



North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
701-328-2750 • TTY 800-366-6888 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

WATER DEVELOPMENT DIVISION
(701) 328-2752

August 24, 2015

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

RE: July 2015 Devils Lake Outlets Monthly Discharge and Water Quality Report

Dear Division of Water Quality:

Enclosed are the monthly discharge reports for the Devils Lake Outlets for the month of July 2015. Discharges from the West and East outlets were limited due to maintenance. A graph of the outlet discharges, streamflows, conductance, and preliminary sulfate sample results is shown in **Figure 1**.

The attached tables contain average daily outlet discharges 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) 328-4948.

Sincerely,

Jonathan Kelsch P.E.
Section Chief of Construction

JK:MW/416-10
Enclosure

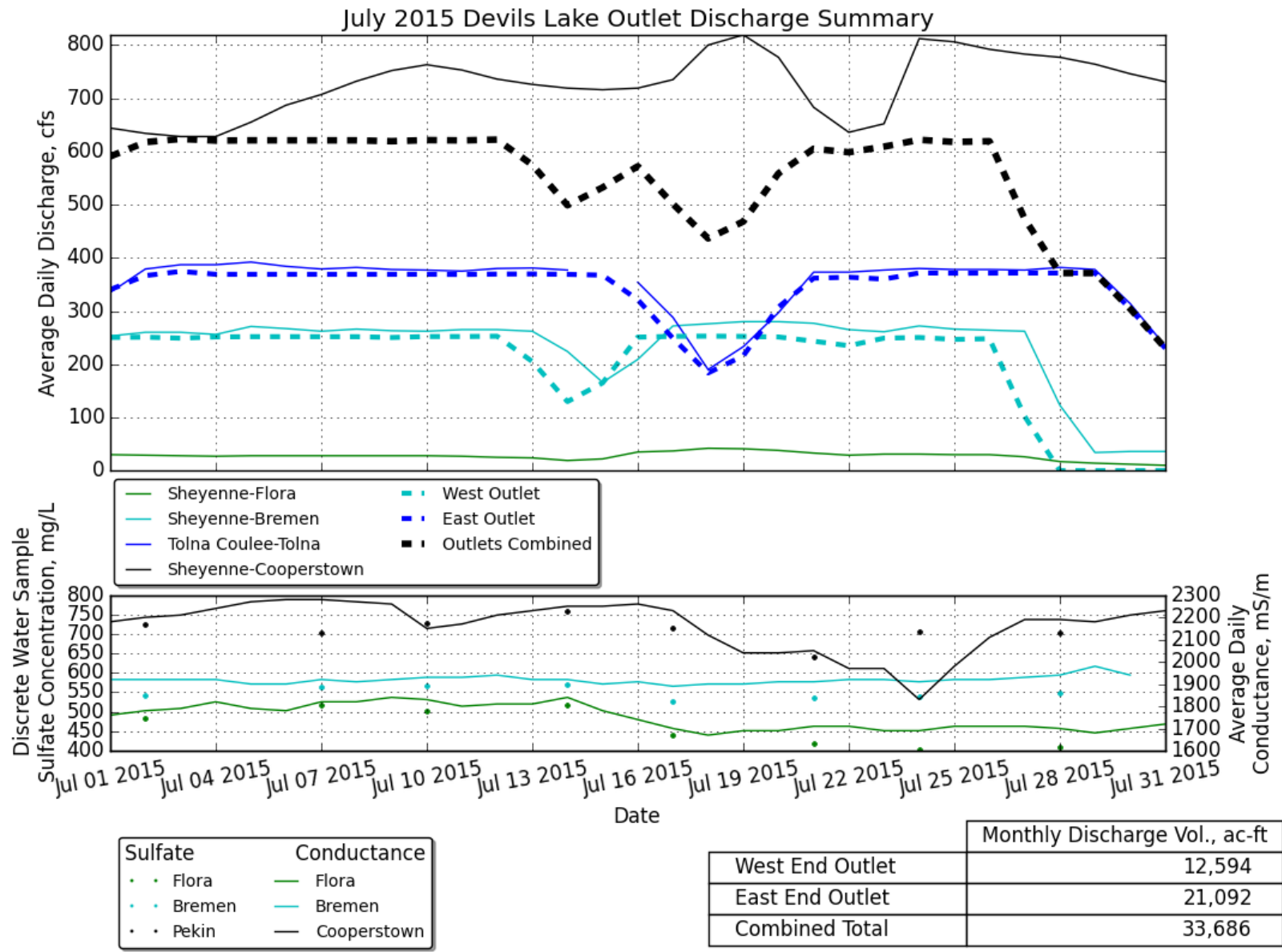


Figure 1: Devils Lake Outlet Discharge Summary

OUTLET OPERATOR NAME/ADDRESS

NAME: ND State Water Commission
 ADDRESS: 900 E Boulevard Avenue,
 Bismarck ND 58505

MONTHLY DISCHARGE REPORT


LOCATION: WEST END OUTLET

FACILITY: Devils Lake Outlet Project

MONITORING PERIOD	
START DATE	END DATE
7/1/15	7/31/15

LOCATION: Benson Co, ND

Devils Lake West Outlet discharged 12,594 ac-ft over 27 Days

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.60	8.79	8.70	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	NA	NA	NA	µS/cm	Continuous	Recorder
SULFATE	538	564	558	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	549	565	559	mg/L	2 x Week	GRAB
OUTLET DISCHARGE	0	253	205	cfs	Continuous	Recorder
SIGNATURE				8/25/15	701-328-4948	
NAME AND TITLE	JONATHAN KELSCH, HEAD, CONSTRUCTION SECTION			DATE	TELEPHONE NUMBER	

COMMENT AND EXPLANATION OF ANY VIOLATIONS

Summary of individual sample results and flow data for outlet, upstream & downstream monitoring locations 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 State Water Commission
