FLOOD SALES TAX COMMITTEE AGENDA FOR NOVEMBER 18, 2024—12:30 PM

Commission Room, Cass County Courthouse

12:30 PM Meeting called to order
Approve minutes of previous meeting—April 4, 2024

- 1. Flood sales tax fund update
- 2. Status of previously approved projects
 - a. 2023 Casselton Industrial Park Improvements
- 3. Review projects and consider funding
 - a. Rush River—Amenia Flood Control
 - b. Maple River Low Head Dam Improvements
 - c. Wild Rice Low Head Dam Improvements
- 4. Other business
- 5. Adjournment

SUBJECT: COUNTY SALES TAX FOR FLOOD RISK REDUCTION AND RECOVERY PROJECTS

ADOPTED DATE: DECEMBER 4, 2017 PAGE 1 OF 4

PURPOSE

The purpose of this policy is to provide guidance for the administration and funding of projects with Cass County Flood Control Sales Tax funds.

GENERAL PROVISIONS

As passed during the 2010 election and extended in the 2016 election, the voters approved the following: The Cass County Home Rule Charter be amended to extend the existing flood protection-related sales, use, and gross receipts tax of one-half of one percent (1/2%) to be used solely for the engineering, land purchase, construction, and maintenance of flood control measures including the Metro Flood Diversion Project including associated special assessments and indebtedness, through December 31, 2084, and shall be rescinded when all of the costs, obligations, and debt for said project have been paid in full and satisfied, whichever event occurs first as provide in Resolution #2016-20.

Cass County Commission Policy 38.23 outlines Ordinance #2010-2 Amended (Flood Control Sales Tax) which serves as the ordinance for the establishment and regulation of the Cass County Flood Control Sales Tax.

This policy governs expenditures of funds from a one half percent County sales tax that started in 2011 and will end in 2084 to fund flood risk reduction projects. The primary purpose of the sales tax measure is to fund local costs associated with a planned Fargo Moorhead Area Flood Diversion project in either Minnesota or North Dakota. The planned diversion project will not address all flood damage risks in Cass County. Additional measures are necessary to reduce risk to areas within and outside of the diversion perimeter. Sales tax proceeds may also be expended for the Diversion and other flood risk reduction or recovery projects subject to funding availability and approval by the County Commission. The County sales tax proceeds should be used to leverage other sources of funding when possible.

County sales tax funds expended within incorporated cities: The County Commission through the Flood Sales Tax Committee may consider requests for flood risk reduction and recovery funding from cities within Cass County. The city will be responsible for planning and engineering costs associated with the project. Plans and specifications should be prepared by a professional engineer registered within the State of North Dakota. Projects won't be considered if they are strictly for new city development, especially cases where a developer would be shifting their cost to the County Flood Sales Tax. The city should also be able to demonstrate that other revenue sources for the project have been actively sought out. The preferred funding split is that City funds match the County sales tax proceeds on a 1:1 basis. Other funding splits may be considered by the Commission on a case by case basis to allow consideration to be given to unique circumstances and the ability of the City to pay 50% of the local cost share.

SUBJECT: COUNTY SALES TAX FOR FLOOD RISK REDUCTION AND RECOVERY PROJECTS

ADOPTED DATE: DECEMBER 4, 2017 PAGE 2 OF 4

County sales tax funds expended outside of incorporated cities: The County Commission, through the Flood Sales Tax Committee, may also consider flood risk reduction and recovery projects recommended by the County Engineer or requested by townships, neighborhood groups, or individuals for areas within and outside of the diversion protected area. Projects won't be considered if they are strictly for new rural development, especially cases where a developer would be shifting their cost to the County Flood Sales Tax. Special assessments may be considered as a local match to County sales tax funds. Funds may be expended for projects that provide benefit to Cass County residents but are physically constructed outside of the County boundaries such as retention projects. Funds may also be spent to assist property owners downstream from the diversion channel in offsetting diversion project impacts.

ADMINISTRATION

The Cass County Commission will organize and appoint members to a Flood Sales Tax Committee. This will be a six-member committee made up of the following members:

- 1. Two members of the Cass County Commission
- 2. Cass County Auditor
- 3. Cass County Administrator
- 4. Cass County Engineer
- 5. One member from either the Southeast Cass, Maple River, Rush River, or North Cass Water Resource District.

The Flood Sales Tax Committee will solicit project requests on a bi-annual basis. Meetings to review project requests will generally be held with one meeting in the fall (October-November) and one meeting in the spring (March-April). Requests received from political subdivisions and county staff for cost effective projects will be prioritized and considered for funding by the County Commission as funds available allow.

FUNDING ELIGIBILITY

Entities eligible for funding: Funding should generally be for flood protection for communities or individuals that live outside of the Diversion protected area or those within the Diversion protected area that do not receive a significant benefit from the Diversion. This includes:

- 1. Cities
- 2. Townships
- 3. Water Resource Districts
- 4. Farmsteads and Homesteads

SUBJECT: COUNTY SALES TAX FOR FLOOD RISK REDUCTION AND RECOVERY PROJECTS

ADOPTED DATE: DECEMBER 4, 2017 PAGE 3 OF 4

Types of projects eligible for funding:

- 1. Levee construction or recertification for cities or rural subdivisions. Generally levee projects should be constructed to FEMA and/or US Army Corps of Engineer standards and be able to bring the benefited area out of the 1% chance (100 year) floodplain. These levees would also need to be maintained at that standard by either the city or township that is a member of the National Flood Insurance Program. Rural subdivisions seeking this funding would need to complete an agreement with the township and form an assessment district for the long term maintenance of the levee.
- 2. Flood control projects.
- 3. Water retention or detention projects.
- 4. Dam construction or maintenance.
- 5. Lift Stations for removing storm water from within a levee protected area.
- 6. Rural Farmstead Ring Levees (in conjunction with the ND State Water Commission 50% cost share) as outlined on the ND State Water Commission website under "Cost Share" at http://www.swc.state.nd.us/project_development/cost_share.html. Generally levee projects should be constructed to FEMA and/or US Army Corps of Engineer standards. However, individual rural farmsteads cannot be "certified" by FEMA or the US Army Corps of Engineers as they not maintained by either a city or township that is a member of the National Flood Insurance Program.
- 7. Road Projects that provide infrastructure protection to prevent significant future flood damage. These requests may be standalone projects or in conjunction with post-flood damage repair with or without FEMA cost share.
- 8. Road access (road raises or other infrastructure improvements that will allow access to a city, subdivision, or rural residence/farmstead).
- 9. Embankment slumping along the Red River, Wild Rice River, Sheyenne River, Maple River, Rush and Lower Rush Rivers, and Legal Drains. River slumping projects may include road and infrastructure repair, home buyouts, and repair to legal drains.
- 10. Home buyouts for flooding and bank slumping.
- 11. Flood Recovery projects to include: Levee repair, road repair, bridge repair, and other infrastructure related repair projects. None infrastructure flood recovery such as debris removal and sandbag cleanup will not be eligible.

