

November 11, 2024

North Dakota Department of Environmental Quality
 Division of Water Quality
 918 East Divide Avenue
 Bismarck, ND 58501-1947

RE: October 2024 Devils Lake Outlets Monthly Discharge and Water Quality Report

Division of Water Quality:

The monthly discharge report for the Devils Lake Outlets for the month of October 2024 is enclosed. The East End Outlet discharge was reduced from 125 cubic feet per second (cfs) to 75 cfs on October 14th and was completely shut down on October 18th. The West End Outlet discharge remained at 200 cfs before it was completely shut down on October 22nd. Both outlets were shut down in October to comply with downstream water quality constraints.

The table below summarizes the average discharge rate and total discharge volume for the West and East End Outlets in October.

	Average Discharge Rate (cfs)	Total Discharge Volume (acre-feet)
West End Outlet	135	8,319
East End Outlet	68	4,159
Combined Total Discharge Volume (acre-ft)		12,477

The attached figures and tables contain daily outlet discharges measured from the flow meters and water quality results from samples collected from the outlets and the corresponding upstream and downstream locations. Also included are average daily stream flow data and conductivity data obtained from the USGS gaging stations located upstream and downstream of the outlets.

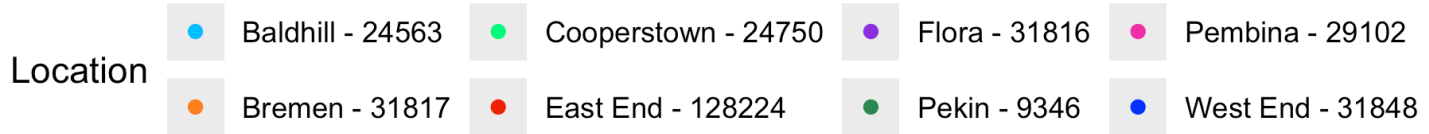
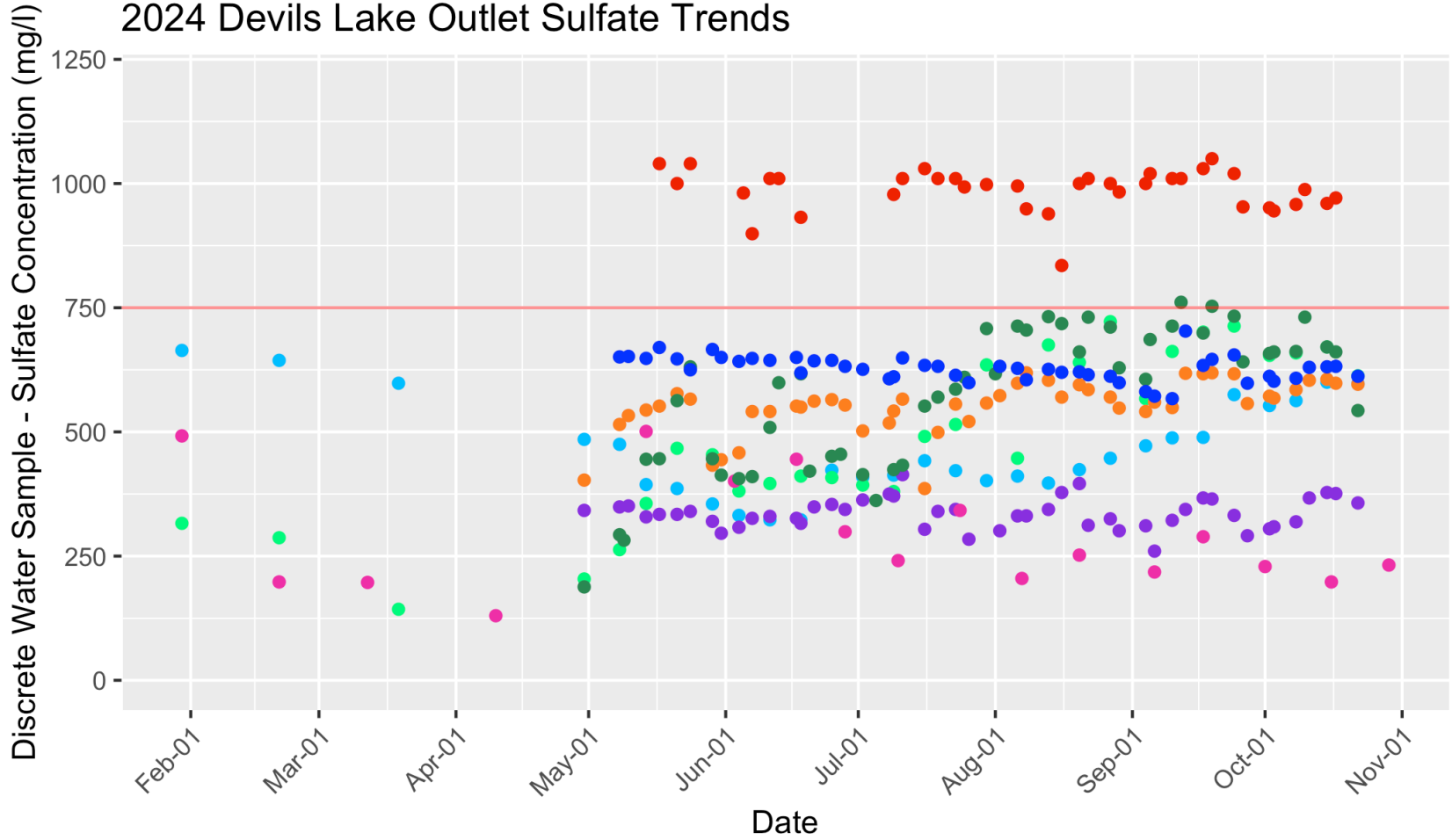
If you have any questions, please contact me at (701) 328-9049.