 ADDRESS: 900 E Boulevard Avenue,
 Bismarck ND 58505

MONTHLY DISCHARGE REPORT


LOCATION: EAST END OUTLET

FACILITY: Devils Lake Outlet Project

LOCATION: Ramsey, Benson, Nelson, ND

MONITORING PERIOD	
START DATE	END DATE
7/1/15	7/31/15

Devils Lake East Outlet discharged 21,092 ac-ft over 31 Days

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.74	8.85	8.81	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	NA	NA	NA	µS/cm	Continuous	Recorder
SULFATE	917	975	937	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	920	965	939	mg/L	2 x Week	GRAB
OUTLET DISCHARGE	184	375	343	cfs	Continuous	Recorder
SIGNATURE				8/25/15	701-328-4948	
NAME AND TITLE	JONATHAN KELSCH, HEAD, CONSTRUCTION SECTION			DATE	TELEPHONE NUMBER	
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
Summary of individual sample results and flow data for outlet, upstream & downstream monitoring locations 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 State Water Commission
 ADDRESS: 900 E Boulevard Avenue,
 Bismarck ND 58505


MONTHLY DISCHARGE REPORT

LOCATION: UPSTREAM OF THE WEST END OUTLET (FLORA)

FACILITY: Devils Lake Outlet Project

LOCATION: Benson Co, ND

MONITORING PERIOD	
START DATE	END DATE
7/1/15	7/31/15

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.46	8.67	8.53	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	1,670	1,840	1,751	µS/cm	Continuous	Recorder
SULFATE	403	518	461	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	406	510	462	mg/L	2 x Week	GRAB
FLOW, INSTREAM	10	42	28	cfs	Continuous	Recorder
SIGNATURE				8/25/15	701-328-4948	
NAME AND TITLE	JONATHAN KELSCH, HEAD, CONSTRUCTION SECTION			DATE	TELEPHONE NUMBER	
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
Summary of individual sample results and flow data for outlet, upstream & downstream monitoring locations attached.						