Cass County Sales Tax Cost Share:

- 1. Generally the cost share will be 50% of the "local" share of the non-retention projects, i.e. if a \$100,000 project had a 50% state cost share, the local share would be \$50,000 and the County cost share would be \$25,000.
- 2. Policy for Retention Projects: Cost share is 75% of the "local" share if they are approved by the Red River Joint Water Resource District.
- 3. Home buyouts for flooding and bank slumping: Cost share is 90% of the "local" cost with the homeowner paying 10% of the "local" cost.

SUBJECT: COUNTY SALES TAX FOR FLOOD RISK REDUCTION AND RECOVERY

ADOPTED DATE: DECEMBER 4, 2017 PAGE 4 OF 4

4. If significant funds are available compared to the project requests, the County may authorize a cost share above 50% for non-retention projects and above 75% for Retention Projects.

PROJECT PRIORITIES

Priority of projects will be based on the following:

- 1. Population benefited by the project
- 2. Distribution of funds by location
- 3. Disbursement percentage determined by the number of people benefited
- 4. Cost effectiveness of the project
- 5. Permanency of the project
- 6. Effect of the diversion on the project
- 7. Does the project have long-term merit (benefits extend beyond 10 years)
- 8. Other sources of funding from local, state, or federal cost share programs.

Evaluation Criteria: The County Commission and/or Flood Sales Tax Committee may use some or all of the following criteria in determining funding priorities:

- 1. Benefit cost ratio
- 2. Land area benefited
- 3. Population benefited
- 4. Downstream flood reduction
- 5. Total acre-feet of retention storage

HISTORICAL REFERENCE: AUGUST 2, 2010

FLOOD SALES TAX COMMITTEE APRIL 15, 2024— 12:30 PM

1. MEETING TO ORDER

Commissioner Duane Breitling called a meeting of the Flood Sales Tax Committee to order on Monday, April 15, 2024, at 12:31 PM in the Commission Room of the Cass County Courthouse. The following members were present: County Commissioner Duane Breitling, County Administrator Robert Wilson, County Finance Director Brandy Madrigga, and Rodger Olson in person and County Commissioner Mary Scherling and County Engineer Tom Soucy via Microsoft Teams. Also present was Assistant County Administrator Tracy Peters, County Commissioner Jim Kapitan, County Commissioner Tony Grindberg, and Assistant County Engineer Kyle Litchy.

2. MINUTES APPROVED

MOTION, passed

Mr. Olson moved and Ms. Madrigga seconded that the minutes of the previous meeting held on November 20, 2023, be approved as written. Motion carried.

3. FLOOD SALES TAX FUND UPDATE

Ms. Madrigga said the Flood Sales Tax Fund has \$13.85 million in approved projects with \$6.8 million in encumbrances and \$4.89 million unencumbered balance.

MOTION, passed

Mr. Olson moved and Ms. Madrigga seconded to receive and file the financial statement. Motion carried.

4. STATUS OF PREVIOUSLY APPROVED PROJECTS

2017 Sheldon Addition Ring Levee Project

Kurt Lysne of Moore Engineering was present and said the Flood Sales Tax Committee approved a 75% cost share for the Sheldon Addition Ring Levee Project. He said the project has been delayed due to the project receiving clay material from the Metro Flood Diversion project and a delay in the Western Cass Flood Study. He said due to the delays in the project, the estimated project cost has increased. My. Lysne said an Assessment District was approved by the residences of the Shelon Subdivision for \$61,700 and the North Dakota State Water Commission (SWC) approved a cost share in 2018, however, they will not execute an agreement until a construction permit is secured. He said the Flood Sales Tax Committee approved funding for the project up to 75% cost share up to \$462,750 in 2017 and the request today is to increase the cost share to percentage to 86%.

Mrs. Scherling asked if the residents will be required to purchase flood insurance. Mr. Lysne said after the Western Cass Flood Study comes out, residents will not have to purchase flood insurance. Mrs. Scherling asked what the average special assessment will be. My. Lysne said under the current formula, the average assessment will be approximately \$4,500.

Cass County Joint Water Resource District (CCJWRD) Board member, David Gust was present and said the CCJWRD took this project on years ago and the subdivision is just outside the Metro Flood Diversion being constructed. He said the cost of rerouting the Diversion to include this subdivision was too much. He requested the Committee approve the increase in funding. A resident of the affected subdivision, Collin Miller, was present and thanked the County for the support this far and said support of this project will ensure with the Diversion going up, water will not flood the homes and properties in the subdivision. A resident of the affected subdivision Anthony Cross was present and thanked the Committee for their

support and consideration. He said the Diversion negatively impacts this area and the Flood Sales Tax funding is needed to help prevent future flooding.

Ms. Madrigga asked if the request is to increase the percentage of funding or overall cost? Mr. Lysne said the local assessment district will only cover \$61,700 and any local costs left to pay after that is being requested by the Flood Sales Tax Committee. He said the total local cost share is not yet determined. He said action is not required today, however would help to show support to the residents. He said the CCJWRD would likely request the Flood Sales Tax Committee hold a special meeting this summer after bids are received. Mr. Olson said the request is to increase the percentage of funding, not the funding amount.

MOTION, passed

Ms. Madrigga moved and Mr. Soucy seconded to support an increase in funding for the 2017 Sheldon Addition Ring Levee project. Motion carried.

2020 Davenport Levee update

Alexa Ducioame, Engineer at Moore Engineering was present and said the Davenport Levee has secured its Section 404 permitting, has a submitted conditional letter of map revision (CLOMR) to FEMA in May and is expected to be approved any day, right of way has been negotiated with two landowners, and the project will be bd this fall. She said an additional cost share request will come to the Committee prior to bidding.

2023 Casselton Industrial Park Improvements

Brandon Oye, Moore Engineering and City Engineer for the City of Casselton held a public input meeting with the business owners in the Industrial Park and the project and updated costs were discussed. He said there were concerns and timing of the project and based on feedback and the City of Casselton is not going to proceed with the project at this time, however, would like to pursue the right of way needed for the project so when it is ready to move forward, there is no delay. My. Lysne said the Flood Sales Tax Committee approved \$2 million in funding for the project and the request is to reduce the cost share to \$1 million. He said a further reduction in cost is possible.

Ms. Madrigga asked if the reduction is by 50%, is the request for the same project. Mr. Oye said the city of Casselton is going to proceed with the right of way acquisition and possible construction in the future. Ms. Madrigga asked if the City will come back for future funding. Mr. Lysne said the City would likely come back with an updated request when ready for construction. Mr. Olson asked if the project is eligible for SWC funding. Mr. Oye said the project does not qualify for SWC funding. Mr. Olson asked what happens if the project does not move forward. My. Ove said it is possible, however, portions of the project need to be improved.

MOTION, passed

Ms. Madrigga moved and Mr. Wilson seconded to reduce the 2023 Casselton Industrial Park Improvements to a 50% cost share with a maximum of \$1 million. Discussion: Ms. Scherling said she would like to note the funds are required to be utilized for flood protection and aligns with the original purpose and application as required by the Flood Sales Tax Policy. Motion carried.

5. PROJECT REQUESTS

City of Mapleton Flood Protection Study

Mr. Oye said the City of Mapleton is requesting funding for a flood protection study to understand infrastructure needs as the city continues to grow. He said the City is in need of a wastewater expansion project and significant struggle of the project is how large the infrastructure should be built to accommodate growth. He said Mapleton is in a unique position as the city is located outside of the FM Diversion Project and could have potential flooding issues.

