

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION
PERMIT NO. GA92W009 (06)
GARRETT COUNTY, MARYLAND**

2006 ANNUAL REPORT

January 2007

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

SECTION		PAGE
1. SUMMARY		1
1.1. LAKE LEVEL MONITORING		1
1.2. TEMPERATURE MONITORING.....		2
1.3. MINIMUM FLOW RELEASE MONITORING.....		3
1.4. DISSOLVED OXYGEN MONITORING.....		3
1.5. RELEASES UNSUITABLE FOR WHITEWATER RECREATION		3
1.6. ZEBRA MUSSEL MONITORING.....		4

APPENDICES

- APPENDIX A - LAKE LEVEL DATA AND GRAPH
- APPENDIX B - TEMPERATURE MONITORING AND RELEASE REPORTS
- APPENDIX C - FLOW BYPASS OPERATION RECORD
- APPENDIX D - RECORD OF DISSOLVED OXYGEN MONITORING
- APPENDIX E - ZEBRA MUSSEL MONITORING REPORT

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

1. SUMMARY

Brookfield Power Piney & Deep Creek, LLC (Brookfield, Permittee) holds Water Appropriation Permit GA92S009 (06) issued by the Maryland Department of the Environment (MDE). This permit provides for the continued operation of the Deep Creek Hydroelectric Station.

Permit Condition 23 requires Brookfield submit an annual report to the MDE, including data and information as specified in Permit Conditions 15 through 19 and 21.

1.1. LAKE LEVEL MONITORING

End of Month Levels

Appendix A contains daily water level data for 2005 in tabular and graphical format. Reservoir levels during the year did not exceed the desired end of month Upper Rule Band (URB) or fall below the desired end of month Lower Rule Band (LRB). Reservoir levels for the end of month are presented in Table 1.

TABLE 1
End of Month Impoundment Levels

MONTH	FEET BELOW UPPER RULE BAND
January	2.8
February	1.7
March	2.0
April	1.1
May	0.5
June	0.1
July	0.3
August	0.7
September	1.7
October	1.4
November	0.1
December	0.3

Daily Levels

The following describes each daily deviation from the URB and LRB for the year and Appendix A provides a summary of these events.

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

Brookfield initiated a reservoir draw down of the lake reservoir to the LRB in January to facilitate maintenance work at the plant. From the end of the draw down, the reservoir was allowed to fill without generation releases. From the end of January until mid-April, the LRB increases at a nearly constant rate. While the reservoir was filling from the original drawdown, due to the lack of rain the level of the reservoir did not increase at a rate to keep up with the increase in the LRB. The lake surface elevation was crossed to below the LRB on March 21st and with an increase in rain went above the LRB on April 23rd. The maximum amount that the reservoir was below the LRB was 0.72'.

The lake elevation remained between the upper and lower rule bands from April 24th to July 5th.

In order to ensure that there is sufficient water available in the lake for whitewater releases and temperature enhancement flows, Brookfield attempts to keep the reservoir at or near the URB to the extent possible from June through the end of August. Brookfield was maintaining the reservoir near the URB when the area received rain on July 5th which caused the elevation to rise above the URB on July 6th and stay above on July 7th. Additional inflow and precipitation caused the elevation to exceed the URB on July 10, 11, and July 13-17.

1.2. TEMPERATURE MONITORING

Brookfield monitored water temperature in the Youghiogheny River in accordance with the "Deep Creek Station, Water Temperature Enhancement Plan" (Approved June 8, 1996, revised September 2001). The plan was designed to maintain temperatures below 25°C in the Youghiogheny River. Brookfield provided MDE with dates and descriptions of temperature excursions at the Sang Run temperature monitoring station in letters dated July 5, August 11, and September 19, 2006.

Releases for temperature enhancement are not required by the protocol when flows at the Oakland gage are greater than 100 cfs. Flows in excess of 100 cfs occurred on June 1-12, June 23, June 26-30, July 1-12, July 14-17, and August 11.

Releases from Deep Creek required by protocol and made on June 17-20, 22, July 18-21, 25-27, 30, 31, August 1-3, 5-9, 12, 13, 15-18, 25, and 26 (30 days).

The water temperature at Sang Run was recorded above 25°C based on the data supplied by Versar on the following days: June 20, 22, July 15, 16, 19, 20, 30, August 1-3, 8, 12, 13, 15, 16, and 22. The dates highlighted indicate days when releases were made from Deep Creek.

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

The temperature enhancement protocol did not require releases on June 12-16, 19, 21, 24, 25, July 13, 22-24, 28, 29, August 4, 10, 14, 19-24, 27-31.

Daily maximum river water temperatures in the Youghiogheny River at Sang Run are presented in Appendix B. The data was collated and provided by Versar, Inc. a consultant to the Maryland Department of Natural Resources (DNR) Power Plant Assessment Division (PPAD).

1.3. MINIMUM FLOW RELEASE MONITORING

The Permittee operated the flow bypass in accordance with the “Deep Creek Station Flow Bypass Operation Protocol” (May 1995, revised September 2001). The flow bypass protocol requires Brookfield to maintain a minimum flow of 40 cfs in the Youghiogheny River immediately downstream of the project tailrace (Oakland USGS Gage) between June 1st and November 30th. As required by the protocol, when flows at the gage fall below 26 cfs, Brookfield may be required to open a bypass valve to release enough water to increase the flow to 40 cfs.

A summary of the days which bypass flows were required is provided in Appendix C. Instantaneous flow data was obtained from either the USGS recording at the Oakland gage, direct readings from the Oakland gage, or from the tailrace gage at the station, per the guidance provided in the protocol. Valve openings were determined from Table 3 of the protocol based on the station operating status.

1.4. DISSOLVED OXYGEN MONITORING

Brookfield operated the dissolved oxygen enhancement weir during the year in accordance with the “Dissolved Oxygen (DO) Enhancement Operations and Monitoring Protocol” approved by the MDE on January 6, 1995. The data collected is included in Appendix D and based on the data, the DO levels in the tailrace did not fall below 6.0 mg/l during the year.

1.5. RELEASES UNSUITABLE FOR WHITEWATER RECREATION

Permit Condition 19 outlines several operating guidelines created to enhance whitewater recreation opportunities in the Youghiogheny River.

Between April 15th and October 15th when the Lake level is between the URB and LRB and no emergency conditions exist, Brookfield is prohibited from releases between 1600 hours and 0800 hours of the following morning unless one of the following conditions is met:

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

1. A release providing three consecutive hours suitable for whitewater boating occurs during the 0800 to 1600 hour period immediately preceding the release **or**
2. A release providing three consecutive hours suitable for whitewater boating occurs during the 0800 to 1600 hour period immediately following the release.

Condition 19 requires the Permittee to document "times and dates when generation releases not suitable for whitewater recreation occurred." There were no releases matching this criteria in 2006.

1.6. ZEBRA MUSSEL MONITORING

Artificial substrates placed at the station intake area during 2006 showed no signs of zebra mussel infestation. Appendix E contains the 2006 Zebra Mussel Monitoring Report data sheets.

