

CONODOGUINET CREEK BASIN

01570000 CONODOGUINET CREEK NEAR HOGESTOWN, PA

LOCATION.--Lat 40°15'08", long 77°01'17", Cumberland County, Hydrologic Unit 02050305, on left bank 1,000 ft upstream from highway bridge on Township Route 596 (Sample Bridge Road), 0.4 mi downstream from Hogestown Run, and 1.0 mi northeast of Hogestown.

DRAINAGE AREA.--470 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1911 to September 1917, October 1929 to September 1958, July 1967 to current year. October 1917 to December 1919 (gage heights and discharge measurements only), in reports of Water Supply Commission of Pennsylvania. Published as "*at Brysons Bridge*" 1912-17.

REVISED RECORDS.--WSP 1722: 1913, 1917.

GAGE.--Water-stage recorder. Datum of gage is 351.00 ft above sea level. Prior to December 1919, nonrecording gage at site 2 mi downstream at different datum. Oct. 1, 1929, to Aug. 3, 1931, nonrecording gage at site 1,000 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since June 1969 the Pennsylvania American Water Co. has diverted water upstream from station for municipal supply. Diversion for the year was equivalent to a mean daily discharge of 8.0 ft³/s. Satellite and landline telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 24	2400	*5,770	*7.83	Sept. 30	2400	4,300	6.71

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	152	134	e76	541	347	501	475	176	111	89	126
2	133	148	130	e70	628	360	537	442	187	116	89	113
3	136	143	129	e110	855	325	522	409	225	161	83	104
4	174	142	128	e300	747	902	472	386	217	218	81	96
5	176	141	135	e250	654	1460	446	371	194	145	83	102
6	171	143	134	e170	569	1090	690	351	168	124	83	171
7	153	147	124	e150	520	974	540	342	153	112	82	318
8	195	150	128	e140	521	794	481	445	156	103	86	378
9	280	143	136	e170	546	684	534	765	152	96	93	291
10	399	143	142	e210	506	639	1790	571	145	102	87	232
11	345	152	138	e230	463	608	1860	447	151	99	84	170
12	266	150	127	e200	442	578	1930	398	144	99	84	160
13	227	149	123	e180	474	588	1680	386	142	98	90	138
14	211	155	120	e155	462	646	1290	471	144	96	220	125
15	196	156	118	e170	406	750	1060	398	152	97	250	122
16	185	143	114	e185	382	848	1030	347	139	93	162	762
17	186	142	116	e230	384	1080	946	318	147	89	123	1200
18	181	139	120	e300	402	1690	782	293	178	87	107	882
19	174	138	119	1170	391	1700	670	282	185	88	99	506
20	166	139	116	1260	362	1300	634	264	166	103	132	368
21	161	145	113	913	338	1110	686	254	155	94	162	330
22	156	145	115	927	310	2040	725	241	144	198	129	352
23	155	138	116	1430	283	1830	1100	258	136	167	125	308
24	161	136	113	4500	262	1350	1080	283	128	125	226	246
25	160	136	112	4890	271	1120	960	279	128	113	182	209
26	154	153	107	1960	262	933	823	257	123	102	181	187
27	153	152	e104	1340	275	805	728	232	119	96	208	175
28	154	150	e101	1070	295	714	641	214	123	93	449	201
29	151	147	e100	916	---	644	570	199	123	90	253	727
30	148	136	e99	767	---	579	516	190	115	92	188	2590
31	151	---	e91	641	---	517	---	180	---	88	148	---
TOTAL	5798	4353	3702	25080	12551	29005	26224	10748	4615	3495	4458	11689
MEAN	187	145	119	809	448	936	874	347	154	113	144	390
MAX	399	156	142	4890	855	2040	1930	765	225	218	449	2590
MIN	133	136	91	70	262	325	446	180	115	87	81	96
CFSM	.40	.31	.25	1.72	.95	1.99	1.86	.74	.33	.24	.31	.83
IN.	.46	.34	.29	1.99	.99	2.30	2.08	.85	.37	.28	.35	.93

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF DAILY RECORD, BY WATER YEAR (WY)

