



Lake Agassiz
Water Authority

LAWA BOARD OF DIRECTORS

OCTOBER 13, 2026

MEETING: LAWA Board of Directors

DATE AND TIME: 10/13/26 @ 10:00am CST

LOCATION: Virtual – Zoom (link bottom of agenda)

1. Call to Order
2. Roll Call
3. **Review and Approval of Bid Package for ENDAWS Transmission Pipeline Contract No. 3**
4. **Procurement of Third-Party Value Engineering Services for ENDAWS Facilities Design and Specifications**
5. Adjourn

BOLD = ACTION ITEM

Join Zoom Meeting

<https://us06web.zoom.us/j/85184161990?pwd=p6rsGKkcNMY5IMgoPK4YxLFd7US89Z.1>

Meeting ID: 851 8416 1990

Passcode: 162602

One tap mobile

+16513728299,,85184161990#

Agenda Item: Procurement of Third-Party Value Engineering Services for ENDAWS Facilities Design and Specifications

Submitted By: Spencer Halvorson, Executive Director

Staff Recommended Action: Approve the hiring of third-party value engineering services to review the ENDAWS facilities design and specifications and approve the course of action that has been developed between LAWA staff and the ND Department of Water Resources

Background

Updated program cost estimates were provided to the LAWA Financial Advisory Committee on September 22, LAWA Technical Advisory Committee on September 24, and LAWA Board of Directors on September 30.

In 2022, indexed program cost projections communicated an estimated \$1.41 billion cost for the Red River Valley Water Supply Project. This \$1.41 billion was used to establish the state of ND's legislative intent contribution of \$953 million for the project and proportionate federal \$454 million ENDAWS project contribution target. The 2026 updated indexed program cost projections communicated at the LAWA committee and board meetings showed a new cost projection of \$1.71 billion.

Per the presentations provided by Black and Veatch, factors and cost pressures influencing the \$300 million increase include but are not limited to:

- Power Supply
- Larger and more complex Biota Water Treatment Plant and facilities
- Added chemical injection facilities
- Pipeline costs on a per mile basis, to include local externality mitigation efforts

In an effort to assess options that could result in capital and O&M cost savings and have a direct impact on future O&M of the facilities, Black and Veatch will be performing supplemental design evaluations with technical memorandum provided on the following subjects as part of their work under recently approved Task Order 3310 (BWTP Contract 3 – Treatment Facilities, Pumping Stations, Final Site Work, Final Design and Procurement Services):

- Standby Capacity (n+1) Analysis
 - o What level of redundancy and back-up is truly needed for these facilities given purpose and mission of the project

- Facility Size Review
 - o What size of a facility is truly needed to meet operational needs
- Geotechnical and Foundation Design

Garrison Diversion and Black and Veatch intend to look for ways to reduce number of tunnels associated with pipeline installation, along with advocating for an adjustment to the water quality compliance point to allow more time for treatment within the pipeline.

In addition to the supplemental design evaluations to be conducted by Black and Veatch, there is a planned value engineering (VE) component to the scope of the RFQ/PP for a Construction Manager at Risk (CMAR). The Black and Veatch internal review, CMAR VE workshop, and design submittal schedule included in the CMAR RFQ/PP is below:

Black and Veatch Supplemental Design Evaluations	October – December, 2026
CMAR Value Engineering Workshop	July 15, 2027
Design Engineer 60% Design Submittal	November 1, 2027
CMAR GMP Amendment on the 60% Design	March 1, 2028
Design Engineer 90% Design Submittal	June 1, 2028
CMAR GMP Amendment on the 90% Design	July 7, 2028

Given the increased cost projections, complexity and importance for this portion of the project, multiple stakeholders and agencies involved, and long-term operation and maintenance implications, it is recommended by staff and the LAWA Technical Advisory Committee (TAC) to procure an independent third-party to conduct a VE review of the ENDAWS facilities design and specifications.

Third-party VE assessments are conducted to receive an unbiased review of project design and specifications, with the goal to save cost and identify sources of tradeoffs between price, quality, and need. Generally, they are conducted between the 30-60% design phases per attorney consultation and research.

Third-party VE services have been hired during previous construction phases of the Red River Valley Water Supply Project (RRVWSP). HDR was the selected firm during a 2018 review of the RRVWSP Preliminary Design Report and milestone design submittals (60%) of Pipeline and Trenchless Crossings Contract 5.

The LAWA TAC recommendation supported the concept whereby Black and Veatch would hire as a sub-consultant previous VE contractor HDR and begin review and workshop upon the selection of the CMAR. Given timelines and workflow projections, it would have been anticipated that a report with considerations would have been completed at the end of March 2027.

In addition to the recommendation by the LAWA TAC, the ND State Water Commission (SWC) directed the ND Department of Water Resources (DWR) to pursue VE services to review portions of the RRVWSP related to the associated projected cost increases. This occurred the afternoon of Thursday, October 8th, after the LAWA TAC recommendation was approved earlier in the morning.

LAWA staff met with DWR the following morning in the effort to align the concurrent efforts to procure VE services to review the ENDAWS facilities design and specifications, all with the goal

to expedite the procurement and execution of such services while ensuring a high-quality review without duplicating efforts.

The aligned strategy proposed for approval would entail Black and Veatch hiring HDR as a sub-consultant to conduct the third-party VE services prior to the CMAR being selected, conducting the review and a draft report, where the CMAR would then provide final comment once hired. This draft report can be anticipated to be completed towards the end of January 2027. While HDR would be serving as a subconsultant to Black and Veatch, oversight would be provided by the ND DWR, LAWA Executive Director, and the Garrison Diversion District Engineer.

These services have been confirmed with the DWR to be cost share eligible. There are currently around \$6 million in contingency funds in the 2023-2025 biennium work plan that are anticipated to be rolled over into the 2025-2027 work plan. There was also a roughly \$2 million difference between the budgeted and approved task order for final design of the Biota Water Treatment Plant. Using these extra contingency funds would be the source from which these services would be paid for.

Analysis and Finding of Facts

- The RRVWSP is experiencing significant cost increase projections (\$300m / 20%) from previous 2022 projections.
 - o The 2022 projection of \$1.41 billion was used to establish the \$953m in ND state legislative funding intent during the 23-25 legislative session, along with the \$454 million federal contribution target for the ENDAWS portion of the project.
- Due to the increased cost projections, complexity and importance for this portion of the project, multiple stakeholders and agencies involved, and long-term operation and maintenance implications, the procurement of third-party VE services is recommended by LAWA TAC
 - o Third-party VE services have been sought during prior development of the project, notably in 2018 when HDR reviewed the RRVWSP Preliminary Design Report and milestone design submittals (60%) of Pipeline and Trenchless Crossings Contract 5.
 - Those with institutional knowledge have affirmed the process was positive and yielded quality results that benefited the RRVWSP.
- The LAWA TAC recommended that Black and Veatch inquire HDR's interest in serving as a sub-consultant under Black and Veatch to conduct these VE services and executing such services immediately once the CMAR was selected, allowing the CMAR to provide the contractor perspective on the Value Engineering review.
 - o Timeline and workflow projection would have expected the VE report to be completed at the end of March 2027.
 - o HDR has been contacted since the LAWA TAC meeting and has confirmed their interest in conducting these services
- Later in the day, after the LAWA TAC meeting, the ND SWC directed DWR pursue VE services to review portions of the RRVWSP contributing to the projected cost increases.
- DWR and LAWA staff met to align the concurrent efforts to procure VE services
- DWR and LAWA staff have aligned on the following course of action for VE services procurement:

- Black and Veatch hiring as a sub consultant prior RRVWSP experienced firm in HDR to provide third-party VE services for the ENDAWS facilities design and specifications.
- HDR providing the services immediately and in advance of the selection of the CMAR, with a draft report expected near the end of January 2027. CMAR would provide final review once on-boarded.
- Oversight for the execution of such services by HDR would be provided by the ND DWR, LAWA Executive Director, and Garrison Diversion District Engineer
- The services have been confirmed by DWR to be cost share eligible and there are excess contingency funds from previous and current work plans to pay for the services.

Attached:

- June 2018 Request for Statement of Qualifications and Preliminary Proposals for Value Engineering Services
- Meeting Minutes from LAWA Board Meetings
 - May 18, 2018
 - August 20, 2018
 - December 14, 2018
- Task Order 3310 – p. 7-12
- CMAR SOQ/PP – p. 11
- 2023-2025 Biennium Work Plan
- 2025-2027 Biennium Work Plan

Red River Valley Water Supply Project
Request for Statement of Qualifications
and
Preliminary Proposal for Value Engineering Services

June 7, 2018

The Garrison Diversion Conservancy District (Garrison Diversion) is requesting Statements of Qualifications and Preliminary Proposals (SOQ/PP) from qualified engineering firms to provide a Value Engineering Team (VE Team) for review of the Red River Valley Water Supply Project Preliminary Design Report (PDR) dated April 2018 and milestone design submittals (60%) of Pipeline and Trenchless Crossings Contract 5. The firm will be selected using the following process:

- A) The Selection Committee will conduct an initial evaluation of firms that submit a SOQ/PP. The Selection Committee will determine the top three firms and conduct phone interviews to obtain clarification on the submittals and to collect additional information. Based on the submittals and phone interviews, the Selection Committee will determine the best-qualified firm.
- B) After the Selection Committee has determined the best-qualified firm, all other firms will be notified that the selection process has been completed, and they were not selected. Negotiations with the first ranked firm will then be initiated. If those negotiations are unsuccessful, Garrison Diversion will enter negotiations with the second ranked firm. A form contract proposed by Garrison Diversion will be made available to the top three firms prior to phone interviews.
- C) Garrison Diversion reserves the right to evaluate the submitted SOQ/PP, to waive any irregularities therein, or to reject any and all SOQ/PP should it be deemed in the best interest of Garrison Diversion.

The deadline for receipt of the SOQ/PP is 2:00 p.m. CST, June 28, 2018. Ranking will take place the following week with phone interviews to follow. It is the Selection Committee's goal to complete the process as indicated in the Schedule under Scope of Services.

The SOQ/PP can be emailed or delivered on flash or thumb drive to:

Kip Kovar, P.E.
District Engineer/Deputy Program Manager for RRWSP Engineering
Garrison Diversion Conservancy District
PO Box 140
401 Hwy 281 NE (physical address)
Carrington, ND 58421

If you have any questions concerning the project or the preparation of a SOQ/PP, please contact Kip Kovar at 701-652-3194 (work), 701-652-5736 (cell), or kipk@gdcd.org.

Scope of Services

Introduction

The Red River Valley Water Supply Project (RRVWSP, the Project) is being undertaken to provide a reliable supplemental water supply to eastern and central North Dakota (ND), primarily in the event of future severe drought conditions. The Project may also provide water to support industrial development in addition to being an environmental benefit to local downstream rivers during times of severe drought by augmenting natural flows. The current Project is a state and locally funded Project, replacing the previously federally funded version. The attached figure shows the pipeline alignment and the Project's major hydraulic structures.