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

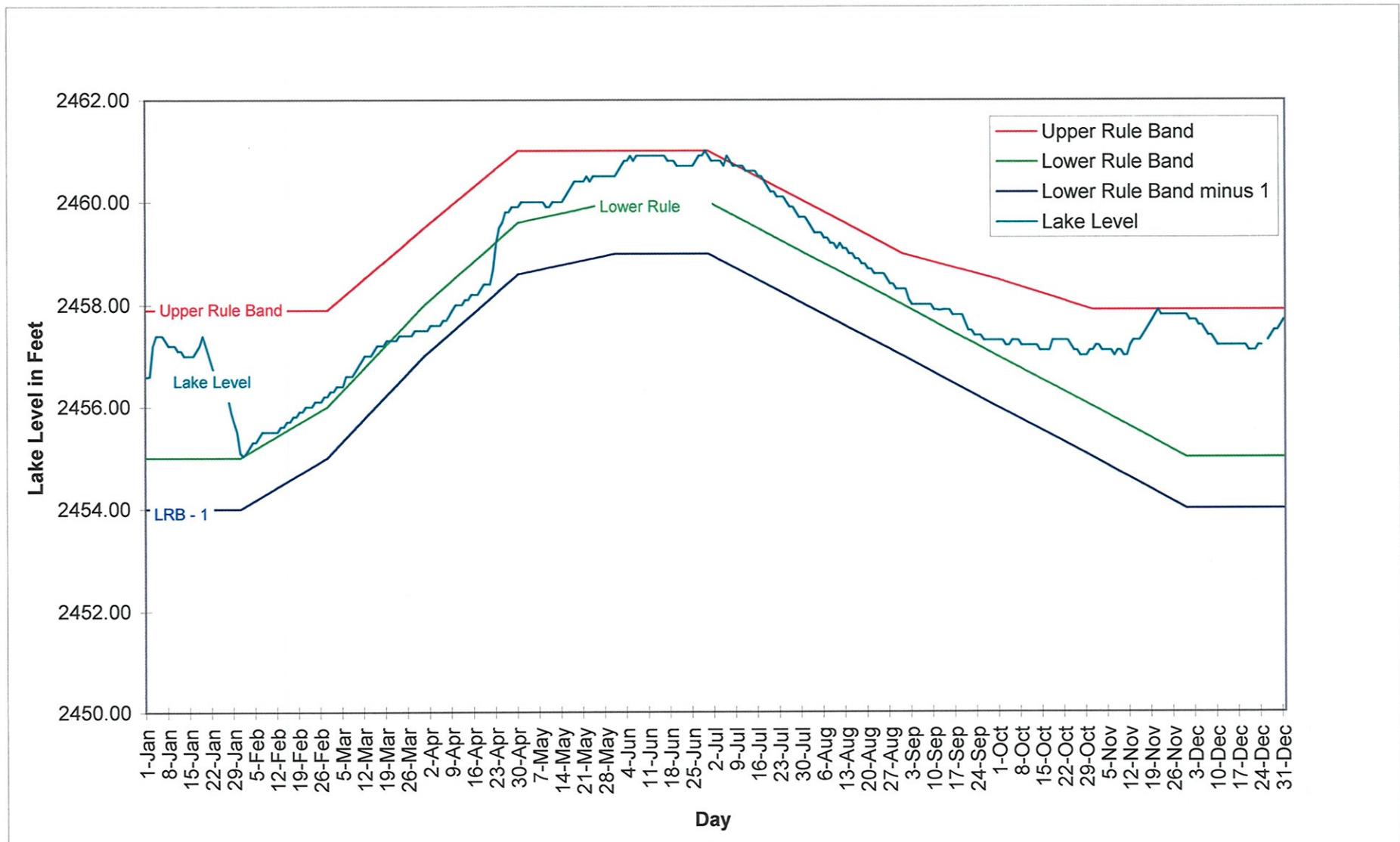
APPENDIX A - LAKE LEVEL DATA AND GRAPH

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

DEEP CREEK LAKE

SURFACE ELEVATION PLOT

Deep Creek Lake Level Graph - 2006



**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

**DEEP CREEK LAKE
DAILY SURFACE ELEVATION TABLE**

Deep Creek Lake
Lake Surface Elevation and Precipitation
2006

January	Surface El.	Precip.	February	Surface El.	Precip.	March	Surface El.	Precip.
1	2456.59	0.1	1	2455.03	0.06	1	2456.3	0.15
2	2456.6	0	2	2455.1	0	2	2456.3	0
3	2457.2	1.1	3	2455.2	0.17	3	2456.4	0.35
4	2457.4	0.2	4	2455.3	0.20	4	2456.4	0
5	2457.4	0.05	5	2455.3	0.30	5	2456.4	0
6	2457.4	0.04	6	2455.4	0.13	6	2456.6	0
7	2457.3	0	7	2455.5	0.02	7	2456.6	0
8	2457.2	0	8	2455.5	0	8	2456.6	0
9	2457.2	0	9	2455.5	0.05	9	2456.7	0
10	2457.2	0	10	2455.5	0	10	2456.8	0
11	2457.1	0	11	2455.5	0	11	2456.9	0
12	2457.1	0.24	12	2455.5	0.15	12	2457	0.15
13	2457	0.27	13	2455.6	0	13	2457	0.82
14	2457	0.35	14	2455.6	0	14	2457	0.4
15	2457	0.03	15	2455.7	0	15	2457.1	0
16	2457	0	16	2455.7	0	16	2457.2	0
17	2457.1	0.95	17	2455.8	0	17	2457.2	0.05
18	2457.2	0	18	2455.8	0.08	18	2457.2	0.1
19	2457.4	0.54	19	2455.9	0.14	19	2457.3	0
20	2457.2	0	20	2455.9	0	20	2457.3	0
21	2457	0	21	2456	0.00	21	2457.3	0
22	2456.8	0.15	22	2456	0.00	22	2457.3	0
23	2456.6	0.4	23	2456	0	23	2457.4	0
24	2456.6	1.05	24	2456.1	0	24	2457.4	0
25	2456.4	0.15	25	2456.1	0	25	2457.4	0
26	2456.4	0.2	26	2456.1	0	26	2457.4	0.05
27	2456.2	0.1	27	2456.2	0	27	2457.4	0.05
28	2455.9	0	28	2456.2	0.15	28	2457.5	0.13
29	2455.7	0.33				29	2457.5	0
30	2455.5	0.04				30	2457.5	0
31	2455.1	0.06				31	2457.5	0
Total		<u>6.35</u>		<u>1.67</u>			<u>2.25</u>	

Deep Creek Lake
Lake Surface Elevation and Precipitation
2006

April	Surface El.	Precip.	May	Surface El.	Precip.	June	Surface El.	Precip.
1	2457.5	0	1	2460	0	1	2460.6	0.12
2	2457.6	0.3	2	2460	0.05	2	2460.7	1
3	2457.6	0	3	2460	0.15	3	2460.8	0.7
4	2457.6	0.5	4	2460	0	4	2460.8	0.07
5	2457.6	0.15	5	2460	0	5	2460.9	0.03
6	2457.7	0.2	6	2460	0	6	2460.8	0.21
7	2457.7	0.8	7	2460	0	7	2460.9	0
8	2457.8	0.22	8	2460	0	8	2460.9	0
9	2457.9	0	9	2459.9	0	9	2460.9	1.5
10	2458	0	10	2459.9	0	10	2460.9	0.05
11	2458	0	11	2460	0	11	2460.9	0
12	2458	0	12	2460	0.45	12	2460.9	0
13	2458.1	0	13	2460	0.05	13	2460.9	0
14	2458.1	0.25	14	2460	0	14	2460.9	0
15	2458.2	0.3	15	2460.1	0.45	15	2460.9	0
16	2458.2	0	16	2460.2	0.9	16	2460.9	0
17	2458.2	0	17	2460.3	0.05	17	2460.8	0
18	2458.3	0.46	18	2460.4	0.25	18	2460.8	0
19	2458.4	0	19	2460.4	0	19	2460.8	0
20	2458.4	0	20	2460.4	0	20	2460.7	0.25
21	2458.4	0.85	21	2460.4	0	21	2460.7	0.05
22	2458.7	1.85	22	2460.5	0	22	2460.7	0.4
23	2459.2	0	23	2460.4	0	23	2460.7	0.95
24	2459.5	0	24	2460.5	0	24	2460.7	0
25	2459.6	0.33	25	2460.5	0	25	2460.7	0.1
26	2459.8	0	26	2460.5	0	26	2460.8	0.79
27	2459.8	0	27	2460.5	0.35	27	2460.9	2.25
28	2459.9	0	28	2460.5	0.05	28	2460.9	0.6
29	2459.9	0	29	2460.5	0	29	2461	0.2
30	2459.9	0	30	2460.5	0	30	2460.9	0.6
Total		6.21		2.75			9.87	

Deep Creek Lake
Lake Surface Elevation and Precipitation
2006

July	Surface El.	Precip.	August	Surface El.	Precip.	September	Surface El.	Precip.
1	2460.8	0	1	2459.6	0	1	2458.3	0
2	2460.8	0	2	2459.5	0	2	2458.1	1.05
3	2460.8	0.2	3	2459.4	0.12	3	2458	0.17
4	2460.8	0	4	2459.4	0	4	2458	0.07
5	2460.7	0.05	5	2459.4	0.15	5	2458	0
6	2460.9	0.55	6	2459.3	0	6	2458	0.17
7	2460.8	0.05	7	2459.3	0.17	7	2458	0.83
8	2460.7	0	8	2459.2	0	8	2458	0
9	2460.7	0	9	2459.2	0.02	9	2458	0
10	2460.7	0	10	2459.1	0	10	2457.9	0
11	2460.7	0	11	2459.2	0.72	11	2457.9	0.42
12	2460.6	0	12	2459.1	0	12	2457.89	0
13	2460.6	0.2	13	2459.1	0	13	2457.9	0.13
14	2460.6	0.55	14	2459	0	14	2457.9	0.63
15	2460.6	0.07	15	2459	0	15	2457.9	0
16	2460.5	0.05	16	2458.9	0.06	16	2457.8	0
17	2460.5	0	17	2458.9	0	17	2457.8	0
18	2460.4	0	18	2458.8	0	18	2457.8	0
19	2460.3	0	19	2458.8	0	19	2457.8	0.08
20	2460.2	0	20	2458.7	0	20	2457.65	0.05
21	2460.2	0	21	2458.7	0	21	2457.5	0
22	2460.1	0.6	22	2458.6	0	22	2457.5	0
23	2460.1	0.4	23	2458.6	0	23	2457.4	0
24	2460.1	0	24	2458.6	0	24	2457.4	0.15
25	2460	0	25	2458.6	0	25	2457.4	0.35
26	2459.9	0	26	2458.5	0	26	2457.3	0
27	2459.9	0	27	2458.4	0	27	2457.3	0
28	2459.8	0	28	2458.4	0.05	28	2457.3	0
29	2459.7	0.6	29	2458.3	0.03	29	2457.3	0.47
30	2459.7	0	30	2458.3	0.23	30	2457.3	0.22
31	2459.7	0	31	2458.3	0.05			
Total		3.32			1.6			4.79

Deep Creek Lake
Lake Surface Elevation and Precipitation
2006

October	Surface El.	Precip.	November	Surface El.	Precip.	December	Surface El.	Precip.
1	2457.3	0.21	1	2457.2	0.13	1	2457.7	0.1
2	2457.3	0.06	2	2457.2	0.8	2	2457.7	0.3
3	2457.2	0	3	2457.1	0.03	3	2457.7	0
4	2457.2	0	4	2457.1	0	4	2457.6	0
5	2457.3	1.3	5	2457.1	0	5	2457.6	0
6	2457.3	0.15	6	2457.1	0	6	2457.5	0
7	2457.3	0.21	7	2457	0.02	7	2457.4	0
8	2457.2	0.09	8	2457.1	0.28	8	2457.4	0
9	2457.2	0	9	2457.1	0.1	9	2457.3	0
10	2457.2	0	10	2457	0	10	2457.2	0
11	2457.2	0	11	2457	0	11	2457.2	0
12	2457.2	0.27	12	2457.2	0.88	12	2457.2	0
13	2457.2	0.04	13	2457.3	0.15	13	2457.2	0
14	2457.1	0	14	2457.3	0	14	2457.2	0.08
15	2457.1	0	15	2457.3	0	15	2457.2	0
16	2457.1	0	16	2457.4	0.3	16	2457.2	0
17	2457.1	0	17	2457.5	0.8	17	2457.2	0
18	2457.3	1.77	18	2457.6	0.05	18	2457.2	0
19	2457.3	0	19	2457.7	0	19	2457.2	0
20	2457.3	0	20	2457.8	0.08	20	2457.1	0
21	2457.3	0.25	21	2457.9	0	21	2457.1	0
22	2457.3	0	22	2457.8	0	22	2457.1	0.02
23	2457.3	0.15	23	2457.8	0	23	2457.2	0.7
24	2457.2	0.25	24	2457.8	0	24	2457.2	0
25	2457.1	0.2	25	2457.8	0	25	0	N/A
26	2457.1	0	26	2457.8	0	26	2457.3	0.53
27	2457	0	27	2457.8	0	27	2457.4	0.4
28	2457	1.13	28	2457.8	0	28	2457.5	0.07
29	2457	0.34	29	2457.8	0	29	2457.5	0
30	2457.1	0.12	30	2457.8	0.14	30	2457.6	0
31	2457.1	0				31	2457.7	0
Total		<u>6.54</u>		<u>3.76</u>			<u>2.2</u>	
						Year Total	<u>51.31</u>	

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

SUMMARY OF DAILY VARIANCES OF THE RULE BANDS

DEEP CREEK HYDROELECTRIC STATION
SUMMARY OF DAILY VARIANCES OF THE RULE BANDS - 2006

Date	Upper Rule Band (URB)	Lower Rule Band (LRB)	Lake Elevation	Δ (Ft)
March 22	2458.98	2457.35	2457.30	-0.05
March 23	2459.04	2457.42	2457.40	-0.02
March 24	2459.09	2457.48	2457.40	-0.08
March 25	2459.14	2457.55	2457.40	-0.15
March 26	2459.19	2457.61	2457.40	-0.21
March 27	2459.24	2457.68	2457.40	-0.28
March 28	2459.29	2457.74	2457.50	-0.24
March 29	2459.35	2457.81	2457.50	-0.31
March 30	2459.40	2457.87	2457.50	-0.37
March 31	2459.45	2457.94	2457.50	-0.44
April 1	2459.50	2458.00	2457.50	-0.50
April 2	2459.55	2458.05	2457.60	-0.45
April 3	2459.60	2458.11	2457.60	-0.51
April 4	2459.65	2458.16	2457.60	-0.56
April 5	2459.70	2458.21	2457.60	-0.61
April 6	2459.75	2458.27	2457.70	-0.57
April 7	2459.80	2458.32	2457.70	-0.62
April 8	2459.85	2458.37	2457.80	-0.57
April 9	2459.90	2458.43	2457.90	-0.53
April 10	2459.95	2458.48	2458.00	-0.48
April 11	2460.00	2458.53	2458.00	-0.53
April 12	2460.05	2458.59	2458.00	-0.59
April 13	2460.10	2458.64	2458.10	-0.54
April 14	2460.15	2458.69	2458.10	-0.59
April 15	2460.20	2458.75	2458.20	-0.55
April 16	2460.25	2458.80	2458.20	-0.60
April 17	2460.30	2458.85	2458.20	-0.65
April 18	2460.35	2458.91	2458.30	-0.61
April 19	2460.40	2458.96	2458.40	-0.56
April 20	2460.45	2459.01	2458.40	-0.61
April 21	2460.50	2459.07	2458.40	-0.67
April 22	2460.55	2459.12	2458.70	-0.42
July 6	2460.84	2459.84	2460.90	0.06
July 11	2460.68	2459.68	2460.70	0.02
July 14	2460.58	2459.58	2460.60	0.02
July 15	2460.55	2459.55	2460.60	0.05
July 17	2460.48	2459.48	2460.50	0.02