City of Mapleton Mayor, Andrew Draeger was present and said Mapleton is in a unique situation surrounded by a levy and the interstate. He said with the FM Diversion flood impacts to Mapleton are unknown. He said the city is working on a long term planning strategy and the proposed study would provide information needed for long term projects.

Mr. Breitling said he reviewed the application and Flood Sales Tax Policy and does not believe the project fits the criteria for Flood Sales Tax Funding. Ms. Madrigga said the policy directly states the funds cannot be used for planning or engineering costs if the projects are for new development. Mr. Oye said the study is for determining if growth is possible and identifying what is and is not feasible for the City. Mr. Draeger said identifying the right size for infrastructure that needs upgrading is the City's biggest concern.

Mr. Olson asked how the proposed project fit under State Water Commission funding. Mr. Oye said the project was approved for SWC funding under flood control. Mrs. Scherling said the policy states funds are not to be utilized for development and the County does not support development outside of the flood plain. She said it is important for the County to draw hard lines that the funds are not to be used for new development.

6. OTHER BUSINESS

There was no other business.

7. ADJOURNMENT

There being no further business, the meeting was adjourned at 1:35 PM.

Minutes prepared by Taylor Kaushagen, Commission Assistant

Cass County Sales Tax Activity (420)					
Cash Basis - 2024					
	11/13/2024				
Date	Description	Amount	Balance		
	Balance Forward		11,005,681.86		
2024	Sales Tax	19,134,352.31	30,140,034.17		
2024	Interest	693,142.33	30,833,176.50		
1/1/2024	Diversion Board of Authority	(1,465,747.26)	29,367,429.24		
1/1/2024	Diversion Board of Authority	(2,614,247.55)	26,753,181.69		
1/1/2024	Misc Revenue	39,716.46	26,792,898.15		
3/7/2024	County Projects	(1,178.95)	26,791,719.20		
3/7/2024	County Projects	(946.67)	26,790,772.53		
3/22/2024	Diversion Board of Authority	(1,777,252.60)	25,013,519.93		
3/25/2024	County Projects	(1,341.74)	25,012,178.19		
3/25/2024	County Projects	(2,375.61)	25,009,802.58		
4/12/2024	County Projects	(186,986.87)	24,822,815.71		
4/22/2024	Diversion Board of Authority	(962,176.76)	23,860,638.95		
5/10/2024	County Projects	(632.68)	23,860,006.27		
5/10/2024	County Projects	(578.04)	23,859,428.23		
5/21/2024	Diversion Board of Authority	(2,139,804.47)	21,719,623.76		
6/20/2024	Diversion Board of Authority	(1,654,081.09)	20,065,542.67		
7/18/2024	Diversion Board of Authority	(1,267,968.27)	18,797,574.40		
8/22/2024	Diversion Board of Authority	(2,500,124.74)	16,297,449.66		
8/15/2024	County Projects	(25,799.27)	16,271,650.39		
8/21/2024	County Projects	(18,047.10)	16,253,603.29		
8/21/2024	County Projects	(3,927.52)	16,249,675.77		
8/22/2024	County Projects	(61,957.50)	16,187,718.27		
9/24/2024	Diversion Board of Authority	(1,641,828.83)	14,545,889.44		
10/21/2024	Diversion Board of Authority	(1,963,059.59)	12,582,829.85		
11/8/2024	County Projects	(87,870.28)	12,494,959.57		
11/8/2024	County Projects	(45,000.00)	12,449,959.57		
			12,449,959.57		
			12,449,959.57		

Reserved for County Projects - Cash	12,449,959.57	
Reserved for Diversion Project	-	12,449,959.57

12,449,959.57

Summary

Receipts

Transfer Sales Tax Revenue 19,134,352.31 Interest Revenue 693,142.33 Misc Revenue 39,716.46 19,867,211.10 **Total Receipts**

Expenditures

(17,986,291.16) **Diversion Board of Authority**

City of Fargo - Cash Flow Other Sources

County Projects (436,642.23) Land Purchase **Total Expenditures** (18,422,933.39)

Receipts over Expenditures 1,444,277.71

Balance from Prior Year 11,005,681.86

Balance Current Year 12,449,959.57

Current County Projects				
11/13/2024				
Project	Total Approved	Paid	Left to Pay	
Closed Projects	\$ 6,622,983.66	\$ 6,622,983.66	\$ -	
2015 Upper Maple River Detention Study Phase II 50%	45,500.00	37,068.77	8,431.23	
2015 Rush River Detention Study Phase II 50%	45,500.00	34,422.58	11,077.42	
2017 Sheldon Addition Ring Levee Project 75%	462,750.00	87,870.28	374,879.72	
2018 City of Hunter Dam Projects 75%	23,582.80	11,527.09	12,055.71	
2019 T-180 Dam Safety Improvements 75%	24,765.89	-	24,765.89	
2020 Davenport Levee 75%	1,425,000.00	-	1,425,000.00	
2021 Gill Township Road	14,250.00	-	14,250.00	
2021 Maple River Township Road	64,970.00	-	64,970.00	
2022 Normanna Township Bank Stabilization 90%	187,137.87	-	187,137.87	
2022 Elm River Dam 1 and 2 at 2/3-of local share	145,733.00	28,577.86	117,155.14	
2022 Fill Township Slide Repair 75%	27,063.00	-	27,063.00	
2022 Maple River Township Slide Repair 75%	45,000.00	45,000.00	-	
2022 Mapleton Flap Gate - Storm Sewer Outfalls 75%	60,000.00	48,413.93	11,586.07	
2022 Reed Township Sheyenne Riverbank Stabilization 50%	8,650.00	7,861.44	788.56	
2022 Elm River Dam Number 3 Improvements 90%	38,160.00	19,283.35	18,876.65	
2022 Casselton Lagoon Slide Repair 75%	525,000.00	474,673.05	50,326.95	
2022 Upper Maple River Detention Study Phase II Part 2 90%	27,720.00	-	27,720.00	
2023 Rush River Amenia Flood Control Project 75%	73,125.00	-	73,125.00	
2023 Rochester/Page Township Slope Erosion Repair 75%	52,500.00	-	52,500.00	
2023 Mapleton 2nd St Storm Lift Station Replacement 75%	870,815.00	61,957.50	808,857.50	
2023 Casselton Industrial Park Improvements 50%	1,000,000.00	-	1,000,000.00	
2023 Kindred Storm Water Detention Pond Project 50%	246,785.00	-	246,785.00	
Tot	al \$ 12,036,991.22	\$ 7,479,639.51	\$ 4,557,351.71	

Reserve for County Projects Activity

Balance of Cash Carried forward from Prior Year \$ 11,005,68		11,005,681.86
Current Year Reserves 1,880,9		1,880,919.93
Total		12,886,601.79
Paid in Current Year 436,642		436,642.23
Encumbrances 4,557,351		4,557,351.71
Un-encumbered Balance		7,892,607.85



SHEILA KLEVGARD, Auditor

MICHAEL FAUGHT, Mayor

DELVIN LOSING, City Attorney

November 7, 2024

Chad M. Peterson Chairman Cass County Commission PO Box 2806 Fargo, ND 58108-2806

RE:

Flood Risk Reduction Project

Industrial Park Flood and Storm Improvements

Casselton, ND

Dear Mr. Peterson,

The City of Casselton has been approved for \$1,000,000 in cost-share for our Industrial Park Flood and Storm Improvements project. As part of the project planning, we coordinated the construction of a regional storm sewer trunk line and detention pond for an outlet to the Swan Creek Diversion through a residential development (Prairie Skies). See exhibit on back of this letter. The Industrial Park storm sewer system would connect to this trunk line as the shared outlet to Swan Creek Diversion. The cost for that storm sewer trunk line and detention pond is being paid for by the existing Industrial Park properties and the newer development properties. The cost of that storm sewer trunk line to be paid by the Industrial Park properties is estimated at around \$1,045,000, with the remaining balance of about \$710,000 paid by the residential development properties, which was determined by prorating the acres of drainage areas between the two.

