

June 26, 2023

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

RE: May 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 May 2024 is enclosed. The West End Outlet began discharging on May 6th at a rate of 200 cfs (cubic feet per second), and the East End Outlet began discharging on May 14th at a rate of 75 cfs. The discharges from both outlets were adjusted to comply with downstream water quantity constraint due to high flows on the Sheyenne River.

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

	Average Discharge Rate (cfs)	Total Discharge Volume (acre-feet)
West End Outlet	165	10,128
East End Outlet	58	3,570
Combined Total Discharge Volume (acre-ft)		13,698

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.

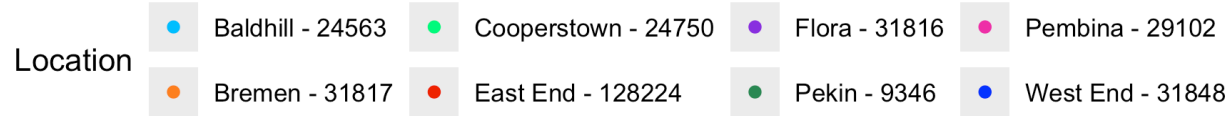
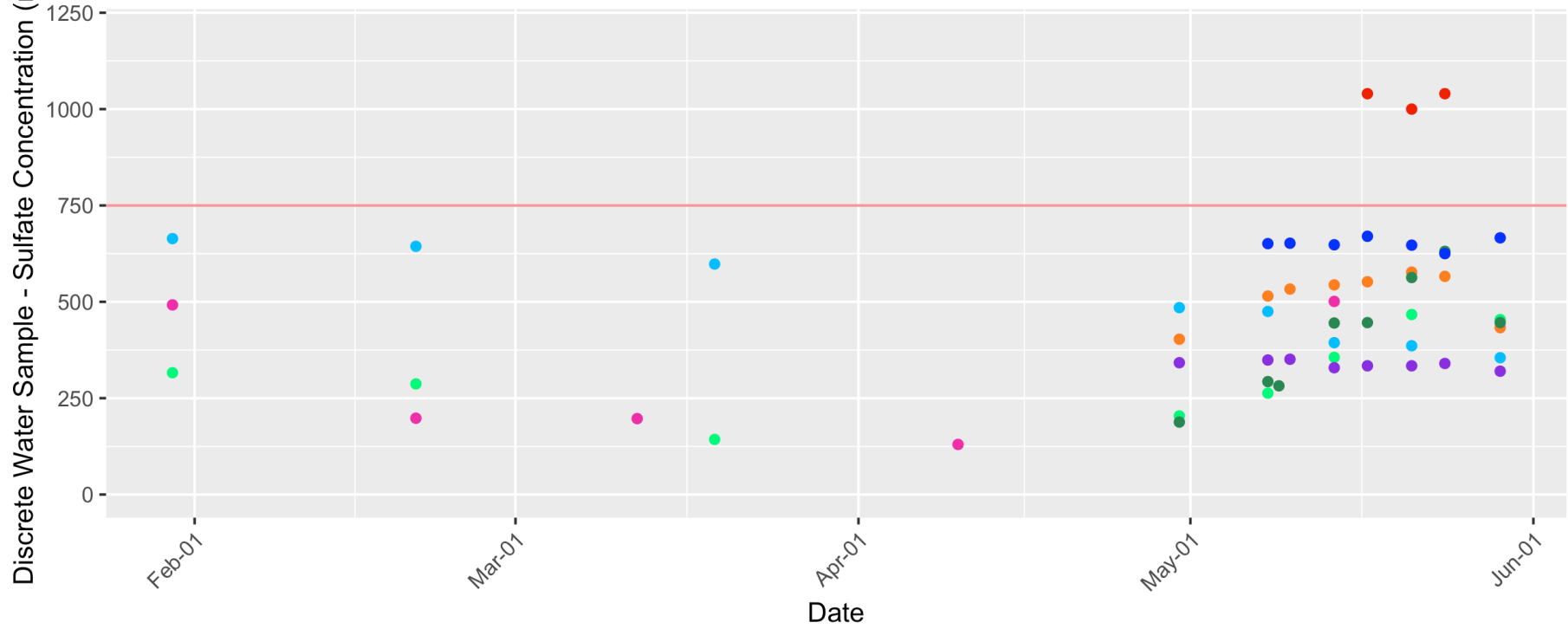
If you have any questions, please contact me at (701) 328-9049.