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

**APPENDIX B - TEMPERATURE MONITORING AND RELEASE
REPORTS**

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

MAXIMUM DAILY RIVER WATER TEMPERATURES

DEEP CREEK HYDROELECTRIC STATION
YOUGHIOGHENY RIVER TEMPERATURE DATA
JUNE 1 - AUGUST 31, 2006

June	Maximum Temperature for Brookfield Logger*	Maximum Temperature for DNR Logger**	July	Maximum Temperature for Brookfield Logger*	Maximum Temperature for DNR Logger**	August	Maximum Temperature for Brookfield Logger*	Maximum Temperature for DNR Logger**
1	22.58		1	21.31	20.315	1	24.96	25.845
2	20.89		2	23.25	23.415	2	25.22	26.285
3	20.09		3	22.18	22.06	3	25.46	26.195
4	17.71		4	22.17	22.145	4	23.65	22.9
5	17.42		5	20.58	20.725	5	24.11	23.415
6	19.37		6	18.92	18.855	6	22.93	23.845
7	20.49		7	17.84	17.635	7	23.49	23.93
8	21.91		8	21.5	21.06	8	26.23	26.11
9	19.48		9	22.09	21.47	9	24.24	25.15
10	20.24		10	21.47	21.06	10	24.28	23.755
11	19.14		11	22.52	23.07	11	23.39	22.565
12	19.19		12	22.17	22.23	12	26.12	26.375
13	23.21		13	21.54	21.645	13	26.03	25.845
14	21.59		14	21.68	21.56	14	22.16	21.56
15	23.93		15	26.01	25.325	15	25.99	25.325
16	21.7	20.895	16	27.45	27.445	16	26.97	26.285
17	23.87	24.8	17	22.66	23.755	17	22.58	22.815
18	21.87	23.07	18	24.23	25.325	18	22.21	21.47
19	21.06	20.485	19	25.72	26.905	19	22.91	22.4
20	25.48	25.15	20	27.32	27.625	20	24.25	23.5
21	24.39	24.015	21	24.08	24.365	21	23.01	21.975
22	25.24	25.495	22	22.3	22.145	22	25.54	24.71
23	22.28	22.06	23	24.84	24.455	23	24.43	23.93
24	22.05	21.89	24	20.95	21.725	24	24.02	23.585
25	20.38	20.155	25	24.22	24.455	25	23.43	22.565
26	19.9	19.995	26	24.57	25.325	26	23.06	22.4
27	18.05	17.715	27	23.43	23.585	27	22.8	22.315
28	18.36	17.795	28	21.87	21.06	28	21.27	20.725
29	17.78	17.555	29	24.57	23.93	29	22.8	22.23
30	17.55	17.715	30	25.74	26.025	30	24.5	24.195
			31	23.54	22.4	31	21.39	20.725

Data presented in this table was collated and provided by Versar, Inc., consultant to the MDNR PPAD.

* - The value presented is maximum water temperatures in °C measured by Brookfield's temperature monitor at Sang Run Bridge

** - The value presented is the arithmetic mean of the daily maximum water temperature in °C measured by two "Tempmentors" placed in the river by MDNR

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

**DEEP CREEK TEMPERATURE ENHANCEMENT PLAN
SANG RUN TEMPERATURE EXCURSIONS**

Summary of Temperature Excursions June 1, 2006 to August 31, 2006				
Date	Duration	Max. Temp (°C)	Category and Cause	Remarks
June 2006				
20	1.33 hr	25.48	(1) Model Uncertainty	Protocol showed release needed at 14:30; release initiated at 13:30 and ended at 19:00
22	0.5 hr	25.24	(1) Model Uncertainty	Protocol showed release needed; release initiated at 15:30 as required
July 2006				
15	3.5 hr	26.01	(1) Model Uncertainty	Oakland gage was unavailable, Friendsville gage showed 146 cfs, protocol did not require a release.
16	3.33 hr	27.45	(1) Model Uncertainty	Oakland gage was unavailable, Friendsville gage showed 121 cfs, temperature would have been exceeded with releases.
19	1.17 hr	25.72	(1) Model Uncertainty	Protocol showed release needed; generation began at 12:00 and ended at 18:00
20	2.17 hr	27.32	(1) Model Uncertainty	Protocol showed release needed 12:30 to 14:30; trouble at the units caused a start-up delay: Unit 1 on line at 12:40, bypass opened at 12:50, Unit 2 on line at 13:00
30	1.67 hr	25.74	(1) Model Uncertainty	Protocol showed release needed; release initiated at 14:30 as required
August 2006				
2	0 hr	25.22	(1) Model Uncertainty	Protocol showed release needed; release initiated at 11:00 as required.
3	0.67 hr	25.46	(1) Model Uncertainty	Protocol showed release needed; release initiated at 11:00 as required.
8	1.83 hr	26.23	(1) Model Uncertainty	Protocol showed release needed; release initiated at 12:30 as required.
12	1.17 hr	26.12	(1) Model Uncertainty	Protocol showed release needed; release initiated at 14:00 as required.
13	0.83 hr	26.03	(1) Model Uncertainty	Protocol showed release needed; release initiated at 14:00 as required.
15	1.33 hr	25.99	(1) Model Uncertainty	Protocol showed release needed; release initiated at 15:00 as required.
16	2.17 hr	26.97	(1) Model Uncertainty	Protocol showed release needed; release initiated at 15:00 as required.
22	2.33 hr	25.54	(1) Model Uncertainty	Protocol conducted and showed that no release was required.
Category (1) Completed established protocol, temperature exceeded 25° C.				

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

TEMPERATURE ENHANCEMENT RELEASES

DEEP CREEK TEMPERATURE ENHANCEMENT RELEASES 2006			
DATE	RELEASE START*	RELEASE END*	FLOW AT OAKLAND (CFS)
June 17	12:30	14:30	48
June 18	11:00	13:00	43
June 20	15:30	16:30	46
June 22	14:30	15:30	36
July 18	11:00	13:00	64
July 19	12:30	14:30	56
July 20	12:30	14:30	50
July 21	12:30	14:30	45
July 25	15:30	16:30	45
July 26	12:30	14:30	38
July 27	12:30	14:30	35
July 30	14:00	15:00	45
July 31	11:00	13:00	36
August 1	11:00	13:00	35
August 2	11:00	13:00	30
August 3	11:00	13:00	27
August 5	11:00	13:00	25
August 6	11:00	13:00	24
August 7	12:30	14:30	21
August 8	12:30	14:30	32
August 9	12:30	14:30	24
August 12	14:00	15:00	43
August 13	14:00	15:00	27
August 15	14:00	15:00	19
August 16	15:00	16:00	21
August 17	11:00	13:00	19
August 18	12:30	14:30	17
August 25	11:00	13:00	12
August 26	11:00	13:00	11

* - Required start and stop times based on the protocol. Units could be operated for longer periods but were required to run in the time period shown.

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

DAILY TEMPERATURE PLAN SHEETS

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

119

= CFS River Flow at Oakland

June 1, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	24.36 (23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	-- (23 to 25.9)	--
1100	-- (23 to 25.4)	--
1200	-- (23 to 25.3)	--
1400	-- (23 to 25.2)	--
1500	--	--

Print Info for file

Tair °C	26.67	Air Temp, Elkins WV - Degree C	80 SHWRS	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	18.80	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	119.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

[Simulate a Run](#)

155

= CFS River Flow at Oakland

June 2, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(20.91) (23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

[Print Info for file](#)

Tair °C	23.89	Air Temp, Elkins WV - Degree C	75 SHWRS	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	18.65	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	155.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

201 = CFS River Flow at Oakland

June 3, 2006

[Simulate a Run](#)

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	20.00 (23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	-- (23 to 25.9)	--
1100	-- (23 to 25.4)	--
1200	-- (23 to 25.3)	--
1400	-- (23 to 25.2)	--
1500	--	--

Tair °C	21.67	Air Temp, Elkins WV - Degree C	71 SHWRS	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	18.08	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	201.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

201

= CFS River Flow at Oakland

June 4, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	20.56	Air Temp, Elkins WV - Degree C	69 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	16.06	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	201.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

197

= CFS River Flow at Oakland

June 5, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	21.67	Air Temp, Elkins WV - Degree C	71 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	14.98	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	197.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

197 = CFS River Flow at Oakland

June 6, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	23.33	Air Temp, Elkins WV - Degree C	74	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV	MOCLDY	Cloud Cover, Elkins WV
T7	14.86	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	197.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

179 = CFS River Flow at Oakland

June 7, 2006

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	20.24 (23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	-- (23 to 25.9)	--
1100	-- (23 to 25.4)	--
1200	-- (23 to 25.3)	--
1400	-- (23 to 25.2)	--
1500	--	--

Tair °C	25.56	Air Temp, Elkins WV - Degree C	78 SHWRS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	64	Cloud Cover Factor, Elkins WV		
T7	15.09	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	179.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

161 = CFS River Flow at Oakland

June 8, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

[Print Info for file](#)

Tair °C	22.78	Air Temp, Elkins WV - Degree C	73 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	15.23	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	161.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

145

= CFS River Flow at Oakland

June 9, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	23.89	Air Temp, Elkins WV - Degree C	75 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	16.55	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	145.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

139

= CFS River Flow at Oakland

June 10, 2006

Simulate a Rain

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	18.33	Air Temp, Elkins WV - Degree C	65 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	15.92	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	139.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

109

= CFS River Flow at Oakland

June 11, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	20.56	Air Temp, Elkins WV - Degree C	69 SHWRS	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	13.97	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	109.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

[Simulate a Run](#)

93 = CFS River Flow at Oakland

June 12, 2006

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	No Further Predictions Necessary Today
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	20.56	Air Temp, Elkins WV - Degree C	69 SHWRS	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	15.22	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	93.00	River Flow at Oakland		

YOUNG HOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

80

= CFS River Flow at Oakland

June 13, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	No Further Predictions Necessary Today
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	24.44	Air Temp, Elkins WV - Degree C	76	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	14.65	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	80.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

70 = CFS River Flow at Oakland

June 14, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	24.50 (23 to 26.4)	No Further Predictions Necessary Today
0900	25.90 (23 to 25.9)	--
1100	25.40 (23 to 25.4)	--
1200	25.30 (23 to 25.3)	--
1400	25.20 (23 to 25.2)	--
1500		--

Tair °C	22.78	Air Temp, Elkins WV - Degree C	73 PTCLDY	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	36	Cloud Cover Factor, Elkins WV		
T7	16.34	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	70.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

[Simulate a Run](#)

64

= CFS River Flow at Oakland

June 15, 2006

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	24.03 (23 to 26.4)	Check Again at 0900
0900	22.90 (23 to 25.9)	No Further Predictions Necessary Today
1100	-- (23 to 25.4)	--
1200	-- (23 to 25.3)	--
1400	-- (23 to 25.2)	--
1500	--	--

Tair °C	24.44	Air Temp, Elkins WV - Degree C	76	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	16.58	River Temp Sang Run @700		
T9	16.60	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	64.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

