

**WATER-QUALITY MONITORING PROGRAM  
CHATFIELD BASIN AND RESERVOIR  
DENVER METROPOLITAN AREA  
ANNUAL BASIC-DATA REPORT  
JANUARY 1991 - DECEMBER 1991**



**ADVANCED  
SCIENCES, INC.**

**WATER-QUALITY MONITORING PROGRAM  
CHATFIELD BASIN AND RESERVOIR  
DENVER METROPOLITAN AREA  
ANNUAL BASIC-DATA REPORT  
JANUARY 1991 - DECEMBER 1991**

**Prepared For:**

**Chatfield Basin Authority  
Denver, Colorado**

**Prepared By:**

**Advanced Sciences, Inc  
Lakewood, Colorado**

ASI Project No. 969.10

Interim: August 6, 1991  
Revised: October 30, 1991  
Final: February 5, 1992



February 5, 1992

Mr. Donald Moore, AICP  
Chair, Chatfield Basin Authority  
Douglas County Planning Division  
118 Third Street  
Castle Rock, Colorado 80104

Subject: Water-Quality Monitoring Program, Chatfield Basin and Reservoir, Denver  
Metropolitan Area: Annual Basic-Data Report, January 1991 - December 1991  
ASI Project No. 969.10


Dear <sup>Don</sup> Mr. Moore:

The attached Tables 1 through 20 incorporate the field measurements and laboratory chemical and biological data collected and available in conjunction with the Chatfield Basin and Reservoir Monitoring Program for the January through December 1991 period. Data related to the supplemental tributary surveys for the period between January through December 1991 (Tables 13 through 20) are incomplete. The Perry Park Water and Sanitation District was not able to collect samples during 1991 at sites 3, 6, 6A, and 6B. Also, the Plum Creek Wastewater Authority has only partially reported their data for sites 4, 4A, and 4B.


We have reviewed selected flow and water-quality data and have updated or corrected certain values. We would recommend that the Authority consider formalizing these revisions for interested data users.

ASI appreciates having this opportunity to provide the Chatfield Basin Authority with continuing water-quality monitoring and data compilation services. If you have any questions, or need additional information, please give us a call.

Yours truly,

  
James R. Kunkel, Ph.D., P.E.  
Project Manager/Senior Hydrologist

Reviewed by:

  
Timothy D. Steele, Ph.D.  
Water Resources Manager

File: 969.10

Mr. Donald Moore, AICP  
February 5, 1992  
Page 2

Attachments -Monitoring Site Locations Figures 1, 2, and 3  
-Water-Quality Basic Data Tables 1 through 20, January - December 1991

cc: Denver Regional Council of Governments  
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Woodward-Clyde Consultants  
Stanford Place 3, Suite 1000  
4582 South Ulster Street Parkway  
Denver, Colorado 80237  
Attn: Dr. Keith W. Little, P.E.

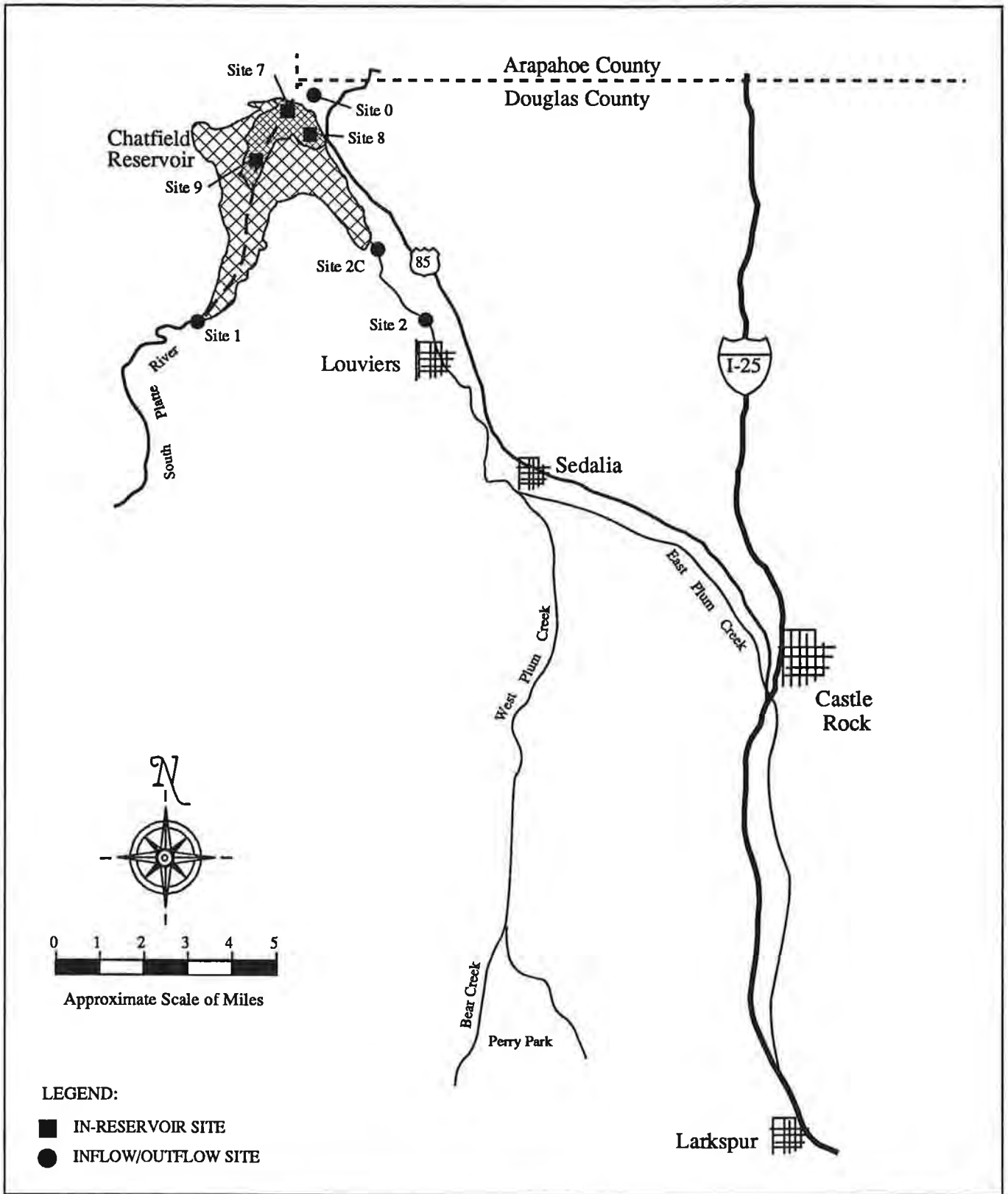
Saunders, Snyder, Ross  
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Attn: Mr. Warren S. Brown, P.E.

Jefferson County Attorney's Office  
1700 Arapahoe Street  
Golden, Colorado 80419  
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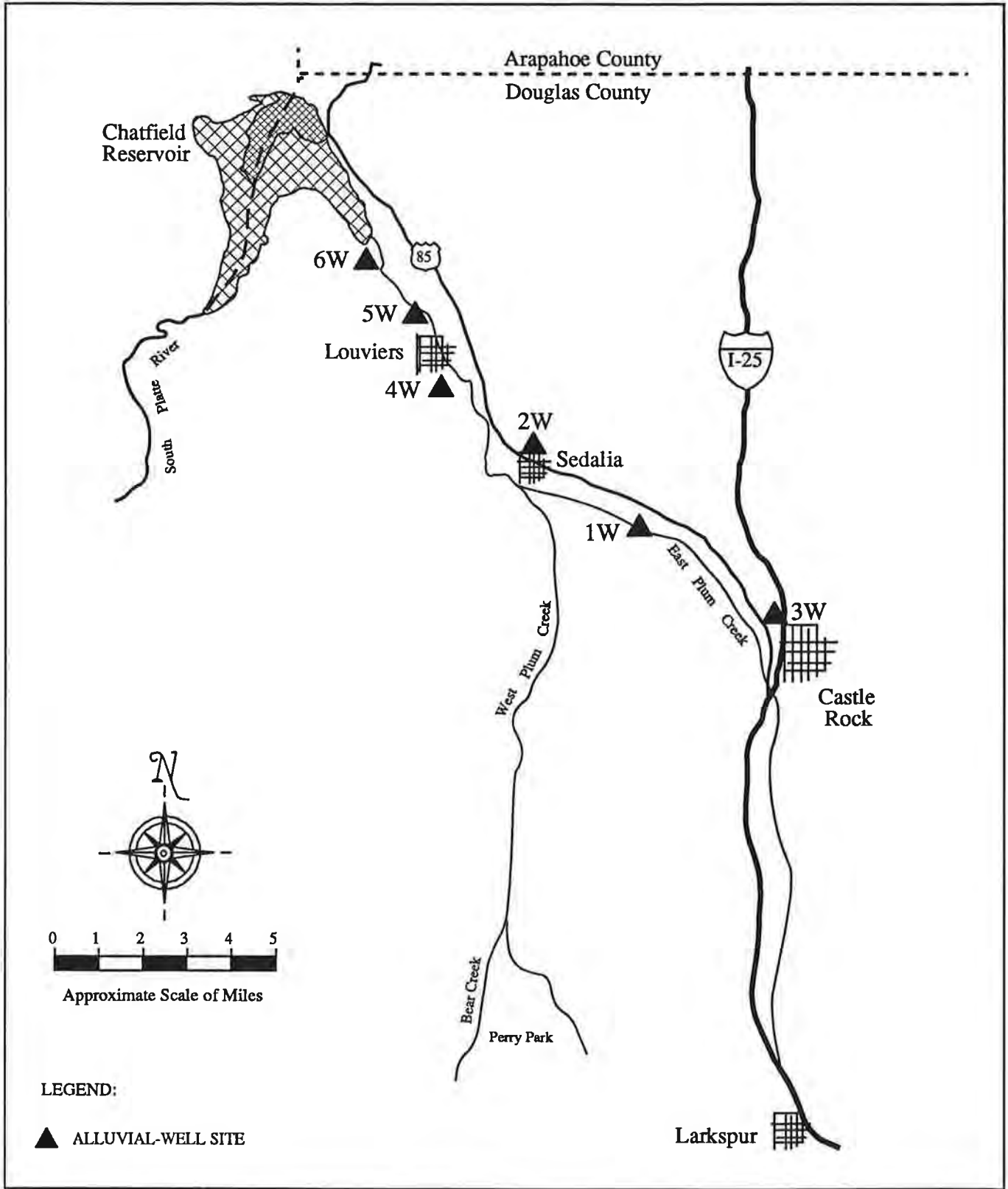