Background

The Project consists of a conventional surface water intake on the Missouri River and an associated pumping station, a biota water treatment facility, several hydraulic facilities along the pipeline's alignment, and a 167-mile pipeline that will flow from the Missouri River near Washburn, ND, to the Sheyenne River immediately north of Lake Ashtabula. The peak capacity of the system will be 165 cubic feet per second (cfs). As conditions warrant, water will be taken directly from the pipeline as well as released from Baldhill Dam (Lake Ashtabula) and transported to the end users via the Sheyenne and Red Rivers (River System), in addition to meeting certain aquatic needs.

As Garrison Diversion's engineering consultant, the Black & Veatch/AE2S Team (Project Team) was tasked with providing a Preliminary Design Report and a 60-percent design submittal for Pipeline Contract 5 (28 miles of pipeline). In addition, the Project Team is securing construction related permits, completing cultural and environmental evaluations and assessments along the alignment, and assisting Garrison Diversion in obtaining access agreements and 150-foot permanent easements. The Project Team is also assisting Garrison Diversion with property platting and acquisition of parcels on which to build facility assets.

VE Project Description

The source of water will be the Missouri River through a conventional intake south of the City of Washburn, ND. A 72-inch diameter pipeline will convey water approximately 167 miles east to the Sheyenne River. The water will be pumped through two pump stations: 1) Missouri River Intake Pumping Station (MRIPS) and 2) Main Pumping Station (MPS). The MRIPS will pump water from the Missouri River to treatment facilities, located at the MPS, to meet State requirements. Water will then be pumped from the MPS to a high point where it will enter Hydraulic Break Tanks (HBT) and then flow by gravity to the Control Valve Structure (CVS) and Discharge Structure and finally into the Sheyenne River. Lake Ashtabula will serve as a regulating reservoir, allowing controlled releases of the water as needed.

The VE will focus on the hydraulics and pipeline components, as more fully described in the PDR (and the 60-percent pipeline design submittal). Specific items for review include:

- Technical/cost/value review of the proposed utilization of HBT in the conveyance system (versus none)
- Technical/cost/value considerations (benefits/drawbacks) of a pressure control structure deployed between HBT and CVS
- Technical/cost/value review of the proposed number and type of pipeline isolation valves
- Technical/cost/value review of proposed pipe material and interior/exterior coatings
- Technical/cost/value review of proposed trenchless crossings designs. (Note: the need for the trenchless crossings is not being reviewed but alternative designs or construction techniques should be evaluated.)
- Technical/cost/value review of proposed number of air release/vacuum relief facilities
- Technical/cost/value review of proposed blow-off facilities
- Technical/cost/value review of proposed fiber optic data/communication system
- Technical/cost/value review of proposed corrosion control plan
- Technical/cost/value review of proposed agricultural land restoration plan

As a part of the Conceptual Design Report, developed prior to the PDR, a 400-foot corridor for the pipeline was established; therefore, evaluation of other corridors will not be a part of this VE evaluation. Garrison Diversion has obtained easement options for about 50 percent of the necessary pipeline right-of-way.

VE Scope of Work

It is intended that the selected firm will conduct a 40-hour value workshop to be held in Fargo, ND, at a time and place as agreed by Garrison Diversion and the firm.

The work will consist of the following individual task:

- Communicating with Garrison Diversion's project manager either in person or by telephone and reaching a decision about details of the value study, including the duration of the workshop.
- Communicating with Garrison Diversion's project manager either in person or by telephone to review the Project and any issues and reach an agreement regarding the date for the value workshop and the team members to be provided by Garrison Diversion, if any, and by the firm.
- Prior to the value workshop, accomplish the following activities:
 - Coordinate workshop logistics;
 - Review the design documents and other documents about the Project provided by Garrison Diversion with the value team members;

- Using information provided by Garrison Diversion and by the design team, prepare cost, energy, life-cycle cost, space, and/or other models appropriate; and
- Conduct a validation of the estimate project cost.
- Workshop will be conducted using a job plan consistent with the Society of American Value Engineers (SAVE) International guidelines for value studies. The workshop will be conducted in the location identified in this SOQ/PP. The facility in which the workshop will be conducted will be provided and paid for by Garrison Diversion. The value workshop will consist of the following six phases conducted over a period of five (5) consecutive days:
 - Information Phase
 - Function Analysis Phase
 - Creativity Phase
 - Evaluation Phase
 - Development Phase
 - Presentation Phase
- Following the value workshop, conduct the following activities:
 - Submit the preliminary value report in electronic and hard copy format, consisting of the workshop products within fourteen (14) days of the completion of the value workshop;
 - Review the design team written responses to the preliminary value report, consult with the value team members as necessary, and prepare for a decision-making meeting;
 - Attend the decision-making meeting and provide information to the decision-makers at the meeting relative to the pros and cons of each value recommendation. Respond to the concerns raised by the design team and others, and assist the designer, design project manager and Garrison Diversion's project manager in reaching decisions about whether to incorporate each value recommendation into the project.
 - Prepare a draft final report within fourteen (14) days following the decision-making meeting that document the entire VE study, including the decision made.

Make appropriate revisions to the draft final report based on comments from Garrison Diversion's project manager and provide an electronic and five (5) hard copies within fourteen (14) days following receipt of comments from Garrison Diversion's project manager.

VE Materials –

- Preliminary Design Report
- Pipeline Contract 5 – 60% design submittal
- Trenchless Crossings Contract 5 – 60% design submittal
- Engineer's Opinion of Probable Construction costs

Schedule

The following draft schedule is anticipated for the study;

- | | |
|---|-----------------------|
| ▪ Issue SOQ/PP | June 7, 2018 |
| ▪ Firm Submit Qualifications | June 28, 2018 |
| ▪ Selection Committee evaluates
Qualifications and short-list | July 5, 2018 |
| ▪ Selection Committee conduct interviews | July 12, 2018 |
| ▪ Notify most qualified firm | |
| ▪ Scope/Fee/Negotiation | July 26, 2018 |
| ▪ Board Approval (Garrison Diversion &
Lake Agassiz Water Authority) | August 16, 2018 |
| ▪ Notice to Proceed | |
| ▪ Pre-workshop tasks | August 30, 2018 |
| ▪ Workshop | September 10-14, 2018 |
| ▪ Preliminary Report | September 24, 2018 |
| ▪ Decision/Implementation | October 1, 2018 |
| ▪ Draft Final Report | October 15, 2018 |
| ▪ Final Report | October 29, 2018 |

Criteria for Evaluation of the SOQ/PP

The criteria for both evaluating and ranking the firms will include the following:

1. The education, experience and expertise of the VE team members. Garrison Diversion expects the team listed in the proposal to perform the work on the Project. (Any proposed Project Manager without SAVE certification will disqualify the firm's proposal.)
2. The firm's specific experience history of performance on similar VE projects for pipeline projects.
3. Availability of the proposed personnel to perform the required work in the timeframe of the VE review.
4. The firm's approach to the planning, organizing and managing the VE effort, including communication procedures, approach to problem solving, cost estimating, quality improvement program and similar factors.

5. Recommendations and opinions of firm's previous VE clients as to its ability to provide valuable VE recommendations and meet deadlines and remain within budget.

6. Selection of a firm will be on the basis of proposal reviews and responses provided by the references. The evaluation will be conducted based on the following:

<u>Criterion:</u>	<u>Weight</u>
▪ Understanding and Approach	20
▪ VE Team Member Qualifications	25
▪ VE Team Leader Qualifications	25
▪ Previous Experience and Performance	15
▪ Availability and Schedule	10
▪ Recent and current work for ND entities	<u>5</u>
	100

Garrison Diversion will make selections for interviews on the basis of the written proposals. Interviews will be held with up to three qualified firms. Final selection of the successful firm(s) will be based on a majority vote of the Garrison Diversion Board, or an authorized committee thereof.

Instructions for Preparation of SOQ/PP

General

In order to minimize the work of the firms initially submitting and the review time required by the Selection Committee, the following instructions should be followed in preparing the SOQ/PP. We ask firms to judge for themselves if they feel qualified to perform the work and if they do, to submit to this request.

- Organize the submittal into the following sections:
 - Section 1 – Project Team Organization
 - Section 2 – General Information about the Firm
 - Section 3 – Experience Record and References
 - Section 4 – VE Session Approach
 - Section 5 – Estimated Cost of the Preliminary Proposal
 - Section 6 – Summary
- Limit the contents of the submittal to that described for each section.
- Be succinct.

Section 1 - Project Team Organization

Provide the following information about the organization or team which you would establish for this particular project.

- Name of firm(s)
- Relationship of the firms, if more than one.

Will relationship be a joint venture or a prime-sub type? If prime-sub type, state which firm will be the prime and what role the subs will play in the Project.

- Key personnel expected to be assigned to the project.

List the VE team members on the Project. If more than one firm is involved, provide this information for each firm and clearly indicate who will serve as project manager for the entire team.

- Brief Resumes

Provide an abbreviated resume for each individual listed in the Project organization. Include the following information in each resume:

- Name
- Title within the firm
- Project assignment
- Education - degree/year/university/specialty
- Registration - state/year
- Certifications or special training that relate to VE reviews
- Number of years with current firm
- Summary of experience relative to this type of project

Section 2 - General Information about the Firm

- Type of firm (private/public Corporation, partnership)
- Number of years in business
- Office locations - list home office and office of Project Manager
- Type of services firm normally provides

- Technology capabilities
- Availability of personnel for the project
- Professional liability insurance - limits of current coverage

Section 3 - Experience Record and References

Prepare a tabulation of information about three projects performed by the firm during the last ten years which best illustrates the firm's ability to perform services required for this project. Following is the minimum information required:

- Location of project and owner; provide name of an individual, address and phone number of owner representative who is personally familiar with the project
- Characteristics of the facility: comparable pipeline size and other project characteristics that reflect the Project's elements under review
- Brief description of the project and results of the review

The described experience referenced should reflect upon the Project Manager. The submittal may include an additional project to represent experience of any other firms involved in the project to highlight their skills. The projects highlighted should note the key people who participated in that project and their role.