Sincerely,



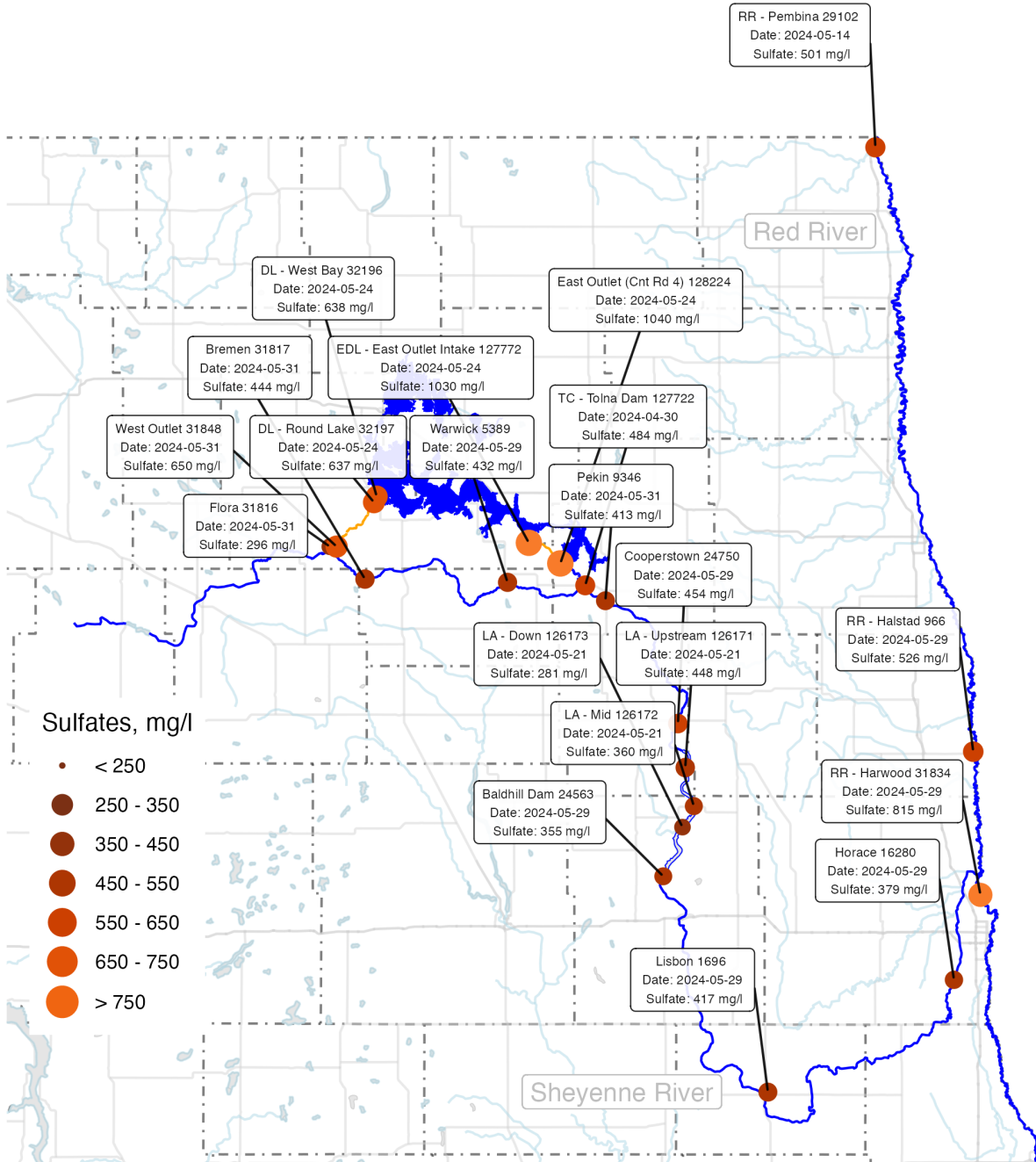
Yaping Chi, P.E.
 Water Resource Engineer, Water Development Division
 YC:/416-10
 Enclosure

2024 Devils Lake Outlet Sulfate Trends



Devils Lake Outlet Operations Preliminary Sulfate Concentrations

05/31/2024



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
5/1/24	5/31/24

LOCATION: Benson Co, ND

Devils Lake West Outlet 10128 ac-ft over 26 Days

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.48	8.61	8.55	SU	2 X Week	GRAB
SULFATE	625	670	651	mg/l	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	636	659	650	mg/L	Average	GRAB
OUTLET DISCHARGE	0	246	165	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>				701-328-9049	
NAME AND TITLE	YAPING CHI, WATER RESOURCES ENGINEER, WATER DEVELOPMENT DIVISION			6/5/24	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
- 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
5/1/24	5/31/24

