Bois de Sioux Watershed District
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Regular Meeting Agenda

JUNE 18, 2020

Approved Minutes are posted on www.bdswd.com. Underscored times will be honored; all other times are estimates.

Board President Linda Vavra, Watershed District Attorney Lukas Croaker, and Administrator Jamie Beyer have determined that an in-person meeting is not practical or prudent because of a health pandemic.

Pursuant to Minnesota Statute 13D.021, this meeting will be held by telephone and electronic means, and:

- All members of the body participating in the meeting, wherever their physical location, will hear one another and can hear all discussion and testimony;
- Members of the public present at the regular meeting location of the body will hear all discussion and testimony and all votes of the members of the body;
- At least one member of the body, chief legal counsel, or chief administrative officer will be physically present at the regular meeting location; and
- All votes will be conducted by roll call, so each member's vote on each issue can be identified and recorded.

Pursuant to Minnesota Statute 13D.021 Pursuant to 13D.021 Subd. 3, any person may monitor the meeting electronically from a remote location, at their own cost.

Join Zoom Meeting by Computer and/or Telephone

www.zoom.com -> Joint a meeting ->Meeting ID: 830 2402 2221 and Password: 494772 (Raise and hold your hand up to be recognized by the President) or you can call-in to: (312) 626-6799 -> Meeting ID: 830 2402 2221 and Password: 494772 (Press *6 to unmute your phone if you wish to speak)

8:00 AM Board Meeting Call to Order
Pledge of Allegiance
Consider Agenda Additions and Approve Agenda
Declaration of Conflicts of Interest
Approve Consent Agenda: *(These items can be approved one motion, or a board member may move items individually)*
- Approve Claims of June 18, 2020 p.1
- Approve Minutes of May 21, 2020 and June 8, 2020 p.5
- Treasurer's Report & Budget p.11

Public Comment

PERMITS Update

DITCHES Update
- WCD #9 — Update
- JD #11 — Update
  - Approve Traverse County Bond Reimbursement Request #2
- JD #6 — Update

Cattail, Brush, Tree, Weed Removal Price Quotes p.17

8:45 AM Review North Ottawa Impoundment Project and Collection Channel Hay Bids

9:00 AM Open hearing to present and discuss the Lake Traverse Water Quality Improvement Project Phase No. 1. The goal of the proposed project is to stabilize the gully erosion and sedimentation for a tributary to Lake Traverse located in Section 14, Windsor Township, Traverse County. The estimated cost of the proposed project is $850,000. The method by which the cost of the proposed project is to be paid is as follows: $283,000 from the Red River Watershed Management Board; $336,775 from the Minnesota Clean Water Fund through sponsoring agency Board of Water and Soil Resources; $200,000 from the Bois de Sioux Watershed District Construction Fund; $4,500 from the Traverse County Local Water Plan; and $25,725 from the Lake Traverse Water Quality Improvement Project Water Management District.

LTWQIP — Board Approval for Project Establishment & Authorizes Construction Bid Advertisement
Land Acquisition

WATERSHED PROJECTS Update
Wilkin SWCD, Kimberly Melton: Cover Crop Pilot Program
Schander Ring Dike Update
North Ottawa — Bird Reports: https://ebird.org/hotspot/L2182908
Kevin Biehn, EOR Report

(continued)

		Request to Fish
		Cattail Removal
	Redpath	Purchase Agreement Updates & CRP Contract

BOARD	Update
MANAGERS	RRWMB, RRRA, RRBC, FDRWG, MAWD, 1W1Plan Update
	Drainage Workgroup Update

GENERAL	Update
	Approve Liability Coverage Non Waiver of Tort Liability p.19
	Approve Annual Organization Resolution & Oath of Office p.21
	Timesheet Reminder
	Minutes & Letters

Next Meeting:

July 16, 2020

Bois de Sioux Watershed District
Transaction Detail by Account
May 22 through June 18, 2020

Type	Date	Num	Name	Memo	Account	Class	Amount
Allen Yaggie							
Check	06/04/2020	20671	Allen Yaggie	PERMANENT BACKSLOPE EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-1,316.00
Check	06/04/2020	20671	Allen Yaggie	PERMANENT CHANNEL EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-6,960.00
Total Allen Yaggie							-8,276.00
AmeriPride Linen & Uniform Services							
Check	06/18/2020		AmeriPride Linen & Uniform Se...	RUGS	53420 · Maintenance	Administrative Fund:General Cash	-31.65
Total AmeriPride Linen & Uniform Services							-31.65
City of Wheaton							
Check	06/04/2020	20668	City of Wheaton	W/S/G	53440 · Utility Expense	Administrative Fund:General Cash	-28.89
Total City of Wheaton							-28.89
Culligan Soft Water							
Check	06/18/2020		Culligan Soft Water		53500 · Office Supplies	Administrative Fund:General Cash	-7.98
Total Culligan Soft Water							-7.98
Dawn Hust							
General Journal	06/12/2020	2019-...	Dawn Hust	Reverse of GJE 2019-20 JB -- For CHK ...	52520 · ROW		6,720.00
General Journal	06/12/2020	2019-...	Dawn Hust	Reverse of GJE 2019-20 JB -- For CHK ...	52520 · ROW		700.00
Total Dawn Hust							7,420.00
Dennis E. Holtz Revocable Living Trust							
Check	06/18/2020		Dennis E. Holtz Revocable Livi...	PERMANENT CHANNEL EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-6,528.00
Check	06/18/2020		Dennis E. Holtz Revocable Livi...	PERMANENT BACKSLOPE EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-716.00
Total Dennis E. Holtz Revocable Living Trust							-7,244.00
Elan Financial Services							
Check	06/18/2020		Elan Financial Services	ADOBE PDF SUB	53200 · Miscellaneous Expenses	Administrative Fund:General Cash	-192.25
Check	06/18/2020		Elan Financial Services	ADOBE SUB	55130 · Website	Administrative Fund:General Cash	-33.65
Check	06/18/2020		Elan Financial Services	FREEFIND SEARCH UPDATE	55130 · Website	Administrative Fund:General Cash	-19.00
Check	06/18/2020		Elan Financial Services	ZOOM SUB	52800 · Meeting Expense	Administrative Fund:General Cash	-32.04
Total Elan Financial Services							-276.94
Emmons & Oliver Resources, Inc.							
Check	06/18/2020		Emmons & Oliver Resources, I...	NORTH OTTAWA AG SUPPORT	51900 · Engineering Services	Construction Fund:North Ottawa Impoun...	-4,572.50
Total Emmons & Oliver Resources, Inc							-4,572.50
Frontier							
Check	06/18/2020		Frontier	PHONE / FAX	53450 · Telephone Expense	Administrative Fund:General Cash	-198.97
Total Frontier							-198.97
Gazette Publishing Co.							
Check	06/18/2020		Gazette Publishing Co	LTWQIP	51500 · Advertising Expense	Construction Fund:Lake Traverse WQ Im...	-114.75
Check	06/18/2020		Gazette Publishing Co	PETITION HEARING	51500 · Advertising Expense	Ditch Fund:TCD #23	-229.50
Total Gazette Publishing Co							-344.25
Genevieve B. Mooty Trust Agreement							
Check	06/04/2020	20672	Genevieve B. Mooty Trust Agre...	PERMANENT CHANNEL EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-10,800.00
Check	06/04/2020	20672	Genevieve B. Mooty Trust Agre...	PERMANENT BACKSLOPE EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-712.00
Total Genevieve B. Mooty Trust Agreement							-11,512.00
Houston Engineering, Inc.							
Check	06/18/2020		Houston Engineering, Inc	Overall Plan Update - 1W1P	53650 · Overall Plan	Construction Fund:Overall Plan & 1W1Pl...	-46,365.23
Total Houston Engineering, Inc							-46,365.23
HPS							
Check	06/18/2020		HPS	NORTH OTTAWA PORTAPOTTY	53440 · Utility Expense	Construction Fund:North Ottawa Impoun...	-175.00
Total HPS							-175.00
Jamie Beyer							
Check	06/18/2020		Jamie Beyer	WEEK ENDING 5/17/20	51300 · Administration Expense	Administrative Fund:General Cash	-1,390.00
Check	06/18/2020		Jamie Beyer	WEEK ENDING 5/24/20	51300 · Administration Expense	Administrative Fund:General Cash	-1,390.00
Check	06/18/2020		Jamie Beyer	WEEK ENDING 5/31/20	51300 · Administration Expense	Administrative Fund:General Cash	-990.00
Check	06/18/2020		Jamie Beyer	WEEK ENDING 5/31/20	51300 · Administration Expense	Administrative Fund:General Cash	-1,120.00
Check	06/18/2020		Jamie Beyer	MILEAGE TO LV - 5/19/20, 6/5/20	53100 · Mileage Expense Staff	Administrative Fund:General Cash	-74.29
Check	06/18/2020		Jamie Beyer	PLEXIGLASS ORDER	54100 · Repairs and Maintena...	Administrative Fund:General Cash	-180.19
Total Jamie Beyer							-5,144.48
Lake Country Technology							
Check	06/18/2020		Lake Country Technology	BACKBLAZE SUBSCRIPTION	53500 · Office Supplies	Administrative Fund:General Cash	-160.31
Total Lake Country Technology							-160.31
Locators & Supplies, Inc.							
Check	06/18/2020		Locators & Supplies, Inc	FLAGGING TAPE	53420 · Maintenance	Administrative Fund:General Cash	-37.27
Total Locators & Supplies, Inc							-37.27
Lyle and Gloria Raguse							
Check	06/01/2020	20661	Lyle and Gloria Raguse	PERMANENT CHANNEL EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-16,944.00
Check	06/01/2020	20661	Lyle and Gloria Raguse	PERMANENT BACKSLOPE EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-2,128.00
Total Lyle and Gloria Raguse							-19,072.00
Marieta A. Maudal							
Check	06/18/2020		Marieta A. Maudal	PERMANENT CHANNEL EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-10,944.00
Check	06/18/2020		Marieta A. Maudal	PERMANENT BACKSLOPE EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-1,404.00
Total Marieta A. Maudal							-12,348.00
MN PEIP							
Check	06/18/2020		MN PEIP		Health Insurance Expense	Administrative Fund:General Cash	-1,874.38
Total MN PEIP							-1,874.38
Niesche Family Credit Trust							
Check	06/18/2020		Niesche Family Credit Trust	PERMANENT CHANNEL EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-6,720.00
Check	06/18/2020		Niesche Family Credit Trust	PERMANENT BACKSLOPE EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-700.00
Total Niesche Family Credit Trust							-7,420.00

Bois de Sioux Watershed District
Transaction Detail by Account
May 22 through June 18, 2020

Type	Date	Num	Name	Memo	Account	Class	Amount
Ohnstad Twichell, PC							
Check	06/18/2020		Ohnstad Twichell, PC	168790 JD #11 REPAIR	52600 · Legal Fees	Ditch Fund JCD #11	-7,547.37
Check	06/18/2020		Ohnstad Twichell, PC	168791 LTWQIP	52600 · Legal Fees	Construction Fund:Lake Traverse WQ Im...	-80.00
Check	06/18/2020		Ohnstad Twichell, PC	168797 REDPATH PROJECT	52600 · Legal Fees	Construction Fund:Redpath Impoundmen...	-6,827.50
Check	06/18/2020		Ohnstad Twichell, PC	168812 GENERAL LEGAL WORK	52600 · Legal Fees	Administrative Fund:General Cash	-1,785.00
Total Ohnstad Twichell, PC							-16,239.87
Olson Tile & Excavating, LLC							
Check	06/18/2020		Olson Tile & Excavating, LLC	FEMA FLOOD REPAIRS	54140 · FEMA Repairs and Ma...	Ditch Fund:TCD #43	-1,827.00
Total Olson Tile & Excavating, LLC							-1,827.00
Otter Tail County							
Deposit	06/01/2020		Otter Tail County	PROPERTY TAXES	42030 · Ottertail County	Administrative Fund:General Cash	4,310.67
Deposit	06/01/2020		Otter Tail County	PROPERTY TAXES	42030 · Ottertail County	Construction Fund	14,067.06
Deposit	06/01/2020		Otter Tail County	PORTION OF PROPERTY TAXES FOR...	42030 · Ottertail County	RRWMB	14,067.06
Total Otter Tail County							32,444.79
Ottertail Power Company							
Check	06/04/2020	20667	Ottertail Power Company	ELECTRICITY	53430 · Electricity	Administrative Fund:General Cash	-90.89
Total Ottertail Power Company							-90.89
QuickBooks Payroll Service							
Liability Check	05/29/2020		QuickBooks Payroll Service	Fee for 2 direct deposit(s) at $1.75 each	53700 · Payroll Expenses	Administrative Fund:General Cash	-3.50
Total QuickBooks Payroll Service							-3.50
Robert K. Wetherbee Testamentary Trust							
Check	06/01/2020	20662	Robert K. Wetherbee Testamen...	PERMANENT CHANNEL EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-11,328.00
Check	06/01/2020	20662	Robert K. Wetherbee Testamen...	PERMANENT BACKSLOPE EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-1,108.00
Total Robert K. Wetherbee Testamentary Trust							-12,436.00
RRWMB							
Check	06/18/2020		RRWMB	PORTION OF PROPERTY TAXES FOR...	54225 · Transfer of Funds RR...	RRWMB	-315,457.76
Total RRWMB							-315,457.76
Runestone Telecom Assoc.							
Check	06/18/2020		Runestone Telecom Assoc	INTERNET & EMAIL	53440 · Utility Expense	Administrative Fund:General Cash	-120.95
Total Runestone Telecom Assoc							-120.95
Sag's Hardware Hank, Inc.							
Check	06/18/2020		Sag's Hardware Hank, Inc	CLEANING SUPPLIES & EXTENSION...	53500 · Office Supplies	Administrative Fund:General Cash	-23.96
Check	06/18/2020		Sag's Hardware Hank, Inc	SURVEY POSTS	54100 · Repairs and Maintena...	Construction Fund:Redpath Impoundmen...	-139.84
Check	06/18/2020		Sag's Hardware Hank, Inc	WEED KILLER	54100 · Repairs and Maintena...	Administrative Fund:General Cash	-17.99
Total Sag's Hardware Hank, Inc							-181.79
Stevens County							
Deposit	06/01/2020		Stevens County	PROPERTY TAXES	42040 · Stevens County	Administrative Fund:General Cash	12,279.33
Deposit	06/01/2020		Stevens County	PROPERTY TAXES	42040 · Stevens County	Construction Fund	40,235.79
Deposit	06/01/2020		Stevens County	PORTION OF PROPERTY TAXES FOR...	42040 · Stevens County	RRWMB	40,235.78
Deposit	06/01/2020		Stevens County	DITCH ASSESSMENT	41190 · Ditch Assesment	Ditch Fund:TCD #8	19.01
Total Stevens County							92,769.91
Sturdevant's Auto Parts							
Check	06/18/2020		Sturdevant's Auto Parts	46-776457	53420 · Maintenance	Administrative Fund:General Cash	-2.69
Total Sturdevant's Auto Parts							-2.69
The Ardis Arnhalt Living Trust							
Check	06/18/2020		The Ardis Arnhalt Living Trust	PERMANENT CHANNEL EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-5,760.00
Check	06/18/2020		The Ardis Arnhalt Living Trust	PERMANENT BACKSLOPE EASEMENT	52520 · ROW	Ditch Fund:JCD #11	-716.00
Total The Ardis Arnhalt Living Trust							-6,476.00
Traverse County							
Deposit	06/01/2020		Traverse County	PROPERTY TAXES	42050 · Traverse County	Administrative Fund:General Cash	59,797.63
Deposit	06/01/2020		Traverse County	PROPERTY TAXES	42050 · Traverse County	Construction Fund	195,481.38
Deposit	06/01/2020		Traverse County	PORTION OF PROPERTY TAXES FOR...	42050 · Traverse County	RRWMB	195,481.39
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:JCD #3	1,790.93
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:JCD #6	1,091.08
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:JCD #7	1,428.29
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:JCD #11	31,385.81
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:JCD #12	2,060.50
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:JCD #14	71,975.16
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #1E	2,518.62
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #1W	2,960.83
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #2	3,153.12
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #4	21,790.12
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #7	7,076.64
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #8	1,423.32
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #9	1,187.71
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #10	3,471.07
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #11	13,927.75
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #13	1,622.90
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #15	844.84
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #16	6,220.65
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #17	4,395.17
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #18	3,038.22
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #19	444.99
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #20	2,645.75
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #22	1,962.03
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #23	5,127.94
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #24	2,087.21
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #26	2,633.76
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #27	7,886.22
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #28	3,588.46
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #29	1,560.68
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #30	5,382.80
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #31	3,736.92
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #32	1,135.14
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #33	769.57
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #35	1,897.35
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #36	1,838.84
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #37	20,305.30
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #38	1,621.09
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #39	523.00
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #40	4,072.70
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund:TCD #41	10,282.75

Bois de Sioux Watershed District
Transaction Detail by Account
May 22 through June 18, 2020