CHATFIELD BASIN AND RESERVOIR  
WATER-QUALITY MONITORING PROGRAM

INFLOW/OUTFLOW AND IN-RESERVOIR  
MONITORING LOCATIONS

PROJECT NO. 969.10  
FIGURE 1

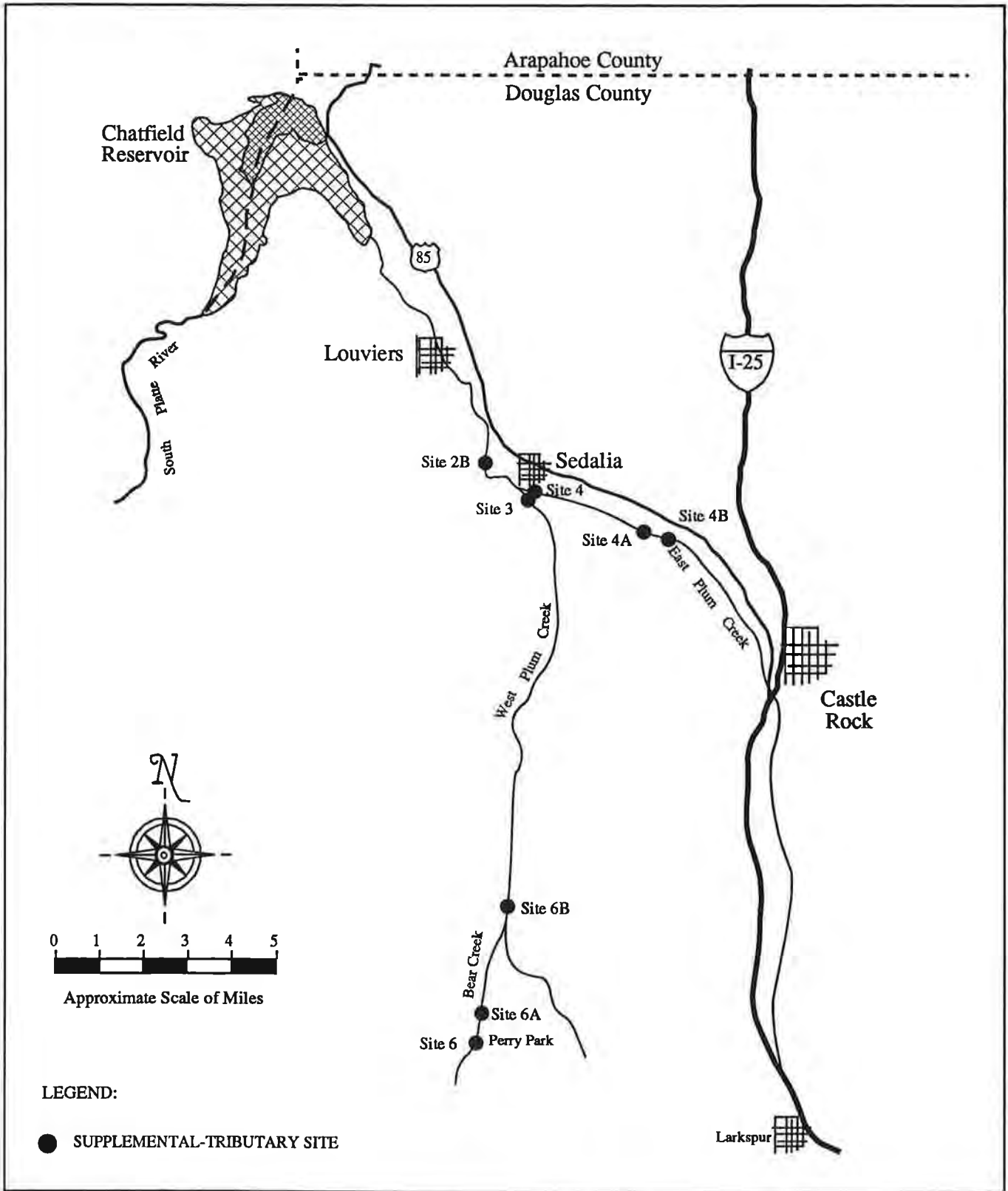




**CHATFIELD BASIN AND RESERVOIR  
WATER-QUALITY MONITORING PROGRAM**

**ALLUVIAL-WELL  
MONITORING LOCATIONS**

**PROJECT NO. 969.10  
FIGURE 2**



**CHATFIELD BASIN AND RESERVOIR  
 WATER-QUALITY MONITORING PROGRAM**



**SUPPLEMENTAL-TRIBUTARY  
 MONITORING LOCATIONS**

PROJECT NO. 969.10  
**FIGURE 3**

## **BASIC DATA TABLES**



**TABLE 1**  
**06709601 CHATFIELD RESERVOIR OUTFLOW NEAR LITTLETON, CO. (SITE 0)**  
**WATER-QUALITY DATA**

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS STREAM- FLOW (CFS)	SPE- CIFIC CON- DUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	PH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	PHOS- PHATE, TOTAL (MG/L AS P)
02-Jan-91	1130	1.0	5	260	12.1	7.2		0.37	0.03	1.72	
30-Jan-91	1000	2.0	2	270	7.2	7.6		0.25	-0.01	0.32	
20-Feb-91	1130	5.0	2	310	11.8	7.4		0.10	-0.01	0.33	
22-Mar-91	1145	4.5	30	250	10.9	7.7		0.11	-0.01	0.15	
03-Apr-91	1245	6.0	45	280	11.5	7.6		0.06	-0.01	0.12	
18-Apr-91	750	6.0	35	260	10.6	7.4		-0.05	-0.01	0.13	
03-May-91	1125	8.0	40	280	9.2	7.5		0.05	-0.01	0.09	
15-May-91	950	11.5	120	300	9.0	7.5		0.32	0.01	0.03	
05-Jun-91	930	13.5	180	310	9.2	6.9		0.05	-0.01	0.11	
20-Jun-91	1220	15.0	50	240	8.6	7.0		0.19	-0.01	0.11	
05-Jul-91	1040	16.5	250	290	8.5	7.2		0.27	-0.01	0.15	0.100
18-Jul-91	1110	16.0	110	270	9.8	7.3		0.18	-0.01	0.17	
01-Aug-91	1055	16.0	115	270	9.0	7.0		0.09	-0.01	0.21	
27-Aug-91	800	15.0	120	260	9.0	7.3		0.10	-0.01	0.07	
06-Sep-91	1210	13.0	200	270	8.8	6.9		0.13	-0.01	-0.02	
02-Oct-91	1455	10.0	0.1	270	10.8	7.8		0.15	-0.01	0.10	
12-Nov-91	1345	10.5	75	220	9.7	6.7		0.09	-0.01	0.06	
04-Dec-91	1010	9.0	2	220	9.2	6.9	0.3				
26-Dec-91	1130	6.0	2	300	7.9	7.4		0.19	-0.01	0.11	
26-Dec-91	9999							0.05	-0.01	0.12	

