of the Annual Report utilized.
- List any and all objectives of the Annual Report intended to be met by the project
- Explain how the project meets each objective.

The Nebraska Department of Natural Resources Annual Report to the Nebraska State Legislature dated 2024 was utilized. NeDNR Goal #1 – Establish strong state leadership, involvement, and support for science-based decision making that is necessary to sustain state and local water management outcomes. The Academy successfully meets the NeDNR Annual Plan of Work, Goal #1 by fostering strong state leadership, involvement, and science-based decision making through leadership development, science-based education, an emphasis on policy and law, promotion of a collaborative approach, and learning through hands-on learning and real-world problem-solving. NeDNR Goal #2 - Provide high quality products and services through the performance of our duties in the areas of floodplain management, flood mitigation planning, dam safety, and survey to promote the safety of all Nebraskans. A total of seven NeDNR staff have completed the Academy, thus gaining further training to provide high quality products. Dozens more participants from around the state interact and work regularly with NeDNR on floodplain management. NeDNR Goal #3 - Develop and implement customized and decentralized water management plans established through collaboration with local Natural Resource Districts and stakeholders that provide for long-term sustainability of the state's water resources. Many of the Academy alumni are directly involved in the development and implementation of water management plans. NeDNR Goal #4 - Encourage strong public engagement with multiple constituents and stakeholder groups in planning and implementation activities to ensure that local and state needs are addressed. The Academy emphasizes the importance of collaboration among diverse stakeholders, including local communities, government agencies, and industry leaders. This collaborative approach ensures that water management strategies are comprehensive and widely supported. NeDNR Goal #5 - Protect existing

water uses through collaborative investments in water resource projects, planning, administration and permitting of surface water rights, and the registration of groundwater wells. The Academy provides comprehensive leadership training, equipping participants with the skills needed to lead effectively in the water management sector. This includes strategic communication, consensus-building, and crisis management. Water rights are a feature of the session held in Scottsbluff each year, where irrigation district managers share insight on administration of water rights to maintain an adequate supply to users, without exceeding what is allocated to them.

16. Federal Mandate Bonus. If you believe that your project is designed to meet the requirements of a federal mandate which furthers the goals of the WSF, then:

    - Describe the federal mandate.
    - Provide documentary evidence of the federal mandate.
    - Describe how the project meets the requirements of the federal mandate.
    - Describe the relationship between the federal mandate and how the project furthers the goals of water sustainability.