Sincerely,



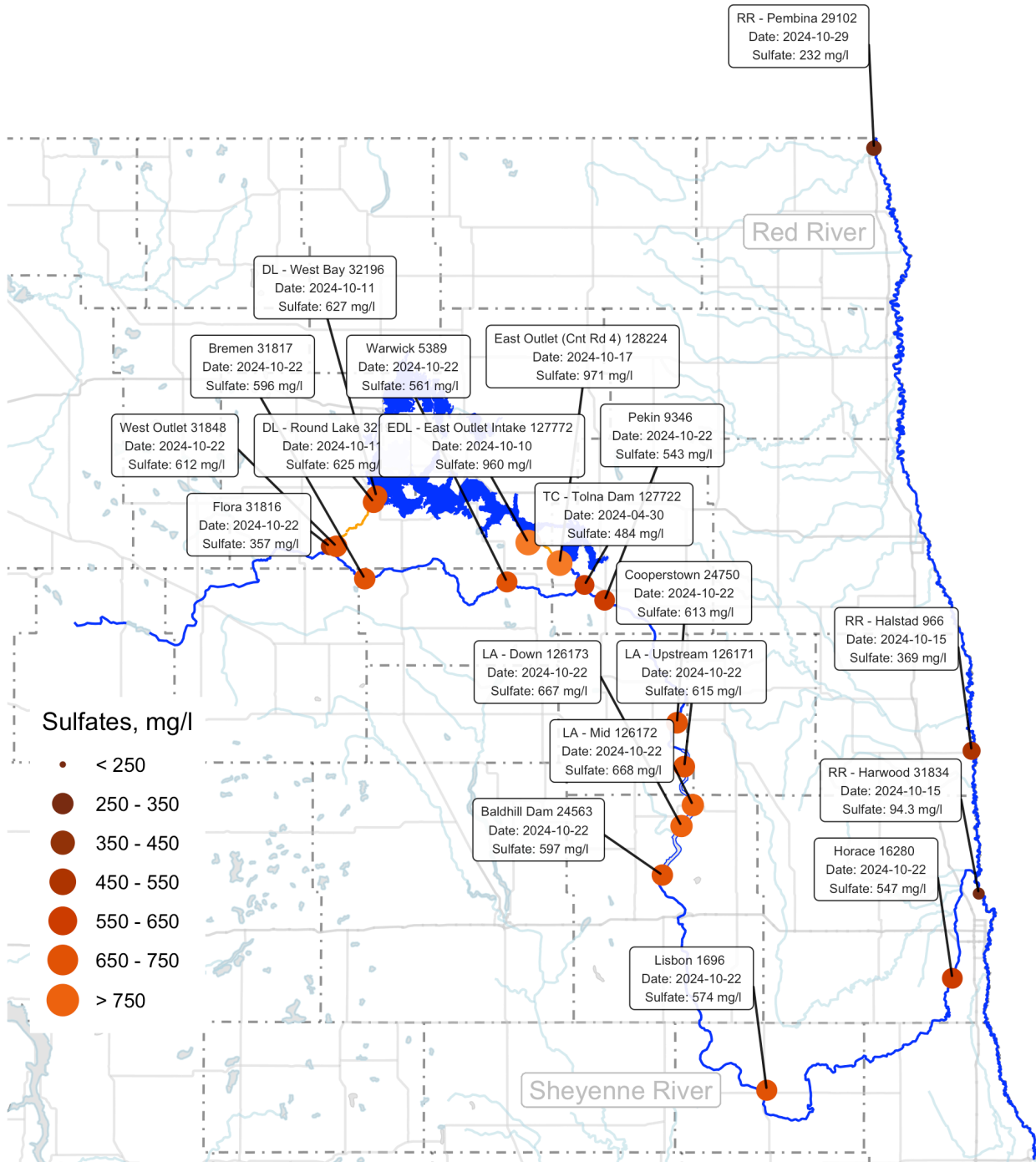
Yaping Chi, P.E.
 Water Resource Engineer, Water Development Division
 YC:/416-10
 Enclosure