**TABLE 1**  
**06709601 CHATFIELD RESERVOIR OUTFLOW NEAR LITTLETON, CO. (SITE 0)**  
**WATER-QUALITY DATA**

DATE	TIME	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	SUS- PENDE SEDI- MENT (MG/L)	LABOR- ATORY SAMPLE NUMBER
02-Jan-91	1130	0.028	0.021	8	88
30-Jan-91	1000	0.014	0.011	5	564
20-Feb-91	1130	-0.005	-0.005	2	999
22-Mar-91	1145	0.03	-0.01	5	1866
03-Apr-91	1245	-0.01	-0.01	4	2311
18-Apr-91	750	-0.01	-0.01	5	2711
03-May-91	1125	-0.01	-0.01	3	3276
15-May-91	950	0.03	-0.01	6	3618
05-Jun-91	930	0.04	0.02	-2	4734
20-Jun-91	1220	0.02	0.02	7	5215
05-Jul-91	1040	0.02	0.02	5	5726
18-Jul-91	1110	0.02	0.01	10	6138
01-Aug-91	1055	0.05	0.05	10	6729
27-Aug-91	800	0.132	0.120	13	7424
06-Sep-91	1210	-0.005	-0.005	10	7720
02-Oct-91	1455	0.005	-0.005	19	8813
12-Nov-91	1345	-0.005	-0.005	5	9823
04-Dec-91	1010	0.020	-0.005		10392
26-Dec-91	1130	-0.005	-0.005	-2	10951
26-Dec-91	9999	-0.005	-0.005	4	10955

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 2**  
**06708000 SOUTH PLATTE RIVER AT WATERTON, CO (SITE 1)**  
**WATER-QUALITY DATA**

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS STREAM- FLOW (CFS)	SPE- CIFIC CON- DUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	PH FIELD (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
02-Jan-91	1200	0.0	61	180	10.3	7.5			0.15	-0.01	0.06	0.018
30-Jan-91	930	0.0		210	7.8	7.6			0.19	-0.01	0.06	-0.005
20-Feb-91	1025	0.0		250	12.5	7.7			0.05	-0.01	1.18	0.009
22-Mar-91	915	3.0	32	210	14.5	7.8			0.10	-0.01	0.05	-0.02
03-Apr-91	1230	6.0	34	270	11.1	7.5			0.08	-0.01	0.05	-0.01
10-Apr-91	1000	4.0		230	11.0	7.6			0.05	-0.01	0.08	0.02
18-Apr-91	715	3.0	31	210	10.0	6.9			0.07	-0.01	0.11	-0.01
24-Apr-91	835	5.5	37	230	10.9	7.4			-0.05	0.01	0.06	-0.01
30-Apr-91	1200	5.0	39	230	12.8	7.5			0.03	-0.01	0.08	0.02
09-May-91	1440	10.0	39	220	10.8	7.9			0.12	0.01	-0.02	0.09
15-May-91	930	9.0	61	260	10.4	6.8			-0.05	0.01	-0.02	0.01
23-May-91	900	12.0	209	280	10.8		7.9		0.11	-0.01	0.15	0.02
29-May-91	1610	11.0	64	160	8.6		7.7		0.04	-0.01	0.05	-0.01
05-Jun-91	1300	11.0	6	180	8.6	7.1			-0.05	-0.01	0.07	0.60
05-Jun-91	9999								-0.20		0.10	0.06
12-Jun-91	1200	11.5	186	120	8.2	6.8			-0.05	-0.01	0.12	0.02
20-Jun-91	945	10.5	202	130	7.6	7.2			0.06	-0.01	0.06	0.02
05-Jul-91	1300	10.5	266	180	10.4	7.2			0.24	-0.01	0.12	0.01
18-Jul-91	1250	15.0	10	180	7.4	7.9			0.13	-0.01	0.10	0.02
01-Aug-91	1115	13.0	53	230	9.6	7.4			0.05	-0.01	0.06	-0.01
27-Aug-91	850	10.0	158	280	10.2	7.1			0.05	-0.01	0.03	0.040
06-Sep-91	1000		75						0.13	-0.01	-0.02	-0.005
02-Oct-91	1250	6.0	32	240	11.2	7.0			0.15	-0.01	0.14	0.270
12-Nov-91	1035	5.0	37	180	9.6	7.2			0.04	-0.01	0.10	0.040
04-Dec-91	1020	7.0	83	190	9.3	7.1		0.2				0.011
26-Dec-91	930	1.0	28	270	8.0	7.0			0.14	-0.01	0.10	-0.005

**TABLE 2**  
**06708000 SOUTH PLATTE RIVER AT WATERTON, CO (SITE 1)**  
**WATER-QUALITY DATA**

DATE	TIME	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	SUS- PENDE SEDI- MENT (MG/L)	LABOR- ATORY SAMPLE NUMBER
02-Jan-91	1200		-0.005	-2	89
30-Jan-91	930		-0.050	-2	563
20-Feb-91	1025		-0.010	6	1000
22-Mar-91	915		-0.01	2	1867
03-Apr-91	1230		-0.01	1	2312
10-Apr-91	1000		0.02	-2	2512
18-Apr-91	715		-0.01	4	2709
24-Apr-91	835		-0.01	4	2897
30-Apr-91	1200		0.02	2	3182
09-May-91	1440		0.06	2	3434
15-May-91	930		-0.01	3	3619
23-May-91	900		-0.01	2	4275
29-May-91	1610		-0.01	6	4276
05-Jun-91	1300		0.03	10	4735
05-Jun-91	9999		0.05	8	9729-38490-2
12-Jun-91	1200		0.02	4	4922
20-Jun-91	945		0.02	2	5217
05-Jul-91	1300		0.01	2	5727
18-Jul-91	1250		-0.01	2	6139
01-Aug-91	1115		-0.01	2	6730
27-Aug-91	850		0.040	-2	7425
06-Sep-91	1000	-0.005		-2	7719
02-Oct-91	1250		-0.005	3	8814
12-Nov-91	1035		-0.005	-2	9824
04-Dec-91	1020		-0.005		10393
26-Dec-91	930		-0.005	-2	10952

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 3**  
**06709530 PLUM CREEK AT TITAN ROAD NEAR LOUVIERS, CO. (SITE 2)**  
**WATER-QUALITY DATA**

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS STREAM-FLOW (CFS)	SPECIFIC CONDUCTANCE FIELD (US/CM)	OXYGEN, DIS-SOLVED (MG/L)	PH FIELD (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	SUS- PENDED SEDI- MENT (MG/L)	LABOR- ATORY SAMPLE NUMBER
02-Jan-91	1215	0.0		220	10.2	7.5		0.23	-0.01	0.84	0.025	0.027	15	90	
30-Jan-91	1030	0.0		250	8.2	7.2		0.20	-0.01	0.94	0.049	0.044	10	565	
20-Feb-91	1040	0.0	19	260	15.0	7.4		-0.05	-0.01	0.04	-0.005	-0.005	-2	1001	
22-Mar-91	930	5.5	9	290	11.8	7.7		0.11	-0.01	1.28	0.03	0.02	44	1868	
03-Apr-91	1145	12.5	22	290	9.0	7.6		0.06	-0.01	0.42	0.03	0.03	164	2313	
10-Apr-91	1030	6.5			9.8			0.06	-0.01	0.86	0.01	0.01	118	2513	
18-Apr-91	730	4.5	34	250	10.5	7.2		-0.05	-0.01	0.90	0.07	0.04	88	2710	
18-Apr-91	9999							-0.05	0.01	0.86	0.06	-0.01	68	2712	
24-Apr-91	900	8.0	32	260	10.0	7.2		-0.05	0.01	0.31	0.08	0.08	77	2896	
30-Apr-91	1230	12.5	47	290	9.0	7.7		0.03	-0.01	0.84	0.18	0.10	161	3181	
09-May-91	1455	14.0	47	260	8.8	7.4		-0.05	0.01	0.22	0.07	0.07	70	3435	
15-May-91	1150	11.0	79	240	8.9	7.1		0.67	0.01	0.18	0.09	0.03	38	3620	
23-May-91	900	15.0		260	8.6		7.9	0.08	0.01	0.47	0.13	0.04	63	4274	
29-May-91	1625	19.0		280	7.0		7.5	0.11	-0.01	0.35	0.07	0.03	21	4277	
05-Jun-91	1245	20.5		280	6.8	7.0		-0.05	-0.01	0.42	0.34	-0.01	47	4736	
12-Jun-91	1125	13.5		260	3.0	6.1		0.05	-0.01	0.05	0.03	0.02	2	4921	
20-Jun-91	955	15.0		280	7.2	7.1		0.06	-0.01	0.18	0.03	-0.01	24	5216	
05-Jul-91	1250		0												
18-Jul-91	1240		0												
01-Aug-91	1400	18.0		340	8.2	7.4		0.05	-0.01	0.46	0.20	0.20	-2	6371	
27-Aug-91	1000		0												
06-Sep-91	1015		0												
02-Oct-91	1300		0												
12-Nov-91	1320	13	5	300	10.4	7.2		0.05	-0.01	1.08	0.018	0.007	6	9825	
04-Dec-91	1135	14	28	290	10.0	7.1		0.7			0.084	0.035			
26-Dec-91	1000	2	8	370	8.0	6.9		0.10	0.01	1.32	-0.005	-0.005	31	10953	

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 3A**  
**393214105024201 PLUM CREEK ABOVE CHATFIELD RESERVOIR (SITE 2C)**  
**WATER-QUALITY DATA (PAIRED SAMPLE)**