Notes:

- 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
- USGS streamflow and specific conductance data courtesy of the USGS
- USGS data are provisional and subject to revision

OUTLET OPERATOR NAME/ADDRESS

NAME: ND State Water Commission
 ADDRESS: 900 E Boulevard Avenue,
 Bismarck ND 58505


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
7/1/15	7/31/15

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.51	8.78	8.67	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	1,890	1,980	1,919	µS/cm	Continuous	Recorder
SULFATE	526	570	549	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	531	569	549	mg/L	2 x Week	GRAB
FLOW, INSTREAM	34	280	233	cfs	Continuous	Recorder
SIGNATURE				8/25/15	701-328-4948	
NAME AND TITLE				JONATHAN KELSCH, HEAD, CONSTRUCTION SECTION		
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
Summary of individual sample results and flow data for outlet, upstream & downstream monitoring locations attached.						

Notes:

- 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
- USGS streamflow and specific conductance data courtesy of the USGS
- USGS data are provisional and subject to revision

OUTLET OPERATOR NAME/ADDRESS

NAME: ND State Water Commission
 ADDRESS: 900 E Boulevard Avenue,
 Bismarck ND 58505


MONTHLY DISCHARGE REPORT

LOCATION: DOWNSTREAM OF THE EAST END OUTLET (PEKIN)

FACILITY: Devils Lake Outlet Project

LOCATION: Nelson Co, ND

MONITORING PERIOD	
START DATE	END DATE
7/1/15	7/31/15

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.52	8.66	8.60	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	NA	NA	NA	µS/cm	Continuous	Recorder
SULFATE	640	760	710	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	674	744	709	mg/L	2 x Week	GRAB
FLOW, INSTREAM	NA	NA	NA	cfs	Continuous	Recorder
SIGNATURE				8/25/15	701-328-4948	
NAME AND TITLE				JONATHAN KELSCH, HEAD, CONSTRUCTION SECTION		
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
<p>Summary of individual sample results and flow data for outlet, upstream & downstream monitoring locations attached.</p>						

Notes:

- 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

**Daily Outlet Discharge and Upstream and Downstream Flows
Devils Lake Outlets**

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)
7/1/15	30	1,760	250	21,630,000	253	1,920	340	29,401,000	335	2,920	644	2,180	591	51,031,000
7/2/15	29	1,780	251	21,678,000	260	1,920	367	31,669,000	379	2,920	634	2,200	617	53,347,000
7/3/15	28	1,790	249	21,509,000	260	1,920	375	32,357,000	387	2,910	628	2,210	623	53,866,000
7/4/15	27	1,820	251	21,719,000	256	1,920	369	31,887,000	387	2,920	628	2,240	620	53,606,000
7/5/15	28	1,790	252	21,760,000	271	1,900	369	31,887,000	392	2,860	655	2,270	621	53,647,000
7/6/15	28	1,780	252	21,761,000	267	1,900	369	31,887,000	384	2,900	687	2,280	621	53,648,000
7/7/15	28	1,820	252	21,756,000	262	1,920	369	31,887,000	379	2,880	707	2,280	621	53,643,000
7/8/15	28	1,820	252	21,754,000	266	1,910	369	31,887,000	382	2,870	732	2,270	621	53,641,000
7/9/15	28	1,840	250	21,621,000	263	1,920	369	31,887,000	378	2,850	752	2,260	619	53,508,000
7/10/15	28	1,830	252	21,784,000	262	1,930	369	31,897,000	377	2,800	763	2,150	621	53,681,000
7/11/15	27	1,800	252	21,776,000	265	1,930	369	31,857,000	375	2,830	753	2,170	621	53,633,000
7/12/15	25	1,810	253	21,828,000	265	1,940	370	31,925,000	380	2,810	736	2,210	622	53,753,000
7/13/15	24	1,810	205	17,720,000	262	1,920	370	31,942,000	381	2,830	726	2,230	575	49,662,000
7/14/15	19	1,840	130	11,210,000	224	1,920	369	31,882,000	377	2,810	719	2,250	499	43,092,000
7/15/15	22	1,780	165	14,246,000	166	1,900	367	31,742,000	-	2,880	716	2,250	532	45,988,000
7/16/15	35	1,740	251	21,679,000	209	1,910	321	27,751,000	354	2,840	719	2,260	572	49,430,000
7/17/15	37	1,700	252	21,810,000	272	1,890	249	21,492,000	288	2,830	735	2,230	501	43,302,000
7/18/15	42	1,670	253	21,841,000	276	1,900	184	15,868,000	190	2,800	800	2,120	436	37,709,000
7/19/15	41	1,690	252	21,800,000	280	1,900	216	18,649,000	233	2,840	819	2,040	468	40,449,000
7/20/15	38	1,690	251	21,707,000	280	1,910	307	26,565,000	297	2,880	777	2,040	559	48,272,000
7/21/15	33	1,710	243	21,020,000	277	1,910	362	31,252,000	373	2,910	683	2,050	605	52,272,000
7/22/15	29	1,710	235	20,290,000	265	1,920	364	31,412,000	373	2,910	636	1,970	598	51,702,000
7/23/15	31	1,690	249	21,514,000	261	1,920	360	31,103,000	377	2,960	652	1,970	609	52,617,000
7/24/15	31	1,690	250	21,620,000	272	1,910	372	32,108,000	380	2,920	812	1,830	622	53,728,000
7/25/15	30	1,710	247	21,316,000	266	1,920	371	32,063,000	378	2,950	806	1,980	618	53,379,000
7/26/15	30	1,710	248	21,425,000	264	1,920	371	32,075,000	378	2,960	792	2,110	619	53,500,000
7/27/15	26	1,710	102	8,813,000	262	1,930	371	32,086,000	377	2,950	783	2,190	473	40,899,000
7/28/15	17	1,700	0	0	123	1,940	371	32,086,000	382	2,990	777	2,190	371	32,086,000
7/29/15	14	1,680	0	0	34	1,980	371	32,086,000	378	3,020	764	2,180	371	32,086,000
7/30/15	12	1,700	0	0	36	1,940	304	26,294,000	314	3,050	746	2,210	304	26,294,000
7/31/15	10	1,720	0	0	36	-	230	19,872,000	234	3,040	731	2,230	230	19,872,000
Minimum	10	1,670	0	0	34	1,890	184	15,868,000	190	2,800	628	1,830	230	19,872,000
Maximum	42	1,840	253	21,841,000	280	1,980	375	32,357,000	392	3,050	819	2,280	623	53,866,000
Average	28	1,751	205	17,696,355	233	1,919	343	29,637,290	353	2,898	726	2,163	548	47,333,645

Notes:	Total (Mgal)	4,103	Total (Mgal)	6,872	Total (Mgal)	10,976
	Total (Ac-ft)	12,594	Total (Ac-ft)	21,092	Total (Ac-ft)	33,686

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
NC - Not calculated



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)	No. of days included in the 7 day Rolling Average
7/1/15	-	-	-	-	-	-	-
7/2/15	8:50	1,770	8.54	484	455	NA	7
7/3/15	-	-	-	-	-	-	-
7/4/15	-	-	-	-	-	-	-
7/5/15	-	-	-	-	-	-	-
7/6/15	-	-	-	-	-	-	-
7/7/15	8:00	1,800	8.55	518	501	NA	7
7/8/15	-	-	-	-	-	-	-
7/9/15	-	-	-	-	-	-	-
7/10/15	10:15	1,830	8.67	501	510	NA	7
7/11/15	-	-	-	-	-	-	-
7/12/15	-	-	-	-	-	-	-
7/13/15	-	-	-	-	-	-	-
7/14/15	8:25	1,850	8.58	517	509	30	7
7/15/15	-	-	-	-	-	-	-
7/16/15	-	-	-	-	-	-	-
7/17/15	8:15	1,710	8.48	439	478	NA	7
7/18/15	-	-	-	-	-	-	-
7/19/15	-	-	-	-	-	-	-
7/20/15	-	-	-	-	-	-	-
7/21/15	7:56	1,710	8.48	418	429	NA	7
7/22/15	-	-	-	-	-	-	-
7/23/15	-	-	-	-	-	-	-
7/24/15	9:54	1,680	8.46	403	411	NA	7
7/25/15	-	-	-	-	-	-	-
7/26/15	-	-	-	-	-	-	-
7/27/15	-	-	-	-	-	-	-
7/28/15	8:00	1,700	8.47	409	406	48	7
7/29/15	-	-	-	-	-	-	-
7/30/15	-	-	-	-	-	-	-
7/31/15	-	-	-	-	-	-	-
Minimum		1,680	8.46	403	406	30	
Maximum		1,850	8.67	518	510	48	
Average		1,756	8.53	461	462	39	