56

= CFS River Flow at Oakland

June 16, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	No Further Predictions Necessary Today
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	26.11	Air Temp, Elkins WV - Degree C	<input type="checkbox"/> 79 MOCLDY	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	16.02	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	56.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

48

= CFS River Flow at Oakland

June 17, 2006

Simulate a Rain

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	26.50 (23 to 26.4)	Check Again at 0900
0900	25.55 (23 to 25.9)	Check Again at 1100
1100	25.03 (23 to 25.4)	Release at 1230 for 2 Hours
1200	25.03 (23 to 25.3)	--
1400	25.03 (23 to 25.2)	--
1500	25.03 (23 to 25.2)	--

Tair °C	30.56	Air Temp, Elkins WV - Degree C	87	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	16.46	River Temp Sang Run @700		
T9	17.00	River Temp Sang Run @900		
T11	18.87	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	48.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

43

= CFS River Flow at Oakland

June 18, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Release at 1100 for 2 Hours
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	30.56	Air Temp, Elkins WV - Degree C	87	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	18.05	River Temp Sang Run @700		
T9	18.33	River Temp Sang Run @900		
T11	20.32	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	43.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Run

39

= CFS River Flow at Oakland

June 19, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Input 1100 SANG RUN Temp
1200	(23 to 25.3)	Input 1100 SANG RUN Temp
1400	(23 to 25.2)	Input 1100 SANG RUN Temp
1500		Input 1100 SANG RUN Temp

Print Info for file

Tair °C	25.00	Air Temp, Elkins WV - Degree C	77 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	19.06	River Temp Sang Run @700		
T9	19.42	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	39.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

46

= CFS River Flow at Oakland

June 20, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	23.59 (23 to 26.4)	Check Again at 0900
0900	23.50 (23 to 25.9)	Check Again at 1100
1100	23.41 (23 to 25.4)	Check Again at 1200
1200	23.32 (23 to 25.3)	Check Again at 1400
1400	23.23 (23 to 25.2)	Check Again at 1500
1500	23.23 (23 to 25.2)	Release ASAP - not later than 1530 for 1 hour

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV	SHWRS	Cloud Cover, Elkins WV
T7	18.08	River Temp Sang Run @700		
T9	18.08	River Temp Sang Run @900		
T11	19.86	River Temp Sang Run @1100		
T12	20.89	River Temp Sang Run @1200		
T14	22.92	River Temp Sang Run @1400		
T15	24.21	River Temp Sang Run @1500		
Q	46.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

43

= CFS River Flow at Oakland

June 21, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	Check Again at 1500
1500	(23 to 25.1)	Check Again Tomorrow at 0700

Tair °C	27.22	Air Temp, Elkins WV - Degree C	81 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	17.70	River Temp Sang Run @700		
T9	17.86	River Temp Sang Run @900		
T11	19.52	River Temp Sang Run @1100		
T12	20.63	River Temp Sang Run @1200		
T14	22.55	River Temp Sang Run @1400		
T15	23.05	River Temp Sang Run @1500		
Q	43.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

36

= CFS River Flow at Oakland

June 22, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	25.02 (23 to 26.4)	Check Again at 0900
0900	24.56 (23 to 25.9)	Check Again at 1100
1100	23.96 (23 to 25.4)	Check Again at 1200
1200	23.31 (23 to 25.3)	Check Again at 1400
1400	26.06 (23 to 25.2)	Release ASAP - not later than 1430 for 1 hour
1500		--

Tair °C	30.56	Air Temp, Elkins WV - Degree C	87 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	18.92	River Temp Sang Run @700		
T9	18.84	River Temp Sang Run @900		
T11	19.25	River Temp Sang Run @1100		
T12	20.44	River Temp Sang Run @1200		
T14	23.61	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	36.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

120

= CFS River Flow at Oakland

June 23, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	28.89	Air Temp, Elkins WV - Degree C	84 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	19.43	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	120.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

88

= CFS River Flow at Oakland

June 24, 2006

Simulate a Rain

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(20.53) (23 to 26.4)	No Further Predictions Necessary Today
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	21.67	Air Temp, Elkins WV - Degree C	71 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	20.34	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	88.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

62

= CFS River Flow at Oakland

June 25, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	No Further Predictions Necessary Today
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	23.33	Air Temp, Elkins WV - Degree C	74	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV	SHWRS	Cloud Cover, Elkins WV
T7	19.30	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	62.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

480

= CFS River Flow at Oakland

June 26, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV	SHWRS	Cloud Cover, Elkins WV
T7	19.00	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	480.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

1820 = CFS River Flow at Oakland

June 27, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	19.06 (23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	-- (23 to 25.9)	--
1100	-- (23 to 25.4)	--
1200	-- (23 to 25.3)	--
1400	-- (23 to 25.2)	--
1500	--	--

Tair °C	21.11	Air Temp, Elkins WV - Degree C	70 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	17.84	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	1820.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

1260 = CFS River Flow at Oakland

June 28, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(19.7 to 26.4) (23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	24.44	Air Temp, Elkins WV - Degree C	76 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	16.55	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	1260.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

733 = CFS River Flow at Oakland

June 29, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	23.89	Air Temp, Elkins WV - Degree C	75 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	16.63	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	733.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

384

= CFS River Flow at Oakland

June 30, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(21 to 26.4) (23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	23.89	Air Temp, Elkins WV - Degree C	75 SUNNY	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	1	Cloud Cover Factor, Elkins WV		
T7	16.26	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	384.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

246 = CFS River Flow at Oakland

July 1, 2006

Simulate a Rain

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	27.78	Air Temp, Elkins WV - Degree C	82	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	15.40	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	246.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

182 = CFS River Flow at Oakland

July 2, 2006

[Simulate a Rain](#)

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	30.56	Air Temp, Elkins WV - Degree C	87	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	18.10	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	182.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

168 = CFS River Flow at Oakland

July 3, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	28.33	Air Temp, Elkins WV - Degree C	83 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	19.40	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	168.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

186

= CFS River Flow at Oakland

July 4, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	27.78	Air Temp, Elkins WV - Degree C	82 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	19.80	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	186.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

205 = CFS River Flow at Oakland

July 5, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	20.58 (23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	-- (23 to 25.9)	--
1100	-- (23 to 25.4)	--
1200	-- (23 to 25.3)	--
1400	-- (23 to 25.2)	--
1500	--	--

[Print Info for file](#)

Tair °C	21.67	Air Temp, Elkins WV - Degree C	71 SHWRS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	64	Cloud Cover Factor, Elkins WV		
T7	19.80	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	205.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

706

= CFS River Flow at Oakland

July 6, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	23.89	Air Temp, Elkins WV - Degree C	75	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	17.70	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	706.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

323 = CFS River Flow at Oakland

July 7, 2006

Simulate a Rain

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	21.67	Air Temp, Elkins WV - Degree C	71 SUNNY	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	1	Cloud Cover Factor, Elkins WV		
T7	16.55	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	323.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

225 = CFS River Flow at Oakland

July 8, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	20.22 (23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	20.22 (23 to 25.9)	--
1100	20.22 (23 to 25.4)	--
1200	20.22 (23 to 25.3)	--
1400	20.22 (23 to 25.2)	--
1500		--

Print Info for file

Tair °C	25.56	Air Temp, Elkins WV - Degree C	78	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV	MOCLDY	Cloud Cover, Elkins WV
T7	16.51	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	225.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

172

= CFS River Flow at Oakland

July 9, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79 SHWRS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	64	Cloud Cover Factor, Elkins WV		
T7	17.35	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	172.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

142

= CFS River Flow at Oakland

July 10, 2006

Simulate a Rain

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	28.89	Air Temp, Elkins WV - Degree C	84 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	17.29	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	142.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

120

= CFS River Flow at Oakland

July 11, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	29.44	Air Temp, Elkins WV - Degree C	85 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	18.32	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	120.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Run

101 = CFS River Flow at Oakland

July 12, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	30.56	Air Temp, Elkins WV - Degree C	87 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	19.80	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	101.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

95 = CFS River Flow at Oakland

July 13, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	No Further Predictions Necessary Today
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	20.50	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	95.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

218

= CFS River Flow at Oakland

July 14, 2006

Simulate a Rain

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	27.22	Air Temp, Elkins WV - Degree C	81 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	20.10	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	218.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Run

146

= CFS River Flow at Oakland

July 15, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	28.33	Air Temp, Elkins WV - Degree C	83 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	21.10	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	146.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

121

= CFS River Flow at Oakland

July 16, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	30.56	Air Temp, Elkins WV - Degree C	87 PTCLDY	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	36	Cloud Cover Factor, Elkins WV		
T7	20.17	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	121.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

103 = CFS River Flow at Oakland

July 17, 2006

[Simulate a Rain](#)

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	32.78	Air Temp, Elkins WV - Degree C	91 PTCLDY	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	36	Cloud Cover Factor, Elkins WV		
T7	20.61	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	103.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

64 = CFS River Flow at Oakland

July 18, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Release at 1100 for 2 Hours
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	32.22	Air Temp, Elkins WV - Degree C	90	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	20.70	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	64.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

56

= CFS River Flow at Oakland

July 19, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Release at 1230 for 2 Hours
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	31.11	Air Temp, Elkins WV - Degree C	88 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	20.90	River Temp Sang Run @700		
T9	21.10	River Temp Sang Run @900		
T11	22.70	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	56.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

50 = CFS River Flow at Oakland

July 20, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.3)	Release at 1230 for 2 Hours
1200	(23 to 25.4)	--
1400	(23 to 25.3)	--
1500	(23 to 25.2)	--

Print Info for file

Tair °C	31.11	Air Temp, Elkins WV - Degree C	88 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	20.80	River Temp Sang Run @700		
T9	21.12	River Temp Sang Run @900		
T11	22.90	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	50.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

45 = CFS River Flow at Oakland

July 21, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	24.44 (23 to 26.4)	Check Again at 0900
0900	25.00 (23 to 25.9)	Check Again at 1100
1100	25.00 (23 to 25.4)	Release at 1230 for 2 Hours
1200	25.00 (23 to 25.3)	--
1400	25.00 (23 to 25.2)	--
1500	25.00 (23 to 25.1)	--

Print Info for file

Tair °C	26.67	Air Temp, Elkins WV - Degree C	80 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	21.96	River Temp Sang Run @700		
T9	22.08	River Temp Sang Run @900		
T11	23.43	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	45.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rate

43

= CFS River Flow at Oakland

July 22, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	No Further Predictions Necessary Today
1400	(23 to 25.2)	--
1500		--

Tair °C	21.67	Air Temp, Elkins WV - Degree C	71 SHWRS	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	21.70	River Temp Sang Run @700		
T9	21.84	River Temp Sang Run @900		
T11	22.20	River Temp Sang Run @1100		
T12	18.72	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	43.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

82

= CFS River Flow at Oakland

July 23, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(21 to 21.0) (23 to 26.4)	No Further Predictions Necessary Today
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	21.67	Air Temp, Elkins WV - Degree C	71 SHWRS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	64	Cloud Cover Factor, Elkins WV		
T7	20.09	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	82.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

54

= CFS River Flow at Oakland

July 24, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	No Further Predictions Necessary Today
1500		--

Print Info for file

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	18.56	River Temp Sang Run @700		
T9	18.63	River Temp Sang Run @900		
T11	20.09	River Temp Sang Run @1100		
T12	20.55	River Temp Sang Run @1200		
T14	19.11	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	54.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

45

= CFS River Flow at Oakland

July 25, 2006

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	Check Again at 1500
1500		Release ASAP - not later than 1530 for 1 hour