Section 4 - Approach

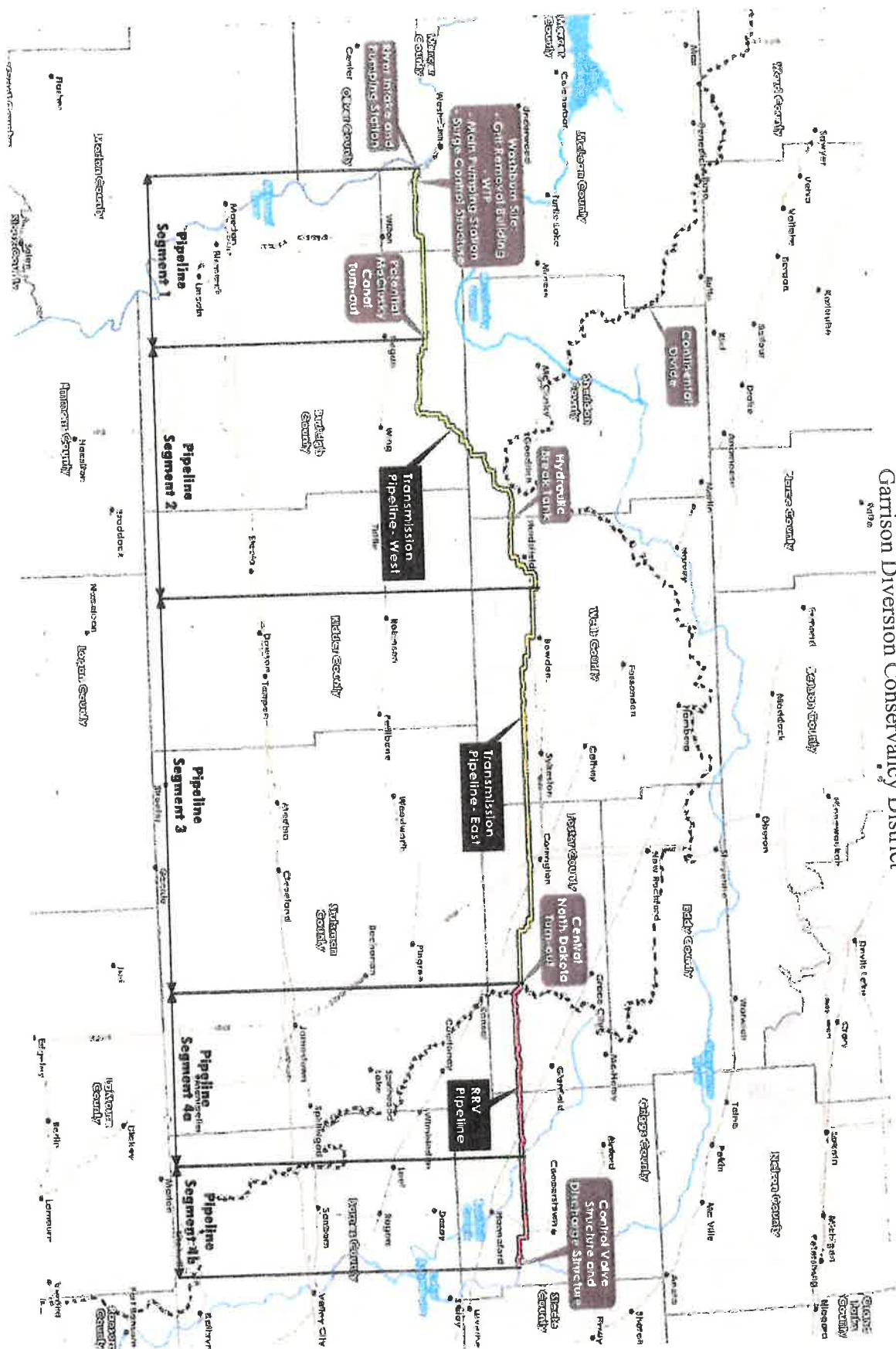
The Project is a major investment for the State of North Dakota and the local water users. Garrison Diversion is concerned with the following critical areas in regards to the Project:

- Economy, reliability and efficiency of the final recommended technology
- Life cycle cost control
- Maintenance and maintainability
- Constructability
- Restoration of the pipeline corridor
- Environmental impacts and mitigation

In this section, prepare a preliminary proposal on how the firm will evaluate the pipeline Preliminary Design. Include what key elements the firm feels are critical in the decision-making process.

Subsequent to your review of the overall scope of the Project, Garrison Diversion would be interested in any comments which may differ from or serve to strengthen the overall Project.

Red River Valley Water Supply Project Garrison Diversion Conservancy District





**Garrison Diversion Conservancy District
PO Box 140
Carrington, ND 58421**

Solicitation Addendum

Date: June 14, 2018

Request for Statement of Qualifications and Preliminary Proposal for Value Engineering Services-RRV-1

Addendum: 1

Page 6 under the heading "Instructions for Preparation of SOQ/PP" inadvertently listed the following:

- Section 5 - Estimated Cost of the Preliminary Proposal
- Section 6 – Summary

These Sections are not included as a part of the SOQ/PP.

Please sign this addendum and return with your submission.

Any questions regarding this addendum must be submitted in writing to:

Kip J. Kovar, PE
Deputy Program Manager for RRVWSP Engineering
701-652-3194 or 701-652-5736
Fax: 701-652-3195
Email: kipk@gdcd.org

By Signature below, I hereby acknowledge receipt of and compliance with the addendum to the above-referenced solicitation.

Please return this acknowledgement with your bid.

Name of Bidder or Offeror: _____

Mailing Address: _____

Printed Name: _____

Title: _____

Date: _____

Mr. Shockley addressed the board, stating that his understanding is that Ohnstad Twichell is being retained to work on the MOU between LAWA and Garrison Diversion. There may be additional work in the future that can be discussed at a later date.

Mr. Shockley said initially, the firm was concerned internally about how to address any conflicts of interest that they may have regarding some of the users. The firm wants to make sure upfront that any potential conflicts have been identified and have contacted administrators from different communities to make sure there were no conflicts.

Mr. Shockley said, as an additional precaution, they are designating three attorneys and one paralegal as representation for LAWA with a creation of a Chinese wall between those people and the rest of the firm.

Mr. Shockley said the fee schedule is currently \$310 for the highest hourly fee and \$165 per hour for the lowest. Once the scope of the engagement is better known, a budget can be put together.

Acting Chair Vein apologized for not getting the engagement letter with Ohnstad Twichell to the board sooner, but in order to keep the project moving forward, they would like to proceed with the engagement for services.

Ms. Norgard said since the board has not reviewed the agreement, Vice Chair Vein could delegate who he would like to have review the agreement with Ohnstad Twichell, and then the motion gets put into place without having to wait until the next meeting.

Acting Chair Vein said he wants the board to be comfortable, and anyone who wants to be a part of the process should contact him or Chair Mahoney. Obviously, a report will be provided at the next board meeting if there are any issues.

Motion by Director Keller to approve a contract between LAWA and Ohnstad Twichell for legal services subject to acceptance of the Review Committee. Second by Director Moen. Upon roll call vote, the following directors voted aye: Althoff, Hancock, Johnson, Keller, Moen and Vein. Those voting nay: Mehnert-Meland. Alternates voting aye: Metzger, Piepkorn and Schelkoph. Absent and not voting: Bigwood and Nilson. Motion carried.

The Review Committee will consist of Chair Mahoney, Vice Chair Vein and Alternate Member Siegert.

NEW BUSINESS

Request for Statement of Qualifications and Preliminary Proposals for Value Engineering Services - - Duane DeKrey, Secretary, provided the background on the value engineering concept.

Mr. Kovar referred to and explained the Draft Statement of Qualifications and Preliminary Proposals for Value Engineering Services in which Garrison Diversion is requesting Statements of Qualifications and Preliminary Proposals (SOQ/PP) from firms to provide a Value Engineering Team for review of the RRWSP Preliminary Design Report (PDR) and milestone design submittals (60%) of Pipeline and Trenchless Crossings Contract 5.

The value engineering team will be made up of five to ten people, who will spend approximately one week studying the PDR and will come up with alternatives to add value to the process. They will then write a report that will go to the owners to review. Once the report is settled upon, it is sent to the engineers, and they begin to determine how to implement the recommendations into the design.

The budget amount for this effort is being estimated at \$150,000 to \$200,000.

Mr. Kovar said a selection committee will evaluate the firms submitting SOQ/PP to determine the top three firms and conduct interviews. Based on the submittals and interviews, the selection committee will choose the best-qualified firm.

Mr. Kovar suggested that the selection committee consist of two representatives from LAWA, two from Garrison Diversion and one from the State Water Commission.

Mr. Kovar stated once the SOQ/PP is approved, it will go out for advertisement. After the proposals are received, the committee would begin its evaluations and make a recommendation. Everything should be finalized by either late August or early September.

Ms. Mooridian reminded the board that this is the type of committee that was used when LAWA and Garrison Diversion were seeking national legal counsel and for the municipal advisor. The only addition would be a State Water Commission representative.

Acting Chair Vein added that Chair Mahoney will be in charge of appointing the two representatives from LAWA.

A copy of the SOQ/PP is attached to these minutes as Annex V.

Motion by Alternate Schelkoph to approve the Request for Statement of Qualifications and Preliminary Proposals for Value Engineering Services. Second by Director Johnson. Upon roll call vote, the following directors voted aye: Althoff, Hancock, Johnson, Keller, Mehnert-Meland, Moen and Vein. Those voting nay: none. Alternates voting aye: Metzger, Piepkorn and Schelkoph. Absent and not voting: Bigwood and Nilson. Motion carried.

OTHER

There being no further business to come before the committee, the meeting adjourned at 1 p.m.

Timothy Mahoney, Chair

Duane DeKrey, Secretary

LAKE AGASSIZ WATER AUTHORITY**BOARD OF DIRECTORS**

**Holiday Inn
Fargo, North Dakota
August 20, 2018**

A meeting of the Lake Agassiz Water Authority (LAWA) board of directors was held at the Holiday Inn, Fargo, North Dakota, on August 20, 2018. The meeting was called to order by Chair Mahoney at 10 a.m.

MEMBERS PRESENT

Chair Tim Mahoney
Vice Chair Ken Vein
Director LaVonne Althoff
Director Dave Carlsrud
Director Tom Erdmann
Director Mark Johnson
Director Ralf Mehnert-Meland
Director Don Moen
Director Keith Nilson
Alternate Gordon Johnson for Director Rick Bigwood
Alternate Geneva Kaiser for Director Bob Keller
Associate Member Carol Siegert
Secretary Duane DeKrey

MEMBERS ABSENT

Director John Hancock
Associate Member Don Bajumpaa

OTHERS PRESENT

Staff members of the Garrison Diversion Conservancy District were present along with others. A copy of the registration sheet is attached to these minutes as Annex I.

The meeting was recorded to assist with compilation of the minutes.

AGENDA

Chair Mahoney asked for approval of the agenda.

**Motion by Director Nilson to approve the board agenda. Second by Director Althoff.
Upon voice vote, motion carried.**

INTRODUCTIONS

Chair Mahoney introduced Tom Erdmann as the new board member for the City of Carrington and welcomed him to the board.

Mr. Erdmann provided a brief background on himself.

CONSIDERATION OF THE MINUTES

Motion by Director Johnson to dispense with a reading of the May 18, 2018, LAWA Board minutes and approve them as distributed. Second by Director Mehnert-Meland. Upon voice vote, motion carried.