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS STREAM- FLOW (CFS)	SPE- CIFIC CON- DUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	PH FIELD (STAND- ARD UNITS)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	SUS- PENDED SEDI- MENT (MG/L)	LABOR- ATORY SAMPLE NUMBER
02-Jan-91	930	1.0		290	8.4	7.0	0.37	-0.01	0.73	0.175	0.041	151	8905
22-Mar-91	945	4.5		300	12.3	7.4	0.11	-0.01	0.94	-0.02	-0.01	5	1869
05-Jun-91	955	12.5		290	8.6	6.9	-0.05	0.01	0.27	0.21	0.01	10	4737
06-Sep-91	1015		0										
26-Dec-91	1115	2.5	8	390	8.2	7.1	0.18	0.03	1.08	-0.005	-0.005	30	10954

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 4**  
**393319105033501 CHATFIELD RESERVOIR NEAR DAM (SITE 7)**  
**WATER-QUALITY DATA**

DATE	TIME	TOTAL DEPTH (FEET)	SAMP-LING DEPTH (FEET)	TEMPER-ATURE (DEG C)	TRANS-PARENCY SECCHI DISK (FEET)	SPE-CIFIC CON-DUC-TANCE FIELD (US/CM)	OXYGEN, DIS-SOLVED (MG/L)	PH FIELD (STAND-ARD UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
02-Jan-91	1100		2.3	0.0	4.5	220	10.2	7.6	8	0.7	-0.005
02-Jan-91	9999								8	0.4	-0.005
02-Jan-91	1105	15.0	12.5	0.0		220	10.6	7.5	10	0.3	-0.005
30-Jan-91	1045		2.2	0.0	4.5	230	8.1	7.9	-2	2.5	0.010
30-Jan-91	1050	13.0	11.0	1.0		220	7.6	7.8	4	0.3	0.011
22-Mar-91	1015		2.5	5.0	5.0	260	10.8	7.5	8	0.3	-0.02
22-Mar-91	1030	44.0	40.0	4.0		250	11.7	7.6	16	1.5	-0.02
22-Mar-91	9999								16	0.5	0.02
03-Apr-91	1040		2.8	6.0	5.6	280	11.2	7.5	4	0.6	0.02
03-Apr-91	1045	40.8	38.0	6.0		280	10.8	7.5	14	0.6	0.08
03-May-91	1055		5.6	7.5	11.2	290	7.2	7.5	2	0.2	0.03
03-May-91	1100	25.7	23.0	7.5		280	8.7	7.4	2	0.1	-0.01
15-May-91	1120		2.6	11.0	5.3	310	8.5	7.9	-2	0.3	0.04
15-May-91	1125	41.5	39.5	10.5		300	8.2	7.7	-2	0.4	0.04
05-Jun-91	1010		3.5	14.0	7.0	310	8.4	6.8	-2	0.3	0.04
05-Jun-91	1015	30.0	27.0	14.0		310	7.0	6.8	-2	0.5	0.03
20-Jun-91	1100		4.2	15.5	8.3	300	8.4	7.5	-2	0.3	0.02
20-Jun-91	1105	27.4	8.3	15.0		300	8.2	7.5	2	0.3	0.03
05-Jul-91	1150		4.0	17.5	8.0	300	7.4	7.1	10	0.4	0.02
05-Jul-91	1155	26.0	24.0	18.0		290	7.6	7.1	20	0.5	0.04
18-Jul-91	1200		5.3	16.0	10.6	290	8.1	7.3	-2	0.3	0.02
18-Jul-91	1205	36.5	34.5	20.0		290	8.7	7.4	-2	0.4	-0.04
01-Aug-91	1115		5.2	16.5	10.4	260	8.1	7.3	16	0.2	0.02
01-Aug-91	1220	42.0	40.0	14.5		280	7.6	7.3	20	0.3	0.05
27-Aug-91	840		3.0	15.5	6.0	270	10.2	7.5	6	-0.1	0.033
27-Aug-91	845	38.6	36.6	15.5		260	8.6	7.3	14	-0.1	0.033

**TABLE 4**  
**393319105033501 CHATFIELD RESERVOIR NEAR DAM (SITE 7)**  
**WATER-QUALITY DATA**

DATE	TIME	TOTAL DEPTH (FEET)	SAMP-LING DEPTH (FEET)	TEMPER-ATURE (DEG C)	TRANS-PARENCY SECCHI DISK (FEET)	SPE-CIFIC CON-DUC-TANCE FIELD (US/CM)	OXYGEN, DIS-SOLVED (MG/L)	PH FIELD (STAND-ARD UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
06-Sep-91	1055		2.4	13.5	4.8	260	9.9	7.2	4	-0.1	-0.005
06-Sep-91	1100	38.0	36.0	13.5		210	9.2	7.3	26	-0.1	0.028
02-Oct-91	1340		3.2	9.0	6.8	260	8.8	7.9	-2	0.2	0.008
02-Oct-91	1345	37.5	35.5	8.5		260	9	7.7	16	0.2	-0.005
12-Nov-91	1130		3.5	9.0	7.0	220	10.4	7.5		-0.1	-0.005
12-Nov-91	1135	39.5	37.0	7.5		210	11.3	7.6	-2	-0.1	-0.005
06-Dec-91	1110		1.9	8.0	3.9	240	10.2	7.5	-2	0.3	-0.005
06-Dec-91	1115	26.0	24.0	9.0		240	9.8	7.3	-2	0.5	-0.005
26-Dec-91	1055	No Sample Collected									
26-Dec-91	1055	No Sample Collected									

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**TABLE 4**  
**393319105033501 CHATFIELD RESERVOIR NEAR DAM (SITE 7)**  
**WATER-QUALITY DATA**

DATE	TIME	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CHLORO- PHYLL A CORR. (UG/L)	PHYTO- PLANK- TON, (SPEC- IES NUMBER)	LABOR- ATORY SAMPLE NUMBER
02-Jan-91	1100	-0.005			93
02-Jan-91	9999	-0.005			92
02-Jan-91	1105	-0.005			94
30-Jan-91	1045	-0.005	5.3		566
30-Jan-91	1050	0.011			567
22-Mar-91	1015	-0.01	5.7		1859
22-Mar-91	1030	-0.01			1860
22-Mar-91	9999	0.02			1865
03-Apr-91	1040	0.02	5.3		2305
03-Apr-91	1045	0.08			2306
03-May-91	1055	0.03	3.6		3270
03-May-91	1100	-0.01			3271
15-May-91	1120	-0.01	8.2		3612
15-May-91	1125	0.02			3613
05-Jun-91	1010	0.04	3.9		4728
05-Jun-91	1015	0.03			4729
20-Jun-91	1100	0.02	1.4		5218
20-Jun-91	1105	0.03			5219
05-Jul-91	1150	0.01	2.1	9	5720
05-Jul-91	1155	0.01			5721
18-Jul-91	1200	-0.01	2.1	11	6144
18-Jul-91	1205	-0.01			6145
01-Aug-91	1115	0.02	2.1	7	6732
01-Aug-91	1220	0.05			6733
27-Aug-91	840	0.024	4.3	22	7426
27-Aug-91	845	0.032			7427

**TABLE 4**  
**393319105033501 CHATFIELD RESERVOIR NEAR DAM (SITE 7)**  
**WATER-QUALITY DATA**

DATE	TIME	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CHLORO- PHYLL A CORR. (UG/L)	PHYTO- PLANK- TON, (SPEC- IES NUMBER)	LABOR- ATORY SAMPLE NUMBER
06-Sep-91	1055	-0.005	2.8	13	7725
06-Sep-91	1100	-0.005			7726
02-Oct-91	1340	-0.005	1.4	12	8807
02-Oct-91	1345	-0.005			8808
12-Nov-91	1130	-0.005	1.4		9826
12-Nov-91	1135	-0.005			9827
06-Dec-91	1110	-0.005	0.7		10457
06-Dec-91	1115	-0.005			10458
26-Dec-91	1055	No Sample Collected			
26-Dec-91	1055	No Sample Collected			

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 5**  
**393248105030201 CHATFIELD RESERVOIR NEAR PLUM CREEK INFLOW (SITE 8)**  
**WATER-QUALITY DATA**