2024 Devils Lake Outlet Sulfate Trends



Devils Lake Outlet Operations Sulfate Concentrations

10/31/24



OUTLET OPERATOR NAME/ADDRESS
 NAME: ND Dept. of Water Resources
 ADDRESS: 1200 Memorial Highway,
 Bismarck ND 58504

MONTHLY DISCHARGE REPORT

LOCATION: WEST END OUTLET

FACILITY: Devils Lake Outlet Project

MONITORING PERIOD	
START DATE	END DATE
10/1/24	10/31/24

LOCATION: Benson Co, ND

Devils Lake West Outlet 8319 ac-ft over 31 Days

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.68	8.86	8.74	SU	2 X Week	GRAB
SULFATE	602	632	618	mg/l	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	605	632	618	mg/L	Average	GRAB
OUTLET DISCHARGE	0	212	135	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>			11/7/24	701-328-9049	
NAME AND TITLE	YAPING CHI, WATER RESOURCES ENGINEER, WATER DEVELOPMENT DIVISION			DATE	TELEPHONE NUMBER	
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
A summary of individual sample results and flow data for both outlets, and upstream & downstream monitoring location is attached.						

Notes:

- ac-ft - Acre feet
- SU - Standard Units
- µS/cm - microsiemens per Centimeter at 25 degrees Celsius
- mg/L - milligrams per liter or parts per million
- cfs - cubic feet per second

OUTLET OPERATOR NAME/ADDRESS
 NAME: ND Dept. of Water Resources
 ADDRESS: 1200 Memorial Highway,
 Bismarck ND 58504

MONTHLY DISCHARGE REPORT

LOCATION: EAST END OUTLET

FACILITY: Devils Lake Outlet Project

MONITORING PERIOD	
START DATE	END DATE
10/1/24	10/31/24

LOCATION: Ramsey, Benson, Nelson Co, ND

Devils Lake East Outlet 4159 ac-ft over 31 Days

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.74	8.86	8.79	SU	2 X Week	GRAB
SPECIFIC CONDUCTANCE	2900	3000	2975	µS/cm	Continuous	Recorder
SULFATE	945	988	962	mg/L	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	948	974	961	mg/l	Average	GRAB
OUTLET DISCHARGE	0	151	68	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>			11/7/24	701-328-9049	
NAME AND TITLE	YAPING CHI, WATER RESOURCES ENGINEER, WATER DEVELOPMENT DIVISION			DATE	TELEPHONE NUMBER	

COMMENT AND EXPLANATION OF ANY VIOLATIONS

Notes:

- ac-ft - Acre feet
- SU - Standard Units
- µS/cm - microsiemens per Centimeter at 25 degrees Celsius
- mg/L - milligrams per liter or parts per million
- cfs - cubic feet per second

OUTLET OPERATOR NAME/ADDRESS
 NAME: ND Dept. of Water Resources
 ADDRESS: 1200 Memorial Highway,
 Bismarck ND 58504

MONTHLY DISCHARGE REPORT

LOCATION: UPSTREAM OF THE WEST END OUTLET (FLORA)

FACILITY: Devils Lake Outlet Project

LOCATION: Benson, ND

MONITORING PERIOD	
START DATE	END DATE
10/1/24	10/31/24

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.43	8.53	8.46	SU	2 X Week	GRAB
SPECIFIC CONDUCTANCE	1470	1710	1603	µS/cm	Continuous	Recorder
SULFATE	305	378	344	mg/L	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	305	377	341	mg/l	Average	GRAB
FLOW, INSTREAM	16	39	25	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>			11/7/24	701-328-9049	
NAME AND TITLE	YAPING CHI, WATER RESOURCES ENGINEER, WATER DEVELOPMENT DIVISION			DATE	TELEPHONE NUMBER	
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
A summary of individual sample results and flow data for both outlets, and upstream & downstream monitoring location is attached						