Type	Date	Num	Name	Memo	Account	Class	Amount
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund TCD #42	5,824.86
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund TCD #43	3,160.98
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund TCD #44	17,130.51
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund TCD #46	1,689.78
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund TCD #48	1,798.37
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund TCD #50	123.05
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund TCD #51	11,037.95
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund TCD #52	15,631.13
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund TCD #53	4,703.13
Deposit	06/01/2020		Traverse County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund TCD #55	1,956.25
Deposit	06/02/2020		Traverse County	BOND REIMBURSEMENT REQUEST #1	20500 · Intergovernmental Rev...	Ditch Fund JCD #11	472,327.18
Total Traverse County							1,248,988.82
Traverse Electric							
Check	06/04/2020	20666	Traverse Electric	REDPATH SHED	53430 · Electricity	Construction Fund Redpath Impoundmen...	-42.75
Total Traverse Electric							-42.75
Tri County Coop							
Check	06/18/2020		Tri County Coop	GAS	54400 · Vehicle Fuel	Administrative Fund General Cash	-284.81
Total Tri County Coop							-284.81
Twin Valley Tire							
Check	06/04/2020	20669	Twin Valley Tire	TIRE REPAIR	54500 · Vehicle Maint & Repair	Administrative Fund General Cash	-23.00
Total Twin Valley Tire							-23.00
Valley Office Products, Inc.							
Check	06/18/2020		Valley Office Products, Inc.	ENVELOPES & POST-IT NOTES	53500 · Office Supplies	Administrative Fund General Cash	-53.99
Total Valley Office Products, Inc.							-53.99
VOID							
Check	06/09/2020	20659	VOID	VOID	42000 · General Property Taxes		0.00
Check	06/09/2020	20660	VOID	VOID	53200 · Miscellaneous Expenses		0.00
Total VOID							0.00
Wilkin County							
Deposit	06/01/2020		Wilkin County	PROPERTY TAXES	42060 · Wilkin County	Administrative Fund General Cash	20,042.78
Deposit	06/01/2020		Wilkin County	PROPERTY TAXES	42060 · Wilkin County	Construction Fund	65,673.54
Deposit	06/01/2020		Wilkin County	PORTION OF PROPERTY TAXES FOR...	42060 · Wilkin County	RRWMB	65,673.53
Deposit	06/01/2020		Wilkin County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund WCD #18	10,287.97
Deposit	06/01/2020		Wilkin County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund WCD #20	9,030.69
Deposit	06/01/2020		Wilkin County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund WCD #25	3,385.56
Deposit	06/01/2020		Wilkin County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund WCD #35	2,281.47
Deposit	06/01/2020		Wilkin County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund WCD #39	1,863.08
Deposit	06/01/2020		Wilkin County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund WCD #Sub-1	6,182.38
Deposit	06/01/2020		Wilkin County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund JCD #6	9,477.41
Deposit	06/01/2020		Wilkin County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund JCD #7	2,697.61
Deposit	06/01/2020		Wilkin County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund JCD #11	44,706.94
Deposit	06/01/2020		Wilkin County	DITCH ASSESSMENTS	41190 · Ditch Assesment	Ditch Fund JCD #12	1,277.03
Total Wilkin County							242,579.99
William E. Raguse Ltd Liab. Ltd Prtnrshp							
Check	06/18/2020		William E. Raguse Ltd Liab. Ltd...	PERMANENT CHANNEL EASEMENT	52520 · ROW	Ditch Fund JCD #11	-9,840.00
Check	06/18/2020		William E. Raguse Ltd Liab. Ltd...	PERMANENT BACKSLOPE EASEMENT	52520 · ROW	Ditch Fund JCD #11	-1,144.00
Total William E. Raguse Ltd Liab. Ltd Prtnrshp							-10,984.00
Winter Family Farms, LLLP							
Check	06/18/2020		Winter Family Farms, LLLP	PERMANENT CHANNEL EASEMENT	52520 · ROW	Ditch Fund JCD #11	-6,768.00
Check	06/18/2020		Winter Family Farms, LLLP	PERMANENT BACKSLOPE EASEMENT	52520 · ROW	Ditch Fund JCD #11	-936.00
Total Winter Family Farms, LLLP							-7,704.00
Xerox Corporation							
Check	06/04/2020	20670	Xerox Corporation	COPIER LEASE	52100 · Equipment Lease & Re...	Administrative Fund General Cash	-282.47
Total Xerox Corporation							-282.47
No name							
Check	05/31/2020			Service Charge	53200 · Miscellaneous Expenses	Administrative Fund General Cash	-2.00
Deposit	05/31/2020			Interest	43000 · Interest Income	Construction Fund	1,560.15
Total no name							1,558.15
TOTAL							**1,128,460.34**

BOIS DE SIOUX WATERSHED DISTRICT
BOARD MEETING MINUTES
May 21, 2020

CALL TO ORDER The meeting was called to order by President Vavra at 8:00 a.m. via conference call and screenshare pursuant to Minn. Stat. § 13D.021. Present: Linda Vavra, Doug Dahlen, Jerome Deal, John Kapphahn, Steven Schmidt, and Allen Wold. Absent: Jason Beyer, Ben Brutlag, Scott Gillespie (joined later). Also present: Engineer Chad Engels, Engineer James Guler, Engineer Technician Troy Fridgen, Attorney Lukas Croaker, and Administrator Jamie Beyer.

ROLL CALL VOTE President Vavra stated that, because this meeting was being held by conference call and screenshare, all votes would be taken by roll call.

AGENDA Dahlen motioned, seconded by Schmidt to approve the agenda with the following changes: remove the EOR North Ottawa Report, add the JD #11 Bond Reimbursement Request #1, add the Samantha Lake Cost Estimate, add the 1W1Plan Joint Powers Agreement. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Kapphahn – aye. Motion carried.

CONFLICTS OF INTEREST Kapphahn stated a conflict of interest on the Samantha Lake project.

CONSENT AGENDA Deal motioned, seconded by Kapphahn to approve the Consent Agenda. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Kapphahn – aye. Motion carried.

PUBLIC COMMENT The meeting was opened for public comment. Mike Larson of Larson Helicopters presented information on cattail and tree/brush removal services at a price of $350 per treated mile and $85 per treated acre plus chemical, respectively. Leo Splonskowski of LM Road Service presented cattail, brush and weed treatments at $125 per hour plus chemical. Engineer Technician Fridgen was asked to bring further details to the next Board meeting.

DRAINAGE DISPUTE Engineer Technician Fridgen gave a brief overview of a drainage dispute between neighbors Eugene Sanasack and Greg Vold. Fridgen stated that a tentative agreement has been reached, and will be attempted before the next board meeting.

WCD #9 Riley Brothers has started construction on the portion of WCD #9 formerly known as WCD #10. They may be done by late July.

JD #11 A preconstruction meeting was held Monday, May 18th with the contractor and utility representatives. Contractor Dean Hormann proposes to start June 1st. Landowner Doug Toussaint has requested grading and side inlet culverts along low lying portions of JD #11 east of Highway 75, along Hwy 55. Similar work is included on other laterals in the project. The estimated cost is not expected to exceed $25,000.

JD #11 NOTICE TO PROCEED Engineer Guler presented a Notice to Proceed. Dahlen motioned, seconded by Deal to approve the Notice to Proceed. Landowner Ray Ehlers requested changes to his property's easements, stating that he felt the changes would not take long to work through. District Engineer Chad Engels relayed that the easements contain standard language, as used on the previous drainage projects, and that passage of the project pursuant to Minn. Stat. Chapter 103E proceedings includes implicit easements required for the construction and continued maintenance of the project; however, the explicit easements are preferred as they can be recorded in the county recorder's office and utilized on future projects to illustrate, by survey, the exact location of the easement areas. Mr. Ehlers will fax the requested changes to the District Office. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Kapphahn – aye. Motion carried.

TCD #23 G. BORSHEIM PETITION At 9:00 am, Wold motioned, seconded by Deal, to open the hearing to consider the petition from Eugene Borsheim requesting authority to use Traverse County Ditch #23 ("TCD #23") as an outlet for the S1/2SW1/4 of Section 34, Range 45, Redpath Township (128N), Traverse County (Parcel #10-0155000). Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Kapphahn – aye. Motion carried. President Vavra opened the meeting. Attorney Croaker read Minn. Stat. § 103E.401, subd. 4. Engineer Engels provided an oral presentation of the existing condition of the ditch system along with a map showing the current assessment district and the LIDAR-based watershed. This information confirmed that surface drainage from the proposed project flows to TCD #23 already. Therefore, because the project is not new surface drainage and simply tile drainage from within the existing watershed, subject to the District's policy

for tile drainage, that the existing design capacity of TCD #23 would not be adversely impacted by the tile project. The applicant was not present to speak to the project, and no comment was received in opposition. Attorney Croaker read the Order, which included that the outlet fee and benefits were calculated to be $2,198.67 and $80.00, respectively. Deal motioned, seconded by Schmidt to approve the Order Authorizing the Use of TCD #23 as an Outlet was approved. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Kapphahn – aye. Motion carried. Dahlen motioned, seconded by Schmidt to close the hearing. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Kapphahn – aye. Motion carried.

JD #11 PROJECT ADDITION

The discussion returned to the request from JD #11 landowner Doug Toussaint. Dahlen made motion, seconded by Schmidt to approve the additional work. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Kapphahn – aye. Motion carried.

JD #11 BUFFER COST-SHARE

Board managers reviewed the $14,190 Flat Rate Based Conservation Practice Assistance Contract with Traverse County SWCD to reduce the cost to install and seed JD #11 buffers on the Traverse County portions of the ditch system. Kapphahn made motion, seconded by Dahlen to approve the cost share agreement. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – no, Kapphahn – aye. Motion carried. Board managers expressed concern over the cost of the native seed mix. Wold asked if the same expensive seed mix would need to be used if the buffer is damaged. Attorney Croaker informed the Board that use of the native mix is preferred, but not mandatory, and that the Board could authorize the use of other seed varieties, such as alfalfa, so long as the seed mixes were not considered noxious weeds. Attorney Croaker also informed the Board that it is responsible for the continued maintenance of the buffers in the same manner as other repairs and that the fee owner of the property is permitted to harvest the vegetation contained in the buffer area.

JD #11 BOND REIMBURSEMENT REQUEST #1

Administrator Beyer reported that Traverse County has elected to retain the JD #11 bond proceeds, and will accept monthly reimbursement requests from the District. Deal motioned, seconded by Dahlen to approve Traverse County Bond Reimbursement Request #1 in the amount of $472,398.06. Roll call vote: Wold – absent/no vote, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Kapphahn – aye. Motion carried.

JD #6 LANDOWNER MEETING

District Engineer Engels discussed project development for the repair of JD #6. The system has a smaller benefitted area, compared to recent ditch system repairs – which will result in higher costs per acre. Engels has been in contact with Board Manager Beyer, who has relayed that landowner support continues for this project. If the District desires to follow the same schedule as in previous projects, a grant application must be submitted in August, and staff requests landowner feedback prior to the application, but under current pandemic restrictions, a large meeting is prohibited. Administrator Beyer presented the current landowner list, which is around 20 people, and recommended that a series of conference calls be offered to landowners. Kapphahn motioned, seconded by Dahlen, to conduct project support polling by telephone. All managers voted aye. Motion carried.

NORTH OTTAWA DRAFT DNR OPERATIONS

Board managers reviewed draft North Ottawa operation recommendations from the DNR. The DNR requests the dedication of 3 interior cells for recovery of operation and maintenance costs through farming, 2 cells for pilot or demonstrations of accomplishing NRE benefits while generating revenue, and 3 cells for the enhanced NRE purposes described by the DNR. Deal suggested that one cell be moved from the third category to the second. Administrator Beyer anticipates that EOR's report, which will describe in more detail their recommendations for revenue-generating and NRE-enhancing opportunities, in June. Kapphahn motioned, seconded by Dahlen, to table the issue to the June 18, 2020 Board meeting. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Kapphahn – aye. Motion carried.

REDPATH PURCHASE AGREEMENTS

Attorney Lukas Croaker gave an update on the final four Redpath land purchase agreements:

Closing was held on May 31, 2020, for land acquired from and sold to Mr. and Mrs. Breckenridge Dilly.

The District was notified of the passing of Mr. Richard Mathias. Dahlen requested staff to let the Mathias family know our thoughts and prayers are with the family. Ohnstad Twichell will continue working with the family to schedule closing on the property when the family is ready to proceed.

Mr. Joe Blume signed the Tennco purchase agreement and the abstract has been updated. Ohnstad Twichell will prepare a title opinion and work with the Title Company to schedule a closing date.

Ohnstad Twichell is preparing closing documents and will work with the Title Company to schedule a closing date.

REDPATH NRCS GRANT APPLICATION

District Engineer Engels described the required 1:1 matching contribution for the Alternative Funding Arrangement grant opportunity through the National Resource Conservation Services' Regional Conservation Partnership Program. If the District were to apply for $5,000,000 from the program, the District could match these fund with its current $2,440,000 Lessard Sams grant award and a $2,600,000 contribution from the District's Construction Fund. A commitment at this time is not binding. If awarded the nationally competitive grant, the Board would later consider for approval a formal grant agreement. The District can also continue to pursue outside funding sources to replace the internal contribution. Dahlen motioned, seconded by Kapphahn to approve the Resolution Adopting Cost-Share Commitment for the Redpath Flood Impoundment and Stream Corridor Restoration. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – absent, Kapphahn – aye. Motion carried. Schmidt had technically difficulties and cast his vote to Administrator Beyer directly – aye.

SAMANTHA LAKE

District Engineer Engels stated that Grant County approved the Samantha Lake Joint Powers Agreement; the final design will be designed in collaboration with the Grant County Engineer. The cost estimate for the project is $228,000 and will be split 50-50. It is anticipated that the construction contract will be below legal bid thresholds, requiring only price quotes. Some construction may take place late this summer, but some work will need to wait until after crops are harvested. Engineering staff met with DNR Hydrologist Emily Siira, who stated that as long as the project maintains lake levels above the Ordinary High Water Level, no public waters regulations are imposed, and that it may be feasible to drop 18" from that mark. The engineering staff may pursue the additional 18" at a future date.

RFQ FOR MOWING & HAYING SERVICES

A Request for Bids for the Mowing and Haying of North Ottawa Impoundment Project, originally drafted December 2019 was reviewed. Kapphahn made motion, seconded by Dahlen, to approve the Request for Bids with the addition of a map. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – no, Kapphahn – aye.

GILLESPIE

Board Manager Gillespie entered the meeting.

1W1PLAN JPA

Board Managers Kapphahn and Dahlen reported that they met with Grant County and Grant County SWCD officials to talk about the BdSWD's interest in participating in a 1W1Plan joint powers entity. The Board managers relayed that they need more information about the organizational options and corresponding liability before making that decision on behalf of the District.

KAPPHAHN

Board Manager Kapphahn left the meeting.

SCHANDER RING DIKE

The District received a written complaint submitted from Landowner Robin Abel, who states that a ring dike burrow pit constructed on property adjacent to his crossed the property line and is now causing noticeable seepage 10 years after its construction. District Administrator Beyer introduced a brief historical timeline related to the complaint. In 2009, the District offered a ring dike program with cost-share provided by EQIP, RRWMB, and the Bois de Sioux Watershed District. Landowner Brenda Schander expressed interest in the program for a farmyard in Section 27 of Brandford Township in Wilkin County. JOR Engineering created design plans for the ring dike in June 2010. No design was included for the excavation pit. Ms. Schander signed a Ring Dike Agreement in August 2010. The agreement outlines the landowner and District responsibilities. Mr. Abel believes the District has liability pursuant to the agreement's fifth clause, which states:

> The Land Owner hereby certifies to the Watershed District that the ring dike will be constructed on land owned by the Land Owner and the earthen material used to construct the ring dike shall be taken from land owned by the Land Owner, or that Land Owner has express written consent from the appropriate Land Owner to take the earthen material, and that there is no one, other than the Land Owner, claiming any right, title, or interest in and to said property nor are there any boundary disputes with adjacent owners which would affect the construction of the ring dike.

In August 2010, Ms. Schander entered into a construction contract with Fridgen Excavating, and the project was completed by November 2010. District Attorney Croaker added that JOR Engineering and Fridgen Excavating are no longer in business, and Ms. Schander no longer owns the property (the parcel was split, and now two new parties own the land). Attorney Croaker discussed that there is uncertainty as to whether previous parties agreed to the location of the burrow pit and moved it without informing the District or

revising the design plans to illustrate the new location. Mr. Abel requested verbal or financial support to 1) restore land removed from his property, and 2) install a tile connection from the burrow pit to his existing tile system, and 3) to establish a time table under which the work would be completed. In exchange, Mr. Abel would permit the connection to his existing tile and cover the future utility costs to operate the pump. Mr. Abel has been successful in petitioning the Wilkin County Highway Department to lower a downstream culvert under CSAH 19, which should be completed this summer. District Engineer Technician Fridgen stated that, after several site visits, he sees three options for the District: 1) Install a tile segment, and drop water levels in the burrow pit 2 – 3'; 2) Move material from the southern edge of the excavation pit to the northern edge to create a dike; or 3) Do nothing. President Vavra recommended that a meeting be held with District staff and the two landowners involved. Attorney Croaker offered for the District to provide mediation services between the landowners, and to aid in permitting.

LTWQIP PHASE NO. 1

Advisory reports from the Minnesota DNR and BWSR were presented. In the DNR's advisory report, it recommended adding smaller rock under the rip rap to prevent erosion. If approved, this recommendation will result in additional cost; these comments will be reviewed further by engineering staff. Pursuant to Minn. Stat. § 103D.605, Gillespie made motion, seconded by Dahlen to set the project hearing for June 18, 2020 at the Bois de Sioux Watershed District office and to publish the required notices. District Engineer Engels presented the estimated cost of the proposed project of $850,000. The Board discussed the method of payment: $283,000 from the Red River Watershed Management Board; $336,775 from the Minnesota Clean Water Fund through sponsoring agency Board of Water and Soil Resources; $200,000 from the Bois de Sioux Watershed District Construction Fund; $4,500 from the Traverse County Local Water Plan; and $25,725 from the Lake Traverse Water Quality Improvement Project Water Management District. Board Manager Schmidt asked whether a $750,000 funding cap would be imposed on this phase, or on subsequent phases. District Attorney Croaker stated that the project cap does not apply to Minn. Stat. § 103D.605 projects. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Gillespie – aye. Motion carried.

