Water-Data Report 2013

01556009 FRANKSTOWN BRANCH JUNIATA RIVER AT RR AT WILLIAMSBURG, PA

Lower Susquehanna Basin
Upper Juniata Subbasin

LOCATION.--Lat 40°28′19″, long 78°11′13″ referenced to North American Datum of 1983, Blair County, PA, Hydrologic Unit 02050302.

DRAINAGE AREA.--296 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

COOPERATION.--Water-quality samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

REMARKS.--Analyses for pH, water temperature, specific conductance, and dissolved oxygen were performed on site. All other sample analyses were performed at the Pennsylvania Department of Environmental Protection laboratory in Harrisburg, Pa. Occasionally, values for filtered parameters may exceed values for the corresponding unfiltered parameter. These results are within the limits of analytical precision and methods.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 1 of 5

[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Discharge, instanta-neous, ft³/s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	pH, water, unfiltered, laboratory, standard units (00403)	Specific conduc-tance, water, unfiltered, laboratory, µS/cm at 25°C (90095)	Specific conduc-tance, water, unfiltered, µS/cm at 25°C (00095)	Tempera-ture, water, °C (00010)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Hardness, water, mg/L as $CaCO_3$ (00900)
10-25-2012	1100	105	9.8	8.4	8.3	541	548	13.3	334	210
10-31-2012	1300	1,890	11.5	8.4	7.9	223	223	9.2	118	85
11-13-2012	1100	285	11.3	8.4	8.1	419	420	8.9	258	160
12-18-2012	1300	895	9.5	8.4	7.9	232	230	8.2	160	88
01-29-2013	1330	808	12.3	7.8	7.7	612	625	3.6	350	--
01-31-2013	1045	5,600	11.3	6.9	7.6	215	203	4.1	162	--
02-11-2013	1245	393	13.0	8.2	8.0	406	406	5.5	244	--
02-27-2013	1230	541	13.7	8.1	8.0	536	536	4.4	312	--
03-20-2013	1245	666	11.1	8.0	8.0	456	441	4.8	40	--
04-18-2013	1230	589	8.4	7.8	7.9	296	296	13.9	172	--
05-21-2013	1000	300	7.3	7.7	8.2	356	350	18.0	252	--
06-07-2013	1300	411	6.3	7.9	8.1	476	463	17.3	310	--
06-08-2013	1300	214	7.1	7.9	8.2	387	387	17.0	248	--
06-11-2013	1230	291	7.0	8.0	8.2	459	475	18.9	314	--
06-24-2013	1315	168	7.3	8.1	8.3	481	475	2.5	336	--
07-17-2013	1445	174	6.9	8.4	8.4	451	462	25.4	304	170
08-08-2013	0900	1,030	--	--	8.0	524	--	--	326	--
08-21-2013	1015	104	8.8	8.1	8.2	520	516	18.3	332	180
09-16-2013	1030	85	9.1	8.2	8.3	592	588	15.7	368	210

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 01556009, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/01556009.2013.pdf

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

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[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; ft^3/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, unfiltered, recoverable, mg/L (00916)	Magnesium, water, unfiltered, recoverable, mg/L (00927)	Sodium, water, unfiltered, recoverable, mg/L (00929)	ANC, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, mg/L as $CaCO_3$ (00417)	Bromide, water, filtered, mg/L (71870)	Chloride, water, filtered, mg/L (00940)	Sulfate, water, filtered, mg/L (00945)	Ammonia, water, filtered, mg/L as N (00608)
10-25-2012	**1100**	10	53.3	18.7	27.6	155	0.1	38.5	63.5	0.030
10-31-2012	**1300**	24	23.3	6.5	8.7	59	< 0.025	11.5	27.0	.040
11-13-2012	**1100**	< 5	41.2	13.4	16.9	115	M	26.4	51.5	< .020
12-18-2012	**1300**	50	23.3	7.1	10.6	63	< 0.025	13.9	26.3	.080
01-29-2013	**1330**	28	34.6	10.5	68.6	76	.1	114	37.8	--
01-31-2013	**1045**	210	17.3	5.2	18.5	38	M	27.9	16.1	.060
02-11-2013	**1245**	< 5	38.8	13.0	23.5	94	M	36.8	43.5	.010
02-27-2013	**1230**	< 5	38.9	12.0	47.6	90	.1	77.8	46.0	--
03-20-2013	**1245**	12	29.9	9.2	39.2	77	M	68.3	31.4	.017
04-18-2013	**1230**	12	26.8	8.8	15.2	75	M	25.8	33.8	.041
05-21-2013	**1000**	6	35.6	12.1	16.8	99	M	26.4	43.4	.039
06-07-2013	**1300**	44	43.9	13.9	27.6	118	.1	40.3	57.9	.084
06-08-2013	**1300**	8	37.9	12.8	18.8	107	M	27.5	40.5	.042
06-11-2013	**1230**	24	41.0	13.3	25.7	117	M	40.4	56.6	.038
06-24-2013	**1315**	< 5	42.3	14.9	24.0	121	M	38.5	52.5	.017
07-17-2013	**1445**	< 5	42.4	15.2	24.9	127	M	26.5	54.2	--
08-08-2013	**0900**	234	51.3	15.6	42.0	125	.1	48.7	72.2	.103
08-21-2013	**1015**	< 5	46.2	16.9	28.1	148	.1	40.4	56.5	.014
09-16-2013	**1030**	< 5	52.1	19.6	33.2	171	.1	46.2	70.7	.020