DATE	TIME	TOTAL DEPTH (FEET)	SAMP-LING DEPTH (FEET)	TEMPER-ATURE (DEG C)	TRANSPARENCY SECCHI DISK (FEET)	SPE-CIFIC CON-DUC-TANCE FIELD (US/CM)	OXYGEN, DIS-SOLVED (MG/L)	PH FIELD (STAND-ARD UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
02-Jan-91	1000		2.0	0.0	4.0	215	9.8	7.7	12	1.8	0.008
02-Jan-91	1005	6.0	4.0	0.0		210	9.8	7.7	28	2.7	0.023
30-Jan-91	1125		1.3	0.0	2.7	240	9.0	7.8	-2	0.2	0.006
30-Jan-91	1130	8.3	6.3	0.5		230	8.2	7.6	-2	0.3	0.013
22-Mar-91	1045		2.6	5.0	5.3	260	10.9	7.4	4	0.4	-0.02
22-Mar-91	1050	15.8	13.8	4.0		250	11.1	7.5	6	0.4	-0.02
03-Apr-91	1030		2.5	6.0	4.9	270	10.8	7.6	4	0.9	0.06
03-Apr-91	1035	16.0	14.0	7.0		270	10.2	7.5	30	0.7	0.07
03-May-91	1015		2.1	9.0	4.2	300	10.5	7.2	4	0.1	0.03
03-May-91	1020	16.0	14.0	7.0		280	9.4	7.5	2	0.2	-0.01
15-May-91	1100		2.6	10.5	5.2	300	8.0	7.8	4	0.3	0.03
15-May-91	1105	10.1	8.0	11.0		300	8.9	7.8	6	0.5	0.03
05-Jun-91	1030		2.8	15.5	5.5	330	8.6	6.8	-2	0.3	0.04
05-Jun-91	1035	16.5	14.5	14.0		320	7.7	6.8	2	1.0	0.03
20-Jun-91	1040		3.6	15.0	7.2	280	7.9	7.4	2	0.4	0.02
20-Jun-91	1045	10.8	8.8	15.0		290	7.9	7.4	6	0.4	0.02
05-Jul-91	1130		1.9	19.5	3.7	300	8.5	7.1	16	0.5	0.02
05-Jul-91	1135	15.0	13.0	17.0		290	7.3	7.2	16	0.7	0.07
18-Jul-91	1140		3.5	18.0	7.0	270	8.0	7.3	2	0.4	0.02
18-Jul-91	1145	16.9	14.9	16.5		290	7.7	7.3	4	1.0	0.01
01-Aug-91	1150		4.9	17.0	9.8	270	7.1	7.1	18	0.1	0.02
01-Aug-91	1155	16.0	14.0	16.5		280	6.8	7.3	12	0.1	-0.01
27-Aug-91	900		2.3	16.0	4.6	270	9.5	7.3	6	-0.1	0.073
27-Aug-91	905	16.1	14.5	16.0		270	9.7	7.1	20	-0.1	0.035
06-Sep-91	1040		1.3	15.0	2.7	240	8.6	7.4	8	-0.1	0.006
06-Sep-91	1045	14.2	12.2	14.0		260	8.9	7.4	6	-0.1	0.006

**TABLE 5**  
**393248105030201 CHATFIELD RESERVOIR NEAR PLUM CREEK INFLOW (SITE 8)**  
**WATER-QUALITY DATA**

DATE	TIME	TOTAL DEPTH (FEET)	SAMP- LING DEPTH (FEET)	TEMPER- ATURE (DEG C)	TRANS- PARENCY SECCHI DISK (FEET)	SPE- CIFIC CON- DUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	PH FIELD (STAND- ARD UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
02-Oct-91	1320		2.9	8.5	5.9	260	8.7	7.8	-2	0.2	0.160
02-Oct-91	1325	14.2	12.2	8.0		260	9.6	7.8	-2	0.2	0.005
12-Nov-91	1115		1.8	10.0	3.5	220	11.2	7.6	-2	0.1	0.020
12-Nov-91	1120	13.2	11.2	10.0		220	10.8	7.7	14	0.1	-0.005
06-Dec-91	1040		1.8	8.0	3.6	240	9.9	7.5	2	0.3	-0.005
06-Dec-91	1045	16.0	14.0	8.0		240	10.1	7.5	-2	0.3	-0.005
26-Dec-91	1100		2.0	1.0	4.0	290	7.9	7.3	4	0.4	-0.005
26-Dec-91	1105	9.5	7.5	1.0		290	8.1	7.4	6	0.7	-0.005
26-Dec-91	9999								-2	0.7	-0.005

**TABLE 5**  
**393248105030201 CHATFIELD RESERVOIR NEAR PLUM CREEK INFLOW (SITE 8)**  
**WATER-QUALITY DATA**

DATE	TIME	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CHLORO- PHYLL A CORR. (UG/L)	PHYTO- PLANK- TON, (SPEC- IES NUMBER)	LABOR- ATORY SAMPLE NUMBER
02-Jan-91	1000	-0.005			95
02-Jan-91	1005	-0.005			96
30-Jan-91	1125	0.006	9.9		568
30-Jan-91	1130	0.012			569
22-Mar-91	1045	-0.01	11.0		1861
22-Mar-91	1050	-0.01			1862
03-Apr-91	1030	0.06	11.4		2307
03-Apr-91	1035	0.07			2308
03-May-91	1015	0.03	8.9		3272
03-May-91	1020	-0.01			3273
15-May-91	1100	-0.01	9.6		3614
15-May-91	1105	-0.01			3615
05-Jun-91	1030	0.04	6.0		4730
05-Jun-91	1035	0.03			4731
20-Jun-91	1040	0.02	2.1		5220
20-Jun-91	1045	0.02			5221
05-Jul-91	1130	0.01	2.5	13	5722
05-Jul-91	1135	0.04			5723
18-Jul-91	1140	-0.01	3.2	12	6140
18-Jul-91	1145	-0.01			6141
01-Aug-91	1150	0.02	2.1	10	6734
01-Aug-91	1155	-0.01			6735
27-Aug-91	900	0.067	3.6	15	7428
27-Aug-91	905	0.035			7429
06-Sep-91	1040	-0.005	4.3	13	7721
06-Sep-91	1045	-0.005			7722

**TABLE 5**  
**393248105030201 CHATFIELD RESERVOIR NEAR PLUM CREEK INFLOW (SITE 8)**  
**WATER-QUALITY DATA**

DATE	TIME	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CHLORO- PHYLL A CORR. (UG/L)	PHYTO- PLANK- TON, (SPEC- IES NUMBER)	LABOR- ATORY SAMPLE NUMBER
02-Oct-91	1320	-0.005	1.4	7	8809
02-Oct-91	1325	-0.005			8810
12-Nov-91	1115	-0.005	1.4		9828
12-Nov-91	1120	-0.005			9829
06-Dec-91	1040	-0.005	1.8		10459
06-Dec-91	1045	-0.005			10460
26-Dec-91	1100	-0.005			10946
26-Dec-91	1105	-0.005			10947
26-Dec-91	9999	-0.005			10950

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 6**  
**393212105042701 CHATFIELD RESERVOIR NEAR SOUTH PLATTE RIVER INFLOW (SITE 9)**  
**WATER-QUALITY DATA**

DATE	TIME	TOTAL DEPTH (FEET)	SAMP-LING DEPTH (FEET)	TEMPER-ATURE (DEG C)	TRANS-PARENCY SECCHI DISK (FEET)	SPE-CIFIC CON-DUC-TANCE FIELD (US/CM)	OXYGEN, DIS-SOLVED (MG/L)	PH FIELD (STAND-ARD UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
02-Jan-91	1020		2.0	0.0	4.0	180	9.8	7.2	6	1.4	0.008
02-Jan-91	1025	5.0	3.5	0.0		185	9.7	7.3	6	3.7	0.013
30-Jan-91	1200		2.6	0.0	5.3	230	8.6	7.8	-2	0.3	0.009
30-Jan-91	1205	28.3	26.3	2.0		240	6.8	7.3	6	0.8	0.015
22-Mar-91	1115		2.4	5.5	4.8	270	12.0	7.4	10	0.5	-0.02
22-Mar-91	1120	10.0	8.0	4.5		250	11.6	7.6	6	0.4	-0.02
03-Apr-91	1105		3.0	6.5	6	270	10.8	7.6	2	0.6	0.04
03-Apr-91	1110	13.1	11.0	6.5		270	10.9	7.6	4	0.6	-0.01
03-May-91	1035		4.1	8.0	8.2	280	9.9	7.6	4	0.6	0.02
03-May-91	1040	9.9	7.9	8.0		280	9.8	7.5	-2	0.2	0.01
15-May-91	1040		2.5	10.0	5.1	290	8.6	7.9	-2	0.3	0.02
15-May-91	1045	9.5	7.5	10.5		290	8.7	8.0	-2	0.4	0.03
05-Jun-91	1050		3.7	12.0	7.5	290	8.3	6.8	-2	0.3	0.04
05-Jun-91	1055	10.0	8.0	15.0		240	8.2	6.9	-2	0.2	0.04
20-Jun-91	1020		3.6	15.0	7.2	280	7.9	7.4	2	0.3	0.02
20-Jun-91	1025	10.8	8.8	15.0		290	7.9	7.4	-2	0.3	0.02
05-Jul-91	1210		5.2	18.5	5.2	280	7.2	7.2	10	0.4	0.01
05-Jul-91	1215	9.4	7.9	17.0		260	7.0	7.3	10	0.5	0.02
18-Jul-91	1220		3.5	18.0	7.0	290	8.2	7.2	-2	0.4	0.04
18-Jul-91	1225	15.8	13.8	16.0		250	8.2	7.4	-2	0.3	0.02
01-Aug-91	1240		3.4	17.0	6.8	270	8.0	7.2	14	0.1	-0.01
01-Aug-91	1245	15.0	13.0	14.5		250	8.0	7.1	6	0.2	0.03
27-Aug-91	920		2.5	15.5	5.0	270	9.4	7.4	2	-0.1	0.033
27-Aug-91	925	11.9	10.4	15.0		270	9.8	7.2	8	-0.1	0.026
06-Sep-91	1120		2.4	15.0	4.9	260	10.8	7.4	8	-0.1	-0.005
06-Sep-91	1125	10.0	8.0	14.0		250	9.6	7.3	6	-0.1	-0.005

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**TABLE 6**  
**393212105042701 CHATFIELD RESERVOIR NEAR SOUTH PLATTE RIVER INFLOW (SITE 9)**  
**WATER-QUALITY DATA**