MEAN	351	484	649	716	814	1084	939	687	485	328	302	310
MAX	1838	1436	1940	1850	2257	3463	2693	1753	3120	1184	1584	1684
(WY)	1977	1971	1997	1996	1984	1994	1993	1998	1972	1989	1915	1996
MIN	55.1	53.4	57.3	83.5	150	287	268	194	148	98.0	86.5	68.0
(WY)	1931	1931	1931	1931	1931	1931	1915	1941	1991	1930	1932	1932

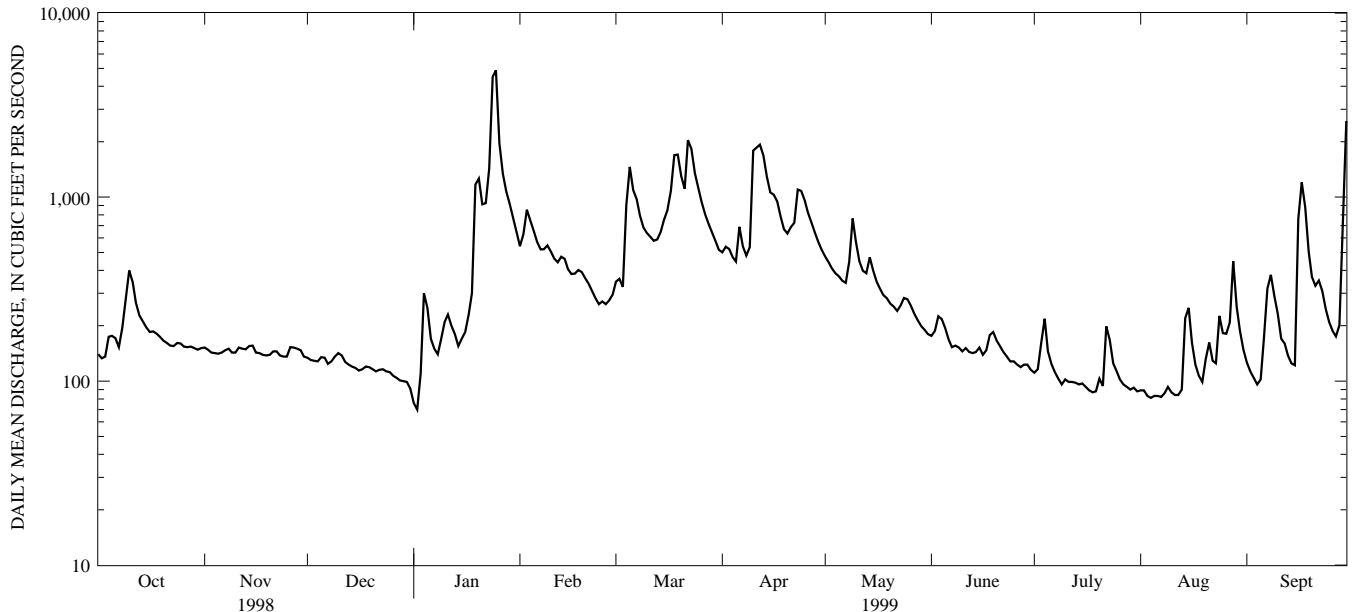
e Estimated.

CONODOGUINET CREEK BASIN

01570000 CONODOGUINET CREEK NEAR HOGESTOWN, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		FOR PERIOD OF DAILY RECORD	
ANNUAL TOTAL	325359		141718			
ANNUAL MEAN	891		388		595	
HIGHEST ANNUAL MEAN					1045	1972
LOWEST ANNUAL MEAN					234	1931
HIGHEST DAILY MEAN	7060	Mar 22	4890	Jan 25	24500	Jun 23 1972
LOWEST DAILY MEAN	e91	Dec 31	e70	Jan 2	26	Dec 23 1930
ANNUAL SEVEN-DAY MINIMUM	a102	Dec 25	84	Aug 2	27	Dec 19 1930
INSTANTANEOUS PEAK FLOW			5770	Jan 24	b33700	Jun 23 1972
INSTANTANEOUS PEAK STAGE			7.83	Jan 24	c17.01	Jun 23 1972
INSTANTANEOUS LOW FLOW			d42	Jan 2	24	Dec 16 1930
ANNUAL RUNOFF (CFSM)	1.90		.83		1.27	
ANNUAL RUNOFF (INCHES)	25.75		11.22		17.19	
10 PERCENT EXCEEDS	2180		914		1260	
50 PERCENT EXCEEDS	380		182		346	
90 PERCENT EXCEEDS	137		101		119	

