### Minutes of Meeting Souris River Joint Water Resource Board Thursday, May 12, 2016 Minot City Auditorium, Minot, ND

A regular meeting of the board of directors of the Souris River Joint Water Resource Board was called to order by chairman David Ashley on Thursday, May 12, 2016, in the Community Room of the Minot City Auditorium. Joint board members attending the meeting were David Ashley, Clif Issendorf, Tom Klein, Roger Sauer, and Dan Jonasson. A quorum was declared. A roster of those attending the meeting are listed on Attachment A.

The board discussed the agenda for the meeting. Chairman Ashley stated that additional items under other business would include:

- 1. Financial Reports
- 2. Golf Course Update
- 3. Report from Tim Fay

It was moved by Roger Sauer, seconded by Clif Issendorf, that the agenda be approved with the additions stated by chairman Ashley. The motion was unanimously approved.

Chairman Ashley called on Maurice Foley. Mr. Foley stated that the Minot Daily News should have recognized chairman David Ashley as part of its story on the signing on the agreement between the Corp and the Joint Board for the feasibility study for the Souris Flood Control Project.

The board reviewed the minutes of the April 14, 2016, board meeting. It was moved by Dan Jonasson, seconded by Roger Sauer, that the minutes be approved. The motion was unanimously approved.

The board reviewed invoices. It was moved by Tom Klein, seconded by Roger Sauer, that the Barr Engineering invoices for environmental and design in the amount of \$184,055.98 be approved. The motion was unanimously approved by roll call vote.

It was moved by Roger Sauer, seconded by Tom Klein, that the invoice from Houston Engineering invoice for environmental and design for the amount of \$265,738.83 be approved. The motion was unanimously approved by roll call vote.

It was moved by Dan Jonasson, seconded by Tom Klein, that the invoice from Ackerman-Estvold for administration services in the amount of \$8,515.00. The motion was unanimously approved.

It was moved by Dan Jonasson, seconded by Roger Sauer, that the invoice from Ackerman-Estvold for the JCS survey for the amount of \$15,245.02 be approved. The motion was unanimously approved by roll call vote.

It was moved by Tom Klein, seconded by Roger Sauer, that the invoice from Apex Engineering for JCS Mapping for the amount of \$3,626.50 be approved. The motion was unanimously approved by roll call vote.

Chairman Ashley called upon Mike Dwyer to provide the financial report. Dwyer stated that the financial report was through May 2016, and included a budget report and an income and expense statement. It was moved by Tom Klein, seconded by Roger Sauer, that the financial reports be approved. The motion was unanimously approved.

Chairman Ashley called upon Frank Durbian to discuss the J. Clark Sayler Nelson Bridge replacement. Durbian indicated that cost sharing was available to replace the Nelson Bridge, through the federal lands access program. David Ashley inquired whether removing the pillars would increase conveyance in McHenry County. Clif Issendorf asked whether the river bends north about 50 yards from the bridge. Durbian indicated yes. Issendorf also inquired whether there were any enhancements for spearing of fish. Ryan Ackerman indicated that good collaboration was taking place between the Joint Board and the U.S. Fish and Wildlife Service and indicated he would provide a recommendation at the next meeting.

The board discussed Outlaw Creek. Ryan Ackerman indicated they would be reviewing all rural phases, including Outlaw Creek, the Starr Program, J. Clark Sayler Refuge, conveyance issues, erosion issues, parks and recreation areas, the City of Minot, and the Maple Diversion.

Dan Jonasson stated the Joint Board needed to provide a breakdown of costs of subprojects. Ryan Ackerman stated that decreased state funding made it essential for the joint board to get future projects into the design pipeline for construction. Clif Issendorf stated it was necessary to prioritize these subprojects.

Mike Hall reported on the Starr Program and provided an update on the Silver Jackets Program. Mr. Hall stated there would be a final meeting on the inventory and a conference call between the Corps and the Joint Board would be taking place. Hall indicated the Corps would brief the Joint Board and the public on the Starr Program.

Mike Hall also provided a weather update and an update on inundation mapping for the entire Souris River Basin. He stated inundation mapping would not be available for 12-18 months, after which there would be education for the public.

Hall indicated a study was ongoing to develop tie-ins for both Canada and the United States. Hall indicated he was seeking updates for this study.

Ryan Ackerman indicated that templates have been developed by Dwyer Law and are ready to be sent out to landowners for individual meetings.

Jerry Bentz provided an update on Phase 1 from Houston Engineering. Bentz stated that they have received comments from the Corps, and were working to be at 90% complete. Bentz also stated that they were coordinating with the DOT regarding the broadway bridge, the pump station design, and interior drainage analysis.