VOLD NORTH OTTAWA

District Administrator Beyer informed the Board that Lessors, Greg and Pat Vold, will be planting soybeans, instead of silage corn, in cells A1, A2, B1, and B2 of North Ottawa.

COVID-19 PREPAREDNESS PLAN

Board managers reviewed the draft COVID-19 Preparedness Plan. Board Manager Gillespie recommended that customers visit the office one-at-a-time. Board managers requested that, dependent upon compliance with May and June executive orders, staff make preparations to accommodate a partial or full opening of the District's office for the June 18, 2020 Board meeting. Gillespie motioned, seconded by Dahlen, to approve the District COVID-19 Preparedness Plan and to give staff discretion on opening and operating the District's office for day-to-day operations. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Gillespie – aye. Motion carried.

MDM GRANT

District Engineer Engels asked Board managers to consider contacting legislators to advocate for preservation of the Multipurpose Drainage Management if the managers desire to continue to receive outside funding for future projects.

TCD #2 CLEAN-OUT

District Engineer Technician Fridgen has had Shores Edge Excavating working on a clean-out of TCD #2, which will exceed the $10,000 threshold by $3,732.50. Schmidt made motion, seconded by Dahlen, to approve the clean-out of $13,732. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Gillespie – aye. Motion carried

Schmidt made motion, seconded by Dahlen, to adjourn. Roll call vote: Wold – aye, Deal – aye, Vavra – aye, Dahlen – aye, Schmidt – aye, Gillespie – aye. Motion carried.

_____ Date: _____, 2020
Linda Vavra, President

_____ Date: _____, 2020
Jamie Beyer, Administrator

BOIS DE SIOUX WATERSHED DISTRICT
BOARD MEETING MINUTES
June 8, 2020

CALL TO ORDER The meeting was called to order by President Vavra at 8:30 a.m. via conference call and screenshare pursuant to Minn. Stat. § 13D.021. Present: Linda Vavra, Ben Brutlag, Doug Dahlen, Jerome Deal, Scott Gillespie, Steven Schmidt, and Allen Wold. Absent: Jason Beyer, John Kapphahn. Also present: Engineer Chad Engels, Engineer James Guler, Engineer Technician Troy Fridgen, Attorney Lukas Croaker, and Administrator Jamie Beyer.

LANDOWNER REQUEST FOR PURCHASE AGREEMENT Attorney Lukas Croaker relayed a request from landowner Mr. Ray Ehlers, to purchase the channel property required for the repair of JD #11, instead of entering into a channel easement and at a price equal to the damages paid on the channel easement. If approved, the landowner also requests a flowage easement.

UTILITY EASEMENT UNSIGNED Moore Engineering has been working with Traverse Electric to have utility services buried in advance of the JD #11 repair construction. To date, Mr. Ehlers has not signed a new utility easement with Traverse Electric allowing for underground utilities (the current easement is for overhead utility infrastructure only). Mr. Ehlers has also not signed the District's purchase agreement (which contains a provision that landowners grant third-party utility easements to the District to accommodate the design of the project). Moore Engineering and Ohnstad Twichell will work to include utility easement language in future Viewers' Reports, to avoid similar delays on future projects. Board Manager Steven Schmidt asked how property tax will be allocated to the new parcel, if purchased by the District. Attorney Lukas Croaker responded that, as owners of the parcel, the Bois de Sioux Watershed District will not be charged property tax, but will receive a small portion of the JD #11 ditch assessment, which would be paid by the JD #11 assessment district.

LANDOWNER CONCERNS Mr. Ehlers relayed his concerns regarding the original easement and purchase agreement documents; these concerns included the preservation of access to drain into the ditch, automatic permission for additional third-party utilities, and concerns about maintenance, inspection, and operation of the repaired drainage system. Attorney Lukas Croaker reiterated that the agreements themselves protect the operation of the drainage system and the ability of the landowner to use it. The easements and purchase agreement limit where third-party easements may be placed, emphasize that access is permitted for operation and maintenance, and prohibit the easement area from being enrolled in programs that are adverse to operation and maintenance of the drainage system. Board Manager Scott Gillespie stated that, in comparison with landowners who did grant easements and were paid damages, Mr. Ehlers will not be able to include these acres in a future land sale.

NEW PURCHASE AGREEMENT Gillespie made motion, seconded by Dahlen, to approve the Purchase Agreement. No vote was taken. Gillespie motioned to approve the Purchase Agreement to include the explicit circumstance that the landowner refuses to sign a third-party utility easement, required by the repair project. Dahlen seconded the motion. Roll call vote: Wold – aye; Deal – aye; Dahlen – aye; Vavra – aye; Brutlag – aye; Schmidt – aye; Gillespie – aye. Motion carried.

NEW UTILITY EASEMENT Mr. Ehlers requested that he be granted permission to run future tile to the edge of the channel, and electrical service through the District-owned buffer; District Engineer Chad Engels offered to include a provision on the landowner's subsequent permit application approval. Gillespie motioned to enter into an easement with Traverse Electric to provide electric service to the landowner's future pump, at the landowner's expense, if no service already exists. Wold seconded the motion. Roll call vote: Wold – aye; Deal – aye; Dahlen – aye; Vavra – aye; Brutlag – aye; Schmidt – aye; Gillespie – aye. Motion carried.

NEW FLOWAGE EASEMENT Attorney Lukas Croaker presented the drafted Flowage Easement, to permit drainage through the District's property once the land sale has closed. Gillespie motioned to enter into the flowage easement upon acquiring the channel property. Wold seconded. Roll call vote: Wold – aye; Deal – aye; Dahlen – aye; Vavra – aye; Brutlag – aye; Schmidt – aye; Gillespie – aye. Motion carried.

NEW FIELD APPROACHES Mr. Ehlers has requested field approaches through the channel property, but final locations have not been determined. District Engineer Chad Engels requested that references to the approaches be removed from the purchase agreement and easement documents at this time. Dahlen motioned to remove these references. Deal seconded. Roll call vote: Wold – aye; Deal – aye; Dahlen – aye; Vavra – aye; Brutlag – aye; Schmidt – aye; Gillespie – aye. Motion carried.

NEW PERMANENT ACCESS EASEMENT Attorney Lukas Croaker recommended that an ingress/egress easement be executed with Mr. Ehlers, once the land closing has occurred and approach locations are known. Gillespie motioned to enter into a permanent access easement once approach descriptions have been created. Dahlen seconded. Roll call vote: Wold – aye; Deal – aye; Dahlen – aye; Vavra – aye; Brutlag – aye; Schmidt – aye; Gillespie – aye. Motion carried.

ABSTRACT Mr. Ehlers must have the land abstract updated and sent to Ohnstad Twichell.

SCREW VALVE CULVERT PROJECT Mr. Ehlers requested an agreement permitting him to operate manual control valves on a lateral of JD #11. District Engineer Chad Engels requested that the landowner complete a permit application, and will work with the landowner to identify where screw gate culverts will be installed.

UNDERGROUND UTILITY EASEMENT Mr. Ehlers stated that he will execute the required utility easement with Traverse Electric as soon as it is corrected. District Engineer Chad Engels will coordinate a conference call with the landowner, Traverse Electric, and Moore Engineering to finalize the easement language to have this issue resolved this week.

Deal motioned, seconded by Dahlen and carried unanimously, to adjourn the meeting at 10:00 am.

_____ Date: _____, 2020
Linda Vavra, President

_____ Date: _____, 2020
Jamie Beyer, Administrator

TREASURER'S REPORT

MAY 2020

BANK ACCOUNT BALANCES FROM BANK STATEMENTS

Bank of the West - Checking: Mixed	$	2,112,061.09
Bremer Bank - Checking	$	2,434.00
Bremer Bank - Money Market	$	5,487,652.93
Bremer Bank CD's	$	1,720,000.00
END OF MONTH AMOUNT IN BANK ACCOUNTS:	$	9,322,148.02

ACCOUNTING FUND BALANCES FROM QUICKBOOKS

	Beginning Balance from Quickbooks 12/31/2019	2020 YTD Revenue 5/31/2020	2020 YTD Expenses 5/31/2020	Current Fund Balance 5/31/2020	
Payroll Liabilities	0.00	0.00	(3,835.80)	(3,835.80)	
General Fund(*)	283,100.50	12,649.82	(148,295.03)	147,455.29	
Ditch Fund					Troy
Total BdSWD #3	87,807.61	0.00	0.00	87,807.61	87,807.61
Total JCD #2	141,675.30	0.00	(85.00)	141,590.30	141,590.30
Total JCD #3	23,779.58	31.89	0.00	23,811.47	26,529.58
Total JCD #6	(64,125.11)	3.34	(80.00)	(64,201.77)	-45,205.11
Total JCD #7	6,873.10	17.02	0.00	6,890.12	15,873.10
Total JCD #11	(214,063.62)	164,806.02	(435,216.27)	(484,473.87)	-484,473.87
Total JCD #12	120,120.83	37,839.54	(6,882.18)	151,078.19	151,078.19
Total JCD #14	(363,402.18)	743.95	(3,315.00)	(365,973.23)	-249,517.18
Total TCD #1E	31,808.41	34.62	0.00	31,843.03	36,208.41
Total TCD #1W	27,372.19	0.00	0.00	27,372.19	32,372.19
Total TCD #2	32,552.22	44.48	(13,732.50)	18,864.20	23,819.72
Total TCD #4	(12,994.73)	44.14	0.00	(12,950.59)	25,505.27
Total TCD #7	651.30	2,134.83	(308.00)	2,478.13	12,183.30
Total TCD #8	(11,725.91)	4,652.74	(6,936.75)	(14,009.92)	-14,009.92
Total TCD #9	17,497.10	1.27	0.00	17,498.37	19,197.10
Total TCD #10	7,247.85	140.52	0.00	7,388.37	14,047.85
Total TCD #11	27,283.41	478.35	0.00	27,761.76	52,333.41
Total TCD #13	3,892.34	36.84	0.00	3,929.18	7,992.34
Total TCD #15	2,612.59	0.61	0.00	2,613.20	3,632.59
Total TCD #16	(19,644.34)	32.76	0.00	(19,611.58)	-9,944.34
Total TCD #17	(39,516.06)	7.47	0.00	(39,508.59)	-31,816.06
Total TCD #18	(8,900.75)	2.63	0.00	(8,898.12)	-4,900.75
Total TCD #19	1,707.76	2.30	0.00	1,710.06	2,407.76
Total TCD #20	(5,125.32)	14.91	0.00	(5,110.41)	-625.32
Total TCD #22	(12,216.93)	2.97	0.00	(12,213.96)	-8,516.93
Total TCD #23	(101,271.55)	4,737.11	(736.00)	(97,270.44)	-91,757.55
Total TCD #24	1,535.61	1.03	(4,052.50)	(2,515.86)	83.11
Total TCD #26	7,407.15	16.33	0.00	7,423.48	12,177.15
Total TCD #27	(52,427.90)	732.38	(3,436.63)	(55,132.15)	-43,164.53
Total TCD #28	(6,406.80)	1,130.02	(399.00)	(5,675.78)	-105.80
Total TCD #29	6,665.18	3.22	0.00	6,668.40	9,615.18
Total TCD #30	(22,622.50)	33.84	0.00	(22,588.66)	-13,622.50
Total TCD #31	(692.25)	71.92	0.00	(620.33)	6,307.75
Total TCD #32	2,601.22	5.40	0.00	2,606.62	4,501.22
Total TCD #33	11,197.70	107.30	0.00	11,305.00	12,597.70
Total TCD #35	9,613.64	1.48	0.00	9,615.12	12,213.64
Total TCD #36	314.17	65.82	0.00	379.99	3,614.17

Total TCD #37	(449,717.47)	4,788.68	(5,730.00)	(450,658.79)	-415,067.47
Total TCD #38	15,889.67	3.65	0.00	15,893.32	18,389.67
Total TCD #39	4,083.44	0.88	0.00	4,084.32	5,083.44
Total TCD #40	7,894.01	21.81	(225.00)	7,690.82	14,769.01
Total TCD #41	(82,153.71)	2,903.56	(92.50)	(79,342.65)	-66,246.21
Total TCD #42	(9,238.70)	119.68	(815.78)	(9,934.80)	145.52
Total TCD #43	8,921.73	6.33	0.00	8,928.06	16,421.73
Total TCD #44	(28,959.13)	12.00	(4,932.50)	(33,879.63)	-3,691.63
Total TCD #46	8,766.00	0.92	0.00	8,766.92	11,066.00
Total TCD #48	(16,617.91)	3.50	0.00	(16,614.41)	-13,217.91
Total TCD #50	2,271.58	0.00	0.00	2,271.58	2,471.58
Total TCD #51	(309.98)	891.85	(1,035.38)	(453.51)	17,254.64
Total TCD #52	(846.98)	202.21	(26,067.50)	(26,712.27)	-1,914.48
Total TCD #53	48,782.95	25.77	0.00	48,808.72	56,782.95
Total TCD #55	(1,093.69)	0.45	0.00	(1,093.24)	1,606.31
Total WCD #Sub-1	19,418.57	65.44	0.00	19,484.01	30,418.57
Total WCD #8	94,346.71	0.79	(1,172.50)	93,175.00	93,175.00
Total WCD #9	913,571.67	1,459.24	(33,006.87)	882,024.04	882,024.04
Total WCD #18	(22,167.95)	544.87	0.00	(21,623.08)	-4,867.95
Total WCD #20	(11,842.78)	1,538.63	0.00	(10,304.15)	4,007.22
Total WCD #25	26,826.41	2.00	0.00	26,828.41	33,326.41
Total WCD #35	25,356.26	0.00	0.00	25,356.26	29,256.26
Total WCD #39	17,266.56	15.29	0.00	17,281.85	20,766.56
Total Ditch Fund - Other	0.00	0.00	(2,705.98)	(2,705.98)	-2,705.98
Total Ditch Fund	207,527.57	230,586.60	(550,963.84)	(112,849.67)	347,223.73
Construction Fund(*)	7,984,340.22	2,740,493.43	(1,766,013.52)	8,958,820.13	
RRWMB Fund	14,069.01	38,167.24	(26,527.30)	25,708.95	
TOTAL Funds	8,489,037.30	3,021,897.09	(2,495,635.49)	9,015,298.90	

RECONCILE BANK STATEMENTS TO QUICKBOOKS

Bank Statement Total From Top:	9,322,148.02
Enter Quickbooks Bank Account Balance Total Assets:	9,015,298.90
+ Enter Uncleared Transactions:	306,849.12
- Uncleared Transactions dated next month:	0.00
Quickbooks Total:	9,322,148.02

Enter Quickbooks Total from Fund Balances Income/Expense Report:	9,019,134.70
Enter Quickbooks Total from Balance Sheet Current Payroll Liabilities:	(3,835.80)
Total:	9,015,298.90
Enter Quickbooks Total Assets from Bank Balances Report:	9,015,298.90

Bois de Sioux Watershed District
GENERAL BUDGET
January through December 2020

	Jan - Dec 20	Budget
Income		
39501 · FEMA/HSEM 2019	1,659.04	
42000 · General Property Taxes	107,178.03	250,000.00
45000 · Miscellanous Income	243.16	
49000 · Project Administration	0.00	170,600.00
Total Income	109,080.23	420,600.00
Gross Profit	109,080.23	420,600.00
Expense		
51000 · Annual Report	1,735.00	1,200.00
55130 · Website	315.90	1,200.00
55140 · Mileage Expense Advisory Com	71.30	150.00
55150 · Service Charges	15.00	
59150 · Education	0.00	
51100 · Accounting Services	15,196.00	40,000.00
51300 · Administration Expense	30,315.77	50,000.00
51500 · Advertising Expense	1,034.48	2,600.00
51600 · Building and Structures	0.00	500.00
51800 · District Insurance & Dues	8,359.00	28,700.00
51900 · Engineering Services	5,782.50	15,000.00
52100 · Equipment Lease & Rental	2,422.82	5,500.00
52200 · Fringe Benefits	5,511.48	12,500.00
52600 · Legal Fees	10,186.66	44,000.00
52700 · Manager Compensation	9,500.00	42,000.00
52800 · Meeting Expense	1,662.11	7,500.00
52900 · Mileage Expense Board	2,121.29	7,000.00
53100 · Mileage Expense Staff	230.18	500.00
53200 · Miscellaneous Expenses	3,947.85	2,500.00
53300 · Office Equip & Furniture	550.00	1,000.00
53400 · Office Operations	4,897.35	12,000.00
53500 · Office Supplies	1,584.96	3,200.00
53600 · Other Supplies	1,026.34	3,500.00
53700 · Payroll Expenses	3,665.96	8,800.00
53800 · Payroll Taxes	3,670.09	9,300.00
54100 · Repairs and Maintenance	385.54	1,500.00
54400 · Vehicle Fuel	921.22	3,000.00
54500 · Vehicle Maint & Repair	837.10	1,500.00
54600 · Viewers Expense	0.00	150.00
54700 · Wages and Salaries	48,643.33	115,800.00
Total Expense	164,589.23	420,600.00
Net Income	**-55,509.00**	**0.00**

Bois de Sioux Watershed District
2019 DITCH FUND BUDGET
January through December 2020