- a Computed using estimated daily discharges.
- b From rating curve extended above 27,100 ft³/s.
- c From floodmark in gage.
- d Result of freeze-up.
- e Estimated.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999

CONODOGUINET CREEK BASIN

01570000 CONODOGUINET CREEK NEAR HOGESTOWN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962, 1965, 1967-68, 1971-72, 1974, 1996 to current year.

REMARKS.--These data in the following table were collected as part of a Chesapeake Bay Watershed project to document nutrient and suspended-sediment concentrations, nutrient loads, and trends in nutrient loading.

Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE OF HG (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1998												
08...	0930	80020	1028	176	741	84	8.2	8.2	513	19.0	15.0	--
NOV												
09...	0945	80020	1028	140	734	88	10.2	7.6	543	7.1	7.5	240
DEC												
07...	0900	80020	1028	120	738	79	8.5	8.2	526	12.3	10.6	--
JAN 1999												
11...	1420	80020	1028	253	734	101	14.1	8.0	554	-4.4	.1	210
25...	1040	80020	1028	5580	734	99	12.9	7.1	195	5.1	2.8	--
FEB												
10...	1120	80020	1028	502	747	102	13.1	7.9	396	11.2	4.1	170
MAR												
10...	1015	80020	1028	642	740	104	13.8	8.1	329	1.3	2.3	--
APR												
12...	1330	80020	1028	2010	737	96	10.7	8.1	226	11.4	9.3	--
16...	1217	80020	1028	1020	728	101	10.5	8.2	281	17.2	11.5	120
MAY												
12...	1220	80020	1028	397	743	115	10.4	8.1	338	20.9	18.8	140
JUN												
08...	1110	80020	1028	161	741	94	7.6	8.1	456	25.6	24.4	--
JUL												
15...	1430	80020	1028	94	746	141	11.2	8.5	461	29.0	26.0	--
22...	1210	80020	1028	120	742	88	7.1	8.2	451	26.0	25.0	190
22...	2050	80020	1028	352	741	98	7.6	8.2	449	27.4	26.7	190
AUG												
17...	1840	80020	1028	113	739	165	12.3	8.6	395	28.1	29.0	--
21...	0930	80020	1028	172	742	72	6.2	8.0	431	20.4	21.2	--
28...	1225	80020	1028	415	741	114	9.5	8.2	465	25.6	22.8	--
SEP												
07...	1510	80020	1028	235	737	113	9.1	8.2	365	24.7	24.3	140
08...	1305	80020	1028	415	738	114	9.3	8.3	451	27.4	24.0	180
16...	1830	80020	1028	1760	729	--	--	8.0	284	19.2	16.6	110