Notes:

- ac-ft - Acre feet
- SU - Standard Units
- µS/cm - microsiemens per Centimeter at 25 degrees Celsius
- mg/L - milligrams per liter or parts per million
- cfs - cubic feet per second

OUTLET OPERATOR NAME/ADDRESS
 NAME: ND Dept. of Water Resources
 ADDRESS: 1200 Memorial Highway,
 Bismarck ND 58504

MONTHLY DISCHARGE REPORT

**LOCATION: DOWNSTREAM OF THE WEST END OUTLET (BREMEN)
 UPSTREAM OF THE EAST END OUTLET**

FACILITY: Devils Lake Outlet Project

LOCATION: Eddy Co, ND

MONITORING PERIOD	
START DATE	END DATE
10/1/24	10/31/24

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.59	8.81	8.7	SU	2 X Week	GRAB
SPECIFIC CONDUCTANCE	2020	2050	2037	µS/cm	Continuous	Recorder
SULFATE	568	606	590	mg/L	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	570	605	588	mg/l	Average	GRAB
FLOW, INSTREAM	17	222	148	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>			11/7/24	701-328-9049	
NAME AND TITLE	YAPING CHI, WATER RESOURCES ENGINEER, WATER DEVELOPMENT DIVISION			DATE	TELEPHONE NUMBER	
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
A summary of individual sample results and flow data for both outlets, and upstream & downstream monitoring location is attached						

Notes:

- ac-ft - Acre feet
- SU - Standard Units
- µS/cm - microsiemens per Centimeter at 25 degrees Celsius
- mg/L - milligrams per liter or parts per million
- cfs - cubic feet per second

OUTLET OPERATOR NAME/ADDRESS
 NAME: ND Dept. of Water Resources
 ADDRESS: 1200 Memorial Highway,
 Bismarck ND 58504

MONTHLY DISCHARGE REPORT

LOCATION: DOWNSTREAM OF BOTH OUTLETS (PEKIN)

FACILITY: Devils Lake Outlet Project

LOCATION: Nelson Co, ND

MONITORING PERIOD	
START DATE	END DATE
10/1/24	10/31/24

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.56	8.72	8.63	SU	2 X Week	GRAB
SULFATE	543	731	655	mg/L	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	602	701	664	mg/L	Average	GRAB
FLOW, INSTREAM	NA	NA	NA	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>			11/7/24	701-328-9049	
NAME AND TITLE	YAPING CHI, WATER RESOURCES ENGINEER, WATER DEVELOPMENT DIVISION			DATE	TELEPHONE NUMBER	
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
A summary of individual sample results and flow data for both outlets, and upstream & downstream monitoring location is attached						

Notes:

- ac-ft - Acre feet
- SU - Standard Units
- µS/cm - microsiemens per Centimeter at 25 degrees Celsius
- mg/L - milligrams per liter or parts per million
- cfs - cubic feet per second
- NA - Not available

OUTLET OPERATOR NAME/ADDRESS
 NAME: ND Dept. of Water Resources
 ADDRESS: 1200 Memorial Highway,
 Bismarck ND 58504

MONTHLY DISCHARGE REPORT

LOCATION: DOWNSTREAM OF BOTH OUTLETS (COOPERSTOWN)

FACILITY: Devils Lake Outlet Project

MONITORING PERIOD	
START DATE	END DATE
10/1/24	10/31/24

LOCATION: Griggs Co, ND

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.55	8.59	8.57	SU	2 X Week	GRAB
SPECIFIC CONDUCTANCE	2110	2280	2220	µS/cm	Continuous	Recorder
SULFATE	613	671	649	mg/L	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	613	671	649	mg/l	Average	GRAB
FLOW, INSTREAM	130	424	329	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>			11/7/24	701-328-9049	
NAME AND TITLE	YAPING CHI, WATER RESOURCES ENGINEER, WATER DEVELOPMENT DIVISION			DATE	TELEPHONE NUMBER	
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
A summary of individual sample results and flow data for both outlets, and upstream & downstream monitoring location is attached						

Notes:

- ac-ft - Acre feet
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- µS/cm - microsiemens per Centimeter at 25 degrees Celsius
- mg/L - milligrams per liter or parts per million
- cfs - cubic feet per second

