

FIELD DATA - Measurements taken on site, 2005

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

<i>Flow Type</i>	<i>Date</i>	<i>FLOW</i>		<i>H2O</i>			
		<i>(ft³/sec)</i>	<i>Time</i>	<i>Temp ° C</i>	<i>DO</i>	<i>pH</i>	<i>TT 1</i>
Base Flow	1/19/2005	21	11:45			8.3	60+
Base Flow	2/17/2005	149	11:30	0.2	11+	8.2	60+
Base Flow	3/22/2005	138	13:45	0.3	14.93	8.5	60+
Snow Melt/Base	3/31/2005	524	13:10	7.1	12.80	8.4	14.6
Storm Flow	4/13/2005	960	15:00	12.0	13.50	8.4	3.5
Storm Flow	4/14/2005	1,484	14:20	12.2	10.44	8.4	5.9
Storm Flow	4/19/2005	1,461	13:00	13.7	9.58	8.4	17.4
?Base Flow?	4/26/2005	658	14:30	9.9	10.83	8.4	36.4
Storm Flow	5/9/2005	1,223	15:00	17.0	9.06	8.4	8.1
Storm Flow	5/11/2005	1,512	15:00	13.9	9.39	8.3	10.2
Storm Flow	5/16/2005	1,800	14:10	10.5	11.71	8.5	10.5
Storm Flow	5/18/2005	1,840	14:30	13.7	9.92	8.5	9.6
Base Flow	5/24/2005	1,244	14:15	19.2	9.35	8.3	12.8
Storm Flow	6/8/2005	1,042	14:00	22.1	8.25		6.4
Storm Flow	6/9/2005	1,124	13:15	21.0	8.41		4.5
Storm Flow	6/17/2005	1,178	12:00	20.0	8.74	8.2	14.6
Base Flow	6/27/2005	496	13:30	24.1	8.10	8.4	17.5
Base Flow	7/5/2005	341	14:00	24.2	12.12	8.4	24.3
Storm Flow	7/29/2005	472	14:45	25.3	9.74	8.4	9.6
Base Flow	8/24/2005	104	13:20	21.9	10.80	8.6	26.7
Storm Flow	9/13/2005	219	15:05	22.3	10.94	8.7	18.3
Storm Flow	9/16/2005	669	13:45	20.0	9.02	8.5	10.8
Storm Flow	9/27/2005	873	12:50	17.0	9.28	8.3	10.3
Base Flow	10/18/2005	589	13:10	13.1	10.54	8.2	32.8
Base Flow	11/21/2005	379	12:15	3.0	14.11	8.2	60+
Base Flow	12/22/2005	376	12:00	-	12.98	8.1	60+

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

FIELD DATA - Measurements taken on site, 2005**PLC010 - Primary Lower Cottonwood River near Leavenworth - Non-impacted stream/Western Corn Belt Plains**

<i>Flow Type</i>	<i>Date</i>	<i>FLOW</i>		<i>H2O</i>			
		<i>(ft³/sec)</i>	<i>Time</i>	<i>Temp ° C</i>	<i>DO</i>	<i>pH</i>	<i>TT 1</i>
Snow Melt/Base	3/31/2005		12:00	5.3	12.74	8.5	21.0
Storm Flow	4/13/2005	815	13:20	12.0	12.10	8.4	11.4
Storm Flow	4/14/2005	1,076	13:20	11.0	10.20	8.3	7.9
Storm Flow	4/19/2005	942	11:30	14.0	9.40	8.2	27.8
Base Flow	4/26/2005	420	13:00	10.0	10.52	8.4	41.6
Storm Flow	5/9/2005	1,010	13:00	16.5	8.15	8.3	8.6
Storm Flow	5/11/2005	1,037	14:20	13.3	9.28	8.2	16.0
Storm Flow	5/16/2005	1,211	12:50	10.4	11.20	8.4	15.0
Storm Flow	5/18/2005	1,499	12:50	13.4	9.66	8.5	4.6
Base Flow	5/24/2005	826	12:50	18.4	8.78	8.2	15.2
Storm Flow	6/9/2005	642	12:15	20.9	8.35		12.3
Storm Flow	6/17/2005	749	11:00	19.2	8.46	8.2	15.8
Base Flow	6/28/2005	295	12:10	24.5	8.65	8.4	32.4
Storm Flow	7/29/2005	387	13:20	22.4	8.12	8.4	10.6
Base Flow	8/24/2005	52	12:15	19.8	14.32	8.6	27.6
Storm Flow	9/13/2005	143	13:55	21.1	8.69	8.5	16.2
Storm Flow	9/16/2005	357	12:25	18.8	8.48	8.4	20.1
Storm Flow	9/27/2005	840	11:45	16.5	8.42	8.5	7.8
Base Flow	10/18/2005	376	12:20	12.8	9.98	8.4	27.8

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

FIELD DATA - Measurements taken on site, 2005**PLC005 - Primary Lower Sleepy Eye Creek near Cobden - Non-impacted stream/Western Corn Belt Plains**