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	ALKA-LINITY WAT DIS TOT IT FIELD CACO3 (MG/L AS CACO3) (39086)	BICAR-BONATE WAT. DIS FET FIELD HCO3 (MG/L) (29804)	BICAR-BONATE WATER DIS IT FIELD HCO3 (MG/L AS HCO3) (00453)	CAR-BONATE WAT. DIS FET FIELD CO3 (MG/L) (29807)
OCT 1998												
08...	--	--	--	--	--	--	--	150	151	190	184	.0
NOV												
09...	75	75	13	2.9	.5	17	13	170	166	200	202	.0
DEC												
07...	--	--	--	--	--	--	--	170	167	200	204	.0
JAN 1999												
11...	63	64	11	3.4	.9	29	23	140	143	170	174	.0
25...	--	--	--	--	--	--	--	40	39	49	48	.0
FEB												
10...	51	53	8.9	2.4	.4	12	13	120	117	140	143	.0
MAR												
10...	--	--	--	--	--	--	--	82	80	98	100	.0
APR												
12...	--	--	--	--	--	--	--	110	108	130	132	.0
16...	--	37	6.7	1.8	.3	8.5	13	130	128	160	156	.0
MAY												
12...	41	45	7.6	2.0	.4	10	13	100	103	130	126	.0
JUN												
08...	--	--	--	--	--	--	--	150	150	180	183	.0
JUL												
15...	--	--	--	--	--	--	--	130	130	160	159	--
22...	72	58	12	3.1	.6	19	17	120	121	150	148	.0
22...	69	58	11	3.1	.6	18	16	120	124	150	151	.0
AUG												
17...	--	--	--	--	--	--	--	110	107	130	131	--
21...	--	--	--	--	--	--	--	120	119	150	145	.0
28...	--	--	--	--	--	--	--	140	137	170	167	.0
SEP												
07...	53	42	7.9	3.2	.6	15	19	85	85	100	104	.0
08...	60	54	10	2.9	.5	16	16	120	117	140	143	.0
16...	40	33	5.9	2.8	.5	11	18	69	68	84	83	.0

CONODOGUINET CREEK BASIN

01570000 CONODOGUINET CREEK NEAR HOGESTOWN, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)
OCT 1998												
08...	0	--	--	--	--	.032	.18	.25	5.1	4.86	4.87	.15
NOV												
09...	0	28	.18	1.1	26	<.020	.22	.23	4.9	--	4.67	--
DEC												
07...	0	--	--	--	--	.028	.30	.30	4.7	4.35	4.37	.27
JAN 1999												
11...	0	55	.11	6.6	26	.084	.28	.36	4.7	4.30	4.39	.19
25...	0	--	--	--	--	.115	.47	1.1	3.5	3.00	3.03	.36
FEB												
10...	0	23	.15	7.1	23	.026	.16	.20	4.0	3.88	3.89	.14
MAR												
10...	0	--	--	--	--	<.020	.17	.29	3.4	3.27	3.28	--
APR												
12...	0	--	--	--	--	.057	.28	.60	2.7	2.37	2.38	.23
16...	0	15	<.10	4.8	15	.029	.18	.29	2.7	2.47	2.48	.15
MAY												
12...	0	17	<.10	4.3	17	.023	.23	.33	3.1	2.82	2.83	.20
JUN												
08...	0	--	--	--	--	.028	.31	.25	3.2	2.82	2.84	.28
JUL												
15...	--	--	--	--	--	<.020	.35	.38	3.4	3.02	3.04	--
22...	0	31	.18	6.4	26	.029	.39	.42	3.2	2.74	2.78	.36
22...	0	28	.17	6.3	23	.037	.40	.44	3.4	2.98	3.01	.36
AUG												
17...	--	--	--	--	--	.021	.25	.27	2.8	2.52	2.55	.23
21...	0	--	--	--	--	.074	.50	.61	3.4	2.90	2.93	.43
28...	0	--	--	--	--	.039	.32	.40	3.7	3.35	3.37	.29
SEP												
07...	0	23	.10	6.1	26	.043	.47	.56	3.3	2.84	2.86	.43
08...	0	27	.12	5.5	24	<.020	.30	.39	3.4	3.10	3.12	--
16...	0	16	.10	6.2	17	.045	.57	1.9	2.8	2.18	2.19	.53
DATE	NITRO- GEN, TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)
OCT 1998												
08...	.22	5.1	.04	22	.04	.012	.04	<.050	.014	<.050	--	--
NOV												
09...	--	4.9	--	--	--	<.010	--	<.050	<.010	<.050	.41	104
DEC												
07...	.28	4.7	.04	19	.06	.019	--	<.050	<.010	<.050	--	--
JAN 1999												
11...	.28	4.8	.11	19	.30	.092	.04	.016	.014	.032	.45	197
25...	.96	4.1	.15	13	.08	.024	.20	.078	.064	.208	--	--
FEB												
10...	.18	4.1	.03	17	.04	.011	.05	.017	.015	.026	.31	279
MAR												
10...	--	3.6	--	14	.06	.017	.08	.007	.025	.019	--	--
APR												
12...	.54	3.0	.07	11	.04	.011	.08	.034	.025	.082	--	--
16...	.26	2.8	.04	11	.04	.012	.05	.011	.016	.034	.23	445
MAY												
12...	.31	3.2	.03	12	.05	.016	.06	.025	.021	.036	.26	192
JUN												
08...	.23	3.1	.04	12	.08	.023	.08	.024	.025	.036	--	--
JUL												
15...	--	3.4	--	13	.08	.023	.03	.018	.010	.026	--	--
22...	.39	3.2	.04	12	.12	.036	--	.017	<.010	.026	.35	76.9
22...	.40	3.4	.05	13	.11	.034	.04	.029	.013	.042	.35	232
AUG												
17...	.25	2.8	.03	11	.09	.026	--	.019	<.010	.025	--	--
21...	.54	3.5	.10	13	.12	.037	--	.027	<.010	.034	--	--
28...	.36	3.8	.05	15	.07	.020	.03	.032	.011	.044	--	--
SEP												
07...	.51	3.4	.06	13	.08	.024	.07	.027	.022	.052	.30	134
08...	--	3.5	--	14	.08	.025	.05	.026	.015	.045	.35	271
16...	1.9	4.1	.06	9.7	.04	.011	.10	.043	.032	.288	.22	780