LOCATION: Ramsey, Benson, Nelson Co, ND

Devils Lake East Outlet 3570 ac-ft over 12 Days

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.66	8.75	8.71	SU	2 X Week	GRAB
SPECIFIC CONDUCTANCE	2960	3000	2980	µS/cm	Continuous	Recorder
SULFATE	1000	1040	1027	mg/L	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	1020	1040	1027	mg/l	Average	GRAB
OUTLET DISCHARGE	0	221	58	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>			6/5/24	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
5/1/24	5/31/24

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.25	8.4	8.33	SU	2 X Week	GRAB
SPECIFIC CONDUCTANCE	1210	1480	1360	µS/cm	Continuous	Recorder
SULFATE	320	351	337	mg/L	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	330	350	339	mg/l	Average	GRAB
FLOW, INSTREAM	68	292	130	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>			6/5/24	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
5/1/24	5/31/24

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.34	8.55	8.47	SU	2 X Week	GRAB
SPECIFIC CONDUCTANCE	1520	1930	1799	µS/cm	Continuous	Recorder
SULFATE	433	577	531	mg/L	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	500	572	538	mg/l	Average	GRAB
FLOW, INSTREAM	88	525	282	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>			6/5/24	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
5/1/24	5/31/24

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.36	8.45	8.42	SU	2 X Week	GRAB
SULFATE	282	631	444	mg/L	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	288	597	433	mg/L	Average	GRAB
FLOW, INSTREAM	NA	NA	NA	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>				701-328-9049	
NAME AND TITLE	YAPING CHI, WATER RESOURCES ENGINEER, WATER DEVELOPMENT DIVISION			6/5/24	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
- 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
5/1/24	5/31/24

LOCATION: Griggs Co, ND

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.34	8.44	8.39	SU	2 X Week	GRAB
SPECIFIC CONDUCTANCE	1110	1660	1435	µS/cm	Continuous	Recorder
SULFATE	263	467	385	mg/L	2 X Week	GRAB
7 DAY AVERAGE OF SULFATE	263	467	385	mg/l	Average	GRAB
FLOW, INSTREAM	227	813	614	cfs	Continuous	Recorder
SIGNATURE	<i>Yaping Chi</i>			6/5/24	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