We are asking for approval to use our current cost-share funds in a similar arrangement to what the Flood Sales Tax Committee previously approved for our shared flood and storm sewer improvements for the school and existing properties on the north side of town, when the Casselton Farms Addition was constructed. Constructing a shared system is more cost effective, but we understand the policy requirement of using cost-share funds only for existing areas, not new development. We would ensure that the funds would only be applied in a manner that benefits the existing Industrial Park properties. We are requesting to use 50% cost-share for the \$1,045,000 amount for the Industrial Park properties, which would be \$522,500 of the approved \$1,000,000 cost-share.

We are respectfully asking for your committee to consider this request at the upcoming meeting on November 18th. This is not a new project request, but a clarification of how we would like to use some of the approved cost-share to support the original project.

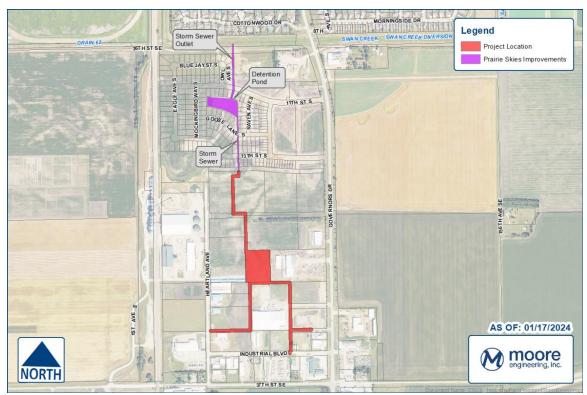
If you have any questions, please feel free to contact me or our City Engineer, Brandon Oye, Moore Engineering, Inc. at 701-282-4692.

Sincerely,

Michael Faught

Mayor - City of Cassellon

Cc: Brandon Oye - Moore Engineering, Inc.



Project Location Exhibit



November 5, 2024

Cass County Joint Water Resource District

Chad Peterson
Cass County Commission
P.O. Box 2806
Fargo, ND 58108-2806

Ken Lougheed Chairman Gardner, North Dakota Dear Chair Peterson,

Keith Weston Manager Fargo, North Dakota RE: Rush River – Amenia Flood Control Project Cost Share Request Cass County, ND
Cass County Flood Sales Tax Cost-Share Request

Gerald Melvin Manager Buffalo, North Dakota The Cass County Joint Water Resource District (the "District") is respectfully requesting cost-share for Conditional Letter of Map Revision (CLOMR) and permitting efforts for the Rush River - Amenia Flood Control Project (the "Project"). The Project is located in and around the City of Amenia in Cass County, North Dakota.

Jacob Gust Manager Fargo, North Dakota

The Rush River RCPP watershed planning process was completed, and the watershed plan was approved by the NRCS. The final plan resulted in a flood control project to remove the City of Amenia from the 100-year flood plain as the preferred alternative. In 2023, the District received cost-share funding from the North Dakota Department of Water Resources (DWR) to complete final design, including hydrology and hydraulic analysis, geotechnical analysis, and preparation of final plans and specifications for the Project.

Rick Steen Manager Fargo, North Dakota

The District is working with Moore Engineering, Inc. (Moore) to complete the CLOMR and permitting efforts. The estimated cost is \$138,000. The District has requested 60% DWR cost-share (in the amount of \$82,800). The District does not have a dedicated funding source for this project. The present application respectfully requests 90% of the remaining local share (in the amount of \$49,680).

Melissa Hinkemeyer Director, Secretary

> Leilei Bao Treasurer

1201 Main Avenue West West Fargo, ND 58078-1301

Suggested motion: Approve the Cass County Joint Water Resource District's request for 90% cost-share for CLOMR and permitting efforts for the Rush River – Amenia Flood Control Project, in an amount not to exceed \$49,680.

701-298-2381 FAX 701-298-2397 wrd@casscountynd.gov casscountynd.gov Chad Peterson Page 2 November 5, 2024

If you have any questions, please feel free to contact me or our project engineer, Alexa Ducioame, Moore Engineering, Inc., at alexa.ducioame@mooreengineeringinc.com or (701) 551-1020.