Tair °C	27.22	Air Temp, Elkins WV - Degree C	81 SHWRS	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	18.76	River Temp Sang Run @700		
T9	18.87	River Temp Sang Run @900		
T11	20.04	River Temp Sang Run @1100		
T12	20.93	River Temp Sang Run @1200		
T14	22.82	River Temp Sang Run @1400		
T15	23.89	River Temp Sang Run @1500		
Q	45.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

38

= CFS River Flow at Oakland

July 26, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Release at 1230 for 2 Hours
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	30.00	Air Temp, Elkins WV - Degree C	86 SHWRS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	64	Cloud Cover Factor, Elkins WV		
T7	18.85	River Temp Sang Run @700		
T9	19.19	River Temp Sang Run @900		
T11	20.55	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	38.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

35

= CFS River Flow at Oakland

July 27, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Release at 1230 for 2 Hours
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	29.44	Air Temp, Elkins WV - Degree C	85 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	19.47	River Temp Sang Run @700		
T9	19.95	River Temp Sang Run @900		
T11	21.80	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	35.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

32

= CFS River Flow at Oakland

July 28, 2006

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	No Further Predictions Necessary Today
1500		~

Tair °C	28.33	Air Temp, Elkins WV - Degree C	83 RAIN	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	20.04	River Temp Sang Run @700		
T9	20.61	River Temp Sang Run @900		
T11	21.04	River Temp Sang Run @1100		
T12	21.24	River Temp Sang Run @1200		
T14	17.70	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	32.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

62

= CFS River Flow at Oakland

July 29, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	No Further Predictions Necessary Today
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	19.38	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	62.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

45

= CFS River Flow at Oakland

July 30, 2006

Simulate a Rain

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	Release ASAP - not later than 1430 for 1 hour
1500		--

Tair °C	27.22	Air Temp, Elkins WV - Degree C	81 SHWRS	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	20.44	River Temp Sang Run @700		
T9	20.57	River Temp Sang Run @900		
T11	21.64	River Temp Sang Run @1100		
T12	22.23	River Temp Sang Run @1200		
T14	24.05	River Temp Sang Run @1400		
T15	25.43	River Temp Sang Run @1500		
Q	45.00	River Flow at Oakland		

YOUNGWOOD RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

36

= CFS River Flow at Oakland

July 31, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Release at 1100 for 2 Hours
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	31.67	Air Temp, Elkins WV - Degree C	89 SHWRS	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	20.98	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	36.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

35

= CFS River Flow at Oakland

August 1, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Release at 1100 for 2 Hours
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	33.33	Air Temp, Elkins WV - Degree C	92	Air Temp, Elkins WV - Degree F
CCF	36	Cloud Cover Factor, Elkins WV	PTCLDY	Cloud Cover, Elkins WV
T7	20.65	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	35.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

30

= CFS River Flow at Oakland

August 2, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Release at 1100 for 2 Hours
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	32.22	Air Temp, Elkins WV - Degree C	90 SHWRS	Air Temp, Elkins WV - Degree F
CCF	64	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	21.13	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	30.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

27

= CFS River Flow at Oakland

August 3, 2006

Simulate a Rain

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Release at 1100 for 2 Hours
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	31.67	Air Temp, Elkins WV - Degree C	89 PTCLDY	Air Temp, Elkins WV - Degree F
CCF	36	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	21.15	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	27.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

25

= CFS River Flow at Oakland

August 4, 2006

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	No Further Predictions Necessary Today
1500		--

Tair °C	28.33	Air Temp, Elkins WV - Degree C	83 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	22.01	River Temp Sang Run @700		
T9	21.92	River Temp Sang Run @900		
T11	22.39	River Temp Sang Run @1100		
T12	22.87	River Temp Sang Run @1200		
T14	19.35	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	25.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

25

= CFS River Flow at Oakland

August 5, 2006

Simulate a Rain

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Release at 1100 for 2 Hours
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	28.89	Air Temp, Elkins WV - Degree C	84 SUNNY	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	19.60	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	25.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

24

= CFS River Flow at Oakland

August 6, 2006

[Simulate a Run](#)

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Release at 1100 for 2 Hours
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	30.00	Air Temp, Elkins WV - Degree C	86 PTCLDY	Air Temp, Elkins WV - Degree F
CCF	36	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	18.88	River Temp Sang Run @700		
T9	18.91	River Temp Sang Run @900		
T11	20.88	River Temp Sang Run @1100		
T12	21.92	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	24.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

21

= CFS River Flow at Oakland

August 7, 2006

[Simulate a Run](#)

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Release at 1230 for 2 Hours
1200	--	--
1400	(23 to 25.3)	--
1500	(23 to 25.2)	--

Tair °C	28.33	Air Temp, Elkins WV - Degree C	83	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV	TSTRMS	Cloud Cover, Elkins WV
T7	20.98	River Temp Sang Run @700		
T9	21.21	River Temp Sang Run @900		
T11	22.69	River Temp Sang Run @1100		
T12	23.27	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	21.00	River Flow at Oakland		

YOUNG HOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Run

32

= CFS River Flow at Oakland

August 8, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Release at 1230 for 2 Hours
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	21.34	River Temp Sang Run @700		
T9	21.43	River Temp Sang Run @900		
T11	22.80	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	32.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Run

24

= CFS River Flow at Oakland

August 9, 2006

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Release at 1230 for 2 Hours
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79	Air Temp, Elkins WV - Degree F
CCF	16	Cloud Cover Factor, Elkins WV	FAIR	Cloud Cover, Elkins WV
T7	18.47	River Temp Sang Run @700		
T9	18.37	River Temp Sang Run @900		
T11	20.39	River Temp Sang Run @1100		
T12	22.17	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	24.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

25

= CFS River Flow at Oakland

August 10, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	Check Again at 1500
1500		Check Again Tomorrow at 0700

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79 TSTRMS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	100	Cloud Cover Factor, Elkins WV		
T7	19.24	River Temp Sang Run @700		
T9	19.15	River Temp Sang Run @900		
T11	19.70	River Temp Sang Run @1100		
T12	20.13	River Temp Sang Run @1200		
T14	21.99	River Temp Sang Run @1400		
T15	23.09	River Temp Sang Run @1500		
Q	25.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Run

126

= CFS River Flow at Oakland

August 11, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Temperature Plan not Required Today - Flow Exceeds 100 CFS
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	24.44	Air Temp, Elkins WV - Degree C	76 VARCLDY	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	20.62	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	126.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

43 = CFS River Flow at Oakland

August 12, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	Release ASAP - not later than 1430 for 1 hour
1500	(23 to 25.0)	—

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79 PTCLDY	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	36	Cloud Cover Factor, Elkins WV		
T7	18.52	River Temp Sang Run @700		
T9	18.35	River Temp Sang Run @900		
T11	19.75	River Temp Sang Run @1100		
T12	20.73	River Temp Sang Run @1200		
T14	23.29	River Temp Sang Run @1400		
T15	25.18	River Temp Sang Run @1500		
Q	43.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

27

= CFS River Flow at Oakland

August 13, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	Release ASAP - not later than 1430 for 1 hour
1500		--

Tair °C	26.67	Air Temp, Elkins WV - Degree C	80 PTCLDY	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	36	Cloud Cover Factor, Elkins WV		
T7	17.19	River Temp Sang Run @700		
T9	16.97	River Temp Sang Run @900		
T11	18.95	River Temp Sang Run @1100		
T12	20.15	River Temp Sang Run @1200		
T14	22.91	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	27.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

21

= CFS River Flow at Oakland

August 14, 2006

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.3)	No Further Predictions Necessary Today
1500	(23 to 25.2)	-

Tair °C	28.89	Air Temp, Elkins WV - Degree C	84	Air Temp, Elkins WV - Degree F
CCF	36	Cloud Cover Factor, Elkins WV	PTCLDY	Cloud Cover, Elkins WV
T7	17.58	River Temp Sang Run @700		
T9	17.68	River Temp Sang Run @900		
T11	18.68	River Temp Sang Run @1100		
T12	19.57	River Temp Sang Run @1200		
T14	19.30	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	21.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

19

= CFS River Flow at Oakland

August 15, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(25.0) (23 to 26.4)	Check Again at 0900
0900	(25.0) (23 to 25.9)	Check Again at 1100
1100	(25.0) (23 to 25.4)	Check Again at 1200
1200	(25.0) (23 to 25.3)	Check Again at 1400
1400	(25.0) (23 to 25.2)	Release ASAP - not later than 1430 for 1 hour
1500		--

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79 SHWRS	Air Temp, Elkins WV - Degree F Cloud Cover, Elkins WV
CCF	64	Cloud Cover Factor, Elkins WV		
T7	20.38	River Temp Sang Run @700		
T9	20.26	River Temp Sang Run @900		
T11	21.06	River Temp Sang Run @1100		
T12	21.92	River Temp Sang Run @1200		
T14	23.76	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	19.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

21

= CFS River Flow at Oakland

August 16, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(25 to 26.4) (23 to 26.4)	Check Again at 0900
0900	(25 to 25.9) (23 to 25.9)	Check Again at 1100
1100	(25 to 25.4) (23 to 25.4)	Check Again at 1200
1200	(25 to 25.3) (23 to 25.3)	Check Again at 1400
1400	(25 to 25.2) (23 to 25.2)	Check Again at 1500
1500	(25 to 25.1) (23 to 25.1)	Release ASAP - not later than 1530 for 1 hour

Print Info for file

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79 SUNNY	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	17.67	River Temp Sang Run @700		
T9	17.62	River Temp Sang Run @900		
T11	19.45	River Temp Sang Run @1100		
T12	20.54	River Temp Sang Run @1200		
T14	23.06	River Temp Sang Run @1400		
T15	24.48	River Temp Sang Run @1500		
Q	21.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

19

= CFS River Flow at Oakland

August 17, 2006

[Simulate a Run](#)

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Release at 1100 for 2 Hours
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	28.89	Air Temp, Elkins WV - Degree C	84	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	17.17	River Temp Sang Run @700		
T9	17.50	River Temp Sang Run @900		
T11	19.44	River Temp Sang Run @1100		
T12	20.07	River Temp Sang Run @1200		
T14	22.41	River Temp Sang Run @1400		
T15	20.64	River Temp Sang Run @1500		
Q	19.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

17

= CFS River Flow at Oakland

August 18, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Release at 1230 for 2 Hours
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	30.00	Air Temp, Elkins WV - Degree C	86 PTCLDY	Air Temp, Elkins WV - Degree F
CCF	36	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	18.36	River Temp Sang Run @700		
T9	18.14	River Temp Sang Run @900		
T11	20.25	River Temp Sang Run @1100		
T12	21.33	River Temp Sang Run @1200		
T14	20.68	River Temp Sang Run @1400		
T15	21.18	River Temp Sang Run @1500		
Q	17.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

15

= CFS River Flow at Oakland

August 19, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	No Further Predictions Necessary Today
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	27.78	Air Temp, Elkins WV - Degree C	82 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	18.97	River Temp Sang Run @700		
T9	18.84	River Temp Sang Run @900		
T11	19.20	River Temp Sang Run @1100		
T12	19.48	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	15.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

14

= CFS River Flow at Oakland

August 20, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	Check Again at 1500
1500		Check Again Tomorrow at 0700