DATE	TIME	TOTAL DEPTH (FEET)	SAMP- LING DEPTH (FEET)	TEMPER- ATURE (DEG C)	TRANS- PARENCY SECCHI DISK (FEET)	SPE- CIFIC CON- DUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	PH FIELD (STAND- ARD UNITS)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
02-Oct-91	1355		2.5	9.0	5.0	260	10.2	8.0	-2	0.2	0.260
02-Oct-91	1400	13	11.0	8.0		260	10.0	7.7	-2	0.2	0.550
12-Nov-91	1200		4.5	10.0	9.0	220	9.4	7.7	2	-0.1	-0.005
12-Nov-91	1205	9.2	7.7	7.5		220	10.3	7.7	-2	-0.1	-0.005
06-Dec-91	1130	No Sample Collected									
06-Dec-91	1135	No Sample Collected									
26-Dec-91	1020		1.8	1.5	3.5	310	8.8	7.5	-2	0.6	-0.005
26-Dec-91	1025	11	9.0	1.5		310	7.9	7.3	-2	0.5	-0.005



**TABLE 6**  
**393212105042701 CHATFIELD RESERVOIR NEAR SOUTH PLATTE RIVER INFLOW (SITE 9)**  
**WATER-QUALITY DATA**

DATE	TIME	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CHLORO- PHYLL A CORR. (UG/L)	PHYTO- PLANK- TON, (SPEC- IES NUMBER)	LABOR- ATORY SAMPLE NUMBER
02-Jan-91	1020	-0.005			97
02-Jan-91	1025	-0.005			98
30-Jan-91	1200	0.009	2.8		570
30-Jan-91	1205	0.015			571
22-Mar-91	1115	-0.01	3.2		1863
22-Mar-91	1120	-0.01			1864
03-Apr-91	1105	0.04	2.1		2309
03-Apr-91	1110	-0.01			2310
03-May-91	1035	-0.01	2.1		3274
03-May-91	1040	0.01			3275
15-May-91	1040	-0.01	3.2		3616
15-May-91	1045	-0.01			3617
05-Jun-91	1050	0.04	2.1		4732
05-Jun-91	1055	0.04			4733
20-Jun-91	1020	0.02	1.4		5222
20-Jun-91	1025	0.02			5223
05-Jul-91	1210	0.01	3.9	8	5724
05-Jul-91	1215	0.01			5725
18-Jul-91	1220	-0.01	1.4	6	6142
18-Jul-91	1225	-0.01			6143
01-Aug-91	1240	-0.01	2.8	9	6736
01-Aug-91	1245	0.03			6737
27-Aug-91	920	0.024	3.6	19	7430
27-Aug-91	925	0.019			7431
06-Sep-91	1120	-0.005	2.5	12	7723
06-Sep-91	1125	-0.005			7724

**TABLE 6**  
**393212105042701 CHATFIELD RESERVOIR NEAR SOUTH PLATTE RIVER INFLOW (SITE 9)**  
**WATER-QUALITY DATA**

DATE	TIME	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CHLORO- PHYLL A CORR. (UG/L)	PHYTO- PLANK- TON, (SPEC- IES NUMBER)	LABOR- ATORY SAMPLE NUMBER
02-Oct-91	1355	-0.005	2.8	12	8811
02-Oct-91	1400	-0.005			8812
12-Nov-91	1200	-0.005	0.8		9830
12-Nov-91	1205	-0.005			9831
06-Dec-91	1130		No Sample Collected		
06-Dec-91	1135		No Sample Collected		
26-Dec-91	1020	-0.005			10948
26-Dec-91	1025	-0.005			10949

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 7**  
**392520104542001 ALLUVIAL WELL NEAR PLUM CREEK WASTEWATER AUTHORITY WWTP (SITE 1W)**  
**WATER-QUALITY DATA**

DATE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	PH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	LAB- ORATORY SAMPLE NUMBER
04-Apr-91	1200	14.0	340	9.3	7.0	1.5	0.06	0.02	2421
12-Jun-91	0928		310		6.2	0.3	0.04	0.04	4915
12-Jun-91	9999					-1.0	-0.02	-0.02	9729-38576-1
04-Sep-91	1345	7.5	280	8.2	6.7	2.8	0.084	0.024	7632
06-Dec-91	1315	9.0	280	7.2	6.4	3.1	0.108	0.070	10461

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 8**  
**392620104574001 ALLUVIAL WELL NEAR TOWN OF SEDALIA (SITE 2W)**  
**WATER-QUALITY DATA**

DATE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MGL)	PH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	LAB- ORATORY SAMPLE NUMBER
04-Apr-91	1230	15.0	220	11.8	6.6	3.1	0.10	0.09	2422
12-Jun-91	0953		310		6.4	3.6	0.14	0.14	4916
04-Sep-91	1330	5.0	290	7.6	6.6	3.3	0.059	0.049	7631
06-Dec-91	1330	10.0	330	6.3	6.6	1.7	0.514	0.417	10462

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 9**  
**392145104513001 ALLUVIAL WELL IN TOWN OF CASTLE ROCK WELL FIELD (SITE 3W)**  
**WATER-QUALITY DATA**

DATE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	PH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	LAB- ORATORY SAMPLE NUMBER
04-Apr-91	1300	12.0	290	11.2	6.3	3.9	0.09	0.05	2423
12-Jun-91	1023		410		6.1	4.0	0.08	0.08	4917
04-Sep-91	1415	5.0	290	8.8	6.7	1.6	0.046	0.024	7633
06-Dec-91	1245	9.5	300	6.9	6.4	1.4	0.011	-0.005	10463

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 10**  
**39281510459001 ALLUVIAL WELL AT FLYING C RANCH ON DOUGLAS COUNTY ROAD 16 (SITE 4W)**  
**WATER-QUALITY DATA**

DATE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	PH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	LAB- ORATORY SAMPLE NUMBER
04-Apr-91	1320	13.0	200	6.8	7.1	0.7	0.01	-0.01	2424
12-Jun-91	1050		240		6.7	-0.1		0.03	4918
04-Sep-91	1245	10.2	220	7.6	7.2	-0.1	0.051	0.028	7630
06-Dec-91	1400	9.5	260	5.8	6.5	1.4	0.029	0.022	10464

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 11**  
**392905105000501 ALLUVIAL WELL NEAR PLUM CREEK AT LOUVIERS ROAD (SITE 5W)**  
**WATER-QUALITY DATA**

DATE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	PH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	LAB- ORATORY SAMPLE NUMBER
04-Apr-91	1340	12.0	250	4.3	6.6	-0.1	0.01	0.01	2425
12-Jun-91	1105		190		7.6	1.2		0.08	4919
04-Sep-91	1225	10.0	290	3.6	6.6	-0.1	0.028	0.024	7629
06-Dec-91	1430	9.0	280	7.0	6.7	2.3	0.060	0.060	10465

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

**TABLE 12**  
**393020105013001 ALLUVIAL WELL AT PLUM CREEK STABLES ON TITAN ROAD (SITE 6W)**  
**WATER-QUALITY DATA**

DATE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	PH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	LAB- ORATORY SAMPLE NUMBER
04-Apr-91	1400	10.0	250	6.9	6.9	0.20	-0.01	-0.01	2426
12-Jun-91	1145					0.10	0.03	0.03	4920
04-Sep-91	1215	15.0	320	3.6	6.9	0.10	0.028	0.024	7628
06-Dec-91	1500	6.5	250	4.2	6.8	-0.10	0.007	0.007	10466

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE



**TABLE 13**  
**PLUM CREEK BELOW THE CONFLUENCE OF EAST & WEST PLUM CREEK (SITE 2B)**  
**SUPPLEMENTAL TRIBUTARY SURVEYS--WATER QUALITY DATA**

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS STREAM- FLOW (CFS)	SPE- CIFIC CONDUC- TANCE (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	pH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, TOTAL KJELDL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	FECAL COLI- FORMS (#/100ML)
10-Apr-91	1352	11.5		340	7.8	7.9		0.03	0.05	2.60	0.50	0.17	0.13	12
23-Apr-91	1224	16.0		320	7.5	7.2		0.09	0.02	0.94	0.30	0.11	0.10	0
07-May-91	958	11.0			8.3	8.1		0.07	0.03	0.49	0.50	0.15	0.10	134

ADDITIONAL DATA TO BE PROVIDED

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.  
 BLANK RANGES INDICATE NO DATA WERE AVAILABLE.  
 TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.  
 SOURCE: PLUM CREEK WASTEWATER AUTHORITY.

**TABLE 14  
WEST PLUM CREEK AT SEDALIA, COLORADO (SITE 3)  
SUPPLEMENTAL TRIBUTARY SURVEYS--WATER-QUALITY DATA**

DATE	TIME	STAGE (FEET)	INSTAN- TANEOUS STREAM- FLOW (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUC- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	pH FIELD (STAND- ARD UNITS)	BIO- CHEMICAL OXYGEN DEMAND (MG/L)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, TOTAL KJELDL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	FECAL COLI- FORMS (#/100ML)
10-Apr-91	1342	0.50	44	11.0	260	7.8	7.9		0.02	0.01	0.33	0.20	0.06	0.03	2
23-Apr-91	1211	0.33	36	14.5	280	7.8	8.1		0.09	0.01	0.60	0.20	0.06	0.05	22
07-May-91	944	0.62	49	10.0		8.2	8.0		0.06	0.03	0.60	0.70	0.09	0.07	202

ADDITIONAL DATA TO BE PROVIDED

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

SOURCE: PLUM CREEK WASTEWATER AUTHORITY.