OFFICER REPORT

None

COMMITTEE REPORTS

Technical Advisory Committee - - Jerry Blomeke, Vice Chair, LAWA Technical Advisory Committee (TAC), reported that the committee met on July 17. At that time, they heard updates on the StateMod and the North Dakota Pollutant Discharge Elimination System (NDPDES) Permit. Updates were also provided on the Red River Valley Water Supply Project (RRVWSP) schedule and designs. A report on easement values was also provided.

The committee was presented with and recommends approval of the following task orders: Amendment No. 3 to the StateMod, Field Verification of Preliminary Design Report (PDR) Pipeline Alignment, Value Engineering Assistance, Project Information Management System and Land Services. These are on the agenda for consideration by the board today.

Contract Review Committee - - Todd Feland, City Administrator, Grand Forks, provided a report from the Contract Review Committee, which was assigned the duty of conducting a review of the engineering contract between Garrison Diversion and Black & Veatch. This contract includes consulting/engineering services for the RRVWSP. The committee has completed the review and is happy to report that Black & Veatch is doing a good job. It has been determined that the terms of the agreement and fees are reasonable.

Mr. Feland added that the committee discovered the contract insurance requirements are in need of further review and suggested that an insurance advisor be obtained.

Value Engineering Study Selection Team - - Bruce Grubb, City Administrator, Fargo, gave an update from the Value Engineering (VE) Study Selection Team, reporting that interviews were held on July 18 and 19 with the two firms that submitted proposals for the RRVWSP VE Study. One was Barr Engineering, and the other was HDR. A selection committee made up of two representatives from Garrison Diversion, two from LAWA and one from the State Water Commission conducted the interviews.

Both firms have very good experience and appear capable; however, in the committee's opinion, their strengths differ slightly, and it was felt that HDR's strengths better aligned with the RRVWSP.

Mr. Grubb stated it is the recommendation of the Selection Committee to hire HDR to conduct the VE Study of the RRVWSP. He referred to the agreement, scope of work and fee proposal submitted by HDR. The total cost of the proposal is \$198,539.

Motion by Director Althoff to approve the agreement and scope of work with HDR for the purpose of conducting a Value Engineering Study on the Red River Valley Water Supply Project. Second by Director Carlsrud. Upon roll call vote, the following directors voted aye: Althoff, Carlsrud, Erdmann, Johnson, Mahoney, Mehnert-Meland, Moen, Nilson and Vein. Alternates voting aye: G. Johnson and Kaiser. Those voting nay: none. Absent and not voting: Hancock. Motion carried.

Motion by Director Mehnert-Meland to approve HDR's Fee Proposal Summary for the Value Engineering Study on the Red River Valley Water Supply Project in the amount of \$198,539. Second by Director Nilson. Upon roll call vote, the following directors voted aye: Althoff, Carlsrud, Erdmann, Johnson, Mahoney, Mehnert-Meland, Moen, Nilson and Vein. Alternates voting aye: G. Johnson and Kaiser. Those voting nay: none. Absent and not voting: Hancock. Motion carried.

RED RIVER VALLEY WATER SUPPLY PROJECT UPDATE

Central North Dakota Environmental Assessment - - Tami Norgard, Vogel Law, provided an update on the Central North Dakota Environmental Assessment (EA), referring to a copy of the Bureau of Reclamation's letter announcing the release of the Draft Finding of No Significant Impact (FONSI) and Final EA. The Final EA was prepared to analyze the environmental, social and economic impacts of issuing a water service contract to Garrison Diversion. The Draft FONSI was prepared to document the environmental review and evaluation of the proposed action in the EA. This means the environmental review has ended. The review period on the FONSI ends August 31.

Ms. Norgard said once the FONSI has been signed, negotiations can begin on a water service contract in order to obtain water from the McClusky Canal.

Upper Sheyenne River Analysis - - Chair Mahoney informed the board that a presentation on the Upper Sheyenne River Analysis was made to the State Water Commission at its meeting on August 9. He called on Steve Burian, Advanced Engineering and Environmental Services, to give a report on the meeting.

Mr. Burian explained that the City of Devils Lake expressed its interest in shortening the route of the pipeline by turning at Highway 30 and believes that delivering the water into the Upper Sheyenne River would be more beneficial and cost effective. A preliminary analysis was done that indicated difficulties with that strategy, yet Devils Lake continued to express concern. A more detailed analysis was then conducted and several meetings were held with the City of Devils Lake.

Mr. Burian said by delivering water to the Upper Sheyenne River, it is approximately 188 river miles further upstream rather than delivering the water to the proposed location. There is potential for considerable water loss along the Upper Sheyenne River stretch either through evaporation, evapotranspiration or through seepage. This is also a very minor stream that has not been proven to be reliable, other than for the Devils Lake Outlet. The preliminary analysis determined there could be losses exceeding 40 cfs or more. The life cycle cost analysis showed on the upper end of the losses it would cost more to go to the

Upper Sheyenne than to the lower Sheyenne River. There are also legal obstacles in terms of the Dakota Water Resources Act and language included with regard to Devils Lake. In addition, there are very few development agreements signed in this area.

In conclusion, when looking at the technical concerns, financial differences, legal issues and the limited users, the original approach remains the best approach.

At the end of the presentation to the State Water Commission, Mr. DeKrey stated that it was the intention of Garrison Diversion and LAWA to move forward with the current plan unless there was major opposition.

Financial Update - - Merri Mooridian, Deputy Program Manager, RRVWSP Administration, provided a financial update. Various funding scenarios are included in the financial models, which are very robust. Various terms and rates are being reviewed.

Ernst & Young, who are the municipal advisors, are on hold with the modeling efforts until more direction is provided from the board.

Work is also being done on the ability to pay analysis.

Work Plan Update - - Kip Kovar, Deputy Program Manager, RRVWSP Engineering, referred to the RRVWSP Work Plan Update dated August 7, which provides the status on each of the approved task orders. A copy of the update is attached to these minutes as Annex II.

Mr. Kovar provided an update on the general design progress for early out construction items, which includes the intake pump station wet well, discharge structure and trenchless crossings. A next step is to attend a scaled model witness test of the pump station, which he will attend in September.

Mr. Kovar also reported on the status of the intake, sovereign lands and NDPDES permits.

Mr. Kovar presented the need and the scope of the new task orders via PowerPoint.

Task Orders

StateMod Amendment No. 3

Mr. Kovar presented and reviewed Amendment No. 3 to the StateMod Task Order. While the work in Amendment No. 2 provided an overall design basis for the RRVWSP pipeline, additional analysis using the model and tasks outside of the model are now being requested as described in this amendment.

Basic services noted under Task 1 are for additional expenses incurred under Amendment No. 2. Tasks 2 through 6 cover new work as described: Task 2 includes project management, Task 3 includes special project and third-party coordination, Task 4 includes on demand alternative modeling and model refinement, Task 5 includes losses for the receiving water and Task 6 includes research and updating the Lake Ashtabula Operating Plan.

The cost of this task order is \$193,428.

Motion by Director Johnson to approve Amendment No. 3 to the StateMod Task Order in the amount of \$193,428. Second by Alternate G. Johnson. Upon roll call vote, the following directors voted aye: Althoff, Carlsrud, Erdmann, Johnson, Mahoney, Mehnert-Meland, Moen, Nilson and Vein. Alternates voting aye: G. Johnson and Kaiser. Those voting nay: none. Absent and not voting: Hancock. Motion carried.

Field Verification of PDR Pipeline Alignment

Mr. Kovar presented and reviewed the task order for Field Verification of PDR Pipeline Alignment.

The task order consists of professional design services associated with the field verification of 139 miles of alignment including any recommended alignment changes, similar to what has been done for the first 28 miles of alignment (Segment 1). Reference materials, including those developed under previous task orders, will be compared to actual field findings and differences noted with written notes, photographs, video, and other descriptive tools.

The total cost of the task order is \$164,000.

Motion by Director Althoff to approve the Task Order for Field Verification of PDR Pipeline Alignment in the amount of \$164,000. Second by Director Nilson. Upon roll call vote, the following directors voted aye: Althoff, Carlsrud, Erdmann, Johnson, Mahoney, Mehnert-Meland, Moen, Nilson and Vein. Alternates voting aye: G. Johnson and Kaiser. Those voting nay: none. Absent and not voting: Hancock. Motion carried.

Value Engineering Assistance

Mr. Kovar next presented and reviewed the Value Engineering Assistance Task Order.

The main focus of this task order is for the engineer and its subconsultant(s) to assist Garrison Diversion as it completes a VE review of the RRVWSP elements through the use of a VE consultant.

The anticipated cost of this task order is \$64,000.

Motion by Director Carlsrud to approve the Task Order for Value Engineering Assistance in the amount of \$64,000. Second by Director Johnson. Upon roll call vote, the following directors voted aye: Althoff, Carlsrud, Erdmann, Johnson, Mahoney, Mehnert-Meland, Moen, Nilson and Vein. Alternates voting aye: G. Johnson and Kaiser. Those voting nay: none. Absent and not voting: Hancock. Motion carried.

Program Management Information System

Mr. Kovar also referred to and reviewed the Program Management Information System Task Order.

The main focus of this task order is to assist Garrison Diversion in making initial contact with vendors and to solicit formal submittals from those vendors to provide hardware, software, and services relating to construction type activity. Information requested of vendors will

address the management, organization, and archiving of information and data over the life of the Project.

The cost of this task order is \$43,100.

Motion by Director Mehnert-Meland to approve the Program Management Information System Task Order in the amount of \$43,100. Second by Director Nilson. Upon roll call vote, the following directors voted aye: Althoff, Carlsrud, Erdmann, Johnson, Mahoney, Mehnert-Meland, Moen, Nilson and Vein. Alternates voting aye: G. Johnson and Kaiser. Those voting nay: none. Absent and not voting: Hancock. Motion carried.

Land Services

Mr. Kovar referred to the task order for Land Services, explaining that the task order was issued previously and the board authorized the first segment.

The purpose of this task order is for survey support services to secure all necessary permanent easements within Segment 1, and to execute existing and secure new easement options on RRVWSP parcels for Segments 2a, 2b, 3 and 4.

Mr. Kovar stated there are limited funds remaining in this biennium so spending requirements need to be balanced out. There are 58 options remaining on a portion of Segment 3, which is part of the 2010 alignment going into the McClusky Canal. These options will expire in the summer of 2019. The options for Segment 3 are: 1) convert the 58 options to easements, 2) renegotiate and extend expiring option agreements, or 3) abandon signed options.

Mr. Kovar reported that Garrison Diversion's board and the LAWA TAC agreed to look at renegotiating and extending the expiring option agreements for Segment 3. Letters would be sent to the landowners to determine if they are willing to sign another option agreement. A decision could then be made by the various boards on which way to go.