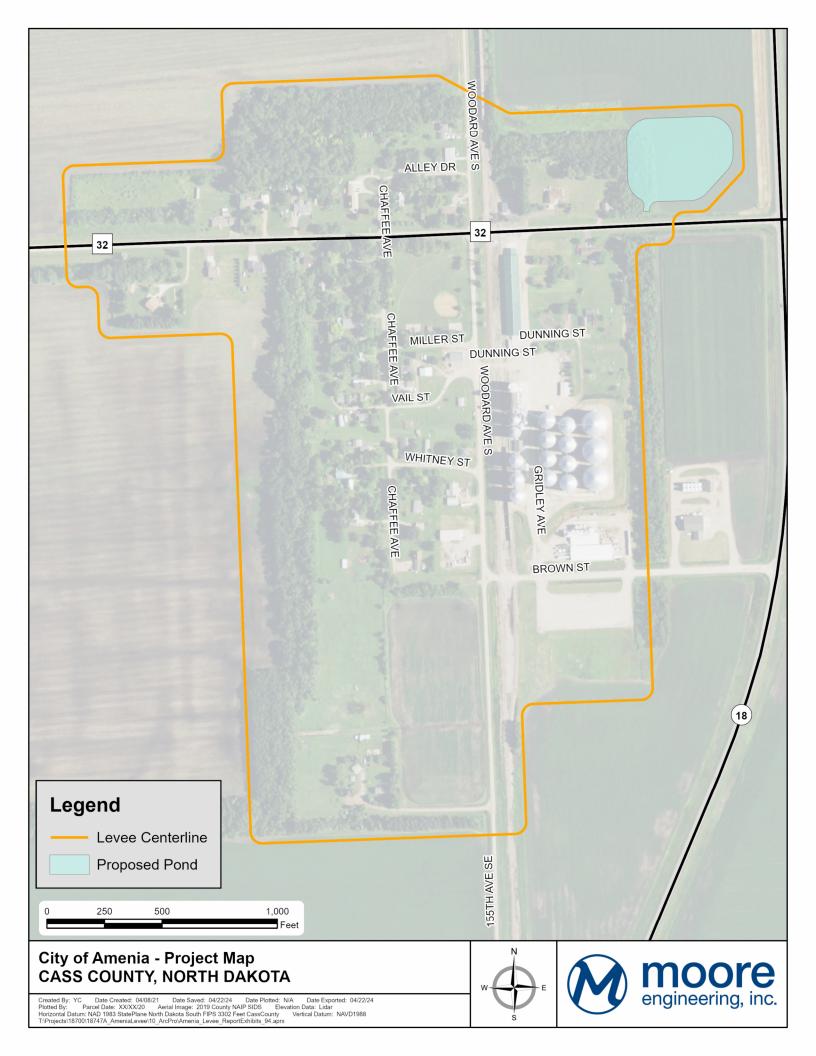
Sincerely,

CASS COUNTY JOINT WATER RESOURCE DISTRICT

Melissa Hinkemeyer

Mer Denkinger

Director, Secretary





Application for Funding from the Cass County Flood Sales Tax Committee

Project Name:					
Date:					
Funding Requested:		Cost Share %	50%	75%	90%
Location (Provide a					
brief discription):					
Name of					
Owner(s)/Applicant		Engineer Name			
Owner(s)/Applicants					
Address		Engineer Firm Name			
Owner(s)/Applicants					
Email		Engineer Email			
Owner(s) Phone		Engineer Phone			
Number		Number			
Owner/Applicant's					
Signature	Melissa Hinkemeyer		Date:		
Representative's					
Signature			Date:		
		_		•	•

Proposal: Brief Narrative Description of Reason(s) for Application

Breakdown of Project Funding		\$ Dollar Amount
Total Project Cost		\$
Additional Funding Source #1 (Name)	•	\$
Additional Funding Source #2 (Name)		\$
Additional Funding Source #3 (Name)		\$
Additional Funding Source #4 (Name)		\$
Local Project Cost (Total Cost – Additional Fur	nding)	\$
Flood Sales Tax Requested Amount		
Applicant/Requesting Entity Cost		

Application and Funding Eligibility

sandbag cleanup will not be eligible.

(see criteria in the Cass County Policy 13.72 Amended County Sales Tax For Flood Risk Reduction and Recovery Projects Adopted December 4, 2017 at www.casscountynd.gov/floodsalestaxcommittee Describe why you are an Eligible Entity: (County, City, Township, Water Resource District, or Home/Landowner)

Project Eligibility: (Outline what provision of the Policy provides eligibility to fund this project based on the
criteria listed below)

1.Levee construction or recertification for cities or rural subdivisions. Generally levee projects
shouldbe constructed to FEMA and/or US Army Corps of Engineer standards and be able to bring the
benefited area out of the 1% chance (100 year) floodplain. These levees would also need to be
maintained at thatstandard by either the city or township that is a member of the National Flood
Insurance Program. Rural subdivisions seeking this funding would need to complete an agreement
with the township and form an assessment district for the long term maintenance of the levee.
2.Flood control projects.
3. Water retention or detention projects.
4.Dam construction or maintenance.
5.Lift Stations for removing storm water from within a levee protected area.
6.Rural Farmstead Ring Levees (in conjunction with the ND State Water Commission 50% cost share)
as outlined on the ND State Water Commission website under "Cost Share"
7.Road Projects that provide infrastructure protection to prevent significant future flood
damage. These requests may be standalone projects or in conjunction with post-flood damage repair
with or without FEMA cost share.
8.Road access (road raises or other infrastructure improvements that will allow access to a
city, subdivision, or rural residence/farmstead).
9.Embankment slumping along the Red River, Wild Rice River, Sheyenne River, Maple River, Rush and
Lower Rush Rivers, and Legal Drains. River slumping projects may include road and infrastructure
repair, home buyouts, and repair to legal drains.
 10. Home buyouts for flooding and bank slumping.
11. Flood Recovery projects to include: Levee repair, road repair, bridge repair, and other
infrastructure related repair projects. None infrastructure flood recovery such as debris removal and

Cost Share Eligibility: (What % of cost share and provision of the Policy provides cost share % eligible for this project

This projec	This project meets the funding cost share eligibility of% based which of the following criteria (select all		
that apply) :		
	1.Generally the cost share will be 50% of the "local" share of the non-retention projects, i.e. if a		
	\$100,000 project had a 50% state cost share, the local share would be \$50,000 and the County		
	2.Policy for Retention Projects: Cost share is 75% of the "local" share if they are approved by the Red		
	River Joint Water Resource District.		
	3. Home buyouts for flooding and bank slumping: Cost share is 90% of the "local" cost with the		
	homeowner paying 10% of the "local" cost.		

Project Priority: (Explain any provisions of the Policy that provides a higher priority for this project)

This project should be a higher priority based on the following criteria (select all that apply and provide a narrative on why the criteria applies):

1.Population benefited by the project
2.Distribution of funds by location
3. Disbursement percentage determined by the number of people benefited
4.Cost effectiveness of the project
5.Permanency of the project
6.Effect of the diversion on the project
7. Does the project have long-term merit (benefits extend beyond 10 years)
8.Other sources of funding from local, state, or federal cost share programs.

Evaluation Criteria: (Describe any specific Evaluation Criteria used to prioritize funding of this project)

This project should be a higher priority based on the following criteria (select all that apply and provide a narrative on why the criteria applies):

1.Benefit cost ratio
2.Land area benefited
3.Population benefited
4.Downstream flood reduction
5.Total acre-feet of retention storage

Attachments

	1.Funding Request Memo from the Project Owner With Suggested Motion
	2.Location Map

Narrative Response for Project Priority and Evaluation Criteria Questions

The Project will immediately benefit the City of Amenia's 85 residents and several businesses by removing the entire City from the 100-year regulatory floodplain delineated by FEMA. The Project will provide permanent flood protection by constructing 11,820 feet of levee around the City. Other improvements with long-term merit include external drainage ditches to prevent standing water against the levee, internal drainage, a stormwater pond, gate well structures, sleeper slabs, culverts, and riprap. During the RCPP planning process, the District completed an economic analysis in which the Project scored a benefit-cost ratio of 1.4. This Project has leveraged multiple funding sources to achieve its flood control goals. In 2022, NRCS provided \$480,000 for final design of the project. In 2023, the DWR approved the District's request for 60% cost share for a portion of final design. Final design has been completed and is being reviewed by the NRCS. The next steps for the project include submitting for a FEMA Conditional Letter of Map Revision (CLOMR), a Construction Permit from the ND Department of Water Resources, and securing construction funding.

In early November 2024, the District applied for 60% DWR cost share again to support CLOMR and permitting efforts.



November 5, 2024

Maple River Water Resource District

Chad Peterson
Cass County Commission
P.O. Box 2806
Fargo, ND 58108-2806

Gerald Melvin Chairman Buffalo, North Dakota

Dear Chair Peterson,

Chad Miller Manager Buffalo, North Dakota RE: Maple River Low Head Dam Improvements Project, Cass County, ND Cass County Flood Sales Tax Cost-Share Request

Dallas Hoffmann Manager Wheatland, North Dakot The Maple River Water Resource District (the "District") is respectfully requesting cost-share for the final design efforts of the Maple River Low Head Dam Improvements Project (the Project). ND Dam 227 is located in Raymond Township, 1.5 miles west of Reile's Acres near where the Maple River discharges into the Sheyenne River.