Print Info for file

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV	TSTRMS	Cloud Cover, Elkins WV
T7	19.92	River Temp Sang Run @700		
T9	19.90	River Temp Sang Run @900		
T11	20.42	River Temp Sang Run @1100		
T12	20.75	River Temp Sang Run @1200		
T14	21.86	River Temp Sang Run @1400		
T15	22.79	River Temp Sang Run @1500		
Q	14.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

15

= CFS River Flow at Oakland

August 21, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.0)	Check Again at 1200
1200	(23 to 25.4)	Check Again at 1400
1400	(23 to 25.3)	No Further Predictions Necessary Today
1500	(23 to 25.2)	--

Print Info for file

Tair °C	28.33	Air Temp, Elkins WV - Degree C	83	Air Temp, Elkins WV - Degree F
CCF	36	Cloud Cover Factor, Elkins WV	PTCLDY	Cloud Cover, Elkins WV
T7	17.74	River Temp Sang Run @700		
T9	17.64	River Temp Sang Run @900		
T11	19.25	River Temp Sang Run @1100		
T12	19.88	River Temp Sang Run @1200		
T14	19.75	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	15.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

15

= CFS River Flow at Oakland

August 22, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	Check Again at 1500
1500	(23 to 25.1)	Check Again Tomorrow at 0700

Print Info for file

Tair °C	27.78	Air Temp, Elkins WV - Degree C	82	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV	TSTRMS	Cloud Cover, Elkins WV
T7	17.14	River Temp Sang Run @700		
T9	16.88	River Temp Sang Run @900		
T11	18.57	River Temp Sang Run @1100		
T12	19.77	River Temp Sang Run @1200		
T14	22.17	River Temp Sang Run @1400		
T15	23.45	River Temp Sang Run @1500		
Q	15.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

15

= CFS River Flow at Oakland

August 23, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	Check Again at 1500
1500		Check Again Tomorrow at 0700

Print Info for file

Tair °C	28.33	Air Temp, Elkins WV - Degree C	83	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	16.86	River Temp Sang Run @700		
T9	16.57	River Temp Sang Run @900		
T11	18.22	River Temp Sang Run @1100		
T12	19.65	River Temp Sang Run @1200		
T14	21.86	River Temp Sang Run @1400		
T15	22.67	River Temp Sang Run @1500		
Q	15.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

13

= CFS River Flow at Oakland

August 24, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	No Further Predictions Necessary Today
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	27.22	Air Temp, Elkins WV - Degree C	81 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	17.49	River Temp Sang Run @700		
T9	17.03	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	13.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Run

12

= CFS River Flow at Oakland

August 25, 2006

Print Info for file

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.0)	Release at 1100 for 2 Hours
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Tair °C	29.44	Air Temp, Elkins WV - Degree C	85	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	18.06	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	12.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

11

= CFS River Flow at Oakland

August 26, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.5) (23 to 26.4)	Release at 1100 for 2 Hours
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	31.67	Air Temp, Elkins WV - Degree C	89	Air Temp, Elkins WV - Degree F
CCF	1	Cloud Cover Factor, Elkins WV	SUNNY	Cloud Cover, Elkins WV
T7	18.78	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	11.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rainfall

10

= CFS River Flow at Oakland

August 27, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	Check Again at 1500
1500		Check Again Tomorrow at 0700

Print Info for file

Tair °C	30.56	Air Temp, Elkins WV - Degree C	87	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV	TSTRMS	Cloud Cover, Elkins WV
T7	19.94	River Temp Sang Run @700		
T9	19.63	River Temp Sang Run @900		
T11	19.96	River Temp Sang Run @1100		
T12	20.15	River Temp Sang Run @1200		
T14	21.08	River Temp Sang Run @1400		
T15	21.68	River Temp Sang Run @1500		
Q	10.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Run

9.3 = CFS River Flow at Oakland

August 28, 2006

[Print Info for file](#)

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	No Further Predictions Necessary Today
1500		--

Tair °C	28.33	Air Temp, Elkins WV - Degree C	83 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	19.59	River Temp Sang Run @700		
T9	19.39	River Temp Sang Run @900		
T11	19.62	River Temp Sang Run @1100		
T12	19.87	River Temp Sang Run @1200		
T14	19.57	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	9.30	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

11

= CFS River Flow at Oakland

August 29, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	No Further Predictions Necessary Today
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	26.11	Air Temp, Elkins WV - Degree C	79 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	19.58	River Temp Sang Run @700		
T9	19.47	River Temp Sang Run @900		
T11	19.73	River Temp Sang Run @1100		
T12	19.87	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	11.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Run

14

= CFS River Flow at Oakland

August 30, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	Check Again at 0900
0900	(23 to 25.9)	Check Again at 1100
1100	(23 to 25.4)	Check Again at 1200
1200	(23 to 25.3)	Check Again at 1400
1400	(23 to 25.2)	Check Again at 1500
1500		Check Again Tomorrow at 0700

Print Info for file

Tair °C	24.44	Air Temp, Elkins WV - Degree C	76	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV	TSTRMS	Cloud Cover, Elkins WV
T7	18.89	River Temp Sang Run @700		
T9	18.85	River Temp Sang Run @900		
T11	20.41	River Temp Sang Run @1100		
T12	21.35	River Temp Sang Run @1200		
T14	23.28	River Temp Sang Run @1400		
T15	23.87	River Temp Sang Run @1500		
Q	14.00	River Flow at Oakland		

YOUGHIOGHENY RIVER WATER TEMPERATURE ENHANCEMENT PLAN

Simulate a Rain

18

= CFS River Flow at Oakland

August 31, 2006

Time	Predicted Maximum River Water Temperature Degree C	Deep Creek Action
0700	(23 to 26.4)	No Further Predictions Necessary Today
0900	(23 to 25.9)	--
1100	(23 to 25.4)	--
1200	(23 to 25.3)	--
1400	(23 to 25.2)	--
1500		--

Print Info for file

Tair °C	20.00	Air Temp, Elkins WV - Degree C	68 TSTRMS	Air Temp, Elkins WV - Degree F
CCF	100	Cloud Cover Factor, Elkins WV		Cloud Cover, Elkins WV
T7	19.25	River Temp Sang Run @700		
T9	--	River Temp Sang Run @900		
T11	--	River Temp Sang Run @1100		
T12	--	River Temp Sang Run @1200		
T14	--	River Temp Sang Run @1400		
T15	--	River Temp Sang Run @1500		
Q	18.00	River Flow at Oakland		

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

APPENDIX C - FLOW BYPASS OPERATION RECORD

Youghiogheny River Bypass Flow Provision			
Date	Flow at Oakland Gage	Bypass Flow	Valve - % Open
8/15/2006	20	2	22
8/17/2006	18	2	22
8/18/2006	16	5	26
8/19/2006	14	8	30
8/20/2006	14	8	30
8/21/2006	15	8	30
8/22/2006	16	8	30
8/23/2006	15	8	30
8/24/2006	12	11	35
8/25/2006	11	12	36
8/26/2006	10	14	39
8/27/2006	9.8	15	40
8/28/2006	9.5	15	40
8/29/2006	12	15	40
8/30/2006	16	9	33
8/31/2006	17	3	23
9/1/2006	16	8	30
9/10/2006	17	2	22
9/11/2006	25	6	27
9/13/2006	16	9	32
9/17/2006	18	2	22
9/18/2006	17	5	26
9/19/2006	16	6	27
9/20/2006	17	8	30
9/21/2006	16	5	26
9/22/2006	14	8	30
9/23/2006	12	11	35
9/24/2006	15	12	36
9/27/2006	16	3	23
9/28/2006	14	9	31
9/29/2006	20	9	36

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

USGS PROVISIONAL WATER DATA FOR THE OAKLAND GAGE

USGS GAGE NO. 03075500

USGS - Youghiogheny River Near Oakland, MD Gage (No. 03075500)
Mean Daily Discharge in cubic feet per second (CFS)

	January	February	March	April	May	June	July	August	September	October	November	December
1	653	432	128	159	170	123	221	34	16	35	170	128
2	849	359	331	143	151	221	169	28	39	37	433	183
3	1870	340	465	142	156	289	206	27	46	25	282	130
4	1680	320	297	223	147	237	176	24	28	22	209	118
5	1440	471	255	231	125	219	305	26	47	175	175	104
6	1020	351	232	263	110	217	570	22	N/A	157	150	96
7	714	304	205	525	99	167	283	24	61	115	130	103
8	510	252	183	729	95	163	204	29	30	77	167	101
9	470	228	176	624	89	145	161	23	21	56	176	82
10	442	240	160	437	80	126	132	76	17	43	145	78
11	382	191	139	323	84	101	112	78	25	36	137	78
12	366	185	247	262	124	90	99	35	17	N/A	778	74
13	311	198	410	254	90	78	170	24	16	N/A	491	83
14	629	245	474	216	82	70	143	20	33	N/A	336	90
15	527	175	369	288	308	64	102	20	31	N/A	275	78
16	413	237	297	225	242	55	87	20	22	N/A	564	75
17	436	490	267	536	224	50	70	18	18	352	865	66
18	1770	362	237	581	446	46	60	16	17	367	598	64
19	1170	281	198	375	346	44	53	14	16	167	409	63
20	835	265	180	289	339	52	48	14	17	125	308	58
21	672	227	163	261	262	45	43	15	16	124	242	56
22	529	197	156	2720	219	51	52	16	14	96	200	73
23	1810	191	143	2330	180	150	80	15	12	86	177	271
24	1630	177	131	1100	154	71	51	12	15	85	156	202
25	1040	154	126	741	136	219	40	11	28	78	135	183
26	728	140	123	601	138	474	36	10	22	71	123	586
27	505	122	116	388	197	1530	32	9.8	16	67	112	616
28	422	133	110	292	142	1120	34	9.5	14	580	103	403
29	587	X	155	235	113	579	56	12	20	530	98	307
30	733	X	133	199	97	322	40	16	27	293	107	265
31	568	X	124	100	X	34	17	X	241	X	235	X

The Data provided above was obtained from the USGS website and bears the following disclaimer: "The data you have obtained from this automated U.S. Geological Survey database have not received Director's approval and as such are provisional and subject to revision. The data are released on the condition that neither the USGS nor the United States Government may be held liable for any damages resulting from its use."