Motion by Director Nilson authorizing the preparation of letters to landowners along Segment 3 to determine interest in renegotiating and extending option agreements. Second by Alternate Kaiser. Upon roll call vote, the following directors voted aye: Althoff, Carlsrud, Erdmann, Johnson, Mahoney, Mehnert-Meland, Moen, Nilson and Vein. Alternates voting aye: G. Johnson and Kaiser. Those voting nay: none. Absent and not voting: Hancock. Motion carried.

Mr. Kovar added that approximately 80 acres is needed for the intake, main pump station, break tank, control valve structure and the discharge site. He proposes, in order to optimize the use of funds, moving forward with the purchase of property for the intake and discharge facilities this biennium. Options to purchase could be secured for the other needed properties.

Motion by Director Althoff authorizing the purchase of property for the RRVWSP intake and discharge facilities. Second by Director Johnson. Upon roll call vote, the following directors voted aye: Althoff, Carlsrud, Erdmann, Johnson, Mahoney, Mehnert-Meland, Moen, Nilson and Vein. Alternates voting aye: G. Johnson and Kaiser. Those voting nay: none. Absent and not voting: Hancock. Motion carried.

LAKE AGASSIZ WATER AUTHORITY

BOARD OF DIRECTORS

**Holiday Inn
Fargo, North Dakota
December 14, 2018**

A meeting of the Lake Agassiz Water Authority (LAWA) board of directors was held at the Holiday Inn, Fargo, North Dakota, on December 14, 2018. The meeting was called to order by Chair Mahoney at 11 a.m.

MEMBERS PRESENT

Chair Tim Mahoney
Vice Chair Ken Vein
Director LaVonne Althoff
Director Rick Bigwood
Director Dave Carlsrud
Director Tom Erdmann
Director John Hancock
Director Mark Johnson
Director Ralf Mehnert-Meland
Director Don Moen
Director Keith Nilson
Alternate Geneva Kaiser for Director Bob Keller
Associate Member Don Bajumpaa
Associate Member Dick Johnson
Associate Member Carol Siegert
Secretary Duane DeKrey

MEMBERS ABSENT

None

OTHERS PRESENT

Staff members of the Garrison Diversion Conservancy District were present along with others. A copy of the registration sheet is attached to these minutes as Annex I.

The meeting was recorded to assist with compilation of the minutes.

AGENDA

Motion by Director Althoff to approve the board agenda. Second by Vice Chair Vein. Upon voice vote, motion carried.

CONSIDERATION OF THE MINUTES

Motion by Director Nilson to dispense with a reading of the October 12, 2018, LAWA Board minutes and approve them as distributed. Second by Director Bigwood. Upon voice vote, motion carried.

OFFICER REPORT

None

COMMITTEE REPORTS**LAWA Technical Advisory Committee****Value Engineering Study Report**

Al Grasser, Chair, LAWA Technical Advisory Committee, provided a report from their meeting held on November 15. The primary purpose of the meeting was to review the Preliminary Value Engineering Study Report on the Red River Valley Water Supply Project (RRVWSP). As a result of the study, various engineering-type alternatives were recommended for consideration as the RRVWSP moves forward. The Design Team reviewed each of the items and provided comments and responses on whether or not to implement the recommendations into final design of the RRVWSP.

Chair Grasser stated that the LAWA TAC went over each of the 46 alternatives, along with the Design Team's responses and recommendations. The TAC had no disagreements with the Design Team's comments and responses. Based on that, the committee recommends approval of the recommendations from the Design Team on the value engineering analysis.

Motion by Director Nilson to approve the Design Team's recommendations on the RRVWSP Value Engineering Study analysis. Second by Director Bigwood. Upon roll call vote, the following directors voted aye: Althoff, Bigwood, Carlsrud, Erdmann, Hancock, Johnson, Mahoney, Mehnert-Meland, Moen, Nilson and Vein. Alternates voting aye: Kaiser. Those voting nay: none. Motion carried.

Upper Sheyenne River Alternative Update

Chair Grasser reminded the board of Devils Lake's request to consider rerouting the RRVWSP pipeline to the Upper Sheyenne River. The LAWA Board then tasked the TAC with looking at option four, which is the Current Alignment/Upper Sheyenne Combination.

The TAC discussed this issue at its November 15 meeting. The item was tabled pending further guidance from the LAWA Board and validation to get into this level of detail. He asked that the technical information be assembled and distributed to the TAC for review at its next meeting.

RED RIVER VALLEY WATER SUPPLY PROJECT UPDATE

McClusky Canal Water Source - - Tami Norgard, Vogel Law, provided an update on the request to consider 145 cfs from the McClusky Canal as an option for the RRVWSP. Both

- (f) Two (2) meetings with other impacted utilities or stakeholders will be held virtually.

3. Task 3 – Supplemental Design Evaluations

The purpose of the supplemental evaluations is to assess options that could 1) result in capital cost and/or O&M cost savings, 2) positively or negatively impact project funding or schedule, and 3) have direct impact on future operations and maintenance of the facilities. These evaluations will provide a summary of options that vary from the Preliminary Design Report and identify cost and operational impacts to Garrison Diversion for consideration of incorporation into the final design. A Technical Memorandum will be issued for each of the tasks below. Technical Memorandums will be reviewed with Garrison Diversion for final determinations, which will either direct its incorporation into the facilities design or not.

- A. Standby Capacity (N+1) Analysis. BWTP is not a potable water treatment facility. As such, some areas where standby units or capacity have been incorporated into the Preliminary Design could be reduced as the current design approach mirrors that of a traditional water treatment plant abiding by standard design approaches for potable water facilities. An analysis completed by Engineer will identify areas where capacity could be reduced, the associated capital cost savings, and potential impacts to operations with a reduction in standby units. A summary will be prepared and reviewed with Garrison Diversion staff for final decisions. Input from Reclamation may be required for some design changes. Specific areas for consideration include:
- i. Standby power generation – number and capacity of units
 - ii. N+1 evaluation (i.e., firm capacity or capacity with the largest unit out of service) – this would apply to items such as:
 - (a) Passive intake screens,
 - (b) Intake pumps,
 - (c) Treatment processes and equipment,
 - (d) Residuals pumps,
 - (e) Residuals treatment equipment,
 - (f) Chemical delivery, storage, handling, and feed equipment,
 - (g) Ultraviolet light (UV) disinfection,
 - (h) Main pumps,
 - (i) Hydro-pneumatic surge tanks,
 - (j) Building mechanical systems (e.g., HVAC, plumbing, fire protection),
 - (k) Electrical systems, and
 - (l) I&C systems.
- B. Facility Size Review. Non-process areas such as office, conference rooms, operations and maintenance areas will be reviewed with Garrison Diversion to determine if size reductions that lead to capital cost reduction are feasible while meeting operational needs.

- C. Geotechnical Design and Assumptions and Foundation Design. Optimization of foundations requirements for areas with lower loading rates will be evaluated along with requirements to address potential for differential settlement. Projected cost savings associated with foundation design revisions will be prepared and reviewed with Garrison Diversion staff for final decisions. A summary of geotechnical considerations for the site will be included.

4. Task 4 – Field Services

This Task Order includes services to collect additional supplemental field data needed to complete final design and for development of bid packages. A Supplemental Geotechnical Field Investigation is being completed under Task Order 3220, and the results of that investigation will be used to support this Task Order. No additional geotechnical field work is included in this Task Order.

- A. Limited Topographic Survey. Engineer will provide field topographic surveys for supplemental data needed for final design. This scope of services includes up to 40 hours of onsite surveying by a 2-man survey crew with supplemental time for data processing and drawing development.
- B. Site Visits. Engineer will make visits to the site for the purpose of collecting supplemental information and other data to support the final design efforts. Up to four trips are anticipated for fee development purposes.

5. Task 5 – Final Design Services

The purpose of final design is to develop design documents for BWTP, which the Owner will provide to a CMAR to build the desired facilities. Engineer will provide final design services and design documents for the BWTP facilities as defined in the ENDAWS PDR. The design documents will be prepared for the purposes of obtaining GMP construction package(s) from a CMAR and construction of the Work. Intermediate deliverables will be prepared and submitted to the Owner upon achievement of 60- and 90-percent design completion. More than one design package may be prepared for separate construction work to be bid by subcontractors to the CMAR. An equipment procurement GMP package may be developed prior to 90-percent design.

- A. Design Team Conference Calls. Engineer will schedule and lead conference calls with the Owner and their team. Calls will be scheduled, and content organized to coincide with other Task Orders for efficient utilization of staff time.
 - i. Owner Conference Calls (up to thirty-six calls will be held). Engineer will conduct bi-weekly conference calls with the Owner to review overall progress, exchange ideas and information, and coordinate activities.
 - ii. Task Order Coordination Calls (up to eighteen calls will be held). Engineer will plan and take part in monthly coordination conference calls with tasks leaders of other Task Orders to share progress and conclusions such that efforts are coordinated.

- B. Compile 30 percent drawing set. The PDR provides visual representation of the BWTP building in a 3-D model. A full PDR plan set will be developed at the start of detailed design. This set will coordinate development of plans and sections across design disciplines and incorporate additional drawings beyond the scope of the PDR. Additional drawings to be developed include:
- i. Control block diagrams.
 - ii. P&ID drawings for chemical systems, safety support systems, air burst system, ammonia feed system, bisulfite system, compressed air, engine generators, solids thickening, and sludge lagoons.
 - iii. Major plans and sections for all process equipment.
 - iv. Mechanical process enlarged plans and sections for MPS, MCIPS, Pretreatment, UV, and Solids Handling Equipment.
 - v. Mechanical process valve and equipment schedules.
 - vi. Plumbing lower-level plan.
- C. Corrosion Protection System Evaluation. Engineer will formulate an approach and develop in detail a corrosion protection system for the Project. Engineer will evaluate the data from corrosivity testing completed and reported under Task Orders 3210 and 3220 and the corrosion protection technical memorandum developed in Task Order 2650. From this information, develop drawings and specifications for the corrosion protection system incorporating them into the DDs. Drawings and specifications will be developed for 60- and 90-percent, and Final deliverables. The 60-percent deliverable consists of the design of essential components of the corrosion protection system. Final client comments will be incorporated into the Final deliverable.
- i. Design Memorandum. Prepare a draft and final corrosion protection system technical memorandum.
 - ii. Final Design Services. Prepare and deliver the design of essential corrosion protection system components.
- D. Front-End Documents Customization
- i. Prepare and deliver draft front-end documents as required to incorporate Reclamation requirements for Federal projects for use by the CMAR in obtaining bids from subcontractors.
 - ii. Conduct a review conference call with Owner and Reclamation to discuss and receive comments on the draft front-end documents.
 - iii. Revise front-end documents addressing comments by Owner and Reclamation and incorporate modifications, if any, into subsequent deliverables.

