

AGRICULTURE AND NATURAL RESOURCES COMMITTEE

**Garrison Diversion Conservancy District
Carrington, ND**

**9:00 A.M.
April 18, 2024**

AGENDA

- 9:00 a.m. I. Call to Order – Kelly Klosterman
- 9:01 a.m. II. Pledge of Allegiance
- 9:02 a.m. III. Roll Call – Lisa Schafer
- 9:05 a.m. IV. **Consideration of Minutes** – Kelly Klosterman
 - A. >June 7, 2023
- 9:06 a.m. VI. Oakes Irrigation Research Site – Kip Kovar/Kelly Klosterman
 - A. Building Update
 - B. Land Transfer Agreement – Tami Norgard
- 9:35 a.m. VII. >McClusky Canal Irrigation Update – Ryan Anderson
 - A. >2024 Irrigation Interest
- 9:40 a.m. VIII. ND Irrigation Association Report – Dani Quissell
 - A. >Irrigation Study
- 9:55 a.m. X. Other
- 10:00 a.m. XI. Adjourn

The following minutes are in draft form subject to review and approval by the Agriculture and Natural Resources Committee at its next meeting.

23-07

**GARRISON DIVERSION CONSERVANCY DISTRICT
AGRICULTURE AND NATURAL RESOURCES COMMITTEE**

Video Conference

June 7, 2023

A meeting of the Agriculture and Natural Resources Committee of the Garrison Diversion Conservancy District was held by video conference on June 7, 2023. The meeting was called to order by Chairman Mark Cook at 9:00 a.m.

DIRECTORS PRESENT

Board Chairman Alan Walter
Committee Chairman Mark Cook
Director Kelly Klosterman
Director Brian Orn
Director Donald Zimbleman
Secretary Kip Kovar

DIRECTORS ABSENT

Director Bill Ongstad

OTHERS PRESENT

Jay Anderson, Vice Chairman, Garrison Diversion Conservancy District, Lisbon, North Dakota
Greg Bischoff, Second Vice Chairman, Garrison Diversion Conservancy District, Valley City, North Dakota
Steve Metzger, Director, Foster County, Carrington Diversion Conservancy District, Carrington, North Dakota
Duane DeKrey, General Manager, Garrison Diversion Conservancy District, Carrington, North Dakota
Ryan Anderson, Engineer, Garrison Diversion Conservancy District, Carrington, North Dakota
Kimberly Cook, Communications Director, Garrison Diversion Conservancy District, Carrington, North Dakota
Lisa Schafer, Executive Assistant, Garrison Diversion Conservancy District, Carrington, North Dakota
Mike Ostlie, Director, NDSU Carrington Research Extension Center, Carrington, North Dakota

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

READING OF THE MINUTES

Motion by Director Orn to dispense with a reading of the April 11, 2023, Agriculture and Natural Resources Committee minutes and approve them as distributed. Second by Director Klosterman. Upon voice vote, motion carried.

ROBERT TITUS RESEARCH FARM BUILDING UPDATE

Bid Tab

Kip Kovar, Secretary, reviewed the bid tabulation summary sheet for the building to be constructed at the Robert Titus Research Farm, stating for these types of projects, North Dakota is considered a multi-prime state, meaning each specific discipline of the project is bid separately. This includes general, mechanical and electrical construction. One bid was received from Kody's Electric in the amount of \$42,277 for the electrical construction. Another bid was received from Gast Construction for general construction in the amount of \$629,800. There was also a bid alternate received from Gast Construction for a different type of insulation consisting of spray foam in the amount of \$24,000. No mechanical bid was submitted.

Mr. Kovar stated typically three contracts would be issued for each subdivision to construct the entire building. Garrison Diversion's plan has always been to construct the building shell and then transfer the remaining construction over to another entity to complete.

Mr. Kovar said Garrison Diversion contracted the architect and developed the building plans and specifications. These are the complete plans and specifications to construct the entire building because that is needed to understand all the dynamics involved.