Date	Above West End Outlet - Sheyenne River near Flora		West End Outlet		Below West End Outlet/Above East End Outlet -Sheyenne River near Bremen		East End Outlet		Below East End Outlet - Tolna Coulee near Tolna		Below East End Outlet - Sheyenne River near Cooperstown		Sum of Outlets	
	Average Streamflow USGS Gage (cfs)	Average Specific Conductance USGS Gage (µS/cm)	Average Daily Outlet Discharge (cfs)	Total Daily Volume (ft3)	Average Streamflow USGS Gage (cfs)	Average Specific Conductance USGS Gage (µS/cm)	Average Daily Outlet Discharge (cfs)	Total Daily Volume (ft3)	Average Streamflow USGS Gage (cfs)	Average Specific Conductance USGS Gage (µS/cm)	Average Streamflow USGS Gage (cfs)	Average Specific Conductance USGS Gage (µS/cm)	Average Daily Outlet Discharge (cfs)	Total Daily Volume (ft3)
10/1/2024	39	1450	199	17178000	209	2000	145	12532000	137	2860	423	2220	344	29710000
10/2/2024	35	1470	201	17333000	216	2020	144	12428000	142	2900	424	2230	344	29761000
10/3/2024	35	1490	212	18296000	214	2030	138	11927000	137	2990	389	2250	350	30223000
10/4/2024	33	1510	204	17652000	222	2030	137	11825000	134	2980	402	2240	341	29477000
10/5/2024	30	1550	148	12762000	214	2030	61	5299000	73	2990	409	2230	209	18061000
10/6/2024	25	1550	137	11875000	144	2030	87	7548000	73	2970	399	2250	225	19423000
10/7/2024	28	1550	199	17213000	172	2050	145	12559000	141	3000	395	2260	345	29772000
10/8/2024	30	1580	191	16485000	205	2040	142	12249000	146	3000	358	2260	333	28734000
10/9/2024	34	1670	207	17886000	209	2020	151	13070000	153	3000	359	2240	358	30956000
10/10/2024	33	1680	205	17698000	-	-	145	12511000	142	2990	-	-	350	30209000
10/11/2024	30	1660	204	17614000	217	2030	141	12184000	140	2980	374	2250	345	29798000
10/12/2024	29	1670	208	17980000	218	2030	144	12405000	142	2970	374	2310	352	30385000
10/13/2024	28	1720	206	17807000	216	2040	139	12007000	138	3010	391	2350	345	29814000
10/14/2024	28	1720	204	17640000	217	2050	100	8632000	104	3010	404	2320	304	26272000
10/15/2024	28	1710	198	17076000	215	2050	81	7036000	78	2980	410	2280	279	24112000
10/16/2024	27	1700	201	17325000	212	2060	80	6915000	77	2970	406	2280	281	24240000
10/17/2024	27	1710	203	17498000	215	2040	83	7174000	79	2990	385	2270	286	24672000
10/18/2024	26	1720	199	17170000	217	2050	33	2849000	45	2940	368	2250	232	20019000
10/19/2024	26	1730	204	17593000	214	2040	0	0	5	2740	363	2170	204	17593000
10/20/2024	24	1740	202	17476000	216	2040	0	0	1	2710	366	2120	202	17476000
10/21/2024	23	-	197	17050000	210	2040	0	0	1	2500	340	2120	197	17050000
10/22/2024	-	-	67	5750000	181	2050	0	0	1	2090	315	2110	67	5750000
10/23/2024	17	1770	0	0	71	2070	0	0	1	-	303	2040	0	0
10/24/2024	16	1770	0	0	26	2070	0	0	1	-	298	1930	0	0
10/25/2024	17	1750	0	0	19	2060	0	0	1	-	292	1890	0	0
10/26/2024	17	1730	0	0	19	2030	0	0	1	-	286	1870	0	0
10/27/2024	17	1710	0	0	19	1990	0	0	1	-	270	1860	0	0
10/28/2024	17	1690	0	0	18	1910	0	0	1	-	227	1840	0	0
10/29/2024	17	1680	0	0	17	1870	0	0	1	-	179	1820	0	0
10/30/2024	17	-	0	0	18	-	0	0	1	-	149	1790	0	0
10/31/2024	17	1680	0	0	17	-	0	0	1	-	130	1760	0	0
Minimum	16	1450	0	0	17	1870	0	0	1	2090	130	1760	0	0
Maximum	39	1770	212	18296000	222	2070	151	13070000	153	3010	424	2350	363	31366000
Average	25	1599	135	11688935	148	1958	68	5843548	68	2764	329	2058	203	17532484
			Total (Mgal)	2710			Total (Mgal)	1355				Total (Mgal)	4065	
			Total (Ac-ft)	8319			Total (Ac-ft)	4159				Total (Ac-ft)	12477	

Notes:

- cfs - cubic feet per second
- µS/cm - Microsiemens per Centimeter at 25 degrees Celsius
- ft3 - cubic feet
- Mgal - Millions of Gallons
- Ac ft - Acre Feet
- USGS streamflow and specific conductance data are preliminary and courtesy of the USGS

**Sheyenne River Upstream of West End Outlet Near Flora
Monthly Water Quality Summary
Devils Lake Outlet Discharge Report**

Date	Time	Specific Conductance USGS Gage (µS/cm)	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	Number of samples included in 7-day Average
10/1/24	-	-	-	-	-	-	-
10/2/24	8:20:00	1470	8.47	305	305	24	1
10/3/24	9:35:00	1490	8.45	309	307	NA	2
10/4/24	-	-	-	-	-	-	-
10/5/24	-	-	-	-	-	-	-
10/6/24	-	-	-	-	-	-	-
10/7/24	-	-	-	-	-	-	-
10/8/24	8:00:00	1580	8.43	319	314	NA	2
10/9/24	-	-	-	-	-	-	-
10/10/24	-	-	-	-	-	-	-
10/11/24	8:55:00	1660	8.46	367	343	NA	2
10/12/24	-	-	-	-	-	-	-
10/13/24	-	-	-	-	-	-	-
10/14/24	-	-	-	-	-	-	-
10/15/24	8:10:00	1710	8.45	378	373	NA	2
10/16/24	-	-	-	-	-	-	-
10/17/24	12:05:00	1710	8.53	376	377	NA	2
10/18/24	-	-	-	-	-	-	-
10/19/24	-	-	-	-	-	-	-
10/20/24	-	-	-	-	-	-	-
10/21/24	-	-	-	-	-	-	-
10/22/24	8:40:00	-	8.44	357	367	NA	2
10/23/24	-	-	-	-	-	-	-
10/24/24	-	-	-	-	-	-	-
10/25/24	-	-	-	-	-	-	-
10/26/24	-	-	-	-	-	-	-
10/27/24	-	-	-	-	-	-	-
10/28/24	-	-	-	-	-	-	-
10/29/24	-	-	-	-	-	-	-
10/30/24	-	-	-	-	-	-	-
10/31/24	-	-	-	-	-	-	-
Minimum		1470	8.43	305	305	24	
Maximum		1710	8.53	378	377	24	
Average		1603	8.46	344	341	24	

Notes:

- µS/cm - microsiemens per Centimeter at 25 degrees Celsius
- mg/L - milligrams per liter or parts per million
- NA - Not analyzed
- USGS specific conductance data courtesy of the USGS
- USGS data are provisional and subject to revision

**West End Outlet
Monthly Water Quality Summary
Devils Lake Outlet Discharge Report**

Date	Time	Specific Conductance from Telemetry System (µS/cm)	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	Number of samples included in 7-day Average
10/1/24	-	-	-	-	-	-	-
10/2/24	8:30:00	-	8.72	612	612	22	1
10/3/24	9:25:00	-	8.78	602	607	NA	2
10/4/24	-	-	-	-	-	-	-
10/5/24	-	-	-	-	-	-	-
10/6/24	-	-	-	-	-	-	-
10/7/24	-	-	-	-	-	-	-
10/8/24	8:10:00	-	8.68	608	605	NA	2
10/9/24	-	-	-	-	-	-	-
10/10/24	-	-	-	-	-	-	-
10/11/24	8:45:00	-	8.78	630	619	NA	2
10/12/24	-	-	-	-	-	-	-
10/13/24	-	-	-	-	-	-	-
10/14/24	-	-	-	-	-	-	-
10/15/24	8:20:00	-	8.68	631	631	NA	2
10/16/24	-	-	-	-	-	-	-
10/17/24	12:15:00	-	8.86	632	632	NA	2
10/18/24	-	-	-	-	-	-	-
10/19/24	-	-	-	-	-	-	-
10/20/24	-	-	-	-	-	-	-
10/21/24	-	-	-	-	-	-	-
10/22/24	8:52:00	-	8.68	612	622	NA	2
10/23/24	-	-	-	-	-	-	-
10/24/24	-	-	-	-	-	-	-
10/25/24	-	-	-	-	-	-	-
10/26/24	-	-	-	-	-	-	-
10/27/24	-	-	-	-	-	-	-
10/28/24	-	-	-	-	-	-	-
10/29/24	-	-	-	-	-	-	-
10/30/24	-	-	-	-	-	-	-
10/31/24	-	-	-	-	-	-	-
Minimum			8.68	602	605	22	
Maximum			8.86	632	632	22	
Average			8.74	618	618	22	