Jason Westbrock reported by telephone on Phases 2 and 3 documents, but that the Corps had a new reviewer and was requesting additional information. Westbrock indicated the design was completed and was waiting for final Corps comments, for which the deadline was May 26. Westbrock also addressed the 83 Bypass coordination, and reviewed the temporary features relating to the Souris Valley Golf Course.

Cindy Hemphill asked for an estimate on cost. Ryan Ackerman indicated that the modifications would be completed ahead of the larger project, and stated an estimate of cost was \$130,000.

It was moved by Dan Jonasson, seconded by Roger Sauer, that the proposed modifications for the Souris Valley Golf Course be approved, and that a cost share request be submitted to the State Water Commission. The motion provided that the estimate of cost is \$130,000. The motion was unanimously approved by roll call vote. Clif Issendorf commented that the levies would take out the greens and tee boxes located on park district lands.

Tim Fay reviewed the plan of study, including hydrology, dam safety work, and related items. Clif Issendorf inquired as to whether the plan of study recommended the Canadian dams as a high priority.

Ryan Ackerman reviewed the J. Clark Sayler survey, which is Attachment C. Ackerman indicated that the area was extremely flat, and the elevation dropped only two inches per mile over a three mile stretch. Ackerman indicated the field survey found a rock dam, and indicated any communication between the U.S. and Canada should address the area 1.5 miles north of the bridge.

Cindy Hemphill stated that City had been notified that Home Sweet Home had been served with condemnation papers and had obtained an attorney.

Chairman Ashely stated that the next meeting of the Souris River Joint Board would be Thursday, June 9, 2016, in Minot.

There being no further business, the meeting was adjourned.

Michael Dwyer

Attachont A



PHONE: (701) 223-4232 WEBSITE: dwyerla	wofficend.com Alexandra	flow
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DANJONASSON	C, to or Minot / GRJB.	Minot
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05/09/16 Accrual Basis

## **Souris River Joint Board** 2016 Budget Report January through May 2016

	Jan - May 16	Budget	% of Budget
Income 4000 · Water Resource Districts			
4001 · Renville	0.00	0.00	0.0%
4002 · Ward	0.00	0.00	0.0%
4003 · McHenry	0.00	0.00	0.0%
4004 · Bottineau	0.00	0.00	0.0%
Total 4000 · Water Resource Districts	0.00	0.00	0.0%
4010 · Contracts/Reimbursements	7 9772 9772 007		V22 237
4011 · State Water Comm. (Minot Pr	1,840,319.00	0.00	100.0%
4012 · State Water Comm. (Souris J	0.00	105,000.00	0.0%
4013 · State Water Comm. (NDIRF)	0.00	0.00	0.0%
4014 · State Water Comm. (214)	0.00	0.00	0.0%
4015 · State Water Comm. (Misc)	0.00	0.00	0.0%
Total 4010 · Contracts/Reimbursements	1,840,319.00	105,000.00	1,752.7%
4020 · City Cost Sharing			
4021 · Minot - Engineering	1,226,896.34	0.00	100.0%
4022 · Minot (214)	0.00	0.00	0.0%
4025 · Velva	0.00	0.00	0.0%
4028 · Burlington	0.00	0.00	0.0%
Total 4020 · City Cost Sharing	1,226,896.34	0.00	100.0%
4040 · Mill Levies/Property Taxes			
4041 · Renville	10,000.00	30,000.00	33.3%
4042 · Ward	169,705.89	200,000.00	84.9%
4043 · McHenry	0.00	0.00	0.0%
4044 · Bottineau	50,000.00	100,000.00	50.0%
Total 4040 · Mill Levies/Property Taxes	229,705.89	330,000.00	69.6%
4050 · Interest	0.00	0.00	0.0%
4080 · Miscellaneous	13.00	0.00	100.0%
Total Income	3,296,934.23	435,000.00	757.9%
Expense Staff Comition			
5000 · Staff Services 5010 · Project Manager	0.00	48,000.00	0.0%
5011 · Administrative	0.00	10,000.00	0.0%
Total 5000 · Staff Services	0.00	58,000.00	0.0%
5100 · Consulting Services	0.00	0.00	0.00/
5110 · Legal (General)	0.00	0.00	0.0%
5111 · Legal (Souris JB)	26,711.67	40,000.00	66.8%
5130 · Engineering (Minot Proj.)	3,047,770.15	0.00	100.0%
5131 · Admin/Coordination (Souris	42,276.11	65,000.00	65.0%
5132 · Engineering (General)	64,142.71	0.00	100.0%
Total 5100 · Consulting Services	3,180,900.64	105,000.00	3,029.4%
5150 · Corps of Engineers			
5151 · 214 MOA	0.00	0.00	0.0%
5152 · Feasibility Study	25,000.00	0.00	100.0%
Total 5150 · Corps of Engineers	25,000.00	0.00	100.0%
5200 · Office Expenses			

