

CHEMICAL DATA - Analytes tested for in a lab, 2005 - MVTL, New Ulm

PLC001 - Primary Lower Cottonwood River near New Ulm - Non-impacted stream/Western Corn Belt Plains

FLOW TYPE	SAMP TYPE	DATE	TIME	LAB SAMPLE ID #	FLOW (ft ³ /sec)	TSS MG/L	N-NO2+NO3 MG/L	P-PO4 MG/L	TP MG/L	FECAL COL. /100ML	TURBIDITY NTU
Base Flow	Grab	1/19/2005	11:45	05-A1502	21	5	6.69	0.027	0.027		3
Base Flow	Grab	2/17/2005	11:30	05-A4060	149	10	4.37	0.188	0.189		6
Base Flow	Grab	3/22/2005	13:45	05-A6825	138	12	2.64	0.030	0.031		7
Base Flow	Grab	3/31/2005	13:10	05-A8102	524	94	2.72	0.118	0.271		37
Storm Flow	Grab	4/13/2005	15:00	05-A9878	960	396	12.40	0.120	0.469		130
Storm Flow	Composite*	4/13/2005	15:05	05-A9879		3580	8.42	0.161	1.980		900
Storm Flow	Grab	4/14/2005	14:20	05-A10044	1,484	590	11.70	0.140	0.477		190
Storm Flow	Grab	4/19/2005	12:55	05-A10636	1,461	204	15.50	0.088	0.236		80
Storm Flow	Composite*	4/19/2005	13:00	05-A10637		2260	13.90	0.129	1.310		390
Base Flow	Grab	4/26/2005	14:30	05-A11670	658	55	12.40	0.049	0.108	110	18
Storm Flow	Grab	5/9/2005	14:30	05-A13853	1,223	336	12.80	0.175	0.291		130
Storm Flow	Composite*	5/9/2005	14:35	05-A13854		3670	12.30	0.200	2.060		1200
Storm Flow	Grab	5/11/2005	15:00	05-A14383	1,512	206	15.90	0.112	0.214		110
Storm Flow	Grab	5/16/2005	14:10	05-A14839	1,800	190	17.40	0.086	0.190		100
Storm Flow	Composite*	5/16/2005	14:20	05-A14840		2300	17.30	0.117	0.464		340
Storm Flow	Grab	5/18/2005	14:15	05-A15364	1,840	190	16.40	0.099	0.201		90
Base Flow	Grab	5/24/2005	14:15	05-A16170	1,244	132	17.20	0.097	0.188	200	37
Base Flow	Grab	6/8/2005	14:00	05-A18107	1,042	149	16.90	0.131	0.153	6000+	39
Storm Flow	Composite*	6/9/2005	13:15	05-A18347		4590	16.50	0.382	2.270		1300
Storm Flow	Grab	6/17/2005	12:00	05-A19506	1,178	149	17.90	0.117	0.155		39
Base Flow	Grab	6/27/2005	13:30	05-A20712	496	101	13.90	0.077	0.160	2700	33
Base Flow	Grab	6/27/2005	13:25	05-A20711	496	106	14.00	0.077	0.158		34
Base Flow	Grab	7/5/2005	14:00	05-A21729	341	57	9.46	0.019	0.079	560	22
Storm Flow	Grab	7/29/2005	14:45	05-A26139	472	142	5.58	0.064	0.163	640	80
Base Flow	Grab	8/24/2005	13:20	05-A29738	104	54	<0.2	0.012	0.105	300	19
Storm Flow	Grab	9/13/2005	15:05	05-A32139	219	136	0.33	0.028	0.190		90
Storm Flow	Grab	9/16/2005	13:45	05-A32873	669	220	7.74	0.135	0.276	4700	90
Storm Flow	Grab	9/27/2005	12:50	05-A34119	873	208	12.90	0.155	0.303		90
Base Flow	Grab	10/18/2005	13:10	05-A37524	589	41	12.60	0.062	0.108	110	22
Base Flow	Grab	11/21/2005	12:15	05-A43207	379	11	10.70	0.013	0.023		7
Base Flow	Grab	12/22/2005	12:00	05-A46578	376	8	14.20	0.063	0.098		8