<i>Flow Type</i>	<i>Date</i>	<i>FLOW</i>		<i>H2O</i>			
		<i>(ft³/sec)</i>	<i>Time</i>	<i>Temp ° C</i>	<i>DO</i>	<i>pH</i>	<i>TT I</i>
Snow Melt/Base	3/31/2005		12:20	6.8	12.02	8.4	60+
Storm Flow	4/13/2005	275	13:50	9.3	10.73	8.3	32.2
Storm Flow	4/14/2005	229	13:40	10.2	11.03	8.4	46.9
Storm Flow	4/19/2005	245	12:10	13.3	9.11	8.4	51.2
Base Flow	4/26/2005	113	13:30	8.6	12.33	8.6	60+
Storm Flow	5/9/2005	337	13:45	14.2	8.46	8.3	16.0
Storm Flow	5/11/2005	279	14:10	11.5	9.07	8.1	39.5
Storm Flow	5/16/2005	294	13:20	10.6	11.17	8.5	46.6
Storm Flow	5/18/2005	675	13:30	12.4	9.11	8.5	10.5
Base Flow	5/24/2005	236	13:20	16.9	9.00	8.3	39.4
Storm Flow	6/8/2005	261	13:05	19.0	8.17		15.4
Base Flow	6/27/2005	109	12:30	22.3	7.63	8.5	33.0
Base Flow	7/5/2005	58	13:15	21.6	10.32	8.3	47.6
Base Flow	7/29/2005	25	13:55	24.6	8.06	8.4	49.9
Base Flow	8/24/2005	12	12:40	20.3	13.43	8.8	16.7
Storm Flow	9/13/2005	123	14:15	20.1	7.19	8.6	17.8
Storm Flow	9/16/2005	167	12:50	17.9	8.23	8.3	30.7
Storm Flow	9/27/2005	234	12:15	15.8	8.92	8.2	34.4
Base Flow	10/18/2005	128	11:55	12.4	10.24	8.0	60+

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

FIELD DATA - Measurements taken on site, 2005

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

<i>Flow Type</i>	<i>Date</i>	<i>FLOW</i>		<i>H2O</i>			
		<i>(ft³/sec)</i>	<i>Time</i>	<i>Temp °C</i>	<i>DO</i>	<i>pH</i>	<i>TT 1</i>
Snow Melt/Base	3/31/2005		11:10	4.2	12.96	8.4	45.4
Storm Flow	4/13/2005	749	12:20	9.0	10.76	8.5	20.7
Storm Flow	4/14/2005	684	12:25	9.4	10.50	8.3	21.0
Storm Flow	4/19/2005	433	10:45	13.5	9.11	8.1	24.0
Base Flow	4/26/2005	207	12:15	8.9	10.47	8.3	42.4
Storm Flow	5/9/2005	305	11:45	15.5	9.15	8.3	38.0
Storm Flow	5/11/2005	340	11:30	12.5	9.77	8.1	43.9
Storm Flow	5/16/2005	465	12:15	9.7	11.30	8.4	25.6
Storm Flow	5/18/2005	696	12:00	13.3	9.32	8.4	10.5
Base Flow	5/24/2005	293	11:55	16.8	9.02	8.2	20.9
Storm Flow	6/9/2005	288	11:20	19.3	8.12		11.4
Storm Flow	6/17/2005	347	10:15	17.4	8.58	8.2	22.4
Base Flow	6/28/05	125	11:15	23.4	7.99	8.5	29.5
Base Flow	7/29/05	28	12:35	23.1	12.25	8.4	23.2
Base Flow	8/24/05	9	11:10	19.1	10.77	8.5	27.6
Storm Flow	9/13/05	86	13:05	20.4	7.12	8.4	18.0
Storm Flow	9/14/05	220	12:40	18.0	7.85	8.4	13.6
Storm Flow	9/16/05	148	11:40	17.5	8.18	8.3	18.7
Storm Flow	9/27/05	481	11:00	15.2	8.68	8.4	9.2
Base Flow	10/17/05	182	13:30	12.8	9.73	8.5	31.0

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

FIELD DATA - Measurements taken on site, 2005

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

<i>Flow Type</i>	<i>Date</i>	<i>FLOW</i>		<i>H2O</i>			
		<i>(ft³/sec)</i>	<i>Time</i>	<i>Temp ° C</i>	<i>DO</i>	<i>pH</i>	<i>TT 1</i>
Snow Melt/Base	3/31/2005	32	10:45	1.3	13.90	8.2	18.1
Storm Flow	4/13/2005	213	11:45	6.7	11.72	8.4	7.4
Storm Flow	4/14/2005	146	11:40	8.1	11.12	8.3	24.9
Base Flow	4/26/2005	51	11:40	7.5	11.42	8.3	51.4
Storm Flow	5/16/2005	121	11:20	10.2	11.11	8.4	19.8
Storm Flow	5/18/2005	156	11:30	13.0	9.64	8.4	15.6
Base Flow	5/24/2005	99	11:15	15.6	9.30	8.3	27.8
Storm Flow	6/17/2005	93	9:30	16.1	8.98	8.1	20.4
Base Flow	6/28/2005	44	10:30	21.5	7.62	8.5	30.7
Base Flow	7/29/2005	14	12:00	21.0	9.10	8.4	60+
Base Flow	8/17/2005	3	12:45	23.0	14.53	8.4	60+
Storm Flow	9/13/2005	30	12:35	19.5	7.92	8.5	27.2
Storm Flow	9/14/2005	115	12:10	16.9	8.27	8.4	12.4
Storm Flow	9/16/2005	37	10:55	16.7	8.77	8.3	20.7
Storm Flow	9/27/2005	154	10:20	15.2	8.92	8.4	9.2
Base Flow	10/17/2005	72	12:45	12.8	9.71	8.4	38.8

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