## Souris River Joint Board 2016 Budget Report January through May 2016

	Jan - May 16	Budget	% of Budget
5205 · Postage	0,00	1,000.00	0.0%
5210 · Copying & Printing	0.00	2,000.00	0.0%
5215 · Dues & Subscriptions	5,000.00	1,000.00	500.0%
5220 · Equipment	0.00	0,00	0.0%
5225 · Insurance	0.00	0.00	0.0%
5230 · Rent	0.00	0.00	0.0%
5235 · Supplies	0.00	1,500.00	0.0%
5240 · Telephone	0.00	0.00	0.0%
5245 · Miscellaneous	0.00	500.00	0.0%
Total 5200 · Office Expenses	5,000.00	6,000.00	83.3%
5300 · Other Expenses			
5310 · ND Water Coalition	1,000.00	1,000.00	100.0%
5320 · Travel	0.00	10,000.00	0.0%
5330 · Meeting Expenses	0.00	5,000.00	0.0%
5335 · Audit/Insurance	0.00	2,500.00	0.0%
5340 · Miscellaneous	0.00	2,000.00	0.0%
Total 5300 · Other Expenses	1,000.00	20,500.00	4.9%
5400 · Projects			
5410 · Renville County	0.00	0.00	0.0%
5420 · Ward County	0.00	0.00	0.0%
5430 · McHenry County	0.00	0.00	0.0%
5440 · Bottineau County	0.00	0.00	0.0%
5450 · Minot	0.00	0.00	0.0%
5460 · Velva	0.00	0.00	0.0%
5465 · Burlington	0.00	0.00	0.0%
5475 · Other	0.00	0.00	0.0%
Total 5400 · Projects	0.00	0.00	0.0%
Total Expense	3,211,900.64	189,500.00	1,694.9%
Net Income	85,033.59	245,500.00	34.6%

# Souris River Joint Board 2016 Income and Expense Report

January through May 2016

Туре	Date	Num	Name	Memo	Amount
Income					
	tracts/Reimburseme				
	tate Water Comm.	(Minot Proj.)	ND Olata Matan Cananiasian	Frankrankra Cambasa	470 040 00
Deposit	02/11/2016		ND State Water Commission	Engineering Services	470,248.00
Deposit Deposit	02/26/2016 03/24/2016		ND State Water Commission ND State Water Commission	Engineering Services Engineering Services	146,036.00 485,321.00
Deposit	05/02/2016		ND State Water Commission	Engineering Services	738,714.00
,		anna (Milimat Di		Engineering convisco	
	11 · State Water Co		roj.)		1,840,319.00
Total 4010 ·	Contracts/Reimburs	sements			1,840,319.00
	Cost Sharing				
	linot - Engineering		O'		0.10.71.0.00
Deposit	02/16/2016		City of Minot	Engineering Services	313,516.28
Deposit	02/29/2016		City of Minot	Engineering Services	97,357.09
Deposit Deposit	03/11/2016 05/09/2016		City of Minot City of Minot	Engineering Services Engineering Services	323,547.10
·			City of Milliot	Engineering Services	492,475,87
	21 · Minot - Enginee	ring			1,226,896.34
Total 4020	City Cost Sharing				1,226,896.34
	Levies/Property Tax	kes			
4041 · R Deposit	Renville 03/02/2016		Renville County	Mill Levy	10,000.00
•	41 · Renville			,	
					10,000.00
4042 · V			Mand Caush	RAUL L many	5,000,70
Deposit	01/01/2016		Ward County	Mill Levy	5,966,73
Deposit	01/01/2016		Ward County	Mill Levy	1,049.41
Deposit	01/07/2016		Ward County	Mill Levy	1,384.56
Deposit	01/08/2016		Ward County	Mill Levy	9,358.43
Deposit	02/04/2016		Ward County	Mill Levy	66,036.84
Deposit	03/04/2016		Ward County	Mill Levy	56,402.72
Deposit	04/04/2016		Ward County	Mill Levy	29,507.20
Total 40	42 · Ward				169,705.89
4044 · E	3ottineau				
Deposit	05/09/2016		Bottineau County	Mill Levy	50,000.00
Total 40	44 · Bottineau				50,000.00
Total 4040	· Mill Levies/Property	, Tavec			229,705.89
	•	TEACS			220,700.00
4080 · Miso Deposit	cellaneous 05/09/2016		ND Insurance Reserve	Refund	13.00
•	· Miscellaneous				13.00
Total Income	THE SOLICITION OF THE SOLICITI				3,296,934.23
					0,200,804.23
	sulting Services				
Check	egal (Souris JB) 01/22/2016	1063	Dwyer Law Office	Legal	9,609.93
Check	04/29/2016	1072	Dwyer Law Office	Legal Fees	17,101.74
			Brijor Zarr Sinos	_03017 000	
	11 · Legal (Souris Ji	•			26,711.67
	Engineering (Minot		Dan Funda and C	Factor and the O	404 000 75
Check	01/22/2016	1060	Barr Engineering Company	Engineering Services	464,896.79
Check	01/22/2016	1061	Houston Engineering, Inc.	Engineering Services	318,893.91
Check	03/10/2016	1064	Barr Engineering Company	Engineering Services	202,911.98
Check	03/10/2016	1065	Houston Engineering, Inc.	Engineering Services	40,480.75
Check	03/31/2016	1067	Barr Engineering Company	Engineering Services	466,538.32
Check	03/31/2016	1068	Houston Engineering, Inc.	Engineering Services	342,329.44
Check	05/02/2016	1073	Barr Engineering Company	Engineering Services	794,246.79