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
Italic font denotes preliminary result

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

Date	Time	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	No. of days included in the 7 day Rolling Average
7/1/15	-	-	-	-	-	-
7/2/15	8:35	8.66	558	565	NA	7
7/3/15	-	-	-	-	-	-
7/4/15	-	-	-	-	-	-
7/5/15	-	-	-	-	-	-
7/6/15	-	-	-	-	-	-
7/7/15	8:10	8.60	564	561	NA	7
7/8/15	-	-	-	-	-	-
7/9/15	-	-	-	-	-	-
7/10/15	10:30	8.75	560	562	NA	7
7/11/15	-	-	-	-	-	-
7/12/15	-	-	-	-	-	-
7/13/15	-	-	-	-	-	-
7/14/15	8:35	8.70	538	549	11	7
7/15/15	-	-	-	-	-	-
7/16/15	-	-	-	-	-	-
7/17/15	8:25	8.74	560	549	NA	7
7/18/15	-	-	-	-	-	-
7/19/15	-	-	-	-	-	-
7/20/15	-	-	-	-	-	-
7/21/15	8:10	8.67	563	562	NA	7
7/22/15	-	-	-	-	-	-
7/23/15	-	-	-	-	-	-
7/24/15	9:40	8.79	562	563	NA	7
7/25/15	-	-	-	-	-	-
7/26/15	-	-	-	-	-	-
7/27/15	-	-	-	-	-	-
7/28/15	-	-	-	-	-	-
7/29/15	-	-	-	-	-	-
7/30/15	-	-	-	-	-	-
7/31/15	-	-	-	-	-	-
Minimum		8.60	538	549	11	
Maximum		8.79	564	565	11	
Average		8.70	558	559	11	

Notes:

mg/L - Milligrams per liter or parts per million
 NA - Not Analyzed
 Italic font denotes preliminary result

**Sheyenne River Downstream of West End Outlet/Upstream of East End Outlet near 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)	No. of days included in the 7 day Rolling Average
7/1/15	-	-	-	-	-	-	-
7/2/15	9:30	1,920	8.64	542	541	NA	7
7/3/15	-	-	-	-	-	-	-
7/4/15	-	-	-	-	-	-	-
7/5/15	-	-	-	-	-	-	-
7/6/15	-	-	-	-	-	-	-
7/7/15	7:35	1,860	8.51	564	553	NA	7
7/8/15	-	-	-	-	-	-	-
7/9/15	-	-	-	-	-	-	-
7/10/15	9:55	1,910	8.76	567	566	NA	7
7/11/15	-	-	-	-	-	-	-
7/12/15	-	-	-	-	-	-	-
7/13/15	-	-	-	-	-	-	-
7/14/15	8:00	1,910	8.66	570	569	96	7
7/15/15	-	-	-	-	-	-	-
7/16/15	-	-	-	-	-	-	-
7/17/15	7:50	1,880	8.68	526	548	NA	7
7/18/15	-	-	-	-	-	-	-
7/19/15	-	-	-	-	-	-	-
7/20/15	-	-	-	-	-	-	-
7/21/15	7:35	1,880	8.65	535	531	NA	7
7/22/15	-	-	-	-	-	-	-
7/23/15	-	-	-	-	-	-	-
7/24/15	10:20	1,870	8.78	540	538	NA	7
7/25/15	-	-	-	-	-	-	-
7/26/15	-	-	-	-	-	-	-
7/27/15	-	-	-	-	-	-	-
7/28/15	7:35	1,930	8.66	549	545	84	7
7/29/15	-	-	-	-	-	-	-
7/30/15	-	-	-	-	-	-	-
7/31/15	-	-	-	-	-	-	-
Minimum		1,860	8.51	526	531	84	
Maximum		1,930	8.78	570	569	96	
Average		1,895	8.67	549	549	90	