**TABLE 15  
EAST PLUM CREEK AT SEDALIA, COLORADO (SITE 4)  
SUPPLEMENTAL TRIBUTARY SURVEY--WATER-QUALITY DATA**

DATE	TIME	STAGE (FEET)	INSTAN- TANEOUS STREAM- FLOW (cfs)	TEMPER- ATURE (DEG C)	SPE- CIFIC CONduc- TANCE FIELD (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	pH FIELD (STD. UNITS)	BIO- CHEMICAL OXYGEN DEMAND (MG/L)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, TOTAL KJELDL. (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	FECAL COLI- FORMS (#/100ML)
10-Apr-91	1330	-0.67	5.2	13.0	390	8.0	8.0		0.04	0.09	5.10	0.80	0.26	0.14	4	
23-Apr-91	1156	-0.80	3.6	15.0	350	8.5	8.5		0.10	0.04	0.99	0.30	0.13	0.10	32	
07-May-91	937	-0.50	8.0	11.0		9.8	8.3		0.05	0.08	0.49	0.80	0.20	0.17	74	
04-Jun-91	1330			25.5			8.2		0.19		3.65					
12-Jul-91	1945			16.0			8.2		0.03	0.07	2.30		0.14	0.10		
25-Jul-91	810			17.5					0.02	0.08	2.20		0.23	0.22		
31-Jul-91	845			19.0			8.2		0.02	0.06	3.90		0.15	0.15		
07-Aug-91	830			18.0			8.1		0.04	0.07	3.90		0.16	0.15		
09-Sep-91	1520			24.0			8.5		0.03	0.04	0.63		0.10	0.09		
25-Sep-91	1000			13.0			8.3		0.04		6.73		0.20	0.16		
17-Oct-91	1458			20.0					0.04	0.09	2.10		0.15	0.10		
22-Oct-91	820			6.0			8.1		0.03	0.10	7.25		0.13	0.10		

01623

0043

ADDITIONAL DATA TO BE PROVIDED

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

SOURCE: PLUM CREEK WASTEWATER AUTHORITY.

**TABLE 16  
EAST PLUM CREEK DOWNSTREAM FROM THE PCWA WWTP (SITE 4A)  
SUPPLEMENTAL TRIBUTARY SURVEYS--WATER-QUALITY DATA**

DATE	TIME	INSTAN- TANEOUS STREAM- FLOW (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CONDCU- TANCE (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	pH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, TOTAL KJELDL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO (MG/L AS P)	FECAL COLI- FORMS (# 100ML)
10-Apr-91	1302		11.0	410	8.0	7.5		0.10	0.04	7.20	0.80	0.15	0.12	0
23-Apr-91	1303		15.5	310	7.8	8.2		0.08	0.01	0.82	0.20	0.11	0.10	14
07-May-91	1034		11.5		8.1	8.0		0.05	0.05	0.48	0.40	0.13	0.09	48
21-May-91	855					7.9		0.04		4.59		0.13		
28-May-91	755					7.9			0.05	0.41				
04-Jun-91	815							0.18	0.03	9.74		0.18		
11-Jul-91	1152							0.15	0.14	6.40		0.11	0.10	
24-Jul-91	914							0.03	0.05	0.79		0.19	0.15	
30-Jul-91	1000							0.05	0.02	4.50		0.13	0.11	
06-Aug-91	955					8.0		0.10	0.03	1.10		0.16	0.14	
12-Aug-91	915							0.03	0.01	0.64		0.18	0.15	
09-Sep-91	1047		21.0			7.5		0.64	0.14	13.4		0.12	0.10	
24-Sep-91	835							0.01	0.04	26.9		0.033	0.036	
16-Oct-91	847		16.5					1.50	0.16	17.9		0.08	0.06	
21-Oct-91	806							0.06	0.03	19.3		0.05	0.05	

ADDITIONAL DATA TO BE PROVIDED

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

SOURCE: PLUM CREEK WASTEWATER AUTHORITY.

**TABLE 17  
EAST PLUM CREEK UPSTREAM FROM THE PCWA WWTP (SITE 4B)  
SUPPLEMENTAL TRIBUTARY SURVEYS--WATER-QUALITY DATA**

DATE	TIME	STAGE (FEET)	INSTAN- TANEOUS STREAM- FLOW (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CONduc- TANCE (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	pH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, TOTAL KJELDL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO TOTAL (MG/L AS P)	FECAL COLI- FORMS (#/100ML)
10-Apr-91	1255	0.22	14	11.0	300	7.8	7.8		0.02	0.02	0.96	0.30	0.17	0.10	4
23-Apr-91	1259	0.10	10	15.0	310	8.0	8.2		0.10	0.02	0.97	0.20	0.12	0.11	34
07-May-91	1027	0.18	11	11.5		8.2	7.9		0.05	0.05	0.38	0.70	0.13	0.12	56
21-May-91	857						8.0		0.03	0.02	0.94		0.11		
04-Jun-91	817						7.9		0.12	0.05	0.75		0.19		
11-Jul-91	1145								0.04	0.01	0.86		0.11	0.10	
24-Jul-91	916								0.03	0.05	0.81		0.19	0.15	
30-Jul-91	955								0.02	0.02	0.75		0.15	0.13	
06-Aug-91	958						8.0		0.01	0.03	1.10		0.13	0.11	
12-Aug-91	916								0.03	0.01	0.64		0.18	0.15	
09-Sep-91	1049			20.0			8.2		0.07	-0.01	0.66		0.11	0.11	
24-Sep-91	837								0.03	0.01	1.94		0.11	0.10	
16-Oct-91	853			17.1					0.05	0.01	1.63		0.11	0.10	
21-Oct-91	808								0.03	0.01	2.09		0.09	0.09	

ADDITIONAL DATA TO BE PROVIDED

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

SOURCE: PLUM CREEK WASTEWATER AUTHORITY.

**TABLE 18**  
**BEAR CREEK NEAR PERRY PARK, COLORADO (SITE 6)**  
**SUPPLEMENTAL TRIBUTARY SURVEYS--WATER-QUALITY DATA**

DATE	TIME	STAGE (FEET)	TEMPER- ATURE (DEG C)	SPE- CIFIC CONduc- TANCE FIELD (US/CM)	pH FIELD (STD. UNITS)	OXYGEN, DIS- SOLVED (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (MG/L)	NITRO- GEN- TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, TOTAL KJELDL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	FECAL COLI- FORMS (#/100ML)
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NO DATA COLLECTED DURING 1991

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

SOURCE: PERRY PARK WATER AND SANITATION DISTRICT.

**TABLE 19  
 BEAR CREEK DOWNSTREAM FROM PERRY PARK WWTP (SITE 6A)  
 SUPPLEMENTAL TRIBUTARY SURVEYS--WATER-QUALITY DATA**

DATE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUCT- TANCE (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	pH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, TOTAL KJELDL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO TOTAL (MG/L AS P)	FECAL COLI- FORMS (#/100ML)
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NO DATA COLLECTED DURING 1991

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.  
 BLANK RANGES INDICATE NO DATA WERE AVAILABLE.  
 TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.  
 SOURCE: PERRY PARK WATER AND SANITATION DISTRICT.

**TABLE 20  
WEST PLUM CREEK DOWNSTREAM FROM THE CONFLUENCE OF BEAR CREEK (SITE 6B)  
SUPPLEMENTAL TRIBUTARY SURVEYS--WATER-QUALITY DATA**

DATE	TIME	STAGE (FEET)	INSTAN- TANEOUS STREAM- FLOW (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CONDUC- TANCE (US/CM)	OXYGEN, DIS- SOLVED (MG/L)	pH FIELD (STAND- ARD UNITS)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, TOTAL KJELDL. (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO TOTAL (MG/L AS P)	FECAL COLI- FORMS (#/ 100ML)
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NO DATA COLLECTED DURING 1991

MINUS SIGN MEANS "LESS THAN" INDICATED VALUE.

BLANK RANGES INDICATE NO DATA WERE AVAILABLE.

TIME = 9999 MEANS THE SAMPLE IS A DUPLICATE OR A SPLIT OF THE SAMPLE IMMEDIATELY ABOVE.

SOURCE: PERRY PARK WATER AND SANITATION DISTRICT.



## **PHYTOPLANKTON SPECIES AND DENSITY**

TABLE 1: Species list and density (cells/mL) of phytoplankton collected from Chatfield Reservoir on July 5, 1991.