Notes:

µS/cm - microsiemens per Centimeter at 25 degrees Celsius
mg/L - milligrams per liter or parts per million
NA - Not analyzed

Sheyenne River Downstream of West End Outlet/Upstream of East End Outlet (Bremen)
Monthly Water Quality Summary
Devils Lake Outlet Discharge Report

Date	Time	Specific Conductance USGS Gage (µS/cm)	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	Number of samples included in 7-day Average
10/1/24	-	-	-	-	-	-	-
10/2/24	8:00:00	2020	8.66	572	572	45	1
10/3/24	9:55:00	2030	8.79	568	570	NA	2
10/4/24	-	-	-	-	-	-	-
10/5/24	-	-	-	-	-	-	-
10/6/24	-	-	-	-	-	-	-
10/7/24	-	-	-	-	-	-	-
10/8/24	7:35:00	2040	8.63	585	577	NA	2
10/9/24	-	-	-	-	-	-	-
10/10/24	-	-	-	-	-	-	-
10/11/24	9:20:00	2030	8.74	604	595	NA	2
10/12/24	-	-	-	-	-	-	-
10/13/24	-	-	-	-	-	-	-
10/14/24	-	-	-	-	-	-	-
10/15/24	7:45:00	2050	8.65	606	605	NA	2
10/16/24	-	-	-	-	-	-	-
10/17/24	11:45:00	2040	8.81	598	602	NA	2
10/18/24	-	-	-	-	-	-	-
10/19/24	-	-	-	-	-	-	-
10/20/24	-	-	-	-	-	-	-
10/21/24	-	-	-	-	-	-	-
10/22/24	8:10:00	2050	8.59	596	597	NA	2
10/23/24	-	-	-	-	-	-	-
10/24/24	-	-	-	-	-	-	-
10/25/24	-	-	-	-	-	-	-
10/26/24	-	-	-	-	-	-	-
10/27/24	-	-	-	-	-	-	-
10/28/24	-	-	-	-	-	-	-
10/29/24	-	-	-	-	-	-	-
10/30/24	-	-	-	-	-	-	-
10/31/24	-	-	-	-	-	-	-
Minimum		2020	8.59	568	570	45	
Maximum		2050	8.81	606	605	45	
Average		2037	8.7	590	588	45	

Notes:

µS/cm - microsiemens per Centimeter at 25 degrees Celsius
mg/L - milligrams per liter or parts per million
NA - Not analyzed
USGS specific conductance data courtesy of the USGS
USGS data are provisional and subject to revision

**East End Outlet
Monthly Water Quality Summary
Devils Lake Outlet Discharge Report**

Date	Time	Specific Conductance USGS Gage (μ S/cm)	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	Number of samples included in 7- day Average
10/1/24	-	-	-	-	-	-	-
10/2/24	9:50:00	2900	8.76	951	951	32	1
10/3/24	11:15:00	2990	8.86	945	948	NA	2
10/4/24	-	-	-	-	-	-	-
10/5/24	-	-	-	-	-	-	-
10/6/24	-	-	-	-	-	-	-
10/7/24	-	-	-	-	-	-	-
10/8/24	9:30:00	3000	8.75	958	952	NA	2
10/9/24	-	-	-	-	-	-	-
10/10/24	9:35:00	2990	8.81	988	973	NA	2
10/11/24	-	-	-	-	-	-	-
10/12/24	-	-	-	-	-	-	-
10/13/24	-	-	-	-	-	-	-
10/14/24	-	-	-	-	-	-	-
10/15/24	9:30:00	2980	8.74	960	974	NA	2
10/16/24	-	-	-	-	-	-	-
10/17/24	10:25:00	2990	8.8	971	966	NA	2
10/18/24	-	-	-	-	-	-	-
10/19/24	-	-	-	-	-	-	-
10/20/24	-	-	-	-	-	-	-
10/21/24	-	-	-	-	-	-	-
10/22/24	-	-	-	-	-	-	-
10/23/24	-	-	-	-	-	-	-
10/24/24	-	-	-	-	-	-	-
10/25/24	-	-	-	-	-	-	-
10/26/24	-	-	-	-	-	-	-
10/27/24	-	-	-	-	-	-	-
10/28/24	-	-	-	-	-	-	-
10/29/24	-	-	-	-	-	-	-
10/30/24	-	-	-	-	-	-	-
10/31/24	-	-	-	-	-	-	-
Minimum		2900	8.74	945	948	32	
Maximum		3000	8.86	988	974	32	
Average		2975	8.79	962	961	32	

Notes:

μ S/cm - microsiemens per Centimeter at 25 degrees Celsius
mg/L - milligrams per liter or parts per million
NA - Not analyzed
USGS specific conductance data courtesy of the USGS
USGS data are provisional and subject to revision

**Sheyenne River Downstream of Both Outlets Near Pekin
Monthly Water Quality Summary
Devils Lake Outlet Discharge Report**

Date	Time	Specific Conductance Laboratory Analysis (µS/cm)	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	Number of samples included in 7-day Average
10/1/24	-	-	-	-	-	-	-
10/2/24	10:15:00	-	8.61	658	658	34	1
10/3/24	11:40:00	-	8.69	661	660	NA	2
10/4/24	-	-	-	-	-	-	-
10/5/24	-	-	-	-	-	-	-
10/6/24	-	-	-	-	-	-	-
10/7/24	-	-	-	-	-	-	-
10/8/24	9:50:00	-	8.58	662	662	NA	2
10/9/24	-	-	-	-	-	-	-
10/10/24	9:55:00	-	8.67	731	697	NA	2
10/11/24	-	-	-	-	-	-	-
10/12/24	-	-	-	-	-	-	-
10/13/24	-	-	-	-	-	-	-
10/14/24	-	-	-	-	-	-	-
10/15/24	10:05:00	-	8.6	671	701	NA	2
10/16/24	-	-	-	-	-	-	-
10/17/24	10:45:00	-	8.72	661	666	NA	2
10/18/24	-	-	-	-	-	-	-
10/19/24	-	-	-	-	-	-	-
10/20/24	-	-	-	-	-	-	-
10/21/24	-	-	-	-	-	-	-
10/22/24	10:10:00	-	8.56	543	602	NA	2
10/23/24	-	-	-	-	-	-	-
10/24/24	-	-	-	-	-	-	-
10/25/24	-	-	-	-	-	-	-
10/26/24	-	-	-	-	-	-	-
10/27/24	-	-	-	-	-	-	-
10/28/24	-	-	-	-	-	-	-
10/29/24	-	-	-	-	-	-	-
10/30/24	-	-	-	-	-	-	-
10/31/24	-	-	-	-	-	-	-
Minimum			8.56	543	602	34	
Maximum			8.72	731	701	34	
Average			8.63	655	664	34	

Notes:

µS/cm - microsiemens per Centimeter at 25 degrees Celsius
mg/L - milligrams per liter or parts per million
NA - Not analyzed

Sheyenne River Downstream of Both Outlets Near Cooperstown
Monthly Water Quality Summary
Devils Lake Outlet Discharge Report

Date	Time	Specific Conductance USGS Gage (μ S/cm)	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	Number of samples included in 7- day Average
10/1/24	-	-	-	-	-	-	-
10/2/24	11:05:00	2230	8.59	654	654	75	1
10/3/24	-	-	-	-	-	-	-
10/4/24	-	-	-	-	-	-	-
10/5/24	-	-	-	-	-	-	-
10/6/24	-	-	-	-	-	-	-
10/7/24	-	-	-	-	-	-	-
10/8/24	10:40:00	2260	8.55	659	659	NA	1
10/9/24	-	-	-	-	-	-	-
10/10/24	-	-	-	-	-	-	-
10/11/24	-	-	-	-	-	-	-
10/12/24	-	-	-	-	-	-	-
10/13/24	-	-	-	-	-	-	-
10/14/24	-	-	-	-	-	-	-
10/15/24	10:45:00	2280	8.58	671	671	NA	1
10/16/24	-	-	-	-	-	-	-
10/17/24	-	-	-	-	-	-	-
10/18/24	-	-	-	-	-	-	-
10/19/24	-	-	-	-	-	-	-
10/20/24	-	-	-	-	-	-	-
10/21/24	-	-	-	-	-	-	-
10/22/24	11:05:00	2110	8.57	613	613	NA	1
10/23/24	-	-	-	-	-	-	-
10/24/24	-	-	-	-	-	-	-
10/25/24	-	-	-	-	-	-	-
10/26/24	-	-	-	-	-	-	-
10/27/24	-	-	-	-	-	-	-
10/28/24	-	-	-	-	-	-	-
10/29/24	-	-	-	-	-	-	-
10/30/24	-	-	-	-	-	-	-
10/31/24	-	-	-	-	-	-	-
Minimum		2110	8.55	613	613	75	
Maximum		2280	8.59	671	671	75	
Average		2220	8.57	649	649	75	

Notes:

μ S/cm - microsiemens per Centimeter at 25 degrees Celsius
mg/L - milligrams per liter or parts per million
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