	Jan - Dec 20	Budget
Income		
39501 · FEMA/HSEM 2019	39,042.25	
20500 · Intergovernmental Revenue	472,327.18	1,877,954.00
Ditch Revenues	604,810.84	1,158,349.00
45000 · Miscellanous Income	3,843.90	
49300 · State Credits & Ag M H Credits	0.00	0.00
49400 · Transfer In	0.00	327,000.00
Total Income	1,120,024.17	3,363,303.00
Gross Profit	1,120,024.17	3,363,303.00
Expense		
51000 · Annual Report	10,012.15	
51500 · Advertising Expense	2,970.26	
51900 · Engineering Services	129,689.90	565,500.00
52500 · Land	364,848.00	507,300.00
52600 · Legal Fees	53,040.13	65,000.00
52800 · Meeting Expense	70.00	
53200 · Miscellaneous Expenses	567.61	38,800.00
53300 · Office Equip & Furniture	1,648.48	
53500 · Office Supplies	53.44	
53600 · Other Supplies	0.00	
53650 · Overall Plan	300.00	
54100 · Repairs and Maintenance	90,833.57	2,161,703.00
54600 · Viewers Expense	2,586.17	25,000.00
Total Expense	656,619.71	3,363,303.00
Net Income	**463,404.46**	**0.00**

Bois de Sioux Watershed District
CONSTRUCTION BUDGET
January through December 2020

	Jan - Dec 20	Budget
Income		
44500 · Project Grant	168,388.00	
39501 · FEMA/HSEM 2019	230.00	
41100 · Riparian Aid MN DOR	54,058.00	120,000.00
Investment Income	29,758.78	60,000.00
41300 · Doran Creek Project Income	1,008.00	
47100 · Storage Building Rental Income	0.00	1,000.00
45100 · Redpath Project Income	102,281.40	
42000 · General Property Taxes	353,625.01	816,032.41
44000 · Land Rental Income	815,693.91	700,000.00
45500 · Land Sale	1,530,000.00	
45000 · Miscellanous Income	800.60	1,500.00
Overall Plan Income-BWSR/State	0.00	135,940.00
49100 · Project Team Income	107.50	
Total Income	3,055,951.20	1,834,472.41
Gross Profit	3,055,951.20	1,834,472.41
Expense		
51675 · Clean Water Cost Share Policy	0.00	235,000.00
51670 · Culvert Szng Cost Share Policy	0.00	144,000.00
51020 · Buffers	450.00	148,540.00
50100 · Stream Gaging Expense	1,340.00	45,000.00
Permits	34,421.00	90,000.00
51010 · Boundary Redetermination	0.00	1,750.00
55120 · Culvert Inventory	0.00	500.00
51100 · Accounting Services	2,316.00	9,500.00
51300 · Administration Expense	0.00	60,000.00
51400 · River Watch/Expense	1,173.60	6,200.00
51500 · Advertising Expense	3,746.84	7,000.00
51900 · Engineering Services	515,900.88	667,732.41
52100 · Equipment Lease & Rental	0.00	700.00
52500 · Land	1,004,490.20	6,000.00
52600 · Legal Fees	64,722.94	70,000.00
52700 · Manager Compensation	0.00	3,000.00
52800 · Meeting Expense	170.00	1,500.00
52900 · Mileage Expense Board	0.00	150.00
53100 · Mileage Expense Staff	0.00	500.00
53200 · Miscellaneous Expenses	800.00	2,700.00
53300 · Office Equip & Furniture	0.00	1,000.00
53400 · Office Operations	648.25	1,500.00
53500 · Office Supplies	53.44	900.00
53600 · Other Supplies	0.00	100.00
53650 · Overall Plan	76,006.16	180,900.00
53900 · Property Taxes	116,788.56	127,300.00
54100 · Repairs and Maintenance	1,233.22	22,000.00
54400 · Vehicle Fuel	70.00	500.00
54500 · Vehicle Maint & Repair	0.00	500.00
Total Expense	1,824,331.09	1,834,472.41
Net Income	**1,231,620.11**	**0.00**

Jamie Beyer

From: troy.bdswd@runestone.net
Sent: Monday, June 01, 2020 2:10 PM
To: Jason Beyer; jeromeadeal@gmail.com; John Kapphahn; scottgillespie@fedtel.net; 'Bois de Sioux Watershed District'
Subject: FW: spray map
Attachments: BdSWD Ditch Inspection Rotation Map.pdf

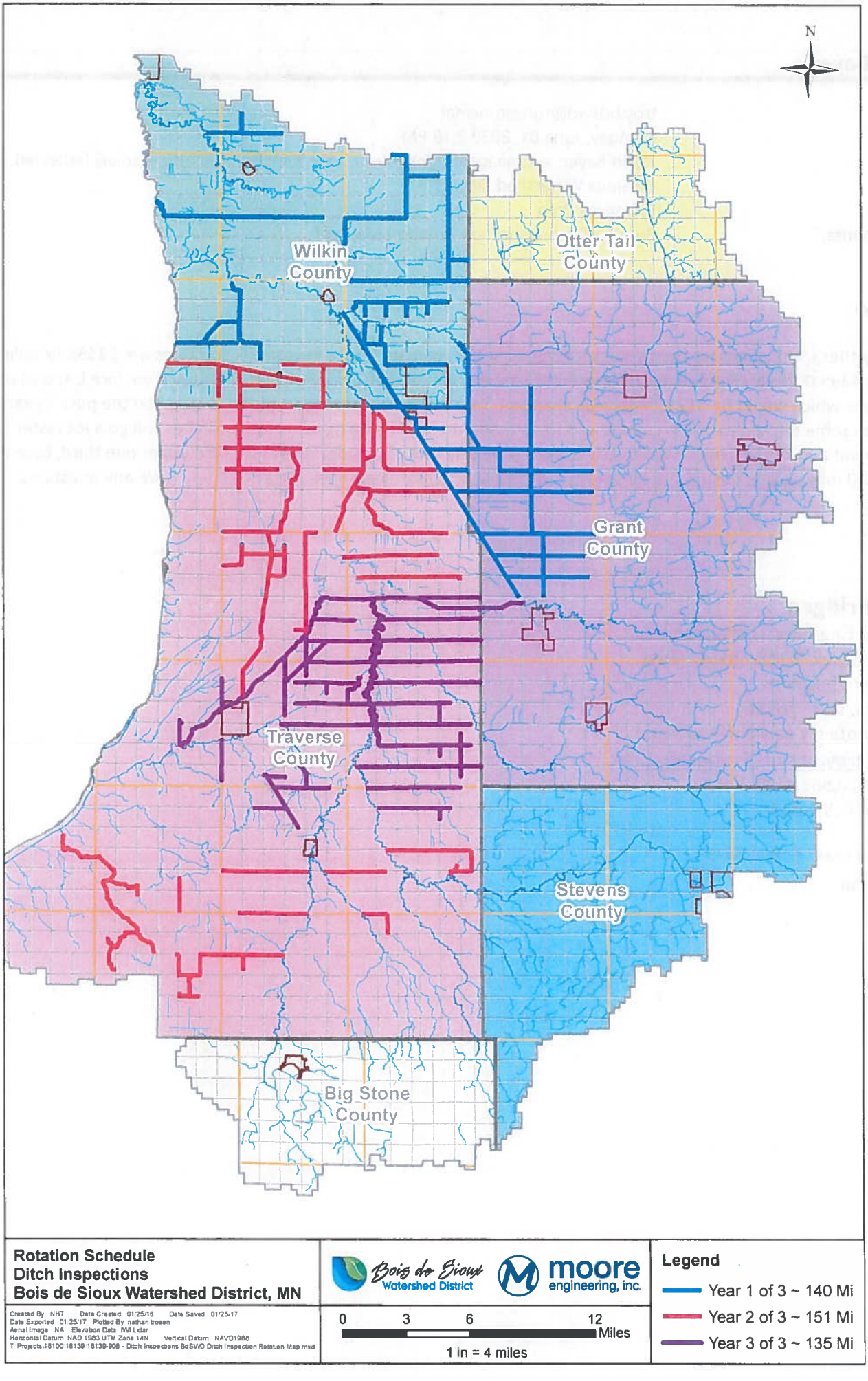
Hey, Guys.

I put together some prices for the cattail spraying. First the Helicopter rate for cattails and trees are $435.00/ mile and L and M is $365.00/Mile. This is a per mile rate but I believe we can get more Bang for the buck if we hire L and M on an hourly rate which would be $125/ hour plus chemical. We have gone over most of the Watershed the past 2 years which has some ditches with less cattails and trees than others. This being said , some ditches will go a lot faster this time around and in my opinion would cost less on an hourly rate than a per miles rate. The upper one third, blue on the map is 140 miles and is the area to be sprayed for this year 2020. Please give me a call if you have any questions.

Thanks,

Troy Fridgen
BdSWD Engineer Technician
Bois de Sioux Watershed District
704 Hwy 75 South
Wheaton, MN 56296
Please note my new email address
Email : troy.bdswd@runestone.net
Phone: 320.563.4185
Cell: 320.815.2657

****
bdswd.com



Rotation Schedule
Ditch Inspections
Bois de Sioux Watershed District, MN

Created By NHT Date Created 01/25/16 Date Saved 01/25/17
Date Exported 01/25/17 Plotted By nathan trosen
Aerial Image NA Elevation Data MN Lidar
Horizontal Datum NAD 1983 UTM Zone 14N Vertical Datum NAVD1988
T:\Projects\18100\18139\18139-908 - Ditch Inspections BdSWD\Ditch Inspection Rotation Map.mxd

Bois de Sioux Watershed District

moore engineering, inc.

0 3 6 12 Miles

1 in = 4 miles

Legend

- Year 1 of 3 ~ 140 Mi
- Year 2 of 3 ~ 151 Mi
- Year 3 of 3 ~ 135 Mi

LMC LEAGUE of MINNESOTA CITIES

LIABILITY COVERAGE – WAIVER FORM

Members who obtain liability coverage through the League of Minnesota Cities Insurance Trust (LMCIT) must complete and return this form to LMCIT before the member's effective date of coverage. Return completed form to your underwriter or email to pstech@lmc.org.

The decision to waive or not waive the statutory tort limits must be made annually by the member's governing body, in consultation with its attorney if necessary.

recommended

Members who obtain liability coverage from LMCIT must decide whether to waive the statutory tort liability limits to the extent of the coverage purchased. The decision has the following effects:

- *If the member does not waive the statutory tort limits*, an individual claimant could recover no more than $500,000 on any claim to which the statutory tort limits apply. The total all claimants could recover for a single occurrence to which the statutory tort limits apply would be limited to $1,500,000. These statutory tort limits would apply regardless of whether the member purchases the optional LMCIT excess liability coverage.

- *If the member waives the statutory tort limits and does not purchase excess liability coverage*, a single claimant could recover up to $2,000,000 for a single occurrence (under the waive option, the tort cap liability limits are only waived to the extent of the member's liability coverage limits, and the LMCIT per occurrence limit is $2,000,000). The total all claimants could recover for a single occurrence to which the statutory tort limits apply would also be limited to $2,000,000, regardless of the number of claimants.

- *If the member waives the statutory tort limits and purchases excess liability coverage*, a single claimant could potentially recover an amount up to the limit of the coverage purchased. The total all claimants could recover for a single occurrence to which the statutory tort limits apply would also be limited to the amount of coverage purchased, regardless of the number of claimants.

Claims to which the statutory municipal tort limits do not apply are not affected by this decision.

BOIS DE SIOUX WATERSHED DISTRICT
2019-2020 ANNUAL ORGANIZATION

BOARD OFFICERS

President ..... Linda Vavra
Vice President ..... Allen Wold
Treasurer ..... John Kapphahn
Secretary ..... Scott Gillespie

NEWSPAPERS

Traverse County ..... Wheaton Gazette
Big Stone County ..... The Northern Star
Grant County ..... Grant County Herald
Wilkin County ..... The Daily News
Otter Tail County ..... The Daily Journal
Stevens County ..... The Chokio Review

CONSULTANTS

Attorney at Law ..... Lukas Croaker
Engineer ..... Chad Engels
Accountant ..... Renee Kannegeisser
Auditor ..... CliftonLarsonAllen

DEPOSITORIES

Bank of the West ..... Wheaton, MN
Bremer Bank ..... Morris, MN

INSURANCE COVERAGE

League of Minnesota Cities ..... Saint Paul, MN

COMMITTEES (appointed by the President)

PERSONNEL COMMITTEE
Scott Gillespie
Steven Schmidt
Linda Vavra
Allen Wold

NORTH OTTAWA OPERATIONS & MAINTENANCE COMMITTEE
Jason Beyer
John Kapphahn
Ben Brutlag

OFFICE BUILDING MAINTENANCE COMMITTEE
Jerome Deal
Linda Vavra
Steven Schmidt

PERMIT REVIEW COMMITTEE
Engineer
Engineer Technician
Board Members Assigned to Respective Areas-See Map

POLICIES & PROCEDURES COMMITTEE
Jason Beyer
Scott Gillespie
Linda Vavra
Steven Schmidt

LEGISLATIVE COMMITTEE
Allen Wold
Scott Gillespie
Linda Vavra
Lukas Croaker

REDPATH COMMITTEE
Allen Wold
Linda Vavra
John Kapphahn
Doug Dahlen
Lukas Croaker
Chad Engels

1W1PLAN COMMITTEE
Steven Schmidt
Allen Wold
Jerome Deal
Linda Vavra

BIG LAKE COMMITTEE
Doug Dahlen
Allen Wold
John Kapphahn
Linda Vavra

DORAN CREEK
Jason Beyer
Linda Vavra
Jerome Deal
Kurt Erlandson

LAKE TRAVERSE WATER QUALITY IMPROVEMENT PROJECT
Jerome Deal
Scott Gillespie
Steven Schmidt
Linda Vavra

ADVISORY COMMITTEE MEMBERS
Jay Backer
Scott Bauer
Duane Duin
Dean Frisch
Doug Jahnke
Eric Klindt
Tom Monson
Ron Staples
Mark Summer
Vernell Wagner
John Walkup

BUFFER COMMITTEE
John Kapphahn
Scott Gillespie
Linda Vavra
Allen Wold

BOARD OF WATER AND SOIL RESOURCES

2020 Legislative Session Update

May 29, 2020

The 2020 Legislature adjourned on May 18, and bills were sent to Governor Walz for signature/veto. Several bills were not concluded.

What makes this year unique is that the COVID-19 pandemic and peacetime emergency extension (requiring renewal every 30 days) means the Governor may call the legislature back on June 12. If that happens, we anticipate legislature will continue work on some bills.

Here's where we are:

Outdoor Heritage Fund + other legacy fund provisions *HF2682*

On May 27, Governor Walz signed this bill into law. Previously, the legislature passed identical bills with strong support in both houses (House 110-21; Senate 67-0). The law includes a 14.8% reduction to each OHF project due to the revised budget projections on the sales tax. BWSR-related projects include:

RIM Reserve Grasslands Phase II	$ 3.233 million
Lower Wild Rice Corridor Habitat Restoration	$ 1.740 million
Camp Ripley ACUB Phase VII	$ 2.712 million
Pine and Leech Watershed Phase I	$ 2.458 million
Mississippi Headwaters Habitat Corridor Phase IV	$ 1.518 million

This law also contains: 1) a retroactive extension for the RIM Wetlands Phase VII project - critical because it allows BWSR to leverage federal funds for the MN CREP; and 2) an extension of one year for Outdoor Heritage Fund, Clean Water Fund and Parks and Trails Fund projects that would otherwise lapse, cancel, or expire on June 30, 2020.

Clean Water Fund

Agencies were asked to provide MMB proposed reduction scenarios for the Clean Water Fund. The legislature did not take up these reductions in a bill, so we will be working with the Administration on next steps for appropriation reduction amounts and processes.

Environment Omnibus Bill *HF4554 and SF4499*

No final bill reconciled. The House and Senate each passed different versions of this bill, but those bills were not reconciled. Both bills included (different) versions of the LCCMR Environmental and Natural

Resources Trust Fund, along with policy provisions for the DNR, PCA, and BWSR. We had just a couple policy and budget-neutral items, including requests for time extensions to our current work and extensions for land use authorities during the pandemic.

Capital Investment Bill *HF2529 and SF3463*

Bills failed on both House and Senate Floor. Bonding Bills require a 3/5th majority to pass and neither the House nor Senate were able to get enough votes to reach this threshold. Those bills included the following BWSR appropriations:

	Gov Rec	House	Senate
MN CREP	$16.5 million	$12.5 million	$ 1 million
Local Roads Wetlands	$26.4 million	$15.0 million	$18 million
Local Roads Wetlands (cash)	$ 8.0 million	$ 8.0 million	$ 0
Total	$50.9 million	$35.5 million	$19 million

Moving Forward

We know these resources are critical for conservation project work, provides and maintains jobs in local communities, and are necessary to receive federal match. BWSR and our partners continue to work together on priorities for a special session June and for the next legislative session in 2021.

technical memo

Project Name |	North Ottawa - Natural Resource Enhancement + Revenue	**Date** |	6.12.2020
To / Contact info |	BdSWD Board of Managers		
Cc / Contact info |	Jamie Beyer – District Administrator Chad Engels – District Engineer		
From / Contact info |	Kevin Biehn, Jason Naber and Mike Talbot – EOR		
Regarding |	Natural Resource and Land Management Use Suitability + Revenue Potential		

TABLE OF CONTENTS

1) BACKGROUND

In early 2019, EOR was hired by the Bois de Sioux Watershed District (BdSWD) to identify and vet revenue and natural resource enhancement synergies for the North Ottawa Impoundment. The preliminary findings of which were presented to the BdSWD Board, BdSWD Staff, MnDNR and Louis Smith of Smith Partners on 2.15.2019.