Mr. Kovar commented the Agriculture and Natural Resources Committee would need to authorize the general construction portion of the building. The electrical portion can be handed off to another entity. Garrison Diversion would also need to help with some of the mechanical construction, which involves installing tubing for the floor heat before the concrete work can be done.

Mr. Kovar added if a bid is not received for a particular portion of construction, North Dakota Century Code allows Garrison Diversion to negotiate with the general contractor on those items.

Mr. Kovar stated if the committee approves Gast Construction's bid of \$629,800, building construction would begin in August and be completed in November. If spray foam insulation is preferred, \$24,000 would be added, making the total \$653,800. Negotiations would be done with Gast Construction on the limited mechanical portion.

Mr. Kovar said because of the timeframe Gast Construction has committed for construction, he recommends the committee approve awarding the contract to Gast Construction.

Funding Options

Mr. Kovar reviewed the spreadsheet he prepared illustrating the funding committed to the research farm annually through 2026 by Garrison Diversion. In March 2021, the Agriculture and Natural Resources Committee approved phased funding for the research farm totaling

\$1,183,438 through 2026, which included \$250,000 for construction of a building. The amount distributed for operating costs through 2023 totals \$513,750.

Mr. Kovar added because of the success at the state legislature this session, funding was obtained for operating costs much sooner than what was anticipated. Because of the funds that will be received from the state, Garrison Diversion is finished with its annual funding commitments effective this year rather than 2026.

Mr. Kovar called attention to Option 1 for proposed funding at the research farm, which includes \$629,000 for the building and the annual operating contributions for 2021, 2022 and 2023. Since Garrison Diversion's future funding contributions for 2024, 2025 and 2026 are now at zero, the revised funding total is \$1,142,750. This is an overall cost savings of \$40,688. A copy of the spreadsheet is attached to these minutes as Annex I.

Mr. Kovar commented if Garrison Diversion's intent was to spend \$1.1 million at the research farm, it is still in the ballpark. The funding would just be spent in a different way. Rather than spending it on operations, the money would be shifted over to brick and mortar.

Director Klosterman said after visiting with Mike Ostlie, Director, NDSU Carrington Research Extension Center, roughly half of the 2023 funding paid by Garrison Diversion for 2023 would be returned. This amounts to approximately \$65,000 to \$70,000, changing the cost savings to about \$120,000.

Director Klosterman stated with the returned funds, Garrison Diversion should be able to assist with the mechanical construction and possibly the spray foam if it is decided to go that route with the insulation. There is also approximately \$40,000 raised by Oakes Enhancement that will be transferred to Garrison Diversion for the construction project, which are intended to be used for the boiler with any remaining funds to go toward the electrical portion.

Duane DeKrey, General Manager, Garrison Diversion, commented Garrison Diversion would be paying quite a bit more for the building than intended, but it was expected the legislature would draw out the switch over to state money for operating costs at the research farm until 2025 or 2026. This funding is coming much earlier than anticipated, and that is why Garrison Diversion could come out ahead financially even if the spray foam insulation is chosen.

Mr. Kovar said construction and material prices have also changed considerably over the last few years.

Recommendation to Award

Motion by Director Orn to recommend approval of the bid for general construction and award the contract for the building shell at the Robert Titus Research Farm to Gast Construction in the amount of \$629,800 and not accept the electrical bid to the Executive Committee. Second by Director Walter.

Director Klosterman stated a more solid number, including the negotiated mechanical cost, will be prepared for the Executive Committee. He and Mr. Kovar will research spray foam insulation.

Upon roll call vote, the following directors voted aye: Cook, Klosterman, Orn, Walter and Zimbleman. Those voting nay: none. Absent and not voting: Ongstad. Motion carried.

There being no further business to come before the committee, the meeting adjourned at 9:26 a.m.