CONODOGUINET CREEK BASIN

01570000 CONODOGUINET CREEK NEAR HOGESTOWN, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	QUALITY ASSUR- ANCE DATA INDICA- TOR CODE (99111)	REP- LICATE TYPE (CODE) (99105)	SAMPLE PURPOSE CODE (71999)	SAMPLER TYPE (CODE) (84164)	SAM- PLING METHOD, CODES (82398)
OCT 1998												
08...	--	--	--	--	2.8	6	52	--	--	10.00	3045	10
NOV												
09...	305	283	14	5.2	2.4	7	52	--	--	10.00	3045	10
DEC												
07...	--	--	--	--	1.2	4	60	--	--	10.00	3045	10
JAN 1999												
11...	331	300	15	7.4	3.0	5	69	--	--	10.00	3045	10
25...	--	--	--	--	1820	121	92	--	--	10.00	3039	10
FEB												
10...	229	217	<10	7.2	2.4	2	71	--	--	10.00	3045	10
MAR												
10...	--	--	--	--	6.8	4	85	--	--	10.00	3045	10
APR												
12...	--	--	--	--	894	164	70	--	--	10.00	3039	10
16...	168	177	29	8.3	27	10	85	--	--	10.00	3039	10
MAY												
12...	188	177	34	12	6.1	6	69	30	20.00	10.00	3045	10
JUN												
08...	--	--	--	--	2.9	7	57	--	--	10.00	3045	10
JUL												
15...	--	--	--	--	.93	4	83	--	--	10.00	3045	10
22...	259	240	13	15	2.1	7	67	--	--	10.00	3045	10
22...	257	236	15	4.8	20	22	85	--	--	10.00	3045	10
AUG												
17...	--	--	--	--	.84	3	60	--	--	10.00	3045	10
21...	--	--	--	--	3.5	8	91	--	--	10.00	3045	10
28...	--	--	--	--	18	17	80	--	--	10.00	3045	10
SEP												
07...	218	188	29	13	2.5	4	86	--	--	10.00	3045	10
08...	254	224	15	12	14	13	84	--	--	10.00	3045	10
16...	165	143	48	6.8	1060	225	92	--	--	10.00	3039	10

CONODOGUINET CREEK BASIN

01570000 CONODOGUINET CREEK NEAR HOGESTOWN, PA--Continued

REMARKS.--The following analyses are quality control samples processed during the 1999 water year and are defined in the explanation of records section entitled, "Water Quality-Control Data". Explanation of column headings and abbreviations--NUT&ION: nutrient and major ion.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
MAY 1999 12...	1221	80020	1028	45	7.6	2.0	10	17	.11	4.3	17	.025
DATE		NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)
MAY 1999 12...		.25	.35	2.82	.016	.06	.030	.021	.037	191	39	12