- E. Permitting. This subtask encompasses applicable governmental approvals, including counties, townships, and utility permits and approvals necessary to construct the facilities. The facilities will comply with overall Federal permit requirements.
- i. Engineer will obtain in conjunction with the Owner necessary approvals from the appropriate utilities, city, county, and state agencies having authority over the Work.
 - ii. Engineer will prepare a permitting schedule identifying action items, decision points, milestones, reviews, and approvals required to complete permitting. Engineer will communicate status of permits to Owner.
 - iii. Contractor-Provided Permits. Engineer will provide in the DDs a list of the permits that must be obtained by the Contractor. Based upon preliminary design, it is understood that the following permits, at a minimum, will be the responsibility of the Contractor:
 - Erosion and sediment control
 - Land disturbance
 - Stormwater
 - Dewatering operations discharge
 - iv. Owner-Provided Permits
 - (a) Engineer will aid the Owner in obtaining the following permits from government agencies, North Dakota Department of Environmental Quality (NDDEQ), United State Environmental Protection Agency (USEPA), North Dakota Department of Transportation (NDDOT), utilities, and other entities as noted below:
 - NDDEQ discharge permit for supernatant from residuals lagoons
 - NDDEQ discharge permit application for SRO at Cooperstown
 - USEPA solids disposal permit
 - NDDOT access
 - County and township conditional use
 - County road closing/detours
 - (b) Assistance provided by Engineer for the above listed permits will include:
 - (i) Preparation of applications, exhibits, drawings, and specifications ready for the Owner's execution and/or transmittal.
 - (ii) Furnishing additional information about the Project's design as required by the permitting authority.

F. 60-percent DDs (Level 2 Design)

- i. The Level 2 design will commence after the Owner accepts the preliminary design set forth in the ENDAWS PDR.

ii. The content of Level 2 deliverables is as follows:

- Draft front-end documents to incorporate Reclamation requirements for Federal projects
- General drawings,
- Site plan, including enlarged lagoon and septic system plans,
- Grading and paving plans,
- Yard piping drawings,
- Structural foundation plans and sections,
- Structural framing plans and sections,
- Architectural plans, sections, elevations, and perspectives,
- Facility plans, sections, and details showing major process and sub-process equipment,
- Piping and instrumentation diagrams (P&IDs),
- Equipment control descriptions,
- Process equipment specifications and data sheets,
- Valve list,
- Instrumentation input and output lists,
- Instrumentation device schedules,
- Substation transformer plan,
- Power and lighting plans,
- Electrical one-line diagrams,
- Electrical fixture schedules,
- Commodity specifications with schedules,
- HVAC layouts and equipment schedules,
- Plumbing plans,
- Duct bank and roadway lighting arrangements,
- Architectural schedules,
- Plumbing schedules,
- Draft technical specifications for each discipline,
- Draft corrosion protection system technical memorandum,
- Constructability review results,
- Quantity takeoffs from Revit model,
- Internal quality control review and refinement,
- QA/QC plan and log update, and
- Task Order schedule update.

iii. Provide technical specifications and drawings for Owner review.

iv. Attend a meeting with the Owner to receive and discuss the Owner's review comments. Document the comments received in a log distributed to meeting attendees.

v. Revise documents as necessary to reflect decisions taken at this level incorporating design modifications into subsequent deliverables.

Table 2 – Project Schedule

Critical Task	Approximate Date
RFP Released for CMAR	October 1, 2026
Mandatory Pre-Proposal Meeting	October 20, 2026
CMAR Proposals Due	November 6, 2026
Notification of Short-Listing	December 4, 2026
CMAR Interviews	January 11-15, 2027
CMAR Selection/Owner Approval	January 22, 2027
Notice of Award – Phase I	January 29, 2027
Owner – Phase 1 Preconstruction Services Contract Negotiations/Award of Contracts	February to March, 2027
Notice to Proceed	April 1, 2027
Phase I Kickoff/Chartering Meeting	April 15, 2027
CMAR Review of PDR and submittal of Baseline Cost and Schedule	June 15, 2027 (60 days after Kickoff/Chartering Meeting)
Value Engineering Workshop	July 15, 2027, (90 days after Kickoff/Chartering Meeting)
Owner Concurrence with CMAR Recommendations for Construction Schedule, Bid Packages, and Procurement of Long Lead Time Equipment	August 13, 2027 (120 days after Kickoff/Chartering Meeting)
60% Design Submittal by the Design Engineer	November 1, 2027
60% Design Review, Cost Estimate, Constructability Review and Schedule Update	December 1, 2027 (30 days after 60% Design Submittal)
60% GMP Amendment Bidding and Submittal Due.	January 14, 2028 (75 days after 60% design submittal)
Award of 60% GMP Amendment CMAR Construction Contract	March 1, 2028
Start of Early Out Construction and Procurement of Long Lead Time Equipment	March to June, 2028
90% Design Submittal by Design Engineer	June 1, 2028
GMP Amendment	July 7, 2028
Substantial Completion	October 2032



2023 to 2025 Biennium Work Plan

(\$246 mil Total Funding: \$4.5M Federal; \$180M State; \$61.5M Local Users)

February 10, 2026

No.	Scope of Work	Feature	Date Task Orders Auth	Note	2023-25 Bien ENDAWS Project Development Budget (mil \$)			2023-25 Biennium RRVWSP Project Development Budget (mil \$)			2023-25 Biennium RRVWSP Project Constr Budget (mil \$) ^{1,2,3}		
					Total	Fed/Sta 75%	Local 25%	Total	State 75%	Local 25%	Total	State 75%	Local 25%
1.	Garrison Diversion Conservancy District Budget	Garrison Diversion's costs for the RRVWSP, including internal mgmt, admin, legal, communication, insurance advisory, misc., etc.	Series D	GD CD									
	Scope: Account for all costs for which Garrison Diversion is responsible not included in other Task Orders listed here.							\$ 1.00	\$ 0.75	\$ 0.25			
	Need: Budget allocation for GD CD direct costs associated with the Red River Valley Water Supply Project.												
2.	Property, Easements, and Crop Damage Payments⁴	Acquire easements in Sheridan and Wells County for 32-mi pipeline. Pay bonus payment to all easement holders. Acquire property for Biota WTP, Hydraulic Break Tanks, McClusky Canal Intake, and James River sites. Pay for crop damage.	Series D	RRVWSP				\$ 2.21	\$ 1.66	\$ 0.55			
	Scope: Costs to obtain easements and acquire property for associated facilities. Crop damage payments to landowners.				ENDAWS	\$ 0.49	\$ 0.37	\$ 0.12					
	Need: Secure land for installing future pipeline segments staying years ahead of pipeline design/construction needs. Purchase property on which to build all remaining facilities so property will be in hand before final design begins.				ENDAWS Facilities	\$ 2.00	\$ 1.50	\$ 0.50					
					Crp Dmg				\$ 0.78	\$ 0.59	\$ 0.20		
3.	Transmission Pipeline East Contract 5C	8± mi of 72" pl, including two 96" tunnels. Pipeline extends eastward from Contract 5B NE of Bordulac to a termination point just east of the James River.	Series D	Prof Svcs							\$ 5.64	\$ 4.23	\$ 1.41
	Scope: Pipeline installation, including construction phase engineering services by Engineer.				Jul-23								
	Need: Continue progress of transmission pipeline installation for completion of RRVWSP by the target end date.				Nov-23						\$ 76.66	\$ 57.50	\$ 19.17
4.	Transmission Pipeline East Contract 5D	10± miles of 72" pl, including several 96" tunnels. Pipeline section extends westward from Contract 5A south of Carrington to a termination point south of Sykeston.	Series D	Prof Svcs							\$ 5.47	\$ 4.10	\$ 1.37
	Scope: Pipeline installation, including construction phase engineering services by Engineer.				Jul-23								
	Need: Continue progress of transmission pipeline installation for completion of RRVWSP by the target end date.				Oct-23					\$ 59.38	\$ 44.53	\$ 14.84	
5.	RRV Transmission Pipeline Contract 6A	6± mi of 72" pl, including several 96" tunnels. Pipeline section extends eastward from Contract 5C just east of the James River to a termination point southwest of Glenfield.	Series D	Prof Svcs							\$ 5.47	\$ 4.10	\$ 1.37
	Scope: Pipeline installation, including construction phase engineering services by Engineer.				Jul-23								
	Need: Continue progress of transmission pipeline installation for completion of RRVWSP by the target end date.				Dec-24					\$ 52.53	\$ 39.40	\$ 13.13	
6.	ENDAWS Transmission Pipeline Contract 3	11± mi of 72" pipeline, including 96" tunnels. Pipeline section extends west from the west end of Contract 4 to the Sheridan Wells County line.	Series D	Aug-23	ENDAWS	\$ 3.06	\$ 2.29	\$ 0.76					
	Scope: Final design (30% docs to biddable plans and specs) and bidding assistance.												
	Need: Continue progress of transmission pipeline installation for completion of RRVWSP/ENDAWS by the target end date.												
7.	Transmission Pipeline East Contracts 4A and 4B	27± mi of 72" pl, including several 96" tunnels. Pipeline extends from the west end of Contract 5D south of Sykeston west to a termination point NE of Hurdsville at HBTs.	Series D	Feb-24	Prof Svcs				\$ 7.18	\$ 5.39	\$ 1.80		
	Scope: Final design (30% docs to biddable plans and specs) and bidding assistance.												
	Need: Have the next pipeline section bid-ready when State funding becomes available (likely the 2025-27 biennium).												