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 - Toina 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)
5/1/2024	70.2	1330	0	0	88.1	1550	0	0	5.85	899	227	1030	0	0
5/2/2024	82.9	1330	0	0	107	1530	0	0	14.3	980	282	1040	0	0
5/3/2024	97.9	1310	0	0	127	1540	0	0	7.44	888	420	1070	0	0
5/4/2024	105	1280	0	0	132	1540	0	0	3.53	904	576	1100	0	0
5/5/2024	100	1260	0	0	132	1540	0	0	2.29	938	666	1090	0	0
5/6/2024	104	1260	132	11402000	141	1510	0	0	1.93	993	676	1110	132	11402000
5/7/2024	127	1240	207	17865000	308	1760	0	0	7.39	939	663	1100	207	17865000
5/8/2024	147	1220	208	17993000	354	1770	0	0	3.76	928	640	1110	208	17993000
5/9/2024	153	1210	209	18064000	356	1770	0	0	2.21	974	618	1140	209	18064000
5/10/2024	150	1210	209	18090000	348	1760	0	0	1.72	990	600	1180	209	18090000
5/11/2024	139	1210	210	18108000	332	1760	0	0	1.4	1040	595	1200	210	18108000
5/12/2024	125	1200	210	18156000	319	1770	0	0	1.31	998	626	1220	210	18156000
5/13/2024	113	1190	210	18131000	308	1770	0	0	1.23	1010	638	1290	210	18131000
5/14/2024	103	-	210	18105000	299	1830	51.5	4450000	45.6	2980	622	1320	261	22555000
5/15/2024	91.8	1450	209	18099000	288	1850	133	11512000	131	2990	595	1460	343	29611000
5/16/2024	83.4	1460	210	18105000	274	1860	166	14374000	177	2990	566	1510	376	32479000
5/17/2024	78.6	1470	209	18092000	269	1870	166	14344000	177	-	566	1520	375	32436000
5/18/2024	74.7	1470	208	17986000	255	1880	165	14277000	178	2990	617	1520	373	32263000
5/19/2024	71.2	1470	210	18128000	250	1890	164	14209000	175	2990	661	1520	374	32337000
5/20/2024	71.8	1470	233	20121000	254	1890	165	14217000	174	3000	674	1570	397	34338000
5/21/2024	75.1	1480	246	21258000	278	1930	164	14161000	174	3000	666	1650	410	35419000
5/22/2024	70.1	1500	246	21262000	283	1920	198	17064000	205	3010	658	1790	444	38326000
5/23/2024	67.6	1500	246	21282000	290	1940	221	19079000	246	3000	640	1770	467	40361000
5/24/2024	128	1480	245	21140000	368	1910	168	14493000	223	2960	643	1760	412	35633000
5/25/2024	275	1320	244	21081000	467	1730	38.5	3329000	49.5	2920	701	1800	283	24410000
5/26/2024	292	1170	163	14047000	525	1610	0	0	2.68	2630	770	1870	163	14047000
5/27/2024	263	1200	127	10958000	442	1520	0	0	3.28	1850	813	1870	127	10958000
5/28/2024	243	1250	127	10946000	387	1480	0	0	2.34	1260	812	1840	127	10946000
5/29/2024	225	1300	126	10927000	358	1520	0	0	1.7	1210	798	1660	126	10927000
5/30/2024	220	1310	126	10916000	343	1560	0	0	1.79	1180	800	1530	126	10916000
5/31/2024	213	1310	127	10933000	328	1550	0	0	1.55	1110	803	1540	127	10933000
Minimum	67.6	1170	0	0	88.1	1480	0	0	1.2	888	227	1030	0	0
Maximum	292	1500	246	21282000	525	1940	221	19079000	246	3010	813	1870	467	40361000
Average	130	1286	165	14232097	282	1665.9375	58.1	5016419	63.2	1760	614	1381	223	19248516
			Total (Mgal)	3300			Total (Mgal)	1163				Total (Mgal)	4463	
			Total (Ac-ft)	10128			Total (Ac-ft)	3570				Total (Ac-ft)	13698	

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 (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
5/1/24	-	-	-	-	-	-	-
5/2/24	-	-	-	-	-	-	-
5/3/24	-	-	-	-	-	-	-
5/4/24	-	-	-	-	-	-	-
5/5/24	-	-	-	-	-	-	-
5/6/24	-	-	-	-	-	-	-
5/7/24	-	-	-	-	-	-	-
5/8/24	8:15:00	1220	8.4	349	349	NA	1
5/9/24	-	-	-	-	-	-	-
5/10/24	9:15:00	1210	8.25	351	350	NA	2
5/11/24	-	-	-	-	-	-	-
5/12/24	-	-	-	-	-	-	-
5/13/24	-	-	-	-	-	-	-
5/14/24	8:00:00	-	8.38	329	340	52	2
5/15/24	-	-	-	-	-	-	-
5/16/24	-	-	-	-	-	-	-
5/17/24	9:35:00	1470	8.3	334	332	NA	2
5/18/24	-	-	-	-	-	-	-
5/19/24	-	-	-	-	-	-	-
5/20/24	-	-	-	-	-	-	-
5/21/24	8:00:00	1480	8.29	334	334	NA	2
5/22/24	-	-	-	-	-	-	-
5/23/24	-	-	-	-	-	-	-
5/24/24	9:20:00	1480	8.35	340	337	NA	2
5/25/24	-	-	-	-	-	-	-
5/26/24	-	-	-	-	-	-	-
5/27/24	-	-	-	-	-	-	-
5/28/24	-	-	-	-	-	-	-
5/29/24	7:47:00	1300	-	320	330	NA	2
5/30/24	-	-	-	-	-	-	-
5/31/24	-	-	-	-	-	-	-
Minimum		1210	8.25	320	330	52	
Maximum		1480	8.4	351	350	52	
Average		1360	8.33	337	339	52	