This project will modify the existing dam to reduce the potential safety risk due to the hydraulic roller effect, which occurs on the downstream side of the dam under the right flow conditions. The District is working with Moore Engineering, Inc. (Moore) to design a rock riffle modification to the dam. Moore will develop the design based on geotechnical evaluations and hydraulic analysis of the structure.

The estimated total cost for the final design effort is \$273,500. In September 2024, the District submitted a 75% cost share application to the North Dakota Department of Water Resources (DWR) for \$178,875. This funding request was approved on October 10, 2024. The remaining local share is \$94,625. The District does not have a dedicated funding source for the Project. In the present application, the District respectfully requests \$85,162.50. This figure amounts to 90% of the local portion.

Melissa Hinkemeyer Director, Secretary

> Leilei Bao Treasurer

1201 Main Avenue West West Fargo, ND 58078-1301

701-298-2381 FAX 701-298-2397 wrd@casscountynd.gov www.casscountynd.gov Suggested motion: Approve the Maple River Water Resource District's request for 90% cost-share for final design activities for the Maple River Low Head Dam Improvements Project, in an amount not to exceed \$85,162.50.

Chad Peterson Page 2 November 5, 2024

If you have any questions, please feel free to contact me or our project engineer, Alexa Ducioame, Moore Engineering, Inc., at alexa.ducioame@mooreengineeringinc.com or (701) 551-1020.

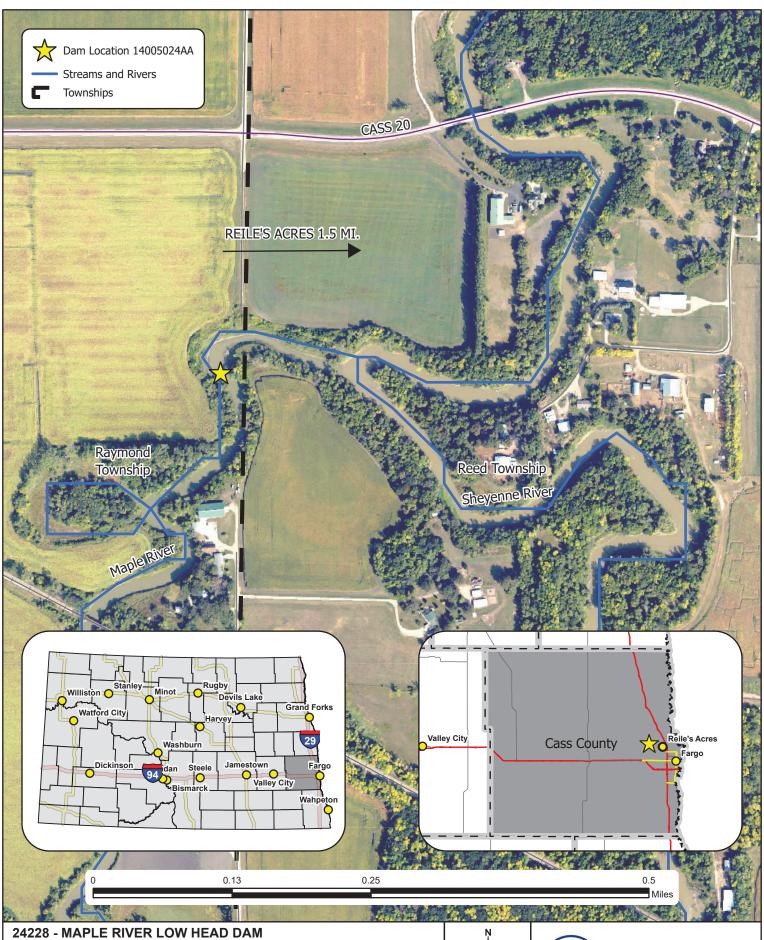
Sincerely,

MAPLE RIVER WATER RESOURCE DISTRICT

Melissa Hinkemeyer

Me Dengeneyer

Director, Secretary



24228 - MAPLE RIVER LOW HEAD DAM ND DWR COST SHARE REQUEST CASS COUNTY, NORTH DAKOTA

Created By: ZAC Date Created: 08/19/2024 Date Saved: 08/21/24 Date Plotted: N/A Date Exported: 08/21/24 Plotted By: Parcel Date: XXXXX/20 Aerial Image: 2022 County NAIP SIDS Elevation Data: Lidar Horizontal Datum: WGS 1984 Web Mercator Auxiliary Sphere Vertical Datum: NAVD1988
T:IProjects/24200/24228/24228_MRWRD_Dam.aprx







Application for Funding from the Cass County Flood Sales Tax Committee

Project Name:	Maple River Low Head Dam Improvements			
Date:	10/11/2024			
Funding Requested:	\$85,162.50	Cost Share %	50%	75% • 90%
Location (Provide a brief discription): NE 1/4, Section 24, Reed Twp. (Latitude: 46.932173; Longitude: -96.92			ude: -96.925322)	
Name of Owner(s)/Applicant	Maple River Water Resource District	Engineer Name	Alexa D	ucioame
Owner(s)/Applicants Address	1201 Main Ave W. West Fargo, ND 58078	Engineer Firm Name	Moore E	Engineering, Inc.
Owner(s)/Applicants Email	hinkemeyerm@casscountynd.gov	Engineer Email	alexa.ducioan	ne@mooreengineeringinc.com
Owner(s) Phone Number	(701) 298-2384	Engineer Phone Number	(701)	551-1020
Owner/Applicant's Signature	Melissa Hinkemeyer		Date:	11/05/2024
Representative's Signature			Date:	

Proposal: Brief Narrative Description of Reason(s) for Application

The Maple River Water Resource District (the "District") is initiating a project to modify "ND Dam 227," an existing low head dam located in Raymond Township, 1.5 miles west of Reile's Acres near where the Maple River discharges into the Sheyenne River. This project will modify the dam to reduce the potential public safety risk due to the hydraulic roller effect, which occurs on the downstream side of the dam under the right flow conditions.

The District is working with Moore Engineering Inc. (MEI) to design a rock riffle modification to the dam. MEI will develop the design based on geotechnical evaluations and hydraulic analysis of the structure. The estimated total cost for the final design effort is \$273,500. On Oct 10th, 2024, the District was approved 75% cost share (\$178,875) from the Department of Water Resources.

The remaining local share is \$94,625. The District does not have a dedicated funding source for the Project. The present application respectfully requests 90% of the local share (\$85,162.50).

Upon completion of the plans, the District will submit a construction funding request. We appreciate your willingness to support this project and help mitigate the public dangers associated with low head dams.