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

**APPENDIX D - RECORD OF DISSOLVED OXYGEN
MONITORING**

(Instrument Calibrated to 2000 ft. MSL)

DISSOLVED OXYGEN MONITORING LOG

DATE	INSTRUMENT CALIBRATION			DO MEASUREMENTS			NO. UNITS GENERATING	TIMES OF GENERATION		SUICIDE GATE POSITION	NON-OPERATING TAILRACE ELEV	OPER TAIL ELEV
N	TIME	TEMP °C	DO (mg/l)	TIME	TEMP °C	DO (mg/l)						
2006												
6/2	10:15	23.2	7.95	10:30	13.1	10.65	2	10:00 - 13:00	Open	2022.1	4	2028.
6/2	12:40	22.0	8.90	12:55	13.4	9.88	2	10:00 - 13:00	Open	2022.1	3	2028.
6/3	14:45	22.5	7.91	12:55	12.8	9.37	1	10:00 - 13:00	Open	2022.1	3	2028.
6/3	2:30	20.3	8.40	2:46	13.2	8.99	0	Post Gen. Reading	" "	" "	" "	" "
6/5	9:32	18.4	8.67	9:45	11.5	8.60	0	Pre Gen. Reading	Open	2022.5	1/3	1/3
6/5	10:45	17.5	8.88	11:05	13.4	9.57	2	10:00 - 13:00	Open	2022.5	2028.	2028.
6/5	16:00	20.1	8.37	16:07	13.1	8.41	2	10:00 - 16:00	Open	2022.4	2028.	2028.
6/6	13:35	22.1	8.03	13:37	12.3	8.78	1	13:00 - 16:00	POST GENERATION TEST	OPEN	2022.4	2028.
6/6	16:32	22.5	8.02	16:37	13.4	8.65	0	POST REGULATION TEST	TEST GENERATION	OPEN	2022.4	—
6/9	09:36	20.4	8.37	09:43	12.5	8.87	0	PRE-GENERATION	Open	2022.2	—	—
6/9	10:49	22.5	8.02	10:54	13.7	9.43	2	10:00 - 13:00	Open	2022.0	2028.	2028.
6/9	3:00	22.2	8.02	3:15	14.8	9.11	0	Post Generation	Open	2022.0	—	—
6/12	09:25	16.7	9.04	9:25	13.5	8.42	0	PREGENERATION	Open	2022.0	—	—
6/12	10:48	16.2	9.03	10:52	14.5	9.15	2	10:00 - 13:00	Open	2022.0	2028.	2028.
6/12	13:43	20.2	8.41	1:48	15.0	8.45	0	Post Generation	Open	2022.0	—	—
6/16	12:06	23.7	7.85	12:08	14.4	9.89	2	10:00 - 13:00	Open	2021.9	2028.	2028.
6/16	13:49	23.9	7.83	13:55	15.4	9.04	0	P254 60%	Open	2021.9	—	—
6/17	13:08	24.9	7.67	13:15	15.1	9.79	2	Temp. Environment 12:30 - 19:30?	Open	2021.8	2022.	2022.
6/17	14:45	20.3	7.22	14:47	15.6	9.01	2	Post Gen	Open	2021.8	2022.	—

Dec 18 06 12:51P DEEK Creek 12:51P Dec 18 06 12:51P DEEK Creek 12:51P Dec 18 06 12:51P DEEK Creek 12:51P

(Instrument Calibrated to 2000 ft. MSL)

DISSOLVED OXYGEN MONITORING LOG

TEMP - EK FIO.

DATE	INSTRUMENT CALIBRATION			DO MEASUREMENTS			NO. UNITS GENERATING	TIMES OF GENERATION	SOLUTE GATE POSITION	NON-OPERATING TAILRACE ELEV	OPEN TAIL E
	CAL.	READINGS	TIME	TEMP OC	DO (mg/l)	TIME	DOWNTREAM FROM WEIR OC	DO (mg/l)			
6/20/06											
6/18	10:14	23.3	7.89	10:17	13.3	11.60	Φ	PRE-GENERATION	OPEN	2021.8	—
6/18	11:51	26.5	7.46	11:53	15.9	9.79	2	11:00 - 13:00	OPEN	2021.8	2028
6/18	13:33	26.9	7.41	13:36	15.8	8.92	Φ	POST GENERATION	OPEN	2021.8	—
6/19	08:53	24.0	7.81	08:56	12.3	8.20	Φ	PRE-GENERATION	OPEN	2021.8	—
6/19	10:45	24.0	7.81	10:46	14.9	9.63	2	10:00 - 13:00	OPEN	2021.8	—
6/19	13:13	22.9	7.97	13:17	15.3	8.74	Φ	POST GENERATION	OPEN	2021.8	2021
6/20	15:21	25.3	7.62	13:26	14.7	10.02	2	16:00 - 16:00	OPEN	2021.8	—
6/22	14:11	27.1	7.36	14:15	15.5	9.50	2	13:30 - 19:21	OPEN	2021.8	2021
6/23	09:19	23.1	7.95	09:25	13.0	8.01	Φ	PRE-GENERATION	OPEN	2022:2	—
6/23	10:45	22.9	7.97	10:49	14.9	9.31	2	10:00 - 13:00	OPEN	2022:2	2022
6/23	13:36	24.6	7.72	13:40	15.4	8.52	Φ	POST GENERATION	OPEN	2022:2	2022
6/26	07:48	22.7	8.00	07:51	12.7	7.70	0	PRE-GENERATION	OPEN	2022:4	—
6/26	10:35	22.6	8.02	10:42	15.1	9.11	2	10:00 - 13:00	OPEN	2022:8	—
6/26	13:29	24.5	7.73	13:32	15.8	8.37	Φ	POST GENERATION	OPEN	2022:8	2028
6/27	14:21	23.0	7.97	14:30	14.2	8.85	2	14:00 - 15:00	OPEN	2022:8	—
6/28	15:15	25.8	7.55	15:23	13.2	8.36	2	15:00 - 19:00	OPEN	2024,5	2025
6/29	08:40	22.1	8.10	08:53	12.8	7.60	0	Pre Generation	Open	2022,3	—
6/30	08:32	17.4	8.90	08:37	12.9	7.14	Φ	PRE-GENERATION	OPEN	2022,3	2022
6/30	10:45	22.4	8.05	10:55	14.3	8.32	2	10:00 - 20:00	OPEN	2022,9	2026

12:52pm Dec 18 06 2025 DEEK Creek 10:21 22.8 7.98 10:32 14.3 8.57 2 10:00 - 20:00 Open 2023.2 2024.5 2025 2027

(Instrument Calibrated to 2000 ft. MSL)

JEP CREEK STATION
DISSOLVED OXYGEN MONITORING LOG

DATE	INSTRUMENT CALIBRATION			DO MEASUREMENTS			NO. UNITS GENERATING	TIMES OF GENERATION	SLUICE GATE POSITION	NON-OPERATING TAILRACE ELEV	OPER TAIL EL
	TIME	TEMP °C	D0 (mg/l)	DOWNSTREAM FROM WEIR TIME	TEMP °C	D0 (mg/l)					
7/2006 1-301-387-5809	09:28	18.8	8.65	09:30	13.2	7.36	φ	PRE-GENERATION	OPEN	2022.2.5	—
7/1 11:52	22.5	8.03	11:54	15.1	8.80	2	10:00 - 13:00	OPEN	2022.5	2028	
7/1 13:55	23.8	7.83	13:58	16.0	8.21	φ	POST GENERATION	OPEN	2022.5	2028	
7/3 08:00	23.2	7.93	08:04	12.8	7.01	φ	PRE-GENERATION	OPEN	2022.5	—	
7/3 10:27	24.9	7.68	10:38	15.3	9.03	2	10:00 - 13:00	OPEN	2022.3	—	
7/3 13:27	26.0	7.51	13:38	15.6	8.05	φ	Post Generation	open	2022.3	2022	
7/6 09:27	18.4	8.70	09:30	12.7	6.65	φ	PRE-GENERATION	OPEN	2023.2	—	
7/6 11:52	22.4	8.05	11:54	15.4	8.49	2	10:00 - 11:00 (REG.) 11:05 - 19:00	OPEN	2023.2	—	
7/7 09:22	20.5	8.33	09:31	12.9	6.85	0	Pre-Generation	OPEN	2023.2	2028	
7/7 10:37	23.4	7.89	10:43	14.7	8.08	2	10:00 - 18:00	OPEN	2022.7	—	
7/10 09:22	21.6	8.19	09:25	12.8	6.36	φ	PRE-GENERATION	OPEN	2022.7	2022	
7/10 11:32	25.6	7.58	11:34	15.5	8.28	2	10:00 - 13:00	OPEN	2022.2	—	
7/10 13:30	24.9	7.68	13:33	16.2	6.91	φ	POST GENERATION	OPEN	2022.2	2028	
7/11 15:05	26.2	7.48	15:15	15.8	8.38	2	13:00 - 16:00	open	2022.1	2028	
7/12 13:50	25.7	7.56	14:05	15.2	7.91	2	13:00 - 16:00	open	2022.1	2028	
7/13 12:44	23.3	7.91	12:49	12.9	6.00	φ	PRE-GENERATION	OPEN	2022.1	2024	
7/13 13:28	20.4	8.37	13:31	14.8	7.13	2	13:00 - 18:00	OPEN	2022.2	—	
7/14 09:26	23.1	7.86	09:28	13.2	6.26	φ	POST GENERATION	OPEN	2022.3	2026	
7/14 10:46	24.7	7.70	10:49	16.1	7.91	2	PRE-GENERATION	OPEN	2022.3	—	
							10:00 - 16:00	OPEN	2022.3	2028.	

(Instrument Calibrated to 2000 ft. MSL)

DEEP CREEK STATION
DISSOLVED OXYGEN MONITORING LOG

DATE	INSTRUMENT CALIBRATION	DO MEASUREMENTS			NO. UNITS			TIMES OF GENERATION		SLUICE GATE POSITION	NON-OPERATING TAILRACE ELEV	OPERATING TAILRACE ELEV
	CAL. READINGS	TIME	TEMP °C	DO (mg/l)	DOWNTSTREAM TIME	WEIR TEMP °C	DO (mg/l)	GENERATING				
2006	2006	9:19	26.6	7.44	9:23	13.0	5.58	Φ	PRE-GENERATION	OPEN	2021.9	—
7/17	10:33	25.9	7.53	10:36	15.5	7.64	2	2	10:00 - 18:00	OPEN	2021.9	2028.0
7/18	10:28	25.9	7.55	10:31	13.5	6.13	Φ	PRE-GENERATION	OPEN	2021.9	2028.0	—
7/19	12:36	27.7	7.30	12:38	15.9	7.46	2	2	11:00 - 18:00	OPEN	2021.9	2028.0
7/20	14:56	28.7	7.20	15:05	15.8	2.60	2	2	12:00 - 18:00	OPEN	2021.8	2028.0
7/21	09:27	26.9	7.38	09:39	13.1	5.48	0	0	Pre-Generation	open	2021.8	2028.0
7/21	10:32	26.4	7.46	10:44	15.4	7.09	2	2	10:00 - 13:00	open	2021.8	—
7/21	16:03	29.2	7.07	16:19	16.5	6.73	0	0	Post Generation	open	2021.8	2028.0
7/22	09:22	24.6	7.71	09:36	13.1	5.11	0	0	Pre Generation	open	2021.8	—
7/22	10:25	22.3	8.07	10:34	15.9	6.75	2	2	10:00 - 16:00	open	2021.9	—
7/24	09:25	22.8	7.96	09:37	13.2	4.56	0	0	Pre Generation	open	2021.9	2028.0
7/24	10:35	23.4	7.85	10:49	16.0	6.64	2	2	10:00 - 13:00	open	2021.9	—
7/25	12:33	25.0	7.47	12:37	14.4	5.21	Φ	Φ	Pre-Generation	open	2021.8	2028.0
7/25	13:35	25.2	7.62	13:39	15.2	6.03	2	2	13:00 - 18:00	open	2021.8	2026.7
7/26	12:59	26.2	7.45	13:02	15.8	7.48	2	2	12:30 - 17:00	2-6" open	2021.8	2028.4
7/27	13:38	26.1	7.61	13:50	16.2	7.51	2	2	12:30 - 17:00	2-6" closed	2021.7	2028.4
7/28	9:15	26.3	7.48	9:30	16.4	7.49	0	0	PRE-GENERATION	2-6" open	2021.7	—
7/28	11:08	23.2	7.94	11:15	16.1	7.15	2	2	10:00 - 17:00	2-6" closed	2021.7	2028.4
7/30	14:39	26.4	7.30	14:49	15.9	6.64	2	2	14:00 - 16:00	2-6" open	2021.8	2028.4