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WATER-QUALITY DATA
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Date	Sample start time	Ammonia, water, unfiltered, mg/L as N (00610)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrate plus nitrite, water, unfiltered, mg/L as N (00630)	Orthophosphate, water, filtered, mg/L as P (00671)	Orthophosphate, water, unfiltered, mg/L as P (70507)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, filtered, mg/L (00602)
10-25-2012	**1100**	0.030	2.04	2.03	0.100	0.10	0.109	0.118	2.2
10-31-2012	**1300**	.030	1.75	1.74	.044	.04	.070	.093	1.9
11-13-2012	**1100**	< .020	2.09	2.05	.029	.03	.029	.040	--
12-18-2012	**1300**	.080	1.09	1.08	.039	.05	.047	.173	1.4
01-29-2013	**1330**	--	1.45	1.45	.028	.03	.034	.104	1.8
01-31-2013	**1045**	.060	.923	.936	.026	.03	.036	.310	1.3
02-11-2013	**1245**	.020	2.01	2.00	.015	.02	.015	.030	2.1
02-27-2013	**1230**	--	1.43	1.45	.019	.02	.019	.049	1.7
03-20-2013	**1245**	.018	1.35	1.34	.013	.02	.017	.041	1.6
04-18-2013	**1230**	.050	1.08	1.08	.020	.03	.025	.044	1.3
05-21-2013	**1000**	.045	1.59	1.58	.041	.05	.047	.062	1.8
06-07-2013	**1300**	.080	1.65	1.66	.164	.17	.177	.269	1.9
06-08-2013	**1300**	.044	1.66	1.67	.086	.09	.097	.127	2.1
06-11-2013	**1230**	.040	1.60	1.60	.082	.09	.087	.150	1.7
06-24-2013	**1315**	.018	2.14	2.13	.080	.09	.084	.101	2.4
07-17-2013	**1445**	--	1.74	1.69	.091	.09	.095	.108	1.9
08-08-2013	**0900**	.112	1.57	1.59	.127	.14	.146	.604	1.9
08-21-2013	**1015**	.024	2.25	2.25	.101	.10	.107	.117	2.3
09-16-2013	**1030**	.021	2.25	2.26	.232	.23	.237	.252	2.5

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[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; ft^3/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Total nitrogen, water, unfiltered, mg/L (00600)	Aluminum, water, unfiltered, recoverable, µg/L (01105)	Barium, water, unfiltered, recoverable, µg/L (01007)	Copper, water, unfiltered, recoverable, µg/L (01042)	Iron, water, unfiltered, recoverable, µg/L (01045)	Lead, water, unfiltered, recoverable, µg/L (01051)	Manganese, water, unfiltered, recoverable, µg/L (01055)	Nickel, water, unfiltered, recoverable, µg/L (01067)	Strontium, water, unfiltered, recoverable, micrograms per liter (01082)
10-25-2012	**1100**	2.4	< 200	M	< 4	70	< 1.0	20	< 50	460
10-31-2012	**1300**	2.1	600	M	< 4	950	M	130	< 50	160
11-13-2012	**1100**	--	< 200	M	< 4	140	< 1.0	40	< 50	360
12-18-2012	**1300**	1.7	2,400	M	M	2,550	M	250	< 50	180
01-29-2013	**1330**	2.0	700	M	M	1,100	M	190	< 10	250
01-31-2013	**1045**	2.0	4,200	M	10	7,750	M	540	< 10	110
02-11-2013	**1245**	2.1	100	M	M	170	M	110	< 10	280
02-27-2013	**1230**	1.8	200	M	M	300	M	170	< 10	310
03-20-2013	**1245**	1.6	500	M	M	440	M	100	< 10	240
04-18-2013	**1230**	1.4	200	M	M	390	M	130	< 10	220
05-21-2013	**1000**	1.8	100	M	M	220	M	70	< 10	290
06-07-2013	**1300**	2.2	800	M	M	1,390	M	270	< 10	380
06-08-2013	**1300**	2.1	200	M	M	330	M	80	< 10	320
06-11-2013	**1230**	1.9	400	M	M	840	M	150	< 10	380
06-24-2013	**1315**	2.4	100	M	M	160	M	40	< 10	240
07-17-2013	**1445**	1.9	M	M	M	90	M	30	< 10	360
08-08-2013	**0900**	2.8	4,800	100	20	8,960	M	1,310	M	480
08-21-2013	**1015**	2.3	M	M	M	160	M	30	< 10	400
09-16-2013	**1030**	2.5	100	M	M	150	M	40	< 10	470

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[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; ft^3/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Zinc, water, unfiltered, recoverable, µg/L (01092)	Boron, water, unfiltered, recoverable, micrograms per liter (01022)	Organic carbon, water, unfiltered, mg/L (00680)
10-25-2012	**1100**	< 10	< 200	3.4
10-31-2012	**1300**	10	< 200	4.0
11-13-2012	**1100**	10	< 200	2.6
12-18-2012	**1300**	30	< 200	5.7
01-29-2013	**1330**	20	20	3.8
01-31-2013	**1045**	60	20	8.0
02-11-2013	**1245**	10	30	1.8
02-27-2013	**1230**	20	30	3.0
03-20-2013	**1245**	20	20	2.3
04-18-2013	**1230**	20	30	2.4
05-21-2013	**1000**	10	20	2.3
06-07-2013	**1300**	30	30	4.3
06-08-2013	**1300**	10	20	2.8
06-11-2013	**1230**	10	30	3.5
06-24-2013	**1315**	10	20	2.6
07-17-2013	**1445**	< 5	30	2.4
08-08-2013	**0900**	110	40	9.0
08-21-2013	**1015**	10	30	3.1
09-16-2013	**1030**	M	30	3.7