2023 to 2025 Biennium Work Plan

(\$246 mil Total Funding: \$4.5M Federal; \$180M State; \$61.5M Local Users)

February 10, 2026

No.	Scope of Work	Feature	Date Task Orders Auth	Note	2023-25 Bien ENDAWS Project Development Budget (mil \$)			2023-25 Biennium RRVWSP Project Development Budget (mil \$)			2023-25 Biennium RRVWSP Project Constr Budget (mil \$) ^{1,2,3}		
					Total	Fed/Sta 75%	Local 25%	Total	State 75%	Local 25%	Total	State 75%	Local 25%
8.	RRV Transmission Pipeline Contract 7	14± mi of 72" pipeline, including several 96" tunnels. Pipeline extends from the east end of Contract 6B to the outfall on the Sheyenne River southeast of Cooperstown.	Series D Aug-23	Prof Svcs									
	Scope: Final design (30% docs to biddable plans and specs) and bidding assistance.							\$ 2.93	\$ 2.19	\$ 0.73			
	Need: Have the next pipeline section bid-ready when State funding becomes available (likely the 2025-27 biennium).												
9.	McClusky Canal Intake and Pumping Station	Siting; passive intake screens, pumping station similar to MRI, and utility extension design can begin for new facility to be located near McClusky, ND.	Series D Feb-24	Prof Svcs									
	Scope: Conceptual and preliminary design of an intake and pumping station at the McClusky Canal.				\$ 0.75	\$ 0.56	\$ 0.19						
	Need: Preliminary designs are necessary so site acquisition can begin and final design can commence when land is secured.												
10.	Biota Water Treatment Plant and Main Pumping Station	165-cfs biota WTP, with chlorine and UV disinfection to meet NDPDES permit and FEIS requirements per Reclamation. Chloramines for residual disinfectant in pipeline.	Series D Feb-24	Prof Svcs									
	Scope: Conceptual and preliminary designs for a Biota WTP and Main Pumping Station, including hydraulic surge facility.				\$ 2.87	\$ 2.15	\$ 0.72						
	Need: Complete design to a point where land acquisition can begin and project can move into final design next biennium.												
11.	Hydraulic Break Tanks	Two 5 MG above-ground storage tanks and accessories, site piping and valves, monitoring, and utility extensions necessary for a new greenfield site.	Series D Feb-24	Prof Svcs									
	Scope: Preliminary design of above-ground tanks and associated facilities at or near the continental divide.				\$ 0.37	\$ 0.28	\$ 0.09						
	Need: Complete design to a point where land acquisition can begin and project can move into final design next biennium.												
12.	PMIS Annual Licenses & Continued Maint/Upgrades	Vendor fees (e-Builder & DocuSign) for licenses of expanded team and consulting support for training of contractors/ subcontractors and workflow/report additions and modifications.	Series D Feb-24	Vend & Prof Svcs									
	Scope: Annual software license renewal for expanded team and consulting support for training and configuration services.							\$ 0.50	\$ 0.37	\$ 0.12			
	Need: Create greater efficiency and documentation for voluminous amount of construction related documents.												
13.	Prg Mgmt to Support Larger Spend and Expanded Team	Overall planning, management, administration, scheduling, budgeting, coordination, meeting preparation/attendance, regulatory interface, reporting, etc.	Series D Aug-23	Prof Svcs									
	Scope: Overall program management, planning, budgeting, scheduling, and other support for Garrison Diversion.							\$ 0.65	\$ 0.49	\$ 0.16			
	Need: Consulting services of a broad programmatic nature not included under project-specific design or construction TOs.												
14.	Outreach, Plng, and Design to Secure User Commitments	Size pipelines, pumping stations, channels, storage, etc. and other necessary infrastructure to deliver raw water to end users. Update capex to reflect current market.	Series D Aug-23	Prof Svcs									
	Scope: User briefings and necessary support, including conceptual designs, to secure project commitments.							\$ 1.69	\$ 1.27	\$ 0.42			
	Need: Define pipeline extensions to identify for users how and a what cost water will be delivered to their communities.												



2023 to 2025 Biennium Work Plan

(\$246 mil Total Funding: \$4.5M Federal; \$180M State; \$61.5M Local Users)

February 10, 2026

No.	Scope of Work	Feature	Date Task Orders Auth	Note	2023-25 Bien ENDAWS Project Development Budget (mil \$)			2023-25 Biennium RRVWSP Project Development Budget (mil \$)			2023-25 Biennium RRVWSP Project Constr Budget (mil \$) ^{1,2,3}		
					Total	Fed/Sta 75%	Local 25%	Total	State 75%	Local 25%	Total	State 75%	Local 25%
15.	Operational Planning and Asset Management Phase 3	Refine details of diversions to/from Lake Ashtabula. Finalize stakeholder roles and responsibilities as it relates to system operation.	Feb-24	Prof Svcs									
	Scope: System modeling, evaluation, planning, and report development documenting results/findings/outcomes.							\$ 0.62	\$ 0.46	\$ 0.15			
	Need: Finalize Garrison Diversion, State Water Commission, and USACE roles for system operation.												
16.	Financial Planning Support	Update financial models; address state loan and financing program changes; end user funding, financing, and cost-share analyses; continued funding and finance outreach.	Aug-23	Prof Svcs									
	Scope: Continue to refine the financial model and provide scenarios as required to support users and the program.							\$ 0.59	\$ 0.44	\$ 0.15			
	Need: Accurate water bill estimates and affordability for customers are necessary to gain approval from users.												
17.	McClusky Canal Hydraulic & Water Quality Investigation	Evaluate canal improvements necessary to deliver flows. Develop operational plan to supply irrigators and ENDAWS/RRVWSP system while improving delivered water quality.	Apr-25	Prof Svcs									
	Scope: Study and report on operation of the McClusky Canal to reliably supply flow to irrigators and the ENDAWS project.				\$ 0.44	\$ 0.33	\$ 0.11						
	Need: The McClusky Canal and the Snake Creek Pumping Plant are critical components of the ENDAWS/RRVWSP system.												
18.	ENDAWS Facilities Site Development Contract 1	Access roads to proposed site of new Biota WTP, mass grading to prepare for structure construction, and temporary excavation support system for intake pumping station wetwell.	Apr-25	Prof Svcs									
	Scope: Final design and bidding assistance with partial execution of the construction work by GDCD.				\$ 0.88	\$ 0.66	\$ 0.22						
	Need: Provide site access for construction and ready site for substantial facilities construction beginning in 2028.												
19.	ENDAWS BWTP Piloting and Treatability Study	Pilot scale treatment train consisting of preliminary treatment, UV disinfection, chlorination, and residual chloramine treatment.	Apr-25	Prof Svcs									
	Scope: water treatment piloting of preliminarily selected treatment processes with a 3-month duration.					\$ -	\$ -	\$ 0.87	\$ 0.65	\$ 0.22			
	Need: Process demonstration necessary to make sure water quality treatment objectives can be met with selections.												
20.	ENDAWS Facilities Supplemental Geotechnical Invest.	Geotechnical borings; soil characterization, sampling and testing; and reporting to fully inform design team and contractors of on-site insitu soil characteristics.	Apr-25	Prof Svcs									
	Scope: Additional borings and soil sampling expanding upon the initial program implemented during preliminary design.				\$ 0.89	\$ 0.66	\$ 0.22						
	Need: More data needed to properly design foundations, structures, pavement, etc. for the new facilities.												
21.	ENDAWS Transmission Pipeline Contract 2	10± mi of 72" pipeline, including one 96" diameter tunnels. Pipeline extends from ND Highway 14 east to the connection point with Contract 3.	Apr-25	Prof Svcs									
	Scope: Final design (30% docs to 90% plans and specs).				\$ 1.78	\$ 1.34	\$ 0.45						
	Need: Have next pipeline section nearly ready so when Federal funding is secured/allocated design can quickly be completed and construction can proceed.												



2023 to 2025 Biennium Work Plan

(\$246 mil Total Funding: \$4.5M Federal; \$180M State; \$61.5M Local Users)

February 10, 2026

No.	Scope of Work	Feature	Date Task Orders Auth	Note	2023-25 Bien ENDAWS Project Development Budget (mil \$)			2023-25 Biennium RRVWSP Project Development Budget (mil \$)			2023-25 Biennium RRVWSP Project Constr Budget (mil \$) ^{1,2,3}		
					Total	Fed/Sta 75%	Local 25%	Total	State 75%	Local 25%	Total	State 75%	Local 25%
22.	ENDAWS Transmission Pipeline Contract 1	11± mi of 72" pipeline, including uup to five 96" diameter tunnels. Pipeline extends from BWTP at McClusky Canal east to ND Highway 14 connection point with Contract 2.	Series E										
	Scope: Final design (30% docs to biddable plans and specs) and bidding assistance.		Apr-25	Prof Svcs	\$ 1.95	\$ 1.46	\$ 0.49						
	Need: Have next pipeline section bid-ready so when Federal funding is secured/allocated construction can proceed.												
23.	Contingency	Budget flexibility to adapt to work plan changes and to pay for construction change orders typically running from 3 to 5% of original construction costs at bid time.	Series D	RRVWSP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6.30	\$ 4.72	\$ 1.57
	Scope: A budget reserve for task order additions to professional services, construction, legal, real estate, etc. TOs.												
	Need: Address and pay for changes that are sure to occur.		Series E	MR&I						\$ 0.06	\$ 0.05	\$ 0.02	
TOTAL PROGRAM BUDGET					\$ 15.48	\$ 11.61	\$ 3.87	\$ 19.02	\$ 14.27	\$ 4.76	\$ 211.50	\$ 158.62	\$ 52.87

Notes:

- Construction costs include management, engineering services during construction, inspection, field quality control, and construction.
- Projects indicated for construction funding in a given biennium will be shovel ready for construction at the start of the biennium.
- Future capital costs are escalated to an anticipated midpoint of construction per Finance Team rates of 7, 6, 5, 5, and 3.5 percent per annum thereafter starting in 2022 with an anticipated 2032 finish. All future RRVWSP construction projects and costs are not shown.
- Land services costs are the amount likely to be paid for real estate, easements, including bonus payments, crop damage, and field obstructions. Estimates include pipeline easements required for the ENDAWS east/west pipeline and remaining easements from the beginning of the Contract 4 transmission main to the Sheyenne River Outfall, with most located in Wells County.
- Items appearing in blue bold are progressing with task orders and contracts issued to the engineering team and contractors, respectively. Items appearing in blue italics have been updated to reflect adjustments made for actual amounts contracted. Items shown in black text are pending. Items highlighted in yellow have changed from the previous version of the Work Plan.