(SEAL)

Mark Cook, Chairman

Kip Kovar, Secretary

**Ag& Natural Resources
March 2021 Minutes**

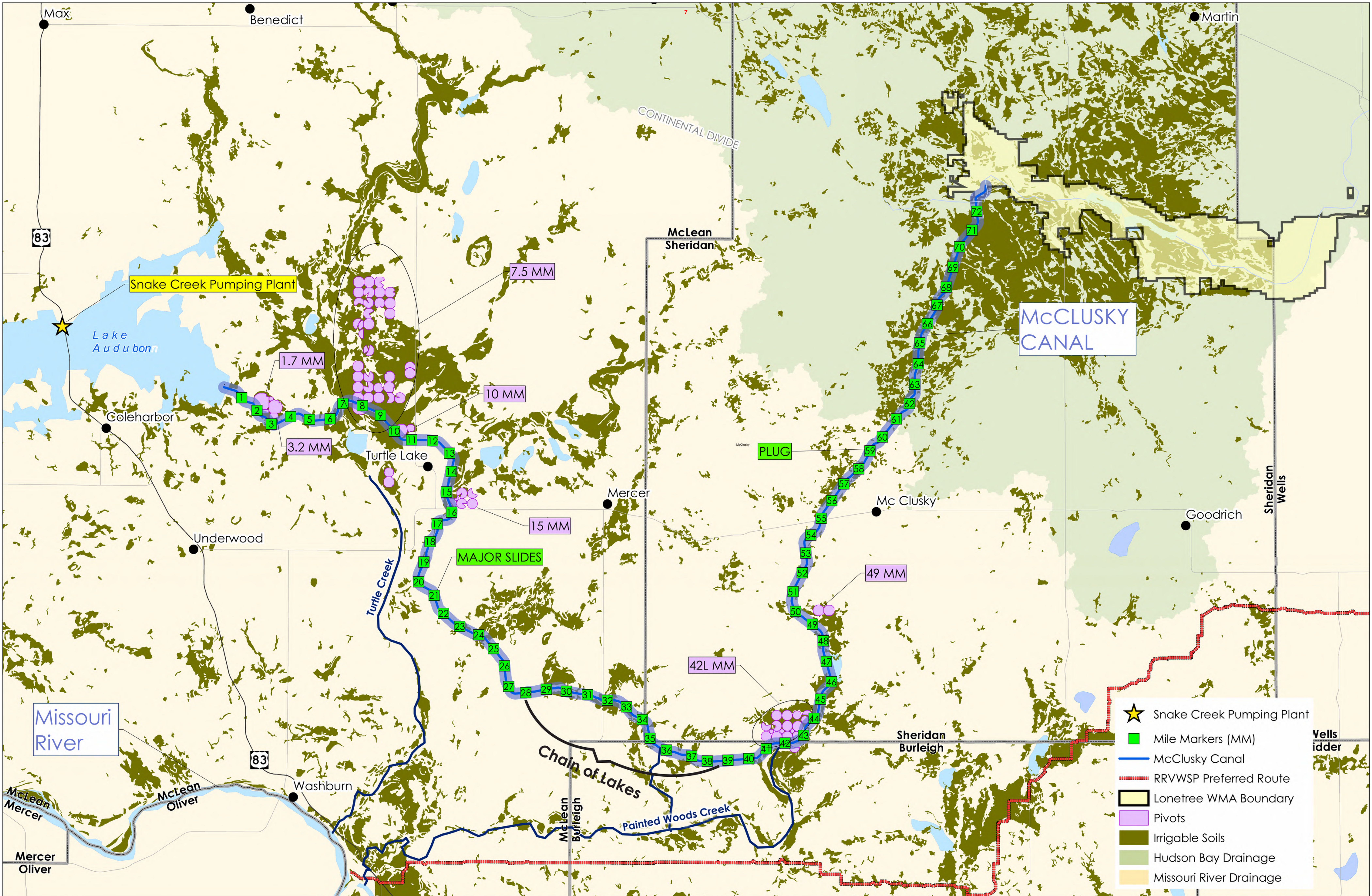
	Actual Payments		Option 1 *		Option 2 **			
2021	\$	178,000.00	2021	\$	178,000.00	2021	\$	178,000.00
Building	\$	-	Building	\$	619,000.00	Building	\$	250,000.00
2022	\$	167,875.00	2022	\$	167,875.00	2022	\$	167,875.00
2023	\$	167,875.00	2023	\$	167,875.00	2023	\$	167,875.00
2024	\$		2024			2024		
2025	\$		2025			2025		
2026	\$		2026			2026		
Totals	\$	513,750.00	Totals	\$	1,132,750.00	Totals	\$	763,750.00
			Cost Savings	\$	50,688.00	Cost Savings	\$	419,688.00