TAXON	STATION		
	RM-1	RP-1	RS-1
DIVISION BACILLARIOPHYTA			
<u>Asterionella formosa</u>	16	73	
<u>Cymatopleura solea</u>		10	
<u>Fragilaria crotonensis</u>		188	
<u>Hantzschia amphioxys</u>			4
<u>Melosira italica</u>		188	
<u>Stephanodiscus dubius</u>			94
<u>S. niagarae</u>		31	16
DIVISION CHLOROPHYTA			
<u>Ankyra judayi</u>	845	689	908
<u>Chlamydomonas</u> sp.	31		
<u>Chlorella</u> sp.	58688	83750	46313
<u>Coccomyxa</u> sp.			751
<u>Gloeocystis gigas</u>	8		
<u>Kirchneriella lunaris</u>		31	
<u>Schroederia setigera</u>	8	10	
DIVISION CHRYSOPHYTA			
<u>Dinobryon divergens</u>	31		
DIVISION CRYPTOPHYTA			
<u>Rhodomonas minuta</u>	94	31	157
DIVISION CYANOPHYTA			
<u>Aphanothece (Coccochloris)</u> sp.	125		157
<u>Dactylococcopsis acicularis</u>		8	
<u>Gloeocapsa</u> sp.		10	
<u>Lynqbya limnetica</u>		376	
TOTAL:	59846	85395	48400
NUMBER OF SPECIES:	9	13	8

TABLE 2: Species list and density (cells/mL) of phytoplankton collected from Chatfield Reservoir on July 18, 1991.

TAXON	STATION		
	RM-1	RP-1	RS-1
DIVISION BACILLARIOPHYTA			
<u>Asterionella formosa</u>	94	4	31
<u>Fragilaria crotonensis</u>	8	8	
<u>Melosira granulata</u>		4	
<u>Navicula capitata</u>		16	
DIVISION CHLOROPHYTA			
<u>Ankyra judayi</u>	63	47	
<u>Chlorella</u> sp.	2000	563	938
<u>Coccomyxa</u> sp.	63	188	
<u>Oocystis pusilla</u>		31	
DIVISION CHRYSOPHYTA			
<u>Dinobryon divergens</u>	500	94	63
<u>Kephyrion spirale</u>	31		
DIVISION CRYPTOPHYTA			
<u>Rhodomonas minuta</u>	282	624	94
DIVISION CYANOPHYTA			
<u>Anacystis</u> sp.		188	
<u>Aphanothece (Coccochloris)</u> sp.	38688	5321	37813
<u>Microcystis aeruginosa</u> ( <u>Anacystis cyanea</u> )	8		
<u>Dactylcocopsis acicularis</u>	31		
DIVISION PYRROPHYTA			
<u>Ceratium hirundinella</u>			8
TOTAL:	41768	7088	38947
NUMBER OF SPECIES:	11	12	6

TABLE 3: Species list and density (cells/mL) of phytoplankton collected from Chatfield Reservoir on August 1, 1991.

TAXON	STATION		
	RM-1	RP-1	RS-1
DIVISION BACILLARIOPHYTA			
<u>Asterionella formosa</u>	8		
<u>Fragilaria crotonensis</u>			8
<u>Melosira granulata</u>			4
<u>M. italica</u>		16	
<u>Stephanodiscus dubius</u>		63	
DIVISION CHLOROPHYTA			
<u>Ankyra judayi</u>		31	31
<u>Chlorella</u> sp.	5813	10000	9188
<u>Coccomyxa</u> sp.		31	
<u>Keratococcus</u> sp.		31	
<u>Kirchneriella lunaris</u>	94		31
<u>Oocystis lacustris</u>		31	
<u>Sphaerocystis schroeteri</u>	156		94
DIVISION CHRYSOPHYTA			
<u>Dinobryon divergens</u>	16		31
DIVISION CRYPTOPHYTA			
<u>Rhodomonas minuta</u>	63	125	625
DIVISION CYANOPHYTA			
<u>Anacystis</u> sp.		2598	
<u>Aphanothece (Coccochloris)</u> sp.	10750	10313	6250
TOTAL:	16900	23239	16262
NUMBER OF SPECIES:	7	10	9

TABLE 1: Species list and density (cells/mL) of phytoplankton collected from Chatfield Reservoir on August 27, 1991.

TAXON	STATION		
	RM-1	RP-1	RS-1
DIVISION BACILLARIOPHYTA			
<u>Achnanthes lanceolata</u>	8		
<u>Asterionella formosa</u>			16
<u>Fragilaria crotonensis</u>	125	94	8
<u>Melosira granulata</u>			
var. <u>angustissima</u>	94	376	31
<u>M. granulata</u> var. <u>granulata</u>		31	188
<u>M. italica</u>	16		
<u>Stephanodiscus tenuis</u>			31
<u>Synedra acus</u>	8		
DIVISION CHLOROPHYTA			
<u>Ankyra judayi</u>	157	16	16
<u>Chlamydomonas</u> sp.		31	63
<u>Chlorella</u> sp.	6688	3813	5188
<u>Gloeocystis gigas</u>	376	31	188
<u>Kirchneriella contorta</u>	31		
<u>K. lunaris</u>	63	31	157
<u>Oocystis pusilla</u>	31		63
<u>Pediastrum duplex</u>	8		
<u>Pteromonas</u> sp.		125	31
<u>Scenedesmus linearis</u>	563	500	
<u>Tetraedron minimum</u>	31		
DIVISION CHRYSOPHYTA			
<u>Chrysococcus</u> sp.	31		
<u>Dinobryon divergens</u>	63	470	407
<u>Kephyrion</u> sp.			31
DIVISION CRYPTOPHYTA			
<u>Rhodomonas minuta</u>	31	31	
DIVISION CYANOPHYTA			
<u>Aphanocapsa delicatissima</u>	625	375	5938
<u>Aphanothece</u> sp.	25500	16250	9313
<u>A. saxicola</u>	12500	25063	
<u>Dactlococcopsis acicularis</u>	94		63
<u>Merismopedia tenuissima</u>			1000
DIVISION EUGLENOPHYTA			
<u>Phacus</u> sp.	8		
<u>Trachelomonas volvocina</u>			157
TOTAL:	47051	47237	22889
NUMBER OF SPECIES:	22	15	19

TABLE 2: Species list and density (cells/mL) of phytoplankton collected from Chatfield Reservoir on September 6, 1991.

TAXON	STATION		
	RM-1	RP-1	RS-1
DIVISION BACILLARIOPHYTA			
<u>Asterionella formosa</u>	19	16	63
<u>Eunotia pectinalis</u> var. <u>minor</u>	8		
<u>Fragilaria crotonensis</u>	438	1878	438
<u>Melosira granulata</u> var. <u>angustissima</u>		21	16
<u>Melosira granulata</u>	16	8	
<u>Nitzschia acicularis</u>		31	
<u>N. agnewii</u>			63
<u>Stephanodiscus niagarae</u>	31		
DIVISION CHLOROPHYTA			
<u>Ankyra judayi</u>	63		188
<u>Chlorella</u> sp.	5625	9188	5500
<u>Chlorococcum</u> sp.			94
<u>Eudorina elegans</u>	8		
<u>Gloeocystis gigas</u>	125	94	8
<u>Oocystis lacustris</u>	250		
<u>Pediastrum duplex</u>			8
<u>Pteromonas</u> sp.			63
<u>Staurastrum paradoxum</u>		8	
DIVISION CHRYSOPHYTA			
<u>Dinobryon divergens</u>	31		
DIVISION CRYPTOPHYTA			
<u>Rhodomonas minuta</u>		31	
DIVISION CYANOPHYTA			
<u>Aphanothece saxicola</u>		4625	
<u>Aphanothece</u> sp.	1500	1813	2375
<u>Merismopedia tenuissima</u>	3000		1500
<u>Microcystis aeruginosa</u>		125	
DIVISION EUGLENOPHYTA			
<u>Euglena</u> sp.		8	
TOTAL:	11114	17846	10316
NUMBER OF SPECIES:	13	13	12

TABLE 3: Species list and density (cells/mL) of phytoplankton collected from Chatfield Reservoir on October 2, 1991.

TAXON	STATION		
	RM-1	RP-1	RS-1
DIVISION BACILLARIOPHYTA			
<u>Asterionella formosa</u>	219	188	31
<u>Caloneis lewisii</u>			31
<u>Cyclotella stelligera</u>	31		
<u>Fragilaria crotonensis</u>		21	16
<u>Melosira ambigua</u>	125		
<u>M. granulata</u> var. <u>angustissima</u>	2254	6855	4194
<u>M. granulata</u>	657		344
<u>M. italica</u>	157	250	470
<u>Navicula capitata</u>		8	
<u>Nitzschia agnewii</u>			31
<u>Stephanodiscus astrea</u>			6
<u>S. dubius</u>			31
DIVISION CHLOROPHYTA			
<u>Ankyra judayi</u>	13		
<u>Chlorella</u> sp.	188	2438	282
<u>Gloeocystis gigas</u>	6	16	
<u>Scenedesmus ecornis</u>			63
DIVISION CRYPTOPHYTA			
<u>Rhodomonas minuta</u>	13		
DIVISION CYANOPHYTA			
<u>Aphanothece</u> sp.			814
<u>Microcystis aeruginosa</u>	6		
DIVISION PYRROPHYTA			
<u>Ceratium hirundinella</u>	6		
TOTAL:	3675	9776	6313
NUMBER OF SPECIES:	12	7	12