3:15 PM 05/09/16 **Accrual Basis** 

## **Souris River Joint Board** 2016 Income and Expense Report January through May 2016

5/02/2016 Engineering (Minot a/Coordination (S 1/22/2016 3/31/2016 4/29/2016 Admin/Coordinatio eering (General) 4/29/2016	ouris JB) 1062 1069 1070	Ackerman Estvold Ackerman Estvold Ackerman Estvold JB)	Engineering Services  Coordination Expenses Coordination Expenses Coordination Expenses	417,472.17 3,047,770.15 3,196.56 19,721.26 19,358.29 42,276.11
a/Coordination (S 1/22/2016 3/31/2016 4/29/2016 Admin/Coordinatio eering (General) 14/29/2016	ouris JB) 1062 1069 1070 n (Souris	Ackerman Estvold Ackerman Estvold Ackerman Estvold JB)	Coordination Expenses	3,196.56 19,721.26 19,358.29
1/22/2016 13/31/2016 14/29/2016 Admin/Coordinatio eering (General) 14/29/2016	1062 1069 1070 n (Souris .	Ackerman Estvold Ackerman Estvold Ackerman Estvold JB)	Coordination Expenses	19,721.26 19,358.29
1/22/2016 13/31/2016 14/29/2016 Admin/Coordinatio eering (General) 14/29/2016	1062 1069 1070 n (Souris .	Ackerman Estvold Ackerman Estvold Ackerman Estvold JB)	Coordination Expenses	19,721.26 19,358.29
4/29/2016 Admin/Coordinatio eering (General) 4/29/2016	1070 n (Souris .	Ackerman Estvold JB)		19,358.29
Admin/Coordinatio eering (General) 4/29/2016	n (Souris .	JB)	Coordination Expenses	
eering (General) 4/29/2016				42,276.11
4/29/2016	1071			
4/29/2016	1071			
4/29/2016		HDR Engineering, Inc.	Engineering Expenses	60,470.71
	1075	Apex Engineering Group	Engineering Services	3,672.00
Engineering (Gene	ral)			64,142.71
sulting Services				3,180,900.64
Engineers				
oility Study				
3/21/2016	1066	U.S. Army Corps of Engineers	Feasibility Study	25,000.00
easibility Study				25,000.00
s of Engineers				25,000.00
penses				
& Subscriptions				
5/09/2016	1077	ND Water Users Association	Membership	5,000.00
Dues & Subscription	ons			5,000.00
e Expenses				5,000.00
penses				
ater Coalition				
5/09/2016	1078	ND Water Coalition	Membership	1,000.00
ND Water Coalition	n			1,000.00
er Expenses				1,000.00
				3,211,900.64
				85,033.59
	Engineers bility Study bi3/21/2016 Feasibility Study bis of Engineers penses Subscriptions bi5/09/2016 Expenses benses ater Coalition bi5/09/2016	Engineers bility Study 3/21/2016 1066 Feasibility Study bs of Engineers penses & Subscriptions 15/09/2016 1077 Dues & Subscriptions be Expenses ater Coalition 15/09/2016 1078 ND Water Coalition	Engineers  bility Study  3/21/2016 1066 U.S. Army Corps of Engineers  Feasibility Study  as of Engineers  penses  & Subscriptions  5/09/2016 1077 ND Water Users Association  Dues & Subscriptions  the Expenses  ater Coalition  1078 ND Water Coalition  ND Water Coalition	Engineers collity Study 13/21/2016 1066 U.S. Army Corps of Engineers Feasibility Study Esasibility Stu