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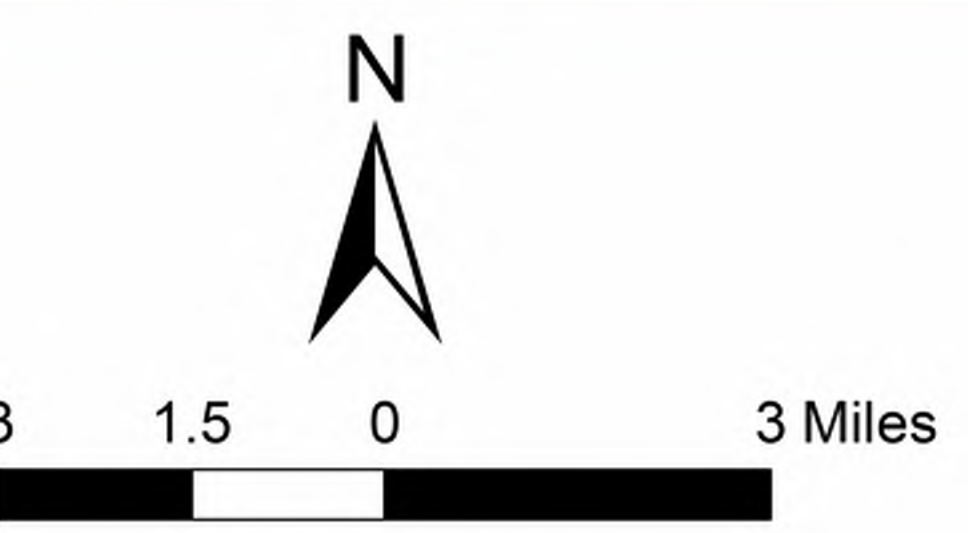
* reduce operating costs that are now being covered by legislature and repurpose funds to building bid amount

** reduce operating costs that are now being covered by legislature and keep the building funded at amount approved 2021 minutes

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- ★ Snake Creek Pumping Plant
- Mile Markers (MM)
- McClusky Canal
- RRVWSP Preferred Route
- ▭ Lonetree WMA Boundary
- Pivots
- Irrigable Soils
- Hudson Bay Drainage
- Missouri River Drainage