*Composite samples weren't used to figure loads in 2005 as sampling intake was compromised; silted in

CHEMICAL DATA - Analytes tested for in a lab, 2005 - MVTL, New Ulm

PLC010 - Primary Lower Cottonwood River near Leavenworth - Non-impacted stream/Western Corn Belt Plains

SAMP		LAB SAMPLE			FLOW	TSS	N-NO2+NO3	P-PO4	TP	FECAL COL.	TURBIDITY
FLOW TYPE	TYPE	DATE	TIME	ID #	(ft ³ /sec)	MG/L	MG/L	MG/L	MG/L	/100ML	NTU
Base Flow	Grab	3/31/2005	12:00	05-A8100		55	3.03	0.109	0.215		21
Storm Flow	Grab	4/13/2005	13:20	05-A9876	815	232	6.91	0.070	0.320		80
Storm Flow	Grab	4/14/2005	13:20	05-A10042	1,076	280	11.30	0.104	0.327		110
Storm Flow	Grab	4/19/2005	11:30	05-A10634	942	142	12.20	0.067	0.320		30
Base Flow	Grab	4/26/2005	13:10	05-A11668	420	39	10.00	0.042	0.101	90	15
Storm Flow	Grab	5/9/2005	13:15	05-A13851	1,010	252	11.60	0.178	0.277		110
Storm Flow	Grab	5/11/2005	14:20	05-A14382	1,037	125	13.30	0.087	0.142		34
Storm Flow	Grab	5/16/2005	13:00	05-A14836	1,211	130	14.60	0.065	0.185		32
Storm Flow	Composite	5/16/2005	13:05	05-A14837	1,211	556	14.20	0.091	0.543		160
Storm Flow	Grab	5/18/2005	12:50	05-A15362	1,499	330	11.40	0.262	0.444		160
Base Flow	Grab	5/24/2005	12:50	05-A16168	826	72	14.00	0.081	0.179	150	30
Storm Flow	Grab	6/17/2005	11:00	05-A19505	749	224	14.50	0.103	0.209		90
Base Flow	Grab	6/28/2005	12:10	05-A20895	295	25	10.40	0.061	0.107	300	11
Storm Flow	Grab	7/29/2005	13:20	05-A26137	387	164	6.61	0.152	0.238	400	70
Base Flow	Grab	8/24/2005	12:15	05-A29736	52	43	2.45	0.012	0.110	550	15
Storm Flow	Grab	9/13/2005	13:55	05-A32137	143	111	4.35	0.051	0.199		34
Storm Flow	Grab	9/16/2005	12:25	05-A32871	357	140	6.43	0.125	0.237	2100	70
Storm Flow	Grab	9/27/2005	11:45	05-A34117	840	426	9.00	0.136	0.453		140
Base Flow	Grab	10/18/2005	12:20	05-A37523	376	33	9.53	0.061	0.113	120	18

Flow measured in Cubic Feet per second (ft³/sec)

CHEMICAL DATA - Analytes tested for in a lab, 2005 - MVTL, New Ulm

PLS005 - Primary Lower Sleepy Eye Creek near Cobden - Non-impacted stream/Western Corn Belt Plains