2025-27 Expanded Biennium Workplan																			
(\$423.33M Total Funding: \$150.00 Federal; \$205.00M State; \$68.33M Local Users (Series F))																			
No.	Scope of Work	Feature	Date Task Orders Auth	Note	Funding Source	2025-27 Bien ENDAWS Project Development Budget (mil \$)				2025-27 Biennium RRVWSP Project Development Budget (mil \$)			2025-27 Biennium ENDAWS Project Construction Budget (mil \$) ^{1,2,3}				2025-27 Biennium RRVWSP Project Construction Budget (mil \$) ^{1,2,3}		
						Total	Federal 75%	State 18.75%	Local 6.25%	Total	State 75%	Local 25%	Total	Federal 75%	State 18.75%	Local 6.25%	Total	State 75.00%	Local 25.00%
1.	Garrison Diversion Conservancy District Budget	Garrison Diversion's costs for the RRVWSP.	--	GD CD	RRVWSP					\$ 1.00	\$ 0.75	\$ 0.25							
	Scope: Account for all costs for which Garrison Diversion is responsible and not included in other Task Orders listed here.																		
	Need: Budget allocation for GD CD direct costs associated with the Red River Valley Water Supply Project.																		
2.	Property, Easements, and Crop Damage Payments ⁴	Easements for Washburn transmission main. Pay for crop damages program wide.	--	Crp Dmg	RRVWSP					\$ 1.82	\$ 1.37	\$ 0.46							
	Scope: Crop damage payments to landowners and easement costs.																		
	Need: Treat landowners right and live up to commitments.																		
3.	Red River Valley Transmission Pipeline Contract 6B	9.2± mi of 72" pl, including one 96" tunnel. Pipeline extends east from Contract 6A northeast of Kensal to a termination point southeast of Glenfield.	TO5662	TO5562	RRVWSP												\$ 5.86	\$ 4.39	\$ 1.46
	Dec-25		Prof Srvs																
	Feb-26		Const, 2028 Fin																
4.	Red River Valley Transmission Pipeline Contract 6C	8.4± miles of 72" pl, including three 96" tunnels. Pipeline section extends east from Ct 6B near Glenfield to a termination point south of Sutton.	TO5662	TO5563	RRVWSP												\$ 6.20	\$ 4.65	\$ 1.55
	Dec-25		Prof Srvs																
	Feb-26		Const, 2028 Fin																
5.	Red River Valley Transmission Pipeline Contract 7A	6.5± mi of 72" pl, including three 96" tunnels. Pl section extends east from Ct 6C near Sutton to a termination point south of Cooperstown.	TO5662	TO5571	RRVWSP												\$ 5.67	\$ 4.25	\$ 1.42
	Dec-25		Prof Srvs																
	Feb-26		Const, 2028 Fin																
6.	ENDAWS BWTP Ct 3 Final Design & Procurement Services	165-cfs biota WTP, with chlorine and UV disinfection to meet NDPDES permit and FEIS requirements per Reclamation. Chloramines for residual disinfectant in pipeline.	TO3310	Prof Srvs	MR&I	\$ 16.02	\$ 12.01	\$ 3.00	\$ 1.00										
	Oct-26																		
7.	MO River Pumping Sta, Trans Main, & Utilities Ext Ct 3	Raw water pumping station and transmission main from Missouri River Pumping Station to the City of Washburn water treatment plant.	TO2240/Aug-26	Prof Srvs	RRVWSP					\$ 0.10	\$ 0.08	\$ 0.03							
	1Q27		Prof Srvs																
8.	ENDAWS BWTP Ct 1 Site Dev & Wet Well Excavation	Access road improvements from Highway 200 north to the future biota water treatment plant site. Mass excavation of site and excavation of intake ps shaft.	TO2650/2550	Prof Srvs	MR&I								\$ 2.13	\$ 1.60	\$ 0.40	\$ 0.13			
	Aug-26																		
	Oct-26		Const																



2025-27 Expanded Biennium Workplan																			
(\$423.33M Total Funding: \$150.00 Federal; \$205.00M State; \$68.33M Local Users (Series F))																			
No.	Scope of Work	Feature	Date Task Orders Auth	Note	Funding Source	2025-27 Bien ENDAWS Project Development Budget (mil \$)				2025-27 Biennium RRVWSP Project Development Budget (mil \$)			2025-27 Biennium ENDAWS Project Construction Budget (mil \$) ^{1,2,3}				2025-27 Biennium RRVWSP Project Construction Budget (mil \$) ^{1,2,3}		
						Total	Federal 75%	State 18.75%	Local 6.25%	Total	State 75%	Local 25%	Total	Federal 75%	State 18.75%	Local 6.25%	Total	State 75.00%	Local 25.00%
9.	ENDAWS BWTP Ct 2 Intake, Tunnel, & Shaft Liner	Passive intake screens/structure on the McClusky Canal along with a 72" tunnel to the shaft/pumping station wetwell. Concrete shaft liner inside circular shaft excavated under Ct 1.	TO2360/2660	Prof Srvs	MR&I	\$ 1.02	\$ 0.77	\$ 0.19	\$ 0.06										
	2Q27		Const	MR&I					\$ 19.00	\$ 14.25	\$ 3.56	\$ 1.19							
	4Q26		Prof Srvs	MR&I					\$ 1.90	\$ 1.43	\$ 0.36	\$ 0.12							
10.	ENDAWS BWTP Ct 4 Power Supply	Electrical system planning, envirotmental studies, land acquisition tasks to support a new power supply to the biota water treatment plant and associated pumping stations.	TO3240/Aug-26	Prof Srvs	OBBBA	\$ 0.70	\$ 0.52	\$ 0.13	\$ 0.04										
	Mar-27		WAPA	OBBBA					\$ 2.00	\$ 1.50	\$ 0.38	\$ 0.13							
	Dec-26		Central Power	OBBBA					\$ 1.80	\$ 1.35	\$ 0.34	\$ 0.11							
11.	PMIS Annual Licenses & Continued Maint/Upgrades	Vendor fees (e-Builder & DocuSign) for licenses of expanded team and consulting support for training of GCs/subs and workflow/report additions and mods.	TO 1630																
	Sep-25		Prof Srvs	RRVWSP					\$ 0.69	\$ 0.52	\$ 0.17								
12.	Program Management Support	Overall planning, management, administration, scheduling, budgeting, coordination, meeting preparation/attendance, regulatory interface, reporting, etc.	TO 1610																
	Apr-26		Prof Srvs	RRVWSP					\$ 0.89	\$ 0.66	\$ 0.22								
13.	Project Participation Agreement Support	Size pipelines, pumping stations, channels, storage, etc. and other necessary infrastructure to deliver raw water to end users. Update CapEx estimates to reflect market.	TO 9610																
	Apr-26		Prof Srvs	RRVWSP					\$ 1.18	\$ 0.89	\$ 0.30								
14.	Operational Planning Phase 4	Refine details of diversions to/from Lake Ashtabula. Finalize stakeholder roles and responsibilities as it relates to system operation.	TO 1620	Prof Srvs	RRVWSP					\$ 0.17	\$ 0.12	\$ 0.04							
	Apr-26		Prof Srvs	RRVWSP					\$ 1.33	\$ 1.00	\$ 0.33								
15.	Financial Planning Support (combined with Item 13)	Update financial models; address state loan and financing program changes; end user funding, financing, and cost-share analyses; continued funding and finance outreach.																	
	Apr-26		Prof Srvs					\$ -	\$ -	\$ -									



2025-27 Expanded Biennium Workplan

(\$423.33M Total Funding: \$150.00 Federal; \$205.00M State; \$68.33M Local Users (Series F))

September 28, 2026

No.	Scope of Work	Feature	Date Task Orders Auth	Note	Funding Source	2025-27 Bien ENDAWS Project Development Budget (mil \$)				2025-27 Biennium RRVWSP Project Development Budget (mil \$)			2025-27 Biennium ENDAWS Project Construction Budget (mil \$) ^{1,2,3}				2025-27 Biennium RRVWSP Project Construction Budget (mil \$) ^{1,2,3}		
						Total	Federal 75%	State 18.75%	Local 6.25%	Total	State 75%	Local 25%	Total	Federal 75%	State 18.75%	Local 6.25%	Total	State 75.00%	Local 25.00%
16.	ENDAWS Transmission Pipeline Contract 3	10.7+/- mi of 72” pipe. Pipeline extends east from Contract 2B to a termination point 4 miles east of Hurdsfield.	TO5535/5635																
	Scope: Pipeline installation, including construction phase engineering services by Engineer.		4Q26	Const	OBBBA							\$ 70.00	\$ 52.50	\$ 13.13	\$ 4.38				
	Need: Continue progress of transmission pipeline installation for completion of program by the target end date.		4Q26	Prof Srvs	OBBBA							\$ 7.00	\$ 5.25	\$ 1.31	\$ 0.44				
17.	ENDAWS Transmission Pipeline Contract 2B	5+/- mi of 72” pipe and 96” tunnel(s). Pipeline extends east from Contract 2A to a termination point east of the Sheridan/Wells County line (24th Ave SE).	TO5526/5626																
	Scope: Pipeline installation, including construction phase engineering services by Engineer.		4Q26	Const	OBBBA							\$ 39.40	\$ 29.55	\$ 7.39	\$ 2.46				
	Need: Continue progress of transmission pipeline installation for completion of program by the target end date.		4Q26	Prof Srvs	OBBBA							\$ 3.90	\$ 2.93	\$ 0.73	\$ 0.24				
18.	ENDAWS BWTP Ct 3 CMAR Part I	Plan for building a 165-cfs biota WTP, with chlorine and UV disinfection to meet NDPDES permit and FEIS requirements. Chloramines for residual disinfectant in pipeline.	1Q27	Const	MR&I														
	Scope: Part I planning, scheduling, constructability reviews, cost estimating services, value engineering services prior to negotiation of a guaranteed maximum price by the Construction Manager at-Risk.												\$ 1.00	\$ 0.75	\$ 0.19	\$ 0.06			
	Need: Alternative delivery of construction using CMAR.																		
19.	Contingency	Budget flexibility to adapt to work plan changes and to pay for construction change orders typically running from 3 to 5% of original construction costs at bid time.			State/Local			\$ 0.17	\$ 0.06	\$ 0.79	\$ 0.28	\$ 0.51			\$ 4.62	\$ 1.12	\$ 10.12	\$ 7.59	\$ 2.53
	Scope: A budget reserve for task order additions to professional services, construction, legal, real estate, etc. TOs.				MR&I	\$ 0.86	\$ 0.64						\$ 9.03	\$ 3.29					
	Need: Address and pay for changes that are sure to occur.				OBBBA	\$ 0.03	\$ 0.03						\$ 6.92	\$ 6.92					
TOTAL PROGRAM BUDGET						\$ 18.62	\$ 13.97	\$ 3.49	\$ 1.16	\$ 8.26	\$ 5.89	\$ 2.37	\$ 184.45	\$ 136.58	\$ 36.21	\$ 11.65	\$ 212.55	\$ 159.41	\$ 53.14
BIENNIUM PROGRAM FUNDING		Funding Agency		Spend	Budget	Delta	Cont (\$)	Cont (%)	Projects										
		Federal (MR&I)		\$ 50.00	\$ 50.00	\$ -	\$ 3.93	7.9%	\$ 46.07										
		Federal (OBBBA)		\$ 100.00	\$ 100.00	\$ -	\$ 6.95	6.9%	\$ 93.05										
		State		\$ 205.00	\$ 205.00	\$ -	\$ 12.65	6.2%	\$ 192.35										
		Local		\$ 68.33	\$ 68.33	\$ -	\$ 4.21	6.2%	\$ 64.12										
		Grand Total		\$ 423.33	\$ 423.33	\$ -	\$ 27.75	6.6%	\$ 395.58	\$ 423.33									

- Notes:**
- 1. Construction costs include management, engineering services during construction, inspection, field quality control, and construction.
 - 2. Projects indicated for construction funding in a given biennium will be shovel ready for construction at the start of the biennium.
 - 3. Future capital costs are escalated to an anticipated midpoint of construction per Finance Team rates of 7, 6, 5, 5, and 3.5 percent per annum thereafter starting in 2022 with an anticipated 2032 finish. All future RRVWSP construction projects and costs are not shown.
 - 4. Land services costs are the amount likely to be paid for real estate, easements, including bonus payments, crop damages, and field obstructions. Estimates include pipeline easements required for the Washburn transmission main and remaining easements on pipeline Contracts 1 through 4 in Sheridan and Wells Counties.
 - 5. Items appearing in blue bold are progressing with task orders and contracts issued to the engineering team and contractors, respectively. Items shown in black text are pending. Items highlighted in yellow have changed from the previous version of the Workplan.