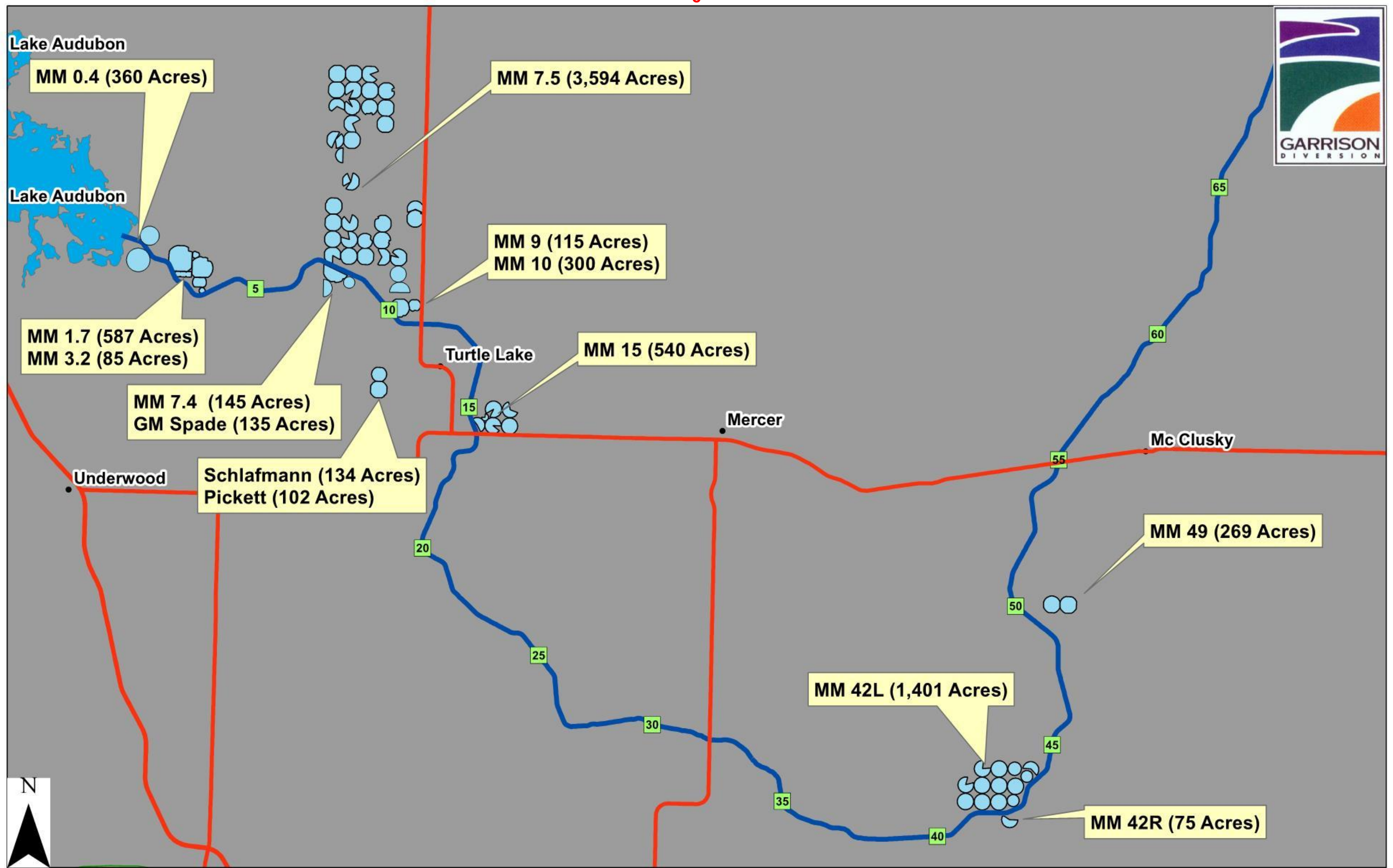


McCLUSKY CANAL

Date: 2/15/2019



Edited by: hrecords
 Imagery 2015 NAIP
 Coordinate System: UTM Zone 14N
 C:\Data\Projects\WAFS\B\Black & Veatch\00200-2017-028\GIS\McClusky Canal Irrigable Lands.mxd





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North Dakota Irrigation Association

P.O. Box 2254
Bismarck, ND 58502
701-223-4615
701-223-4645 (fax)

Dedicated to strengthening and expanding irrigation to build and diversify our economy

March 7, 2024

Garrison Diversion Conservancy District
Executive Committee
401 US-281
Carrington, ND 58421

Chair Walters and Executive Committee Members,

The North Dakota Irrigation Association (NDIA) greatly appreciates the support the Irrigation Association receives from the Garrison Diversion Conservancy District (GDCCD) in support of irrigation development. The NDIA has been working with the Department of Water Resources (DWR), GDCCD staff and North Dakota State University (NDSU) to develop a proposal to conduct a statewide irrigation suitability analysis. This research will result in a detailed map of every county in the state. The map will indicate sites of potential development based on factors such as water availability, power availability and soil suitability.