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

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

Date	Time	Specific Conductance from Telemetry System ($\mu\text{S}/\text{cm}$)	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
5/1/24	-	-	-	-	-	-	-
5/2/24	-	-	-	-	-	-	-
5/3/24	-	-	-	-	-	-	-
5/4/24	-	-	-	-	-	-	-
5/5/24	-	-	-	-	-	-	-
5/6/24	-	-	-	-	-	-	-
5/7/24	-	-	-	-	-	-	-
5/8/24	8:25:00	-	8.54	651	651	29	1
5/9/24	-	-	-	-	-	-	-
5/10/24	9:00:00	-	8.51	652	652	NA	2
5/11/24	-	-	-	-	-	-	-
5/12/24	-	-	-	-	-	-	-
5/13/24	-	-	-	-	-	-	-
5/14/24	8:14:00	-	8.55	648	650	11	2
5/15/24	-	-	-	-	-	-	-
5/16/24	-	-	-	-	-	-	-
5/17/24	9:55:00	-	8.61	670	659	NA	2
5/18/24	-	-	-	-	-	-	-
5/19/24	-	-	-	-	-	-	-
5/20/24	-	-	-	-	-	-	-
5/21/24	8:10:00	-	8.48	647	659	NA	2
5/22/24	-	-	-	-	-	-	-
5/23/24	-	-	-	-	-	-	-
5/24/24	9:35:00	-	8.59	625	636	NA	2
5/25/24	-	-	-	-	-	-	-
5/26/24	-	-	-	-	-	-	-
5/27/24	-	-	-	-	-	-	-
5/28/24	-	-	-	-	-	-	-
5/29/24	8:00:00	-	-	666	646	NA	2
5/30/24	-	-	-	-	-	-	-
5/31/24	-	-	-	-	-	-	-
Minimum			8.48	625	636	11	
Maximum			8.61	670	659	29	
Average			8.55	651	650	20	

Notes:

$\mu\text{S}/\text{cm}$ - 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 (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
5/1/24	-	-	-	-	-	-	-
5/2/24	-	-	-	-	-	-	-
5/3/24	-	-	-	-	-	-	-
5/4/24	-	-	-	-	-	-	-
5/5/24	-	-	-	-	-	-	-
5/6/24	-	-	-	-	-	-	-
5/7/24	-	-	-	-	-	-	-
5/8/24	7:35:00	1770	8.43	515	515	NA	1
5/9/24	-	-	-	-	-	-	-
5/10/24	9:40:00	1760	8.34	533	524	NA	2
5/11/24	-	-	-	-	-	-	-
5/12/24	-	-	-	-	-	-	-
5/13/24	-	-	-	-	-	-	-
5/14/24	7:35:00	1830	8.49	544	539	33	2
5/15/24	-	-	-	-	-	-	-
5/16/24	-	-	-	-	-	-	-
5/17/24	9:15:00	1870	8.52	552	548	NA	2
5/18/24	-	-	-	-	-	-	-
5/19/24	-	-	-	-	-	-	-
5/20/24	-	-	-	-	-	-	-
5/21/24	7:32:00	1930	8.5	577	565	NA	2
5/22/24	-	-	-	-	-	-	-
5/23/24	-	-	-	-	-	-	-
5/24/24	9:00:00	1910	8.55	566	572	NA	2
5/25/24	-	-	-	-	-	-	-
5/26/24	-	-	-	-	-	-	-
5/27/24	-	-	-	-	-	-	-
5/28/24	-	-	-	-	-	-	-
5/29/24	7:21:00	1520	-	433	500	NA	2
5/30/24	-	-	-	-	-	-	-
5/31/24	-	-	-	-	-	-	-
Minimum		1520	8.34	433	500	33	
Maximum		1930	8.55	577	572	33	
Average		1799	8.47	531	538	33	

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

**East End Outlet
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
5/1/24	-	-	-	-	-	-	-
5/2/24	-	-	-	-	-	-	-
5/3/24	-	-	-	-	-	-	-
5/4/24	-	-	-	-	-	-	-
5/5/24	-	-	-	-	-	-	-
5/6/24	-	-	-	-	-	-	-
5/7/24	-	-	-	-	-	-	-
5/8/24	-	-	-	-	-	-	-
5/9/24	-	-	-	-	-	-	-
5/10/24	-	-	-	-	-	-	-
5/11/24	-	-	-	-	-	-	-
5/12/24	-	-	-	-	-	-	-
5/13/24	-	-	-	-	-	-	-
5/14/24	-	-	-	-	-	-	-
5/15/24	-	-	-	-	-	-	-
5/16/24	-	-	-	-	-	-	-
5/17/24	7:40:00	-	8.75	1040	1040	NA	1
5/18/24	-	-	-	-	-	-	-
5/19/24	-	-	-	-	-	-	-
5/20/24	-	-	-	-	-	-	-
5/21/24	9:25:00	3000	8.66	1000	1020	NA	2
5/22/24	-	-	-	-	-	-	-
5/23/24	-	-	-	-	-	-	-
5/24/24	7:20:00	2960	8.73	1040	1020	NA	2
5/25/24	-	-	-	-	-	-	-
5/26/24	-	-	-	-	-	-	-
5/27/24	-	-	-	-	-	-	-
5/28/24	-	-	-	-	-	-	-
5/29/24	-	-	-	-	-	-	-
5/30/24	-	-	-	-	-	-	-
5/31/24	-	-	-	-	-	-	-
Minimum		2960	8.66	1000	1020		
Maximum		3000	8.75	1040	1040	NA	
Average		2980	8.71	1027	1027	0	