In February 2020, the District expanded EOR's scope to further vet options. Specifically, EOR was tasked with identify and evaluate opportunities that satisfy natural resource and revenue goals for the impoundment. The methodology and findings of runoff modeling and associated compatibility of individual crops and uses are described herein.

2) CHARACTERIZATION OF NORTH OTTAWA IMPOUNDMENT

Completed in 2016, the impoundment (see Figure 2), controls 75 square miles of the 320 square mile Rabbit River Watershed. The primary objective of the facility is flood mitigation, and the facility provides 16,000 acre-feet of flood water storage, which is equivalent to 75% of the estimated 100-year spring runoff. This is expected to reduce peak flows on the Bois de Sioux River at Wahpeton/Breckenridge by about 5%. See Figure 3 for impoundment attributes, such as farmable acreage and lowest farmable elevation, frequently referenced herein.

The North Ottawa Impoundment has become a popular site for upland and wetland bird species. The facility currently provides habitat for sixty species of greatest conservation need (SGCN), four state endangered species, two state threatened species, and twelve species that are considered of special concern in Minnesota. North Ottawa has also become a breeding site for at least 29 species. For more information on the impoundment visit
http://www.bdswd.com/PDF/North%20Ottowa%20Brochure_2019.pdf

Figure 1 – Light Geese utilizing flooded corn stubble in Cell A2. Photograph provided by BdSWD, dated 3/24/2020.

3) EXECUTIVE SUMMARY

A continuous simulation of watershed runoff and impoundment storage was completed for representative dry, normal, and wet years, 2003, 2005 and 2004, respectively. Using conservative assumptions, modeling has indicated that six of the eight 'A & B' cells are suitable for production of various crops and/or livestock grazing. BdSWD has indicated that historic observation and operation flexibility indicates that it is possible to successfully farm all eight 'A & B' cells.

There is a myriad of suitable revenue options with varying habitat and public benefits. While a particular option detailed herein may currently be of less or no interest to the BdSWD, EOR recommends that the District pursue as many options as prudent to provide future flexibly in operating the impoundment.

Based on the following rental scenario, it is estimated that the District could net $70,000± in annual income via land lease(s). Understandably, all eight cells could operationally be leased for row crops, and this would net greater income.

3 cells	*Unrestricted farm use (corn, corn silage, soybeans, small grains, etc.)*
3 cells	*Corn silage or small grain with cover crop and/or grazing of perennial forage and/or native seed production and/or perennial crop such as alfalfa*
2 cells	*Moist Soil/Holding*

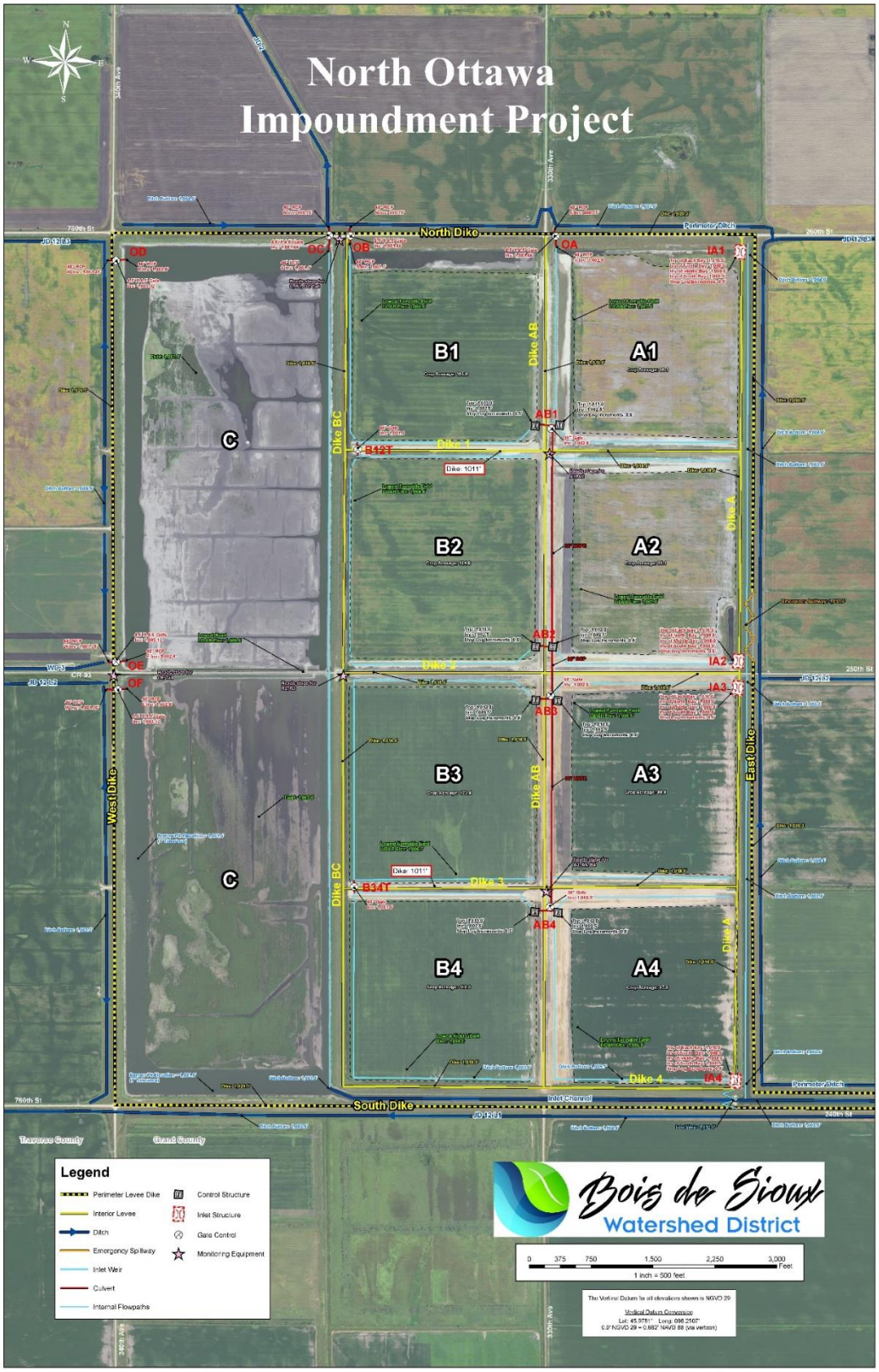


Figure 2. Map of North Ottawa Impoundment provided by the Bois de Sioux Watershed District.

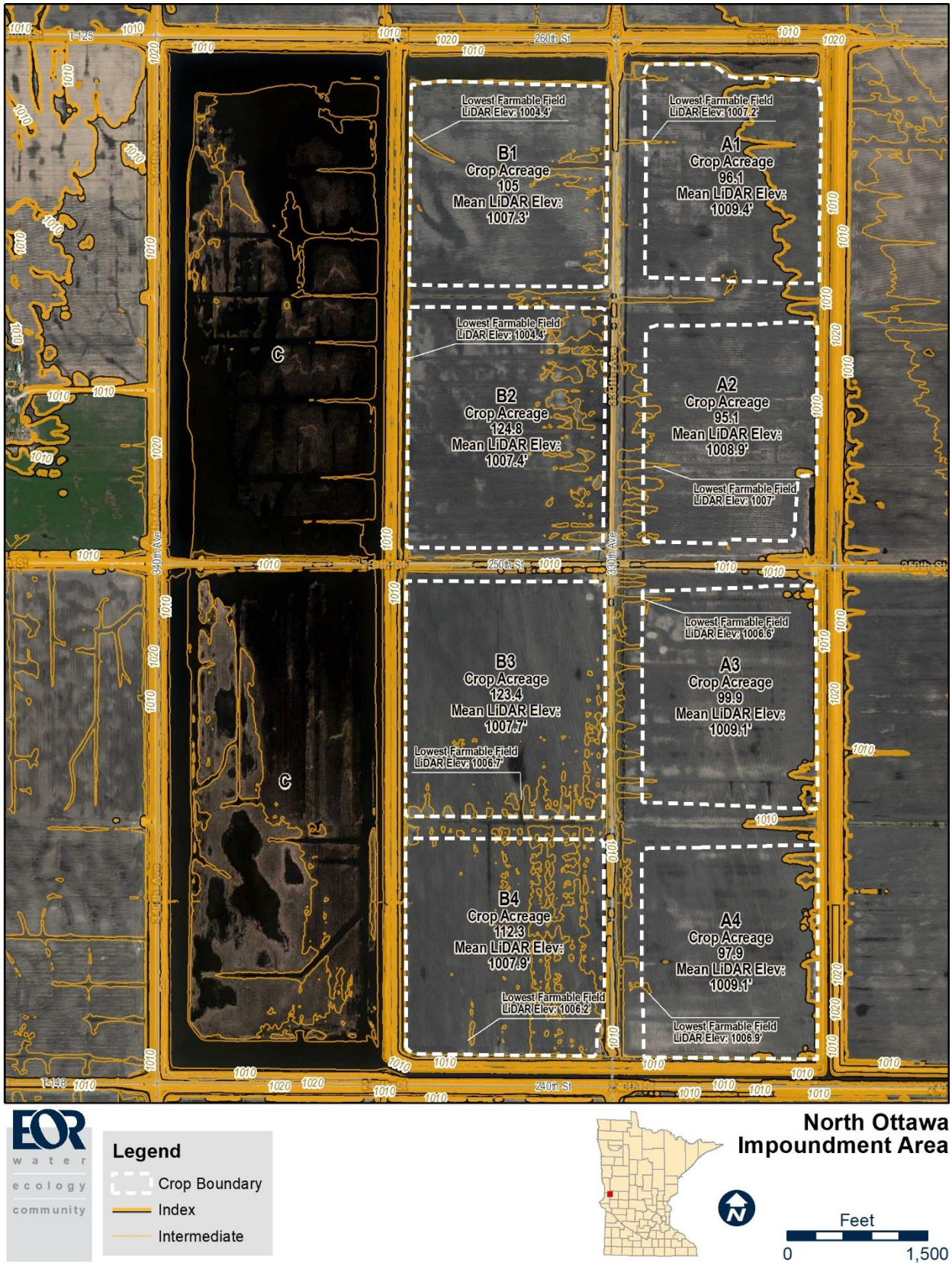


Figure 3. Map of North Ottawa Impoundment highlighting attributes frequently referenced in this memo, such as farmable acreage and lowest farmable elevation.

4) INTERPRETATION OF MODELING – CROP/USE SUITABILITY

A continuous simulation of watershed runoff and impoundment storage was completed for representative dry, normal, and wet years, (2003, 2005 and 2004, respectively). For a detailed report on modeling methodology see Appendix A and modeling results see Appendix B.

The model was constructed to address the following questions around the suitability of the impoundment to various uses and the flood mitigation priority:

1. Determine suitability of potential crops and other uses to flood mitigation priority,
2. Articulate inundation probability to potential lessees,
3. Address stakeholder comments pertaining to the incompatibility of flood storage and various uses.

Based on the modeling results & BdSWD observed conditions, significant portions of the North Ottawa Impoundment appear suitable to a variety of agricultural crops and other recreational and revenue uses. While the period of full impound buildout operation is short (2016 to present), observations indicate that under a normal year, stored runoff from spring snowmelt can be released from the impoundment with sufficient time to prepare and plant dedicated cells of the impoundment.

Field Crops Usual Planting & Harvest Dates

Typical planting and harvest dates, as reported by the USDA, are identified in Table 1. Most spring drawdowns should have little to no impact on the timing of planting and associated yields, in so long as the drawdown schedule has been currently calculated and release has been actively managed.

Crop/Use Suitability

Based on the modeled growing season conditions for a representative dry, normal, and wet year and the spring inundation and operations witnessed by BdSWD thus far, there are suitable crops/forage to a minimum of six of the eight 'A & B cells'. Again, District staff and engineering staff have indicated that actual operation flexibility potentially allows for all eight 'A & B cells' to be utilized for crops or forage. Model results are summarized in Table 2 in the form or total hours of inundation by each cell for the representative years. Note that model parameters (i.e. evaporation), utilized were conservative so modeled conditions are likely 'wetter' than actuality. Based on modeled inundation conditions, a qualitative crop suitability to flood mitigation is provided for each crop/forage discussed. Also, note that suitability is germane to the specific mock flood mitigation sequencing assumed, as articulated in Table 2.

Table 1. Usual Minnesota Planting and Harvesting Dates for Traditional Crops; sourced from Field Crops Usual Planting and Harvesting Dates (October 2010) USDA, National Agricultural Statistics Service

USE/CROP	USUAL MN DATES	
	PLANTING	HARVEST
Hay, Alfalfa	N/A	5/25-9/24
Hay, Other	N/A	6/6-8/30
Corn Silage	4/22-5/29	8/27-10/14
Corn	4/22-5/29	9/27-11/23
Soybeans	5/2-6/13	9/20-10/31
Barley, spring	4/15-6/3	7/26-9/18
Oats, spring	4/11-5/26	7/21-9/4
Wheat, spring	4/14-6/1	7/30-9/22

Table 2. Crop Suitability relative to flood mitigation priority and associated operation

Crop Suitability Relative to Modeled Growing Season Flood Storage

Cell			MODELED STORAGE - TOTAL HOURS APR THRU NOV						Qualitative Crop Suitability to Flood Mitigation							
			Dry Year (2003)		Normal (2005)		Wet (2004)									
ID	Mock 2021 Operation		Total Hours Above Lowest Farmable El.	Max. % of Farmable Ground Inundated	Total Hours Above Lowest Farmable El.	Max. % of Farmable Ground Inundated	Total Hours Above Lowest Farmable El.	Max. % of Farmable Ground Inundated	Corn & Soybeans	Small Grains	Hay, Alfalfa & Hay, Other	Corn Silage	Rotational Grazing	Native Wetland Seed/Sod Propagation	Alt. Annual Moist Soil Crop (i.e. Swamp Milkweed)	Alt. Annual Moist Soil Crop (i.e. Japanese Millet)
	Spring Dewater Sequence	Growing Season Inundation Sequence														
A1	1st	8th	0	0	0	0	0	0								
B1	2nd	7th	0	0	0	0	0	0								
A2	3rd	6th	0	0	0	0	519	100								
B2	4th	5th	278	16	466	12	1,161	100								
A3	5th	4th	369	13	671	10	1,445	100								
B3	6th	3rd	469	100	888	100	1,693	100								
B4	7th	2nd	2,077	100	2,437	100	2,908	100								
A4	8th	1st	2,157	100	2,562	100	2,988	100								

Most Suitable
Suitable
Somewhat Suitable
Not Suitable

Note the following regarding Table 2:

- Suitability broadened to account for conservative H&H model parameters
- Suitability of rotational grazing based on pairing ≥ 1 wetter cell with ≥ 1 drier cell
- Native wetland seed production and other moist soil crops would require some inundation and may slightly reduction inundation of other cells

5) SUMMARY OF ALTERNATIVES USES

The following uses, which have been previously discussed with the District Board, remain valid. Renewable energy production, however, does not appear viable at this time due to little interest expressed by both private solar developers and the local electric utility.

Native Wetland Seed Production

Suitability & Production Particulars: Native seed is in high demand for ecosystem restoration projects across the Midwest. The North Ottawa Impoundment and the ability to manipulate hydrology affords a unique and possibly ideal condition for establishing and harvesting seed from perennial wet prairie and wetland native species. Manipulation and maintaining soil moisture and/or standing water is essential for the establishment, production and/or harvesting of numerous species. For example, some wetland species are frequently harvested by combine, which necessitates dewatering in advance of harvest. Water control is extremely important during the establishment year(s).

Native seed is most efficiently produced via a patchwork of singular species. For example, the farmable acreage of a dedicated cell would likely be divided into 20 or more units, each with a single native species

stand. The overall cell would be floristically diverse but comprised of a monoculture patchwork. The probable desired acreage for this use is 1 or 2 total cells.

Based on informal conversations with current producers, there are multiple potential parties interested in leasing acreage for native wetland seed production. For a detailed listing of Minnesota, North Dakota, and South Dakota Conservation Seed/Plant Vendors (October 2019), visit the following link provided by United States Department of Agriculture:
https://www.blogs.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/ndpmcot8152.pdf

The distance of the impoundment from current native seed growers will likely necessitate nearby equipment storage and/or local contracting for maintenance (spraying, mowing, etc.). Locating inexpensive machinery storage and/or a suitable maintenance contractor will have a bearing on rental rate. Additionally, where the cell(s) are in the flood mitigation sequence, as well as the plausible assurance for desired inundation, will greatly affect rental rate(s). Based on preliminary discussions with growers, the estimated annual rental rate for native seed production is $60 to $80 per acre.

Natural Resource Benefits: Increases carbon sequestration, reduces CO2 emissions, provides nesting and forage for pollinators, small mammals, herptiles, and grassland birds. Potentially lowers local industry cost of wetland seed and increases species availability and thus may lower the cost of important ecosystem restoration projects.

Alternative Crops (such as milkweed or Japanese Millet)

Suitability & Production Particulars: Alternative crops that fare better or thrive in moist soils should be considered as revenue and wildlife alternatives for cells prioritized for flood mitigation. Such representative crops include Japanese millet, (*Echinochloa esculenta*) and Swamp milkweed, (*Asclepias incarnata L*). Swamp milkweed is an important native perennial pollinator species, with a growing market for the seed floss in the fabrics industry, including many other uses. Japanese millet, also known as barnyard millet or billion-dollar grass, is an annual plant well adapted to much of the U.S. It tolerates heat and humidity well and can tolerate periodically wet soils or shallow flooding (provided part of the plant remains above water). However, Japanese millet may perish if completely submerged in floodwaters for an extended period. It has been used in the U.S. both for forage and wildlife planting, particularly to attract and support ducks, but it also has potential for human food and cover crop use.