The NDIA believes this could be a valuable resource in showcasing pockets for potential development as well as identifying potential barriers to development. The visual component of this analysis will also be beneficial when speaking to state legislators, water commissioners, and others about the importance of irrigation to the state.

A detailed description of the proposed study as well as the total budget are included with this letter. The NDIA is looking for partners to help fund this project. NDSU has already committed to contributing up to \$30,000. The NDIA's request to partners is as follows:

NDSU:	\$30,000
GDCCD:	\$30,000
DWR:	\$30,000
<u>ND Water Users/NDIA:</u>	<u>\$ 6,084 + in-kind coordination</u>
Total	\$96,084

The NDIA would be very grateful should the GDCCD Executive Committee approve \$30,000 in support of this important research project. Thank you for your consideration of this request. Please feel free to reach out to Dani Quissell, executive director, at dquissell@ndwater.net should you have any questions.

Sincerely,

Steve Hansen
President

North Dakota Statewide Irrigation Feasibility Study

1. Background and Objective

The North Dakota Irrigation Association, the Department of Water Resources, and the Garrison Diversion Conservancy District seek a team of researchers *to identify the locations and areas of the land in North Dakota counties where there exists a high probability of developing future irrigation projects in the short-term, medium-term, and long-term.* The NDSU Department of Agricultural and Biosystems Engineering (ABEN) is proposing the following project methods, milestones and deliverables.

2. Methods, Milestones, and Deliverables

Our team proposes to conduct the irrigation feasibility study county by county with the best, currently available data. For each county, the study will be carried out in three steps. In Step 1, we will use the most recent SSURGO data to develop a soil suitability map for irrigation using the method specified in the NDSU Extension Bulletin AE1637 (Revised March 2023). In Step 2, we will remove the lands that are prohibited from developing irrigation projects such as roads, federal land, tribal land, wildlife refuge, etc., from the soil suitability map to develop an irrigation potential map for that county. In Step 3, we will use a weighting scheme that will be agreed upon by a range of stakeholders to account for all the factors that may affect a parcel of land's probability (or feasibility) for developing irrigation projects in the future. For example, these factors may include water availability, distance to water resources, 3-phase power availability, elevation lift for pumping, etc. It should be noted that economic or financial factors will not be considered in this step. Finally, the potential land will be ranked according to the weighted sum of scores received and subsequently classified as suitable for short-term, medium-term, or long-term irrigation project development.

The soil suitability maps and the irrigation potential maps developed in Step 1 and Step 2 for all ND counties are intermediate project milestones, while the land classification maps developed in Step 3 for all ND counties are project deliverables.

3. Timeline

The project will be divided into two phases. In Phase 1 (April 1 - August 31), we plan to work on a few (or as many as possible) ND counties chosen by the sponsors to iteratively develop a reasonable methodology as briefly described above and submit a progress report. In Phase 2 (September 1 – December 31), we plan to complete the feasibility study for all remaining ND counties and submit the final report.

4. Personnel

- Dr. Zhulu Lin (PI), Associate Professor, NDSU ABEN Dept.
- Dr. Rob Proulx (Co-PI), Extension Ag Tech Systems Specialist, NDSU ABEN Dept.
- Postdoctoral Research Associate (to be hired)

5. Personnel Challenges and Contingency Plan

The completion of this project by December 2024 will largely depend upon our ability to hire a postdoc who has the required spatial data processing skills and is willing to work on a short-term project for approximately nine months. A Ph.D. student (ABD) from the Civil, Construction, and Environmental Engineering Dept. with the requisite skillset has expressed interest in working on this project. If for any reason, we fail to hire a postdoc or the postdoc leaves the project prematurely for his or her next job, our contingency plan is to partially “buy out” Co-PI Proulx’s Extension time and PI Lin’s teaching time in Fall 2024 to work on the project to ensure its on-time completion. If needed, we also plan to enlist PI Lin’s incoming visiting scholar (Dr. Xia Liu) to work on this project in Fall 2024.