Breakdown of Project Funding		\$ Dollar Amount		
Total Project Cost			\$ 273,500	
Additional Funding Source #1 (Name)	DWR Cost SI	nare Program	\$ 178,875	
Additional Funding Source #2 (Name)			\$	
Additional Funding Source #3 (Name)			\$	
Additional Funding Source #4 (Name)			\$	
Local Project Cost (Total Cost – Additional Fu	ınding)		\$ \$94,625	
Flood Salas Tay Requested Amount			COE 162 FO	
Flood Sales Tax Requested Amount			\$85,162.50	
Applicant/Requesting Entity Cost			\$9,462.50	

Application and Funding Eligibility

(see criteria in the Cass County Policy 13.72 Amended County Sales Tax For Flood Risk Reduction and Recovery Projects Adopted December 4, 2017 at www.casscountynd.gov/floodsalestaxcommittee Describe why you are an Eligible Entity: (County, City, Township, Water Resource District, or Home/Landowner)

Water Resource District

Project Eligibility: (Outline what provision of the Policy provides eligibility to fund this project based on the criteria listed below)

	1.Levee construction or recertification for cities or rural subdivisions. Generally levee projects
	shouldbe constructed to FEMA and/or US Army Corps of Engineer standards and be able to bring the
_	benefited area out of the 1% chance (100 year) floodplain. These levees would also need to be
	maintained at thatstandard by either the city or township that is a member of the National Flood
	Insurance Program. Rural subdivisions seeking this funding would need to complete an agreement
	with the township and form an assessment district for the long term maintenance of the levee.
✓	2.Flood control projects.
	3. Water retention or detention projects.
✓	4.Dam construction or maintenance.
	5.Lift Stations for removing storm water from within a levee protected area.
	6.Rural Farmstead Ring Levees (in conjunction with the ND State Water Commission 50% cost share)
	as outlined on the ND State Water Commission website under "Cost Share"
	7.Road Projects that provide infrastructure protection to prevent significant future flood
	damage. These requests may be standalone projects or in conjunction with post-flood damage repair
	with or without FEMA cost share.
	8.Road access (road raises or other infrastructure improvements that will allow access to a
	city, subdivision, or rural residence/farmstead).
	9.Embankment slumping along the Red River, Wild Rice River, Sheyenne River, Maple River, Rush and
	Lower Rush Rivers, and Legal Drains. River slumping projects may include road and infrastructure
	repair, home buyouts, and repair to legal drains.
	10. Home buyouts for flooding and bank slumping.
	11.Flood Recovery projects to include: Levee repair, road repair, bridge repair, and other
	infrastructure related repair projects. None infrastructure flood recovery such as debris removal and
	sandbag cleanup will not be eligible.

Cost Share Eligibility: (What % of cost share and provision of the Policy provides cost share % eligible for this project

This project meets the funding cost share eligibility of% based which of the following criteria (select all that apply):			
	1.Generally the cost share will be 50% of the "local" share of the non-retention projects, i.e. if a \$100,000 project had a 50% state cost share, the local share would be \$50,000 and the County		
√	2.Policy for Retention Projects: Cost share is 75% of the "local" share if they are approved by the Red River Joint Water Resource District.		
	3. Home buyouts for flooding and bank slumping: Cost share is 90% of the "local" cost with the homeowner paying 10% of the "local" cost.		

Project Priority: (Explain any provisions of the Policy that provides a higher priority for this project)

This project should be a higher priority based on the following criteria (select all that apply and provide a narrative on why the criteria applies):

	1.Population benefited by the project
	2.Distribution of funds by location
	3. Disbursement percentage determined by the number of people benefited
✓	4.Cost effectiveness of the project
	5.Permanency of the project
	6.Effect of the diversion on the project
✓	7. Does the project have long-term merit (benefits extend beyond 10 years)
	8.Other sources of funding from local, state, or federal cost share programs.

Evaluation Criteria: (Describe any specific Evaluation Criteria used to prioritize funding of this project)

This project should be a higher priority based on the following criteria (select all that apply and provide a narrative on why the criteria applies):

	1.Benefit cost ratio
	2.Land area benefited
4	3.Population benefited
	4.Downstream flood reduction
√	5.Total acre-feet of retention storage

Attachments

√	1.Funding Request Memo from the Project Owner With Suggested Motion
√	2.Location Map

Narrative Response for Project Priority and Evaluation Criteria Questions

The DWR approved the District's request for 75% cost share on October 10th, 2024. The project is cost effective because the existing lowhead dam will be entombed and used as the foundation for the rock riffle structure. The project's design thus avoids construction costs associated with structure removal and the need to perform analysis of upstream and downstream impacts for a proposed removal. The total acre-feet of retention storage will remain constant as a result of this project. Furthermore, the rock riffle structure will return the dam to a more natural state that necessitates only minimal maintenance. Lastly, the project will benefit the public by providing a permanent solution to the safety hazards associated with lowhead dams while also improving fish passage and angling opportunities upstream of the existing structure.



November 5, 2024

Southeast Cass Water Resource District

Chad Peterson Cass County Commission P.O. Box 2806 Fargo, ND 58108-2806

Keith Weston Chairman Fargo, North Dakota Dear Chair Peterson,

Dave Branson Manager Fargo, North Dakota RE: Wild Rice Low Head Dam Improvements Project Cass County, ND

Rick Steen Manager Fargo, North Dakota The Southeast Cass Water Resource District (the "District") is respectfully requesting cost share for the final design efforts of the Wild Rice Low Head Dam Improvements Project (the Project). The Wild Rice Low Head Dam is located in Stanley Township, 4 miles east of Horace, North Dakota.

This project will modify the existing dam to reduce the potential safety risk due to the hydraulic roller effect, which occurs on the downstream side of the dam under the right flow conditions. The District is working with Moore Engineering Inc. (Moore) to design a rock riffle modification to the dam. Moore will develop the design based on geotechnical evaluations and hydraulic analysis of the structure.

The estimated total cost for the final design effort is \$314,500. In September 2024, the District submitted a 75% cost share application to the Department of Water Resources (DWR) for \$209,625. This funding request was approved on October 10, 2024. The remaining local share is \$104,875. The District does not have a dedicated funding source for the Project. In the present application, the District respectfully requests \$94,387.50. This figure amounts to 90% of the local portion.

Melissa Hinkemeyer Director, Secretary

> Leilei Bao Treasurer

1201 Main Avenue West West Fargo, ND 58078

701-298-2381 FAX 701-298-2397 wrd@casscountynd.gov www.casscountynd.gov Suggested motion: Approve the Southeast Cass Water Resource District's request for 90% cost share for final design activities for the Wild Rice Low Head Dam Improvements Project, in an amount not to exceed \$94,387.50.

Chad Peterson Page 2 November 5, 2024

If you have any questions, please feel free to contact me or our project engineer, Alexa Ducioame, Moore Engineering Inc., at alexa.ducioame@mooreengineeringinc.com or (701) 551-1020.