As there is not currently, a well-established local market for the seed the most plausible use for Japanese millet is likely forage use. Japanese millet can make a suitable hay crop or can be directly grazed. It has better potential for regrowth provided the cutting is done early enough, such as by 36 inches, and at least 6 to 10 inches of stem height is left for regrowth. Adequate soil moisture for regrowth will be needed. In a University of Minnesota trial, biomass harvested was 3.5 dry tons per acre with one cutting and a total of 5.0 tons with multiple cuttings.

Species in the genus *Asclepias*, are a host for monarch caterpillars and a nectar source for many species of butterfly. More emphasis on the emerging floss market is associated with Common milkweed, (*Asclepias syriaca*), but Swamp milkweed has shown promise and is a moist soil alternative, whereas Common milkweed is not. Milkweed floss is an organic, lightweight fiber that is being utilized in the fabrics industry for its superior insulative and water repellent properties, amongst other uses.

Natural Resource Benefits: Vary greatly on specific crop, but the intent is to provide superior and alternative habitat and benefits for insects and wildlife simultaneously.

Rotational/Managed Grazing

Suitability & Production Particulars: Grazing rotations allow higher densities of livestock over shorter periods of time. This practice provides some pastures with 6 weeks or more of undisturbed nesting and foraging habitat for waterfowl, as well as many other grassland and wetland birds, reptiles, amphibians, and insects. Research has shown managed rotation of livestock increases plant diversity for wildlife, rebuilds soil structure, enhances carbon sequestration, and will produce more pounds of meat per acre.

Stable and consistent water sources will be necessary for each grazing paddock. Fence installation, likely requiring power to electrify, will be necessary to both contain and rotate livestock. Improvements may be necessary to provide a stable means for moving livestock up and down a cell embankment as livestock are brought to the impoundment and rotated from one cell to the next.

Livestock would be wintered offsite and would graze dedicated cells between May thru September. A rotational grazing plan and District enforcement of such plan will be necessary to ensure wildlife benefits are met.

Rotational grazing usually utilizes a minimum of 7 (sometimes many more) paddocks. Grazing periods range between one week and one day so impoundment cells will need to be further subdivided into paddocks. It is important that all pastures be given some "rest" time. Ideally, animals would begin grazing a pasture when plants are 6 to 10 inches tall and removed when plants are no less than 3 inches tall. These heights are somewhat dependent on forage species. The vegetative period of growth of a species is the ideal time for grazing. Overgrazing can cause muddy conditions, erosion, killing desired pasture species and allowing for the introduction of weeds that tolerate compacted soils. Undergrazing is also undesirable as animals are likely to graze selectively, allowing less desirable plants to outcompete desired ones. Undergrazed pastures require more frequent mowing to keep undesirable plants in check, and especially to keep those plants from going to seed and spreading further.

Natural Resource Benefits: Increases carbon sequestration, reduces CO2 emissions, provides nesting and forage for pollinators; habitat for small mammals, herptiles, and grassland birds; and increases opportunity for upland game management.

Corn Silage or Small Grain with Cover Crop Establishment & Moist Soil Management

Suitability & Production Particulars: Corn silage and small grains require fewer days to maturity and therefore are harvested in late summer or early fall. During an average year there is then sufficient time to sow and establish a post-harvest cover crop. Given average conditions, the cover crop would be well established prior to fall migration and any designated use for Moist Soil/Holding. The corn silage / small grain to cover crop rotation would provide an important diversity of cover and forage for wildlife.

Given its wildlife value and greater suitability to moist soils, Japanese millet should be considered as a cover crop alternative. Japanese millet can also be used as a single species cover in upland sites to smother weeds; one study found a dense stand of Japanese millet was effective in reducing yellow nutsedge weed population. Another trial found that Japanese millet worked well in mixes with cowpeas. In general, Japanese millet is a viable option for mixes, especially to help support wildlife and provide diversity of plant types that can respond to different soil moisture conditions.

Natural Resource Benefits: Increases forage base for small mammals, passerines, and waterfowl – these crops are protected within the Impoundment's wildlife refuge, ripen early, and become a wildlife food source (earlier than other crops) in the area. Cover crops will reduce erosion and benefit overall soil health.

6) FURTHER EXPLORATION OF USE & NEED

The following opportunities & requirements have been further vetted for both natural resource enhancement and revenue returns. The District should consider each of the following as an Operations and Maintenance Plan for the impoundment is further refined.

Native Prairie Establishment & Conservation Program Enrollment

In discussing the Impoundment with native seed growers, another possible beneficial use and revenue stream has been identified. A grower will install, establish, and manage a diverse native prairie on designated cell(s). In exchange for providing this service the grower gets annual rights to harvest seed and possibly mulch off the site. This acreage may be eligible for enrollment in a conservation program (i.e. CRP, CREP, RIM, Conservation Easement). The harvest impacts, as well as mulching, (cutting & baling) need to be specified to determine if there are conflicts with conservation program restrictions. This designation would require a long-term lease/agreement and would likely not be suitable to Moist Soils/Holding priority cells.

Multi-Year Lease Agreements

Multi-year lease agreements will be a necessity for any perennial crops/forage; lower District administrative cost and higher rental rates are expected from a longer lease term. Furthermore, multi-year lease terms will be necessary for the District and lessee to make direct and indirect investments in the farmable acreage.

Means to Rotate Production and/or Account for Management of Holding Cells

Cells prioritized as Moist Soils/Holding cells will experience greater frequency, depth, and duration of ponding. The result of this condition and no soil tillage/disturbance will likely result in a plant community dominated by the few species that can thrive in such conditions, such as cattails and possibly reed canary grass, a non-native invasive plant. A monoculture of cattails is not optimal habitat for most waterfowl species, as well as other priority species for the impoundment.

The cost to preparing cells for farming that have previously been dedicated to Moist Soil/Holding for multiple years is expensive. As the District has experienced, cattails readily develop considerable biomass, which requires expensive inputs (i.e. burning, chopping, spraying and/or tillage) to prepare for planting.

If there is a desire by BdSWD and/or project stakeholders to minimize cattail dominance in the 'A & B cells', the most cost-effective approach to minimizing establishment is to frequently rotate cells prioritized for Moist Soil/Holding. Cells should not be prioritized for such use for greater than two consecutive years, ideally rotated every year. Considerably less cattail biomass will establish via a single year of Moist Soil/Holding prioritization. Regardless, the primary benefit to rotating Moist Soil/Holding cells and managing cattails is habitat optimization and managing cattails will incur greater operation and maintenance expense. Strictly from an operating cost perspective, the BdSWD should consider not rotating Moist Soil/Holding cells and accept a resulting cattail monoculture or look to project stakeholders

for assistance with management. If specific cells are designated to Moist Soil/Holding the District could transfer vegetation management responsibility of these cells to the State.

If cells prioritized as Holding Cells cannot practically or permissibly be rotated and farmed, as a means to discourage monoculture growth, budget should be accounted for to manage expected condition.

Additionally, sediment from runoff is expected to settle out in the impoundment and as such, sediment removal will be required with some frequency to maintain operations. All necessary rights, approvals and funding will be necessary to complete this necessary activity.

Hunting / Walk-In-Access

The 2012 Minnesota Legislature established a Walk-In Access (WIA) Program (Minnesota Statutes 97A.126) to provide public hunting access to wildlife habitat on private land. Walk-In Access (WIA) provides public hunting opportunities on private land that is already enrolled in existing conservation programs or lands with high quality natural cover. WIA program is voluntary for landowners. Most landowners choose to enroll their property for two or three years. Enrolled lands are covered under the Minnesota recreational use laws that limit landowners' liability. MnDNR conservation officers handle trespass and hunting violations. Local Soil & Water Conservation Districts enroll landowners in WIA. Landowners receive $10-$13/acre to allow public hunting.

Applicable acreage for the North Ottawa Impoundment may be limited to dedicated holding cells and conveyance channels, as cropland may not suffice, and Cell C may be excluded because of real or implied refuge status/standing. Enrollment may however conflict with the desire to frequently rotate the Moist Soil/Holding cells. When considering enrollment, the District should contemplate any potential impacts and conflicts, such as diminished 'birding value' and increased O&M from probable access. More information on the State program can be found at https://www.dnr.state.mn.us/walkin/enroll.html

Impoundment Monitoring & Management

The means to actively and/or accurately monitor water levels are currently limited, as monitoring equipment has failed and/or was inadequate. Uses such as Wetland Seed Production may require more active water level management than the District has encountered managing the facility thus far. Going forward, lessees and prospective lessees will likely require greater detail on water levels to manage production and substantiate rent bids. To accommodate this need the District should account for the infrastructure, equipment and/or personnel to monitor and manage the facility.

7) MOCK CELL DEDICATION AND ESTIMATED ASSOCIATED INCOME

Annual Revenue Scenario

There is a myriad of suitable revenue options with varying habitat and public benefits. While a particular option may currently be of less or no interest to the BdSWD, as many options as prudent should be pursued to provide future flexibly in operating and sustaining the impoundment.

To provide the BdSWD and project stakeholders with a sense of potential revenue generation, a plausible lease condition was forecasted for a simulated year (Table 3). Proposed uses in the mock 2021 lease year have not been approved or otherwise endorsed by any stakeholder but are thought to be reasonable and beneficial to all parties. The mock lease is based on the following designations for the eight A & B cells:

3 cells *Unrestricted farm use (corn, corn silage, soybeans, small grains, etc.)*

3 cells *Corn silage or small grain with cover crop and/or grazing of perennial forage and/or native seed production and/or perennial crop such as alfalfa*

2 cells *Moist Soil/Holding*

Acreages utilized were provide by the BdSWD and rental rates utilized are based on recent North Ottawa bids, with adjustments for both cell inundation probability and agricultural BMP requirements. Based on this analysis the District could currently net $70,000± annually.

Table 3 - Estimate of revenue generation - Mock Year 2021 Income & Use

Mock 2021 Lease Income

Cell			Proposed Use	Estimated Rent ($/Ac)	Subtotal
ID	Farmable Acreage	Growing Season Inundation Sequencing			
A1	96.1	8th	*Corn or soybean - no restrictions*	$ 136	$ 13,070
B1	105	7th	*Corn or soybean - no restrictions*	$ 136	$ 14,280
B2	124.8	6th	*Corn or soybean - no restrictions*	$ 131	$ 16,349
A2	95.1	5th	*Small grains or corn silage w/ post-harvest cover crop establishement;*	$ 90	$ 8,559
A3	99.9	4th	*1) small grains or corn silage w/ post-harvest cover crop establishement; and/or 2) grazing w/ perennial forage; and/or 3) native seed production and/or 4) perennial crop such as alfalfa*	$ 90	$ 8,991
B3	123.4	3rd	*1) small grains or corn silage w/ post-harvest cover crop establishement; and/or 2) grazing w/ perennial forage; and/or 3) native seed production and/or 4) perennial crop such as alfalfa*	$ 70	$ 8,638
B4	112.3	2nd	*Moist Soil or Holding*	$ -	$ -
A4	97.9	1st	*Moist Soil or Holding*	$ -	$ -
				Projected Annual Income:	**$ 69,886**

Ten Year Use Rotation Scenario

A multiyear view is necessary to provide stakeholders & lessees with a perspective of how uses will be rotated and transitioned across the facility. Furthermore, perennial crops and necessary multi-year leases necessitate a multiyear plan.

A perennial crop or forage, which requires greater up-front establishment and/or infrastructure cost, will necessitate a long-term lease (5+ years), to support this use and garner a return on investment. Cells dedicated for this use would not be part of a Moist Soil/Holding rotation during this period but would provide flood mitigation relief if warranted.

As detailed in Section 6, Permanent Moist Soil/Holding cell designation or rotation will have a bearing on cattail establishment and the management of cattails for farming (if rotated) and habitat. Given this financial and ecological impact, Moist Soil/Holding rotation or designation should be forecasted for an extended period.

Ten-year rotation scenarios with (Table 4), and without (Table 5), Moist Soil/Holding rotation have been provided herein. Both mock scenarios (Table 4 & Table 5), include dedicated grazing and/or native seed production and/or perennial crop such as alfalfa. Additionally, a 1-year Moist Soil/Holing rotation without grazing and/or native seed production and/or perennial crop such as alfalfa (Table 6), has also been illustrated. Note that when two cells are excluded from Moist Soil/Holding rotation and two or more cells are in a long term lease, an every other year rotation is necessitated for Moist Soils/Holding designation, as seen in Table 4.

When possible corn silage (or small grains) with a post-harvest cover crop should be planted ahead of a cell transition to Moist Soil/Holding. The actual transition could occur the fall of the cover crop seeding or the following spring depending on cover crop establishment and operation & maintenance objectives.

Note the following regarding Moist Soil/Holding rotation (Table 4 & Table 6) – transitions can or should occur mid-year. For example, it may be prudent to transfer Moist Soil/Holding dedication in late summer or early fall to cells with establishing cover crop and start dewatering that year's Moist Soil/Holding cells for fall tillage.

Table 4 – Ten year use and rotation scenario for all eight A & B cells – including perennial crop(s) with 1-year Moist Soil/Holding cell rotation. Note – growing season inundation sequencing in italics.

CELL	YEAR & GROWING SEASON INUDATION SEQUENCE									
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A1	*8th*	*8th*	*8th*	*8th*	*8th*	*8th*	*8th*	*8th*	*8th*	*8th*
B1	*7th*	*7th*	*7th*	*7th*	*7th*	*7th*	*7th*	*7th*	*7th*	*7th*
A2	*1st*	*4th*	*2nd*	*6th*	*1st*	*4th*	*2nd*	*6th*	*1st*	*4th*
B2	*2nd*	*6th*	*1st*	*4th*	*2nd*	*6th*	*1st*	*4th*	*2nd*	*6th*
A3	*3rd*	*5th*	*3rd*	*5th*	*3rd*	*5th*	*3rd*	*5th*	*3rd*	*5th*
B3	*5th*	*3rd*	*5th*	*3rd*	*5th*	*3rd*	*5th*	*3rd*	*5th*	*3rd*
B4	*4th*	*1st*	*6th*	*2nd*	*4th*	*1st*	*6th*	*2nd*	*4th*	*1st*
A4	*6th*	*2nd*	*4th*	*1st*	*6th*	*2nd*	*4th*	*1st*	*6th*	*2nd*

Moist Soil/Holding (always the 1st and 2nd Cell Inundated)

Total Farmable Acres Over Ten Years

Corn, Corn Silage, Soybeans or Small Grains	3064.2
Small grains or corn silage w/ post-harvest cover crop	1097.3
Grazing w/ perennial forage; and/or Native seed production and/or Perennial crop such as alfalfa	2233.0

Table 5 - Ten year use and rotation scenario for all eight A & B cells – including perennial crop(s) without Moist Soil/Holding cell rotation. Note – growing season inundation sequencing in italics.

CELL	YEAR & GROWING SEASON INUDATION SEQUENCE									
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A1	*4th*	*8th*	*8th*	*8th*	*4th*	*8th*	*8th*	*8th*	*4th*	*8th*
B1	*8th*	*4th*	*7th*	*7th*	*8th*	*4th*	*7th*	*7th*	*8th*	*4th*
A2	*7th*	*7th*	*4th*	*6th*	*7th*	*7th*	*4th*	*6th*	*7th*	*7th*
B2	*6th*	*6th*	*6th*	*4th*	*6th*	*6th*	*6th*	*4th*	*6th*	*6th*
A3	*3rd*	*5th*	*3rd*	*5th*	*3rd*	*5th*	*3rd*	*5th*	*3rd*	*5th*
B3	*5th*	*3rd*	*5th*	*3rd*	*5th*	*3rd*	*5th*	*3rd*	*5th*	*3rd*
B4	*1st*	*2nd*	*1st*	*2nd*	*1st*	*2nd*	*1st*	*2nd*	*1st*	*2nd*
A4	*2nd*	*1st*	*2nd*	*1st*	*2nd*	*1st*	*2nd*	*1st*	*2nd*	*1st*

Moist Soil/Holding (always the 1st and 2nd Cell Inundated)

Total Farmable Acres Over Ten Years

Corn, Corn Silage, Soybeans or Small Grains	3166.9
Small grains or corn silage w/ post-harvest cover crop	1043.1
Grazing w/ perennial forage; and/or Native seed production and/or Perennial crop such as alfalfa	2233.0

Table 6 - Ten year use and rotation scenario for all eight A & B cells – excluding perennial crop with 1-year Moist Soil/Holding cell rotation. Note – growing season inundation sequencing in italics.