6. Budget and Justification

6A. Salaries and Wages

PI Lin is requesting a 1.5-month summer salary of \$17,063, which is based on a base salary of \$11,375/month. Lin will be responsible for identifying data needs and availability, leading the methodology development for the irrigation feasibility study, supervising the postdoc and visiting scholar, communicating with project sponsors and other stakeholders, managing the project, presenting results, and writing reports and journal articles. The rate of fringe benefits is 21% for summer salary.

A postdoc is expected to be hired to work on this project for nine months (April-December) for \$41,250, which is based on a base yearly salary of \$55,000. The postdoc will be responsible for retrieving and processing data, developing methodology, generating GIS maps for the intermediate milestones and final deliverables, presenting results, and developing drafts for reports and journal articles. The rate of fringe benefits is 55% for full-time postdocs.

Co-PI Proulx will be responsible for developing computer scripts to process SSURGO data, co-supervising the postdoc, communicating with project sponsors and other stakeholders, presenting results, and participating in report and journal article writing. Proulx has a 12-month appointment and will not request salaries.

Salary is \$58,313 and fringe benefits is \$26,271. Total \$84,584.

6B. Operating Expense

Funds are requested by PI Lin and Co-PI Proulx to cover in-state travel to project meetings and irrigation-related meetings at \$1000 per person x 2 = \$2000. Travel will cover mileage at the state fleet rate of \$0.46/mile, per diem at \$45/day, and lodging costs at \$100/night when applicable and according to NDSU travel policy. Funds are also requested to cover the postdoc’s domestic trip to present results at a scientific conference. Each domestic trip is budgeted at \$2,000 per person: Airfare (\$650), Registration (\$300), Lodging, \$250/nt x 3 nights (\$750), Meals per diem, \$70/day x 3 days (\$210), and other travel costs such as ground transportation, baggage fees, etc. (\$90). Total travel: \$4000.

We also request funds to purchase one customized HP Z2 Tower Workstation for the postdoc at \$4000 & one HP Desktop for the visiting scholar at \$1500. Total computer cost: \$5,500.

One journal article is expected to be published from this irrigation feasibility study for a semi-arid region. Publication page charge fees: \$2000.

Total operating expense: \$11,500

6C. Total Direct Cost: \$96,084

6D. NDSU Office RCA's Contribution: (\$25,000 - \$30,000)

6E. Total Indirect Cost: \$0

6F. Total Cost to Sponsors:

NDSU

Standard Proposal Budget

Justification

<u>Salaries & Wages</u>	<u>Requested Funds</u>	
Full time faculty	\$17,063	1.5 m summ
Fringe Benefits @ 21%	\$3,583	
Full time staff, research assoc., techs, post docs	\$41,250	9 months (A
Fringe Benefits @55%	\$22,688	
Graduate Assistant	\$0	
Fringe Benefits @ 3%	\$0	
Undergraduate Researcher	\$0	
Fringe Benefits @10%	\$0	
Total Salaries & Fringe Benefits	\$84,584	
<u>Operating Expense</u>		
Tuition		
Travel	\$4,000	Domestic tra
Material and Supplies	\$5,500	1 HP Z2 tow
Postage		
Printing	\$2,000	Publication c
Repairs		
Subcontracts		
Rents & Leases		
Expendable Equipment		
Operating Fees & Services		
Professional Fees & Services		
Other Expense		
Total Operating Expense	\$11,500	
Total Direct Costs	\$96,084	
Facilities & Administrative % TDC	0.00% IDCs	\$0
Total Cost	\$96,084	