FLOW TYPE	SAMP		LAB SAMPLE		FLOW	TSS	N-NO2+NO3	P-PO4	TP	FECAL COL.	TURBIDITY
	TYPE	DATE	TIME	ID #	(ft ³ /sec)	MG/L	MG/L	MG/L	MG/L	/100ML	NTU
Base Flow	Grab	3/31/2005	12:20	05-A8101		4	4.09	0.083	0.133		6
Storm Flow	Grab	4/13/2005	13:50	05-A9877	275	66	19.20	0.094	0.176		22
Storm Flow	Grab	4/14/2005	13:40	05-A10043	229	30	20.20	0.079	0.111		10
Storm Flow	Grab	4/19/2005	12:10	05-A10635	245	31	21.50	0.069	0.111		10
Base Flow	Grab	4/26/2005	13:30	05-A11669	113	7	20.40	0.028	0.045	20	6
Storm Flow	Grab	5/9/2005	13:45	05-A13852	337	92	22.10	0.171	0.194		24
Storm Flow	Grab	5/11/2005	14:10	05-A14381	279	30	23.50	0.094	0.136		12
Storm Flow	Grab	5/16/2005	13:20	05-A14838	294	31	24.40	0.072	0.105		14
Storm Flow	Grab	5/18/2005	13:30	05-A15363	675	122	22.00	0.215	0.280		38
Base Flow	Grab	5/24/2005	13:20	05-A16169	236	37	26.10	0.085	0.126	91	14
Base Flow	Grab	6/8/2005	13:05	05-A18106	261	124	24.00	0.187	0.187	6000+	33
Base Flow	Grab	6/27/2005	12:30	05-A20710	109	33	21.30	0.097	0.131	1400	13
Base Flow	Grab	7/5/2005	13:15	05-A21728	58	18	17.10	0.038	0.074	1100	11
Base Flow	Grab	7/29/2005	13:55	05-A26138	25	14	3.08	0.078	0.094	220	8
Base Flow	Grab	8/24/2005	12:40	05-A29737	12	70	<0.2	0.023	0.224	3000	21
Base Flow	Grab	8/24/2005	12:40	05-A29739	12	72	<0.2	0.016	0.226		
Storm Flow	Grab	9/13/2005	14:15	05-A32138	123	104	2.24	0.160	0.242		32
Storm Flow	Grab	9/16/2005	12:50	05-A32872	167	34	15.30	0.181	0.187	14000	16
Storm Flow	Grab	9/27/2005	12:15	05-A34118	234	38	22.10	0.136	0.178		14
Base Flow	Grab	10/18/2005	11:55	05-A37522	128	5	19.90	0.061	0.068	91	7

Flow measured in Cubic Feet per second (ft³/sec)

CHEMICAL DATA - Analytes tested for in a lab, 2005 - MVTL, New Ulm

PMC020 - Primary Middle Cottonwood River near Lambertton - Non-impacted stream/Western Corn Belt Plains

FLOW TYPE	SAMP		LAB SAMPLE		FLOW	TSS	N-NO2+NO3	P-PO4	TP	FECAL COL.	TURBIDITY
	TYPE	DATE	TIME	ID #	(ft ³ /sec)	MG/L	MG/L	MG/L	MG/L	/100ML	NTU
Base Flow	Grab	3/31/05	11:10	05-A8099		13	2.54	0.066	0.136		10
Storm Flow	Grab	4/13/05	12:20	05-A9875	749	216	11.20	0.096	0.373		100
Storm Flow	Grab	4/14/05	12:25	05-A10041	684	156	11.50	0.095	0.252		35
Storm Flow	Grab	4/19/05	10:45	05-A10633	433	78	11.60	0.055	0.152		22
Base Flow	Grab	4/26/05	12:15	05-A11667	207	24	9.76	0.032	0.078	150	12
Storm Flow	Composite	5/9/05	12:00	05-A13849		220	8.46	0.141	0.239		110
Storm Flow	Grab	5/9/05	12:10	05-A13850	305	38	10.40	0.029	0.101		13
Storm Flow	Grab	5/11/05	11:30	05-A14380	340	34	11.20	0.030	0.090		14
Storm Flow	Grab	5/16/05	12:15	05-A14835	465	56	13.70	0.042	0.109		18
Storm Flow	Grab	5/18/05	12:00	05-A15360	511	140	12.80	0.131	0.198		80
Storm Flow	Composite	5/18/05	12:15	05-A15361		154	11.90	0.022	0.226		100
Base Flow	Grab	5/24/05	11:55	05-A16167	293	73	13.30	0.049	0.118	290	23
Storm Flow	Composite	6/9/05	11:20	05-A18346		164	12.50	0.035	0.171		37
Storm Flow	Composite	6/17/05	10:15	05-A19504		336	15.00	0.090	0.272		130
Base Flow	Grab	6/28/05	11:15	05-A20894	125	23	10.00	0.031	0.108	380	16
Base Flow	Grab	7/29/05	12:35	05-A26136	28	64	2.29	0.037	0.153	640	22
Base Flow	Grab	8/24/05	11:10	05-A29735	9	38	<0.2	0.011	0.105	450	15
Storm Flow	Grab	9/13/05	13:05	05-A32136	86	114	1.80	0.272	0.450		70
Storm Flow	Grab	9/14/05	12:40	05-A32327	220	128	1.12	0.140	0.181	6000	35
Storm Flow	Grab	9/16/05	11:40	05-A32879	148	66	5.39	0.182	0.232		26
Storm Flow	Grab	9/27/05	11:00	05-A34116	481	232	11.10	0.155	0.293		80
Base Flow	Grab	10/17/05	13:30	05-A37351	182	26	10.40	0.051	0.087	210	13