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

**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
5/1/24	-	-	-	-	-	-	-
5/2/24	-	-	-	-	-	-	-
5/3/24	-	-	-	-	-	-	-
5/4/24	-	-	-	-	-	-	-
5/5/24	-	-	-	-	-	-	-
5/6/24	-	-	-	-	-	-	-
5/7/24	-	-	-	-	-	-	-
5/8/24	9:50:00	-	8.41	293	293	NA	1
5/9/24	12:30:00	-	8.39	282	288	NA	2
5/10/24	-	-	-	-	-	-	-
5/11/24	-	-	-	-	-	-	-
5/12/24	-	-	-	-	-	-	-
5/13/24	-	-	-	-	-	-	-
5/14/24	9:40:00	-	8.44	445	364	50	2
5/15/24	-	-	-	-	-	-	-
5/16/24	-	-	-	-	-	-	-
5/17/24	7:10:00	-	8.44	446	446	NA	2
5/18/24	-	-	-	-	-	-	-
5/19/24	-	-	-	-	-	-	-
5/20/24	-	-	-	-	-	-	-
5/21/24	10:00:00	-	8.36	563	505	NA	2
5/22/24	-	-	-	-	-	-	-
5/23/24	-	-	-	-	-	-	-
5/24/24	7:50:00	-	8.45	631	597	NA	2
5/25/24	-	-	-	-	-	-	-
5/26/24	-	-	-	-	-	-	-
5/27/24	-	-	-	-	-	-	-
5/28/24	-	-	-	-	-	-	-
5/29/24	9:30:00	-	-	446	539	NA	2
5/30/24	-	-	-	-	-	-	-
5/31/24	-	-	-	-	-	-	-
Minimum			8.36	282	288	50	
Maximum			8.45	631	597	50	
Average			8.42	444	433	50	

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
5/1/24	-	-	-	-	-	-	-
5/2/24	-	-	-	-	-	-	-
5/3/24	-	-	-	-	-	-	-
5/4/24	-	-	-	-	-	-	-
5/5/24	-	-	-	-	-	-	-
5/6/24	-	-	-	-	-	-	-
5/7/24	-	-	-	-	-	-	-
5/8/24	10:45:00	1110	8.4	263	263	NA	1
5/9/24	-	-	-	-	-	-	-
5/10/24	-	-	-	-	-	-	-
5/11/24	-	-	-	-	-	-	-
5/12/24	-	-	-	-	-	-	-
5/13/24	-	-	-	-	-	-	-
5/14/24	10:35:00	1320	8.44	356	356	168	1
5/15/24	-	-	-	-	-	-	-
5/16/24	-	-	-	-	-	-	-
5/17/24	-	-	-	-	-	-	-
5/18/24	-	-	-	-	-	-	-
5/19/24	-	-	-	-	-	-	-
5/20/24	-	-	-	-	-	-	-
5/21/24	10:45:00	1650	8.34	467	467	NA	1
5/22/24	-	-	-	-	-	-	-
5/23/24	-	-	-	-	-	-	-
5/24/24	-	-	-	-	-	-	-
5/25/24	-	-	-	-	-	-	-
5/26/24	-	-	-	-	-	-	-
5/27/24	-	-	-	-	-	-	-
5/28/24	-	-	-	-	-	-	-
5/29/24	10:20:00	1660	-	454	454	NA	1
5/30/24	-	-	-	-	-	-	-
5/31/24	-	-	-	-	-	-	-
Minimum		1110	8.34	263	263	168	
Maximum		1660	8.44	467	467	168	
Average		1435	8.39	385	385	168	

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