1907 17th Street Southeast Minot, ND 58701 701.837.8737 www.ackerman-estvold.com

#### **MEMORANDUM**

Date: May 12, 2016

To: Souris River Joint Board

From: Ackerman-Estvold

Ryan Ackerman, PE

Re: J. Clark Salyer Structure Survey

This memorandum describes the preliminary findings of the survey from Dam 357, located approximately one mile south of the United States / Canada border, to the downstream end of the survey, located approximately 13.5 river miles (distance along the stream thread) north of the United States / Canada border, or approximately four miles north and one mile west of Coulter, Manitoba.

In early 2016, the Souris River Joint Water Resource Board (SRJB) commissioned the survey of the various hydraulic structures through the J. Clark Salyer (JCS) Refuge in McHenry and Bottineau counties. The purpose of this survey was to catalogue the elevations of these structures using a consistent datum. The horizontal datum used for the survey was the North American Datum of 1983 (NAD 83). The vertical datum used for the survey was the North American Vertical Datum of 1988 (NAVD 88). The unit of measure was US survey feet.

As the scope of the survey was being developed, it was determined that it would be beneficial to collect limited survey information downstream of the JCS Refuge in Manitoba. The purpose of collecting this information was to better understand how downstream channel and structure configurations impact the resulting tailwater of the Souris River in Manitoba. Understanding this tailwater condition is important so that the effectiveness of proposed improvements within the JCS Refuge can be evaluated.

The locations of the cross sections collected as part of the survey are shown in **Figure 2** in red. These locations were chosen based on reconnaissance of aerial photos of the area and are generally areas in which bridges are located.

During the reconnaissance of aerial photos, a potential dam was identified approximately 1.5 miles north and 1 mile east of Coulter. This is identified as cross section location 2 on **Figure 2**. Field investigations and survey confirmed the presence of a small dam at this location, as shown in **Figure 1**.

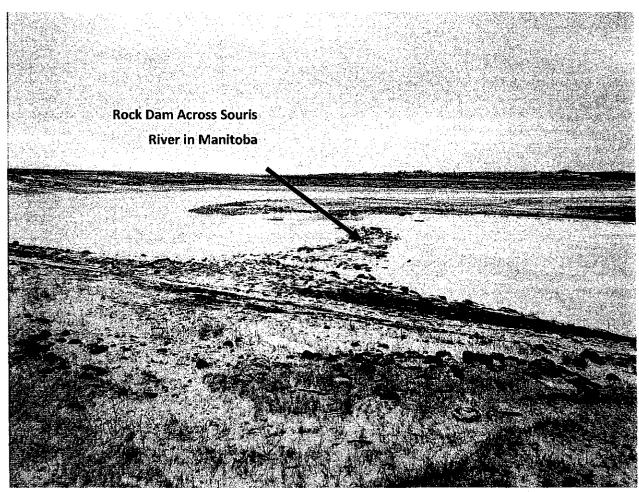


Figure 1. Photo of existing rock dam on Souris River approximately 8.9 miles downstream of United States / Canada border



Cross Section Location	Description	River Bottom Elevation (NAVD 88)
1	Rural Road Bridge	1401.1 (1)
2	Unidentified Dam	1408.0 (2)
3	Former Railroad Bridge	1400.4 (1)
4	Highway Bridge	1402.8 (1)
5	Former Railroad Bridge	1402.3 (1)
6	Dam 357	1409.3 (3)

- Elevations for river bottom were taken approximately 150 feet upstream of the structure to account for potential bed loss due to scour
- (2) River bottom elevation for the unidentified dam are based on the top of rock elevation assumed to correspond to the spill elevation of the dam
- (3) River bottom elevation for Dam 357 is based on the overtopping elevation for the primary control structure

Figure 2. Cross section survey locations from Dam 357 downstream to end of survey in Manitoba

The results of the survey indicate a very flat river bottom gradient (less than 2 inches per mile) within the first 13.5 miles of the Souris River in Manitoba. This gradient will create tailwater conditions along the Mouse River in North Dakota that could limit the effectiveness of improvements within sections of the JCS Refuge. Additionally, the presence of the rock dam on the Souris River northeast of Coulter, Manitoba, could limit the effectiveness of improvements within sections of the JCS Refuge.

Additional hydraulic analyses will be performed using the data collected as part of this study to better inform the various stakeholders of the effectiveness of alternative strategies to limit the impacts of the Mouse River in Bottineau County.