Sincerely,

SOUTHEAST CASS WATER RESOURCE DISTRICT

Melissa Hinkemeyer

ML Horkemeyer

Director, Secretary



ND DWR COST SHARE REQUEST
CASS COUNTY, NORTH DAKOTA

Created By: ZAC. Date Created: 08/19/2024 Date Sevent: 08/21/24 Date Plotted: N/A Date Exp

Created By: ZAC Date Created: 08/19/2024 Date Saved: 08/21/24 Date Plotted: N/A Date Exported: 08/21/24 Plotted By: Parcel Date: XXXXX20 Aerial Image: 2022 County NAIP SIDS Elevation Data: Lidar Horizonial Datum: WGS 1984 Web Mercator Auxiliary Sphere Vertical Datum: NAVD1988 T::ProjectsS2410032417724177_SECWRD Dam aprx







Application for Funding from the Cass County Flood Sales Tax Committee

Project Name:	Wild Rice River Low Head Dam			
Date:	10/11/2024			
Funding Requested:	\$94,387.50	Cost Share %	50%	75% 💽 90%
Location (Provide a brief discription):	13804924CA. Latitude: 4	6.75092; Lor	ngitude	e: - 96.81188.
Name of Owner(s)/Applicant	Southeast Cass Water Resource District	Engineer Name	Alexa	Ducioame
Owner(s)/Applicants Address	1201 Main Ave W. West Fargo, ND 58078	Engineer Firm Name	Moore I	Engineering Inc.
Owner(s)/Applicants Email	hinkemeyerm@casscountynd.gov	Engineer Email	alexa.ducioam	e@mooreengineeringinc.com
Owner(s) Phone Number (701) 298-2384		Engineer Phone Number	(701) !	551-1020
Owner/Applicant's Signature	Melissa Hinkemeyer		Date:	11/05/2024
Representative's Signature			Date:	

Proposal: Brief Narrative Description of Reason(s) for Application

The Southeast Cass Water Resource District (WRD) is initiating a project to modify the Wild Rice Dam, an existing low head dam located in Stanley Township, 4 miles east of Horace. The project will modify the dam to reduce the potential public safety risk due to the hydraulic roller effect, which occurs on the downstream side of the dam under the right flow conditions.

The District is working with Moore Engineering Inc. (MEI) to design a rock riffle modification to the dam. MEI will develop the design based on geotechnical evaluations and hydraulic analysis of the structure. The estimated total cost for the design effort is \$314,500. On October 10th, 2024, the DWR approved the District's request for 75% cost share (\$209,625). The remaining local share is \$104,875. The District does not have a dedicated funding source for the Project. The present application respectfully requests 90% of the local share (\$94,387.50).

Upon completion of the plans, the District will submit a construction funding request. We appreciate your willingness to support this project and help mitigate the public dangers associated with low head dams.

Breakdown of Project Funding		\$ Dollar Amount		
Total Project Cost			\$314,500	
Additional Funding Source #1 (Name)	DWR Cost SI	nare Program	\$ 209,625	
Additional Funding Source #2 (Name)			\$	
Additional Funding Source #3 (Name)			\$	
Additional Funding Source #4 (Name)			\$	
Local Project Cost (Total Cost – Additional Fu	unding)		\$ 104,875	
Flood Sales Tax Requested Amount			\$94,387.50	
Applicant/Requesting Entity Cost		_	\$10,487.50	

Application and Funding Eligibility

(see criteria in the Cass County Policy 13.72 Amended County Sales Tax For Flood Risk Reduction and Recovery Projects Adopted December 4, 2017 at www.casscountynd.gov/floodsalestaxcommittee Describe why you are an Eligible Entity: (County, City, Township, Water Resource District, or Home/Landowner)

Water Resource District

Project Eligibility: (Outline what provision of the Policy provides eligibility to fund this project based on the criteria listed below)

	1.Levee construction or recertification for cities or rural subdivisions. Generally levee projects
	shouldbe constructed to FEMA and/or US Army Corps of Engineer standards and be able to bring the
_	benefited area out of the 1% chance (100 year) floodplain. These levees would also need to be
	maintained at thatstandard by either the city or township that is a member of the National Flood
	Insurance Program. Rural subdivisions seeking this funding would need to complete an agreement
	with the township and form an assessment district for the long term maintenance of the levee.
✓	2.Flood control projects.
	3.Water retention or detention projects.
✓	4.Dam construction or maintenance.
	5.Lift Stations for removing storm water from within a levee protected area.
	6.Rural Farmstead Ring Levees (in conjunction with the ND State Water Commission 50% cost share)
	as outlined on the ND State Water Commission website under "Cost Share"
	7.Road Projects that provide infrastructure protection to prevent significant future flood
	damage. These requests may be standalone projects or in conjunction with post-flood damage repair
	with or without FEMA cost share.
	8.Road access (road raises or other infrastructure improvements that will allow access to a
	city, subdivision, or rural residence/farmstead).
	9.Embankment slumping along the Red River, Wild Rice River, Sheyenne River, Maple River, Rush and
	Lower Rush Rivers, and Legal Drains. River slumping projects may include road and infrastructure
	repair, home buyouts, and repair to legal drains.
	10. Home buyouts for flooding and bank slumping.
	11. Flood Recovery projects to include: Levee repair, road repair, bridge repair, and other
	infrastructure related repair projects. None infrastructure flood recovery such as debris removal and
	sandbag cleanup will not be eligible.

Cost Share Eligibility: (What % of cost share and provision of the Policy provides cost share % eligible for this project

This proje	This project meets the funding cost share eligibility of% based which of the following criteria (select all				
that apply	that apply):				
	1.Generally the cost share will be 50% of the "local" share of the non-retention projects, i.e. if a				
	\$100,000 project had a 50% state cost share, the local share would be \$50,000 and the County				
V	2.Policy for Retention Projects: Cost share is 75% of the "local" share if they are approved by the Red				
	River Joint Water Resource District.				
	3. Home buyouts for flooding and bank slumping: Cost share is 90% of the "local" cost with the				
	homeowner paying 10% of the "local" cost.				

Project Priority: (Explain any provisions of the Policy that provides a higher priority for this project)

This project should be a higher priority based on the following criteria (select all that apply and provide a narrative on why the criteria applies):

	1.Population benefited by the project
	2.Distribution of funds by location
	3. Disbursement percentage determined by the number of people benefited
✓	4.Cost effectiveness of the project
✓	5.Permanency of the project
	6.Effect of the diversion on the project
✓	7. Does the project have long-term merit (benefits extend beyond 10 years)
V	8.Other sources of funding from local, state, or federal cost share programs.

Evaluation Criteria: (Describe any specific Evaluation Criteria used to prioritize funding of this project)

This project should be a higher priority based on the following criteria (select all that apply and provide a narrative on why the criteria applies):

√	1.Benefit cost ratio
	2.Land area benefited
	3.Population benefited
7	4.Downstream flood reduction
√	5.Total acre-feet of retention storage

Attachments

✓	1.Funding Request Memo from the Project Owner With Suggested Motion
✓	2.Location Map

Narrative Response for Project Priority and Evaluation Criteria Questions

The DWR approved the District's request for 75% cost share on October 10th, 2024. The project is cost effective because the existing lowhead dam will be entombed and used as the foundation for the rock riffle structure. The project's design thus avoids construction costs associated with structure removal and the need to perform analysis of upstream and downstream impacts for a proposed removal. The total acre-feet of retention storage will remain constant as a result of this project. Furthermore, the rock riffle structure will return the dam to a more natural state that necessitates only minimal maintenance. Lastly, the project will benefit the public by providing a permanent solution to the safety hazards associated with lowhead dams while also improving fish passage and angling opportunities upstream of the existing structure.