CELL	YEAR & GROWING SEASON INUDATION SEQUENCE									
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A1	*8th*	*5th*	*8th*	*8th*	*8th*	*8th*	*8th*	*5th*	*8th*	*8th*
B1	*7th*	*8th*	*5th*	*7th*	*7th*	*7th*	*7th*	*8th*	*5th*	*7th*
A2	*1st*	*7th*	*4th*	*2nd*	*3rd*	*5th*	*1st*	*6th*	*4th*	*2nd*
B2	*2nd*	*6th*	*3rd*	*1st*	*6th*	*4th*	*2nd*	*4th*	*3rd*	*1st*
A3	*3rd*	*1st*	*7th*	*3rd*	*2nd*	*3rd*	*5th*	*1st*	*7th*	*3rd*
B3	*4th*	*2nd*	*6th*	*4th*	*1st*	*6th*	*3rd*	*2nd*	*6th*	*4th*
B4	*5th*	*3rd*	*1st*	*6th*	*4th*	*2nd*	*4th*	*7th*	*1st*	*6th*
A4	*6th*	*4th*	*2nd*	*5th*	*5th*	*1st*	*6th*	*3rd*	*2nd*	*5th*

Moist Soil/Holding (always the 1st and 2nd Cell Inundated)

Total Farmable Acres Over Ten Years

Corn, Corn Silage, Soybeans or Small Grains	3151.3
Small grains or corn silage w/ post-harvest cover crop	3213.6
Grazing w/ perennial forage; and/or Native seed production and/or Perennial crop such as alfalfa	0.0

8) SUMMARY – BENEFIT OF A WORKING LANDS MODEL

The North Ottawa Impoundment is already a birding mecca as it is operated now. With the addition of perennial crops/forage and/or the inclusion of Agricultural Best Management Practices, such a working lands model has the potential to be a net gain for wildlife and public use. This working lands model would sustain a variety of habitats as well as an insect community, which in turn would benefit both migratory and non-migratory wildlife. Whereas, a less actively farmed model, would be a financial burden on the Watershed District and may even result in lower net habitat value than existing conditions, as some cells will likely mature to a monoculture regime, which affords similar and degraded overall habitat. Furthermore, this operation would serve as a new standard and precedent for flood mitigation projects.

There are many options for the A & B cells that are compatible with flood storage, provide NREs and generate revenue for sustainability of North Ottawa. From native seed production to grazing to alternative crops, the potential for this amazing resource to continue to provide the habitat it does currently is extraordinary. We look forward to this becoming reality.

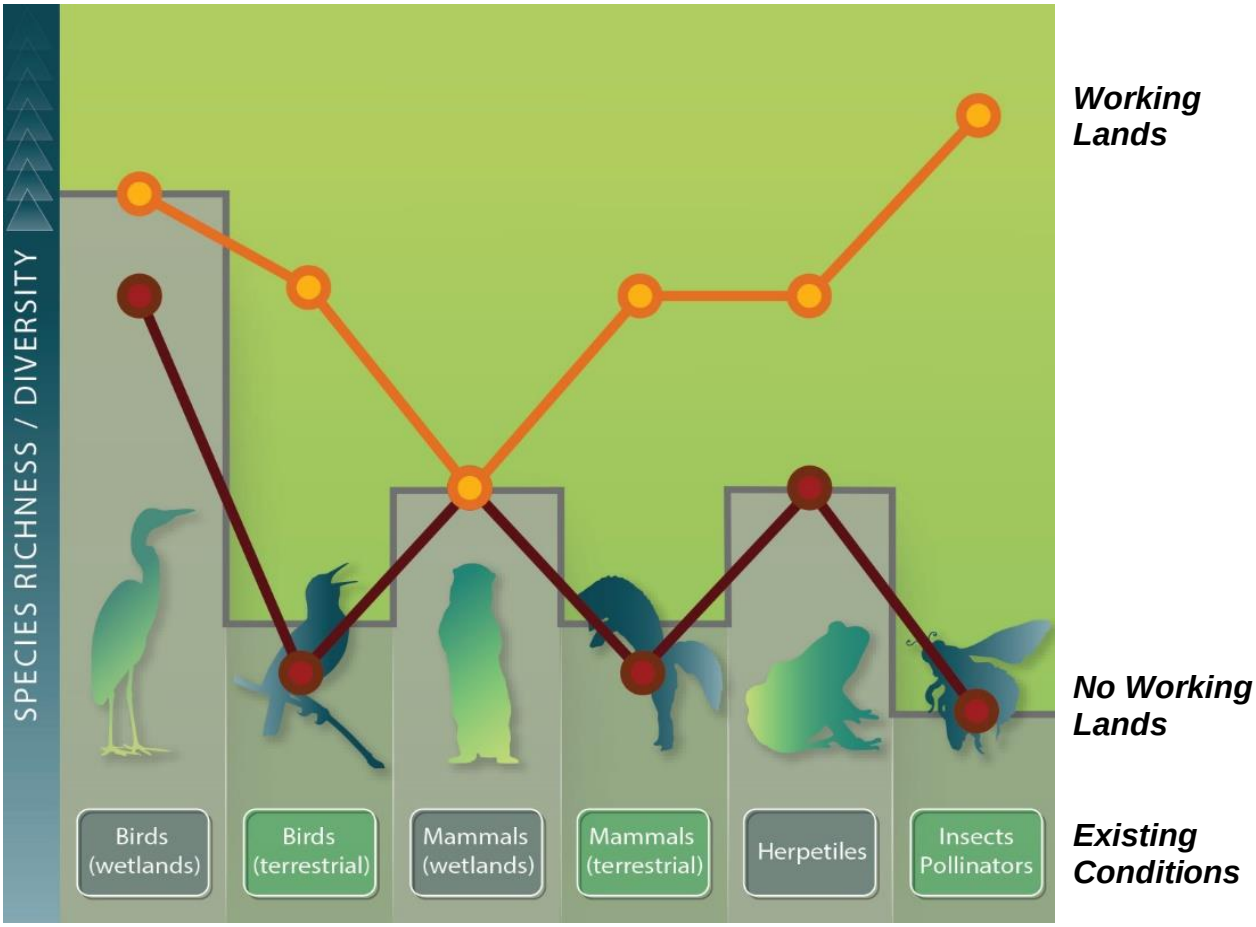


Figure 4. Graphical depiction of how a working lands model would benefit overall species richness/diversity over no working lands.

APPENDIX A – MODELING METHODOLOGY

A hydrologic and hydraulic (H/H) model was constructed in order to assist in a quantitative assessment of (a) the suitability of crop growth and alternative uses within the impoundment cells, (b) the probability and severity of growing season inundation within each cell, and (c) the potential incompatibility of using the farmable[1] portion of the land within the each cell for both flood storage and other uses. While the BdSWD has kept records of water levels and operations within the impoundment at least as far back as 2016, operations of the various controls (e.g. valves, gates, weirs) have not been consistent year-to-year, and continuous level measurements were only available for 2016 and 2017. It was therefore difficult to draw concrete conclusions from these data about how the impoundment might operate across a range of hydrologic conditions and under more prescriptive operations.

The model was constructed using PCSWMM, a "decision support tool" that acts as a front-end for EPA SWMM5 ("SWMM"). This modeling platform was chosen because SWMM supports robust simulation of hydraulic systems, including in situations where low gradients may produce tailwater and/or backwater conditions, and because it allows for the programming of complex logic-driven control rules that permit the simulation of the opening and closing of gates and valves, the raising/lowering of stop logs and weirs, and other such dynamic activities.

As shown in Figure 7, the SWMM model functions to simulate both the hydraulics of the impoundment and the hydrology of (i.e. runoff from) the direct drainage areas. A curve number of 82 was used to generate runoff from the direct drainage areas. Seepage rates within the impoundments were conservatively assumed to be negligible, and evaporation from open water surfaces was estimated using daily evapotranspiration estimates from the Priestley-Taylor equation. Inflows from the 74-square-mile upstream drainage area via the "perimeter ditch" were simulated using the existing HEC-HMS model for the BdSWD. For a detailed description of the configuration of the impoundment and its control structures, refer to the North Ottawa Impoundment Operation and Maintenance Manual (2017).

A set of continuous simulations was performed for the growing season (April 15th to October 31st) to provide a reasonable representation of conditions within the impoundment across a range of hydrologic regimes and with a specific set of operational rules in place. An analysis was performed of rainfall records from ASOS weather stations near the impoundment. Data from Watertown, SD (station code ATY) was used, as this station had relatively complete weather records for 15+ years and was close enough to North Ottawa Township (< 90 miles) to have a very similar climate. As shown in Figure 5, the driest, wettest, and most average years in the record were 2003, 2004, and 2005, respectively.

The HEC-HMS model was first run for these years using the Watertown precipitation data. The resulting simulated discharge at the closest upstream node to the impoundment was used as an inflow time series to the PD node in each SWMM simulation.

A relatively simple set of control rules was implemented to simulate prescriptive operation of control structures such that the storage volume of each cell was maximized to the extent possible, and the intended order of cell inundation was (from first to last): A4, B4, B3, A2, B2, B1, A1. However, since the inlet weirs from the perimeter ditch are configured to allow inflows to A1, A2, A3, and A4 (at varying elevations), this sequence of inundation is not strictly enforceable - particularly under wet conditions.

[1] The "farmable" portion of the land within each cell refers areas above the lowest farmable elevations shown in Figure 3. Generally, it includes that portion of each cell that is flat and dry enough to be otherwise arable and excludes the conveyances and embankments, and is roughly bounded by the inflection points shown in Figure 6.

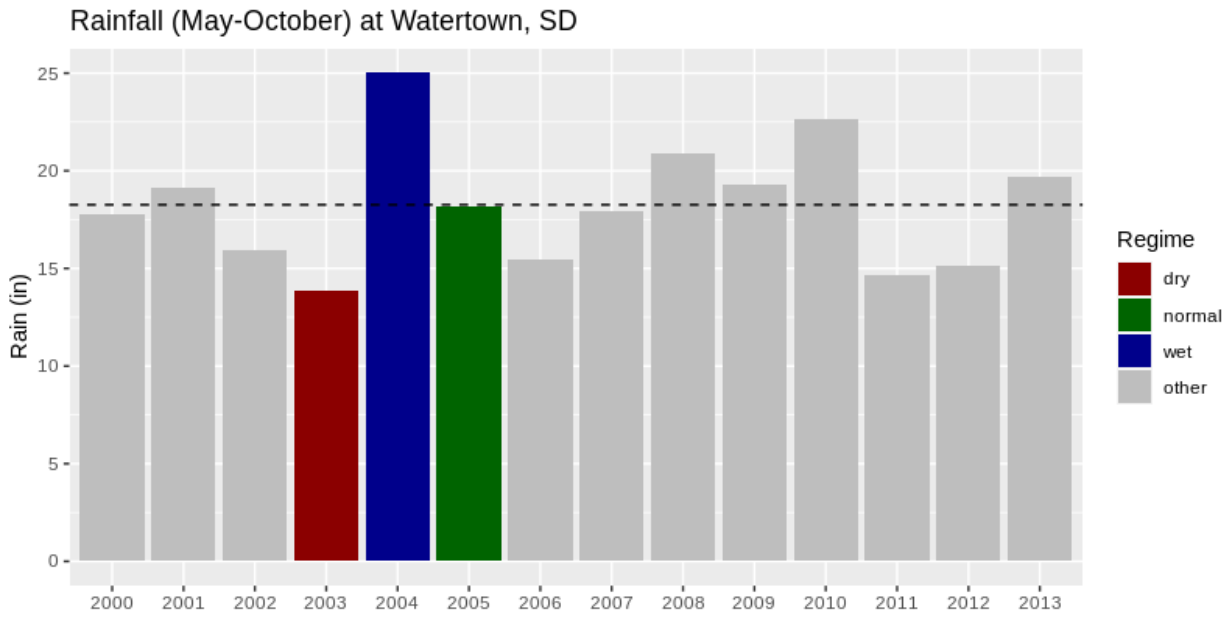


Figure 5. Rainfall at Watertown, SD

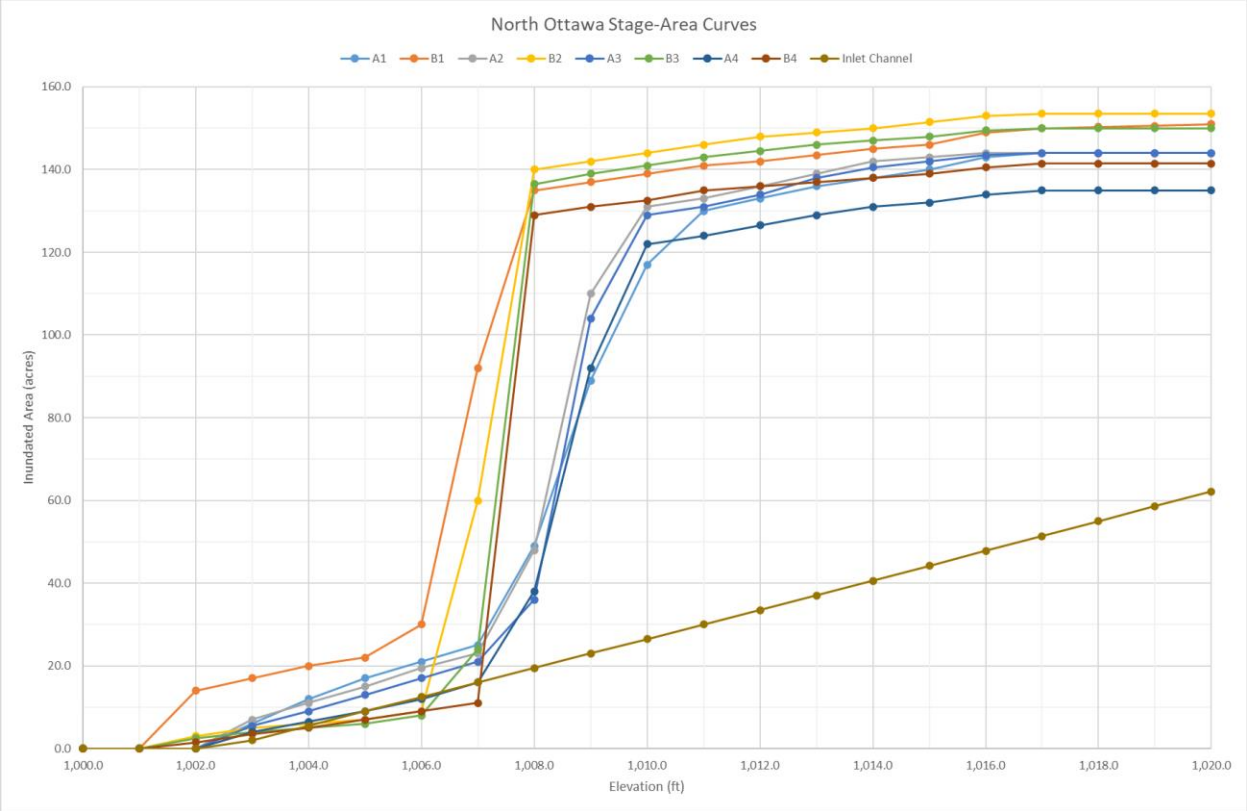


Figure 6. Stage-area curves for the impoundment cells (Moore Engineering)

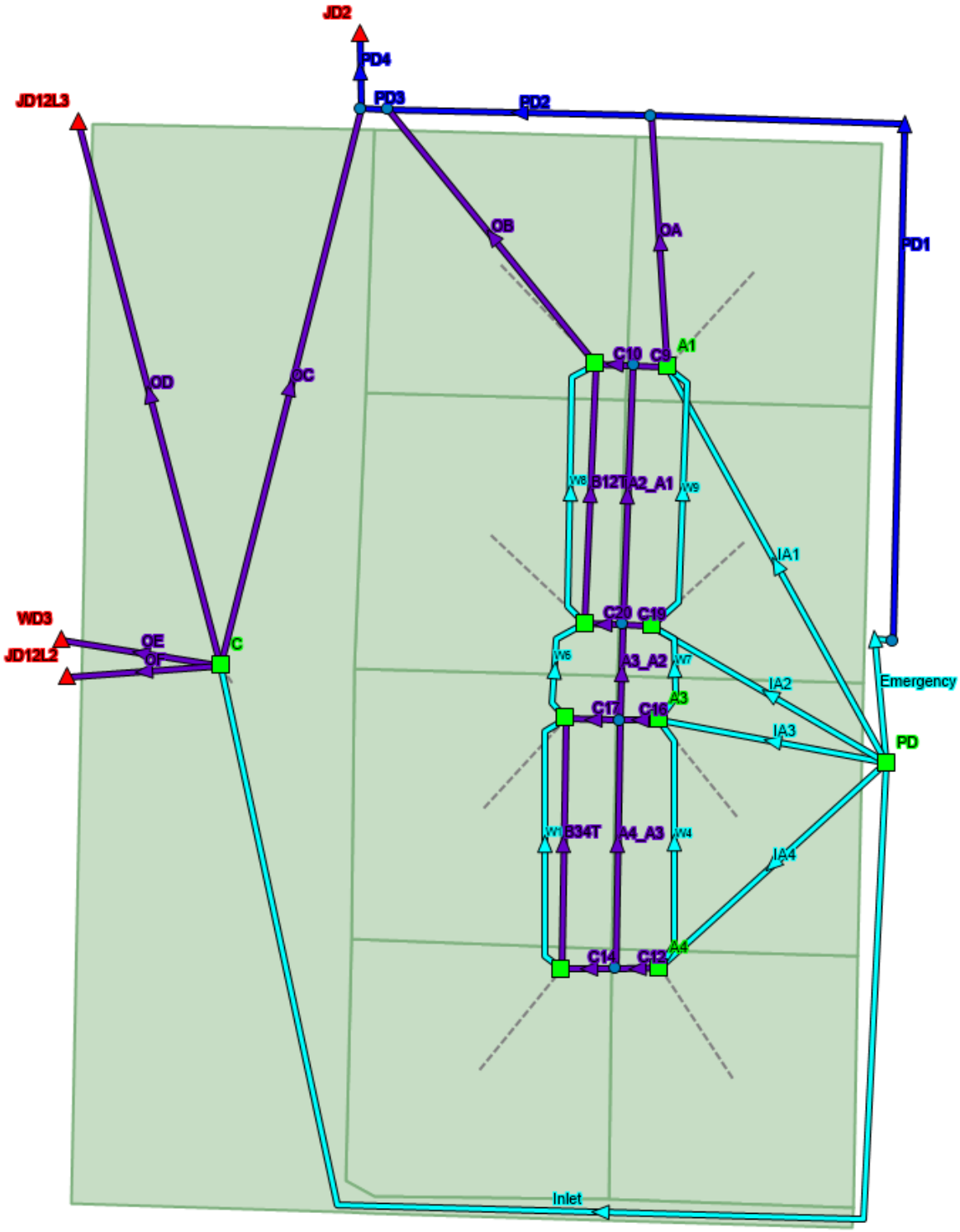


Figure 7. PCSWMM model schematic

APPENDIX B – MODELING ASSESSMENT

Simulation Results

Using the stage-area curves provided by Moore Engineering (which were also used to construct the SWMM model), the model results were summarized by analyzing the time during which water surface elevations exceeded the approximate lowest (Figure 8) and highest (Figure 9) farmable elevations within each cell. Inundation above the lowest farmable elevation indicates that at least some portion of the field was under water, while inundation above the highest farmable elevation indicates that the entire field was under water. Additionally, these figures show the total inundation hours during each month of the simulation.