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
 Italic font denotes preliminary result

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

Date	Time	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	No. of days included in the 7 day Rolling Average
7/1/15	-	-	-	-	-	-
7/2/15	11:15	8.81	931	935	NA	7
7/3/15	-	-	-	-	-	-
7/4/15	-	-	-	-	-	-
7/5/15	-	-	-	-	-	-
7/6/15	-	-	-	-	-	-
7/7/15	9:18	8.78	937	934	NA	7
7/8/15	-	-	-	-	-	-
7/9/15	-	-	-	-	-	-
7/10/15	8:30	8.85	975	956	NA	7
7/11/15	-	-	-	-	-	-
7/12/15	-	-	-	-	-	-
7/13/15	-	-	-	-	-	-
7/14/15	9:50	8.82	955	965	16	7
7/15/15	-	-	-	-	-	-
7/16/15	-	-	-	-	-	-
7/17/15	12:15	8.84	919	937	NA	7
7/18/15	-	-	-	-	-	-
7/19/15	-	-	-	-	-	-
7/20/15	-	-	-	-	-	-
7/21/15	9:15	8.80	943	931	NA	7
7/22/15	-	-	-	-	-	-
7/23/15	-	-	-	-	-	-
7/24/15	12:10	8.82	922	933	NA	7
7/25/15	-	-	-	-	-	-
7/26/15	-	-	-	-	-	-
7/27/15	-	-	-	-	-	-
7/28/15	9:15	8.74	917	920	21	7
7/29/15	-	-	-	-	-	-
7/30/15	-	-	-	-	-	-
7/31/15	-	-	-	-	-	-
Minimum		8.74	917	920	16	
Maximum		8.85	975	965	21	
Average		8.81	937	939	19	

Notes:

mg/L - Milligrams per liter or parts per million
 NA - Not Analyzed due to operation constraints
 Italic font denotes preliminary result

**Sheyenne River Downstream of East End Outlet near Pekin
Monthly Water Quality Summary
Devils Lake Outlet Discharge Report**

Date	Time	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	No. of days included in the 7 day Rolling Average
7/1/15	-	-	-	-	-	-
7/2/15	10:40	8.53	725	708	NA	7
7/3/15	-	-	-	-	-	-
7/4/15	-	-	-	-	-	-
7/5/15	-	-	-	-	-	-
7/6/15	-	-	-	-	-	-
7/7/15	9:45	8.52	702	714	NA	7
7/8/15	-	-	-	-	-	-
7/9/15	-	-	-	-	-	-
7/10/15	8:05	8.64	727	715	NA	7
7/11/15	-	-	-	-	-	-
7/12/15	-	-	-	-	-	-
7/13/15	-	-	-	-	-	-
7/14/15	10:15	8.63	760	744	40	7
7/15/15	-	-	-	-	-	-
7/16/15	-	-	-	-	-	-
7/17/15	12:35	8.65	716	738	NA	7
7/18/15	-	-	-	-	-	-
7/19/15	-	-	-	-	-	-
7/20/15	-	-	-	-	-	-
7/21/15	9:45	8.54	640	678	NA	7
7/22/15	-	-	-	-	-	-
7/23/15	-	-	-	-	-	-
7/24/15	11:30	8.66	707	674	NA	7
7/25/15	-	-	-	-	-	-
7/26/15	-	-	-	-	-	-
7/27/15	-	-	-	-	-	-
7/28/15	9:40	8.61	704	706	22	7
7/29/15	-	-	-	-	-	-
7/30/15	-	-	-	-	-	-
7/31/15	-	-	-	-	-	-
Minimum		8.52	640	674	22	
Maximum		8.66	760	744	40	
Average		8.60	710	709	31	

Notes:

mg/L - Milligrams per liter or parts per million

NA - Not Analyzed

Italic font denotes preliminary result

Bold font denotes sample sulfate concentration exceeds 750 mg/L