Flow measured in Cubic Feet per second (ft³/sec)

CHEMICAL DATA - Analytes tested for in a lab, 2005 - MVTL, New Ulm

TUP - Tertiary Plum Creek near Walnut Grove - Non-impacted stream/Western Corn Belt Plains

FLOW TYPE	SAMP TYPE	DATE	TIME	LAB SAMPLE ID #	FLOW (ft ³ /sec)	TSS MG/L	N-NO2+NO3 MG/L	P-PO4 MG/L	TP MG/L	FECAL COL. /100ML	TURBIDITY NTU
Base Flow	Grab	3/31/2005	10:45	05-A8098	32	54	5.43	0.086	0.175		20
Storm Flow	Grab	4/13/2005	11:45	05-A9874	213	316	17.00	0.098	0.341		90
Storm Flow	Grab	4/14/2005	11:40	05-A10040	146	180	15.70	0.092	0.215		38
Base Flow	Grab	4/26/2005	11:40	05-A11666	51	20	13.20	0.019	0.060	200	10
Storm Flow	Grab	5/16/2005	11:20	05-A14833	121	98	14.50	0.039	0.133		25
Storm Flow	Composite	5/16/2005	11:30	05-A14834		428	15.90	0.053	0.376		150
Storm Flow	Grab	5/18/2005	11:30	05-A15359	156	142	13.60	0.068	0.184		36
Base Flow	Grab	5/24/2005	11:15	05-A16166	99	62	14.70	0.037	0.096	200	22
Storm Flow	Composite*	6/17/2005	10:15	05-A19503		496	16.00	0.047	0.321		140
Base Flow	Grab	6/28/2005	10:30	05-A20893	44	46	13.70	0.050	0.095	800	18
Base Flow	Grab	7/29/2005	12:00	05-A26135	14	10	7.35	0.070	0.087	1700	7
Base Flow	Grab	7/29/2005	12:00	05-A26140	14	8	7.42	0.067	0.085		8
Base Flow	Grab	8/17/2005	12:45	05-A28937	3	8	1.02	<0.01	0.034	270	7
Storm Flow	Grab	9/13/2005	12:35	05-A32135	30	80	0.79	0.031	0.132		28
Storm Flow	Grab	9/14/2005	12:10	05-A32326	115	352	9.73	0.194	0.473	14000	130
Storm Flow	Grab	9/16/2005	10:55	05-A32878	37	80	9.45	0.109	0.187		25
Storm Flow	Grab	9/27/2005	10:20	05-A34115	154	162	13.60	0.144	0.254		80
Base Flow	Grab	10/17/2005	12:45	05-A37350	72	25	12.70	0.043	0.072	200	12

*This sample wasn't used in figuring annual loads as it was compromised; intake silted in

Flow measured in Cubic Feet per second (ft³/sec)