Notably, in these figures in can be seen that the "sacrificial" cells (A4 & B4) are significantly more impacted by flood storage than the remainder of the cells. Under this configuration, cells A1 and B1 were never needed for flood storage and cell A2 was only needed for flood storage during the wettest year (2004). The implications of these results for crop growth and other purposes will be discussed in a later section.

As shown in Figure 10, the simple operational configuration used in this modeling exercise still allowed for favorable flood control during the wettest year, with outflow from cell C limited to periods when flows in the downstream ditch (JD2) were less than 100 cfs. Under a more actively managed operational configuration, it appears highly likely that the system can be optimized for both flood storage and other uses in the majority of cells.

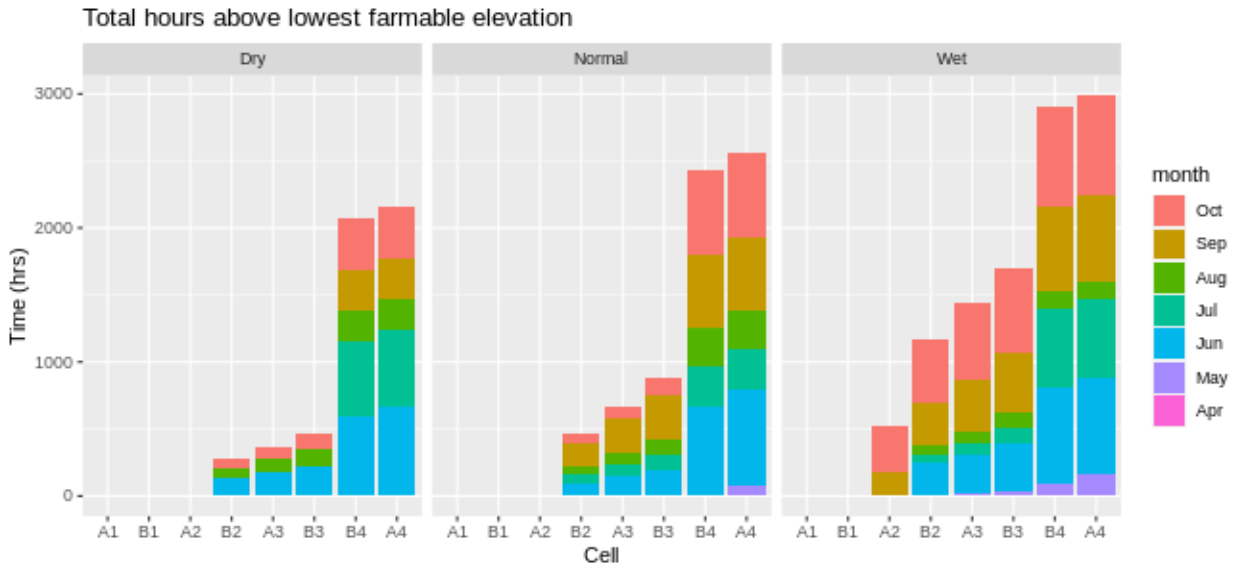


Figure 8. Total hours of simulated inundation above the lowest farmable elevation within each cell

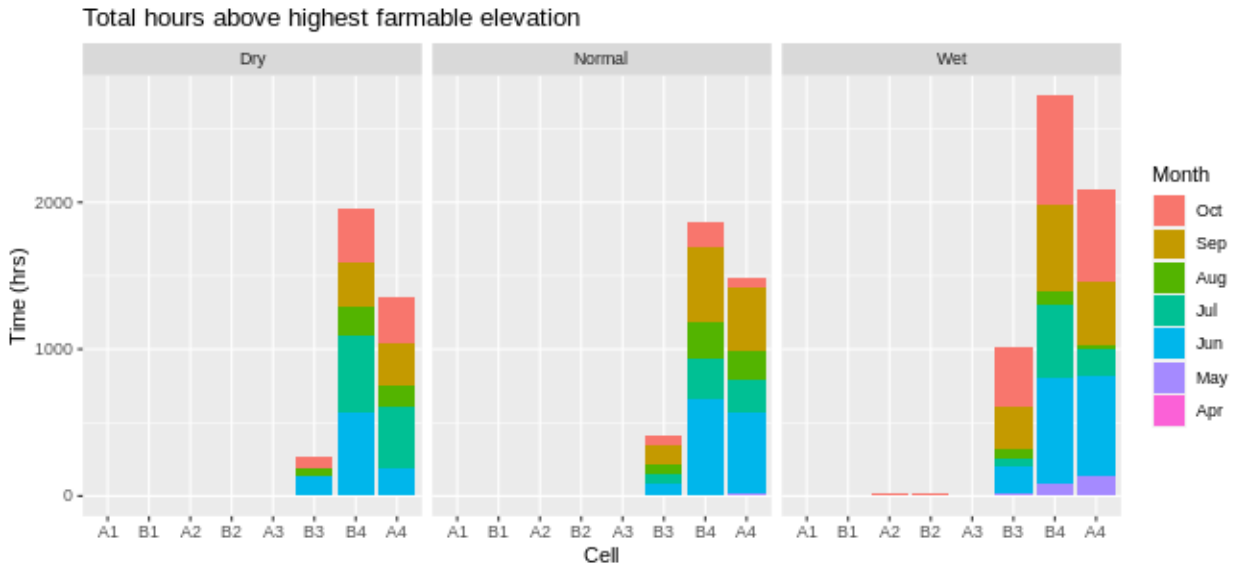


Figure 9. Total hours of simulated inundation above the highest farmable elevation within each cell

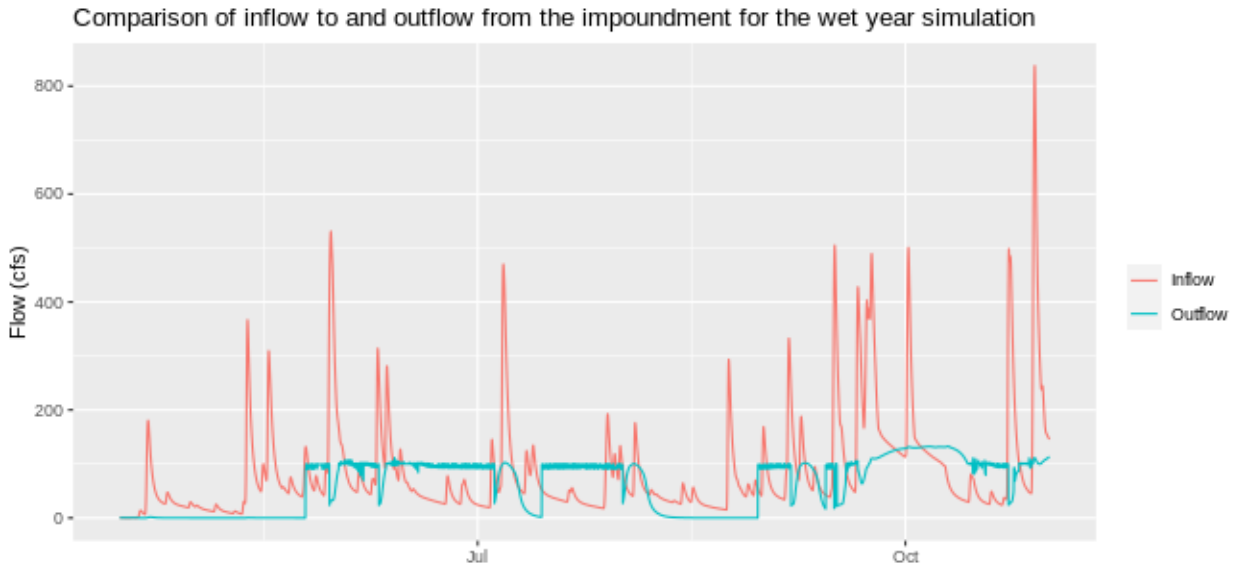


Figure 10. Comparison of inflow and outflow for the wet year (2004) simulation

Comparison with Observed Water Levels

As mentioned previously, water levels were continuously monitored during 2016 and 2017. These data were analyzed in a similar fashion to the simulated water level data, as shown in Figure 11 and Figure 12. While these observations are difficult to compare directly to the simulations since they occurred during different time periods and under different operations, the overall duration of cell inundation was close enough to the simulated results that no adjustments were made to either the SWMM or HEC-HMS models' hydrologic parameters.

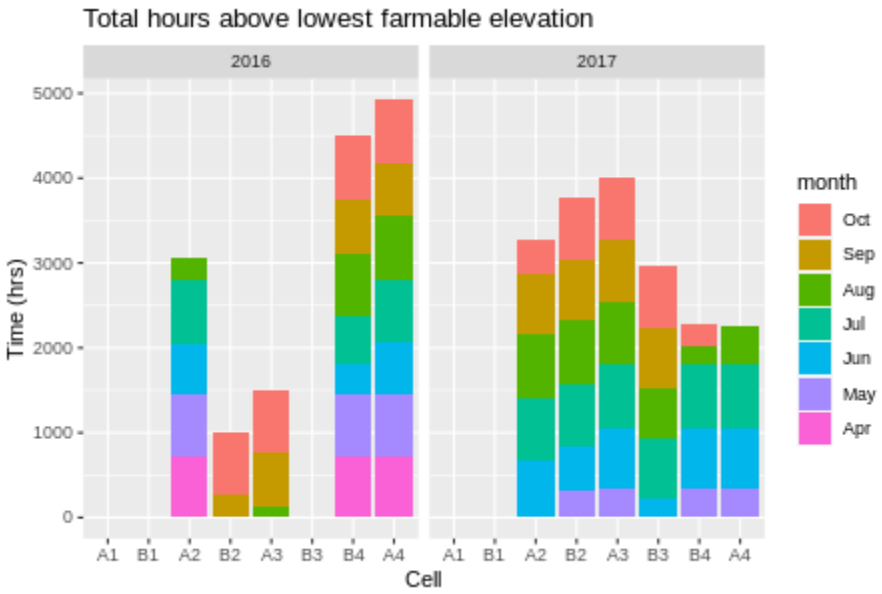


Figure 11. Total hours of observed inundation above the lowest farmable elevation within each cell

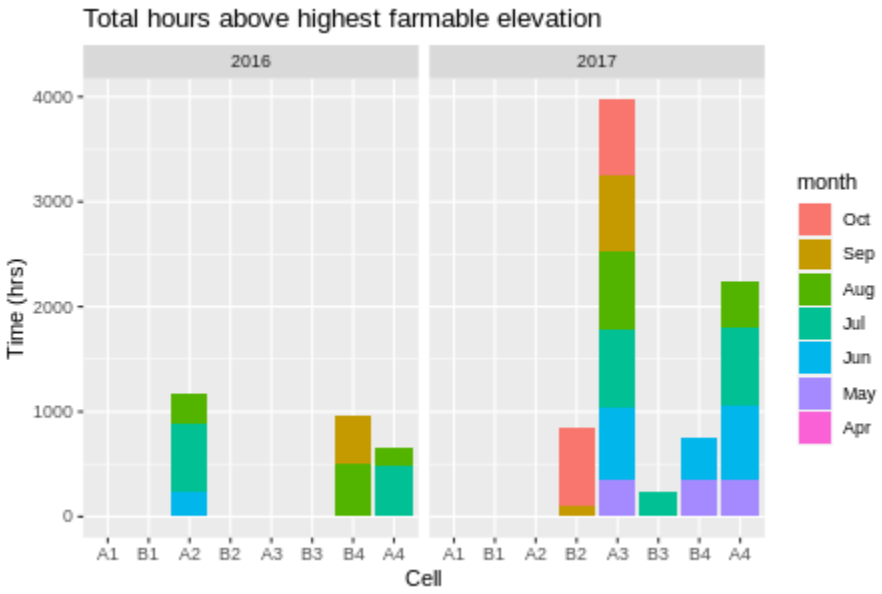


Figure 12. Total hours of observed inundation above the highest farmable elevation within each cell

Note the following regarding Observed Inundation (Figure 11 & Figure 12) – witnessed inundation was primarily driven by facility operation not precipitation.

APPENDIX C – OBSERVED SPRING DRAWDOWN [PROVIDED BY MOORE ENGINEERING]

As discussed previously, the winter through spring melt time periods were intentionally excluded from the runoff simulation model. This liberty was taken, in part, to remove impoundment operation variables, which greatly effect inundation and drawdown. Rather, the runoff simulation model was constructed to illustrate planting, growing season and harvest conditions (April thru November).

Clearly spring runoff and associated drawdown will have an impact on spring planting conditions and timing. The BdSWD & Moore Engineering have provided the following observations and survey data to characterize spring drawdowns witnessed to date.

The full impound buildout has been in operation since 2016. From 2016 to 2018, spring runoff reportedly did not exceed the minimum farmable elevations of all eight A & B cells. During that time period spring planting was unaffected by flood mitigation priorities or field conditions inside the impoundment mirrored conditions outside.

The first major spring runoff since the facility was operational, was witnessed in 2019. BdSWD staff and/or Moore Engineering staff completed limited water stage recordings to document the runoff event (Table 7). Measurements were not taken throughout the entire draw down so the exact date that the water level reached the lowest field elevation is unknown. Cells prioritized for cropping that year were drawn down within ideal planting timeframes, while not exceeding the established outlet threshold(s).

Table 7 – Observed Water Level Stage from Spring 2019 Flood Mitigation & Drawdown

CELL		INTENDED LAND USE	MAXIMUM WATER STAGE ELEVATION - DATE	LAST RECORDED WATER STAGE ELEVATION – DATE
ID	LOWEST FARMABLE FIELD ELEVATION			
A1	1007.2	Spring Flooding / Crop (Corn)	1013.9 – 4/9	1006.4 – 4/29
A2	1007.0	Spring Flooding / Crop (Corn)	1014.2 – 4/8	1008.0 – 4/29
A3	1006.6	Spring Flooding / Summer Tillage / Fall Flooding	1014.2 – 4/8	1008.3 – 4/29
A4	1006.9	Holding (Water)	1014.2 – 4/8	1012.0 – 4/25
B1	1004.4	Spring Flooding / Crop (Corn)	1013.5 - 4/8	1006.5 – 4/29
B2	1004.4	Spring Flooding / Crop (Corn)	1014.0 - 4/8	1007.5 – 4/29
B3	1006.7	Spring Flooding / Summer Tillage / Fall Flooding	1014.1 – 4/8	1008.8 – 4/29
B4	1006.2	Holding (Water)	1014.1 – 4/8	1011.0 – 4/25

APPENDIX D – SWMM CONTROL RULES

Rule A3_B3_Closed
If Node A3 head <= 1002
Then Conduit C16 status = Closed
And Conduit C17 status = Closed

Rule A3_B3_Open
If Node B3 head >= 1005
Then Conduit C16 status = Open
And Conduit C17 status = Open

Rule A4_B4_Closed
If Node B4 head <= 1001
Then Conduit C12 status = Closed
And Conduit C14 status = Closed

Rule A4_B4_Open
If Node A4 head >= 1012
Then Conduit C14 status = Open
And Conduit C12 status = Open

Rule B34T_Closed
If Node B3 head <= 1006
Or Node C head > 1012
Then Conduit B34T status = Closed

Rule B34T_Open
If Node B4 head >= 1010
OR Node C head < 1006
Then Conduit B34T status = Open

Rule OC_Closed
If Conduit PD4 flow > 100
OR Conduit Inlet flow > 5
Then Conduit OC status = Closed

Rule OC_Open
If Conduit PD4 flow < 5
Or Conduit Inlet flow < 5
Then Conduit OC status = Open

Rule OD
If Node C head >= 1015
Then Conduit OD status = Open
Else Conduit OD status = Closed

Rule OE
If Node C head >= 1015
Then Conduit OE status = Open
Else Conduit OE status = Closed

Rule OF
If Node C head >= 1015
Then Conduit OF status = Open
Else Conduit OF status = Closed

Rule PD_A1_Closed
If Node PD head <= 1008
Then Conduit IA1 status = Closed

Rule PD_A1_Open
If Node PD head >= 1015
Then Conduit IA1 status = Open

Rule PD_A2_Closed
If Node PD head <= 1008
Then Conduit IA2 status = Closed

Rule PD_A2_Open
If Node PD head >= 1015
Then Conduit IA2 status = Open

Rule PD_A3_Closed
If Node PD head <= 1008
Then Conduit IA3 status = Closed

Rule PD_A3_Open
If Node PD head >= 1014
Then Conduit IA3 status = Open

Rule PD_A4_Close
If Conduit B34T status = Open
Then Conduit IA4 status = Closed

Rule PD_A4_Open
If Node C head >= 1012
Then Conduit IA4 status = Open