Dec 18 06 12:55p Dec 18 06 12:55p Dec 18 06 12:55p

(Instrument Calibrated to 2000 ft. MSL)

DEEP CREEK STATION
DISSOLVED OXYGEN MONITORING LOG

DATE	INSTRUMENT CALIBRATION			DO MEASUREMENTS			NO. UNITS GENERATING	TIMES OF GENERATION	SLUICE GATE POSITION	NON-OPERATING TAILRACE ELEV	OPERATING TAILRACE ELEV
	CAL.	READINGS	TIME	TEMP °C	DO (mg/l)	TIME	TEMP °C	DO (mg/l)			
9/2/06											
7/31	09:32	23.5	7.89	09:37	13.3	3.90	∅	PRE-GENERATION	2-Closed	2-Closed	2-Closed
7/31	10:30	22.9	7.85	10:49	16.3	6.94	2	10:00 - 13:00	2-C Open	2021.7	2021.7
7/31	13:36	26.4	7.46	13:40	17.0	5.08	∅	Post Generation	2-C Open	2021.7	2028.4
8/01	10:47	27.1	7.39	10:51	13.7	4.40	∅	PRE-GENERATION	2-C Closed	2021.7	—
8/01	11:52	27.8	7.29	11:55	16.5	7.22	2	11:00 - 16:00	2-C Open	2021.7	—
8/02	10:15	27.3	7.48	10:30	13.9	4.32	∅	PRE-GENERATION	2-C Closed	2021.7	2028.4
8/02	11:20	29.1	6.93	11:30	16.3	9.02	2	11:00 - 16:00	2-C Open	2021.7	2021.8
8/03	11:20	28.4	7.06	11:30	16.7	7.11	2	11:00 - 13:00	2-C Open	2021.8	2028.4
8/04	07:40	24.9	7.67	09:50	13.6	3.62	∅	Pre-Generation	2-C Open	2021.8	2028.4
8/04	11:50	24.9	7.62	11:55	16.6	6.20	2	10:00 - 13:00	2-C Open	2021.6	—
8/04	13:22	25.1	7.62	13:33	17.1	4.43	∅	Post Generation	2-C Closed	2021.6	2028.4
8/05	10:29	21.5	8.21	10:43	16.2	6.61	2	10:00 - 13:00	2-C Open	2021.6	2028.4
8/05	13:32	21.8	7.51	13:40	17.7	5.78	∅	Post Generation	2-C Closed	2021.6	—
8/06	12:15	26.2	7.41	12:27	16.9	6.71	2	11:00 - 13:00	2-C Open	2021.6	2028.4
8/06	13:28	26.0	7.52	13:42	17.9	5.24	∅	Post Generation	2-C Closed	2021.6	2028.4
8/07	09:50	25.2	7.39	10:00	13.7	3.80	∅	Pre-Gen	2-C Open	2021.6	—
8/07	10:30	24.2	7.60	10:40	16.7	6.34	2	10:00 - 13:00	2-C Open	2021.6	—
8/07	15:17	26.9	7.39	15:19	17.0	3.81	∅	Post Gen	2-C Open	2021.6	2028.4
8/08	08:51	24.0	7.80	08:54	13.7	3.23	∅	PRE-GENERATION	2-C Closed	2021.6	—
8/08	13:20	25.6	7.58	13:25	13.7	6.71	2	12:30 - 15:00	2-C Open	2021.6	2028.4

(Instrument Calibrated to 2000 ft. MSL)

DEEP CREEK STATION
DISSOLVED OXYGEN MONITORING LOG

DATE	INSTRUMENT CALIBRATION			DO MEASUREMENTS			NO. UNITS GENERATING	TIMES OF GENERATION	SLUICE GATE POSITION	NON-OPERATING TAILRACE ELEV	OPERATI TAILRAC ELEV
	TIME	TEMP °C	DO (mg/l)	TIME	TEMP °C	DO (mg/l)					
8/20/06	15:23	25.5	7.59	15:25	17.3	4.18	φ	Post Generation	2-CLOSED 2-6" OPEN	2021.6	—
8/08	10:51	21.9	8.13	10:54	13.9	3.19	φ	Pre-Generation	2-CLOSED 2-6" OPEN	2021.6	—
8/09	13:28	24.8	7.69	13:54	16.9	6.50	2	12:30 - 14:30	2-CLOSED 2-6" OPEN	2021.6	—
8/09	15:03	24.7	7.72	15:05	17.4	4.27	φ	Post Generation	2-CLOSED 2-6" OPEN	2021.6	2028.4
8/11	09:30	24.4	7.70	09:38	13.1	2.91	φ	Pre-Generation	2-CLOSED 2-6" OPEN	2022.1	—
8/11	11:28	25.5	7.60	11:30	17.2	6.65	2	10:00 - 13:00	2-CLOSED 2-6" OPEN	2022.1	—
8/11	13:33	27.7	7.29	13:36	17.6	3.99	φ	Post-Generation	2-CLOSED 2-6" OPEN	2022.0	—
8/12	14:22	25.9	7.48	14:33	17.4	6.61	2	14:00 - 15:00	2-CLOSED 2-6" OPEN	2022.0	2028.4
8/12	15:15	23.7	7.85	15:26	17.5	3.59	φ	Post-Generation	2-CLOSED 2-6" OPEN	2021.7	2028.4
8/13	14:25	21.5	8.19	14:28	16.6	6.07	2	14:00 - 15:00	2-CLOSED 2-6" OPEN	2021.7	—
8/13	15:21	22.2	8.08	15:23	17.5	3.22	φ	Post Generation	2-CLOSED 2-6" OPEN	2021.6	2028.4
8/14	09:28	19.3	8.55	09:30	13.8	3.20	φ	Pre-Generation	2-CLOSED 2-6" OPEN	2021.6	—
8/14	10:27	18.9	8.63	10:29	16.9	6.05	2	10:00 - 13:00	2-CLOSED 2-6" OPEN	2021.6	2028.4
8/14	13:24	25.2	7.63	13:26	17.2	3.30	φ	Post Generation	2-CLOSED 2-6" OPEN	2021.6	—
8/15	14:18	24.9	7.79	14:30	17.4	6.22	2	14:00 - 15:00	2-CLOSED 2-6" OPEN	2021.6	2028.4
8/16	15:18	22.6	7.68	15:28	17.3	6.02	2	15:00 - 16:00	2-CLOSED 2-6" OPEN	2021.6	2028.4
8/17	13:00	22.2	8.08	13:15	17.8	6.06	2	11:45 - 14:00	2-CLOSED 2-6" OPEN	2021.6	2028.4
8/17	14:23	24.0	5.00	14:31	18.3	2.35	0	Post Generation	2-CLOSED 2-6" OPEN	2021.6	2028.4
8/18	09:30	19.6	8.52	09:32	13.9	4.54	φ	Pre-Generation	2-CLOSED 2-6" OPEN	2021.6	—
8/18	10:29	20.8	8.30	10:31	17.8	6.08	2	10:00 - 13:00	2-CLOSED 2-6" OPEN	2021.6	2028.4

DEC 18 06 12:53p DEEP CREEK

(Instrument Calibrated to 2000 ft. MSL)

DEEP CREEK STATION
DISSOLVED OXYGEN MONITORING LOG

DATE	INSTRUMENT CALIBRATION			DO MEASUREMENTS DOWNSTREAM FROM WEIR DO			NO. UNITS GENERATING	TIMES OF GENERATION		SUICIDE GATE POSITION	NON-OPERATING TAILRACE ELEV	OPE TAI E
	CAL. TIME	TEMP °C	DO (mg/l)	TIME	TEMP °C	DO (mg/l)						
8/22/2020	14:56	25.2	7.65	14:58	18.7	4.25	Φ	Post GENERATION		2-CLOSED	2021.6	—
8/18	09:34	20.7	8.33	09:36	13.7	5.71	Φ	PRE-GENERATION		2-6" OPEN	2021.6	—
8/21	10:28	20.5	8.35	10:34	16.8	6.08	2	PRE-GENERATION		2-CLOSED	2021.6	—
8/21	13:28	22.4	8.05	13:30	17.7	3.95	Φ	POST GENERATION		2-6" OPEN	2021.6	2020.
8/25	09:20	19.4	8.30	09:28	13.9	5.55	Φ	Pre-Generation		2-CLOSED	2021.6	—
8/25	10:21	22.1	8.08	10:29	18.0	6.13	2	Post-Generation		2-6" OPEN	2021.7	—
8/25	13:28	25.2	7.70	13:39	18.5	5.21	Φ	Post-Generation		2-CLOSED	2021.7	—
8/26	10:51	22.8	7.98	10:53	14.1	6.40	Φ	PRE-GENERATION		2-6" OPEN	2021.7	2028
8/26	11:34	24.0	7.79	11:36	17.6	6.01	2	Post-Generation		2-CLOSED	2021.7	—
8/26	13:35	25.8	7.56	13:37	18.3	6.08	Φ	PRE-GENERATION		2-6" OPEN	2021.7	—
8/28	09:43	23.9	7.48	09:45	14.4	6.62	Φ	Post GENERATION		2-6" OPEN	2021.7	—
8/28	10:34	22.8	7.99	10:37	17.4	5.43	2	PRE-GENERATION		2-CLOSED	2021.7	—
8/28	13:46	26.1	7.52	13:48	18.4	6.54	Φ	Post GENERATION		2-6" OPEN	2021.7	2028.
8/30/2020 Deep Creek	09:39	20.2	8.42	09:49	14.1	4.98	Φ	Pre - Generation		2-CLOSED	2021.7	—
8/30/2020 Deep Creek	10:32	17.4	8.89	10:40	20.6	6.95	2	Pre - Generation		2-6" OPEN	2021.7	—
9/02	09:34	16.7	9.04	09:37	20.2	5.86	Φ	PRE-GENERATION		2-CLOSED	2021.6	—
9/02	10:32	17.0	8.98	10:35	19.9	7.12	2	Post - GENERATION		2-6" OPEN	2021.6	—
9/02	14:26	18.6	8.67	14:27	19.8	5.06	Φ	Post - GENERATION		2-CLOSED	2021.6	2028.
9/04	09:23	15.3	9.17	09:36	14.1	2.22	Φ	Pre- Generation		2-6" OPEN	2021.2	—
9/04	10:49	15.7	9.22	11:00	18.0	6.22	2	10:00 - 13:00		2-CLOSED	2021.7	2028.

1-301-387-5809

2021.7

(Instrument Calibrated to 2000 ft. MSL)

DEEP CREEK STATION
DISSOLVED OXYGEN MONITORING LOG

DATE	INSTRUMENT CALIBRATION			DO MEASUREMENTS			NO. UNITS GENERATING	TIMES OF GENERATION	SLUICE GATE POSITION	NON-OPERATING TAILRACE ELEV	OPERATI TALLRAC ELEV
	CAL. #	INSTRUMENT READINGS	TEMP OC	DO (mg/l)	DOWNTREAM FROM WEIR TIME	TEMP OC					
9/04	14:28	22.0	2.93	14:38	19.3	5.04	Φ	Post-Generation	2-Closed	2021.7	—
9/08	10:13	19.0	8.63	10:23	18.0	6.45	2	10:00 - 13:00	2-6" open	2021.7	—
9/08	13:33	20.9	8.29	13:36	18.5	4.12	Φ	Post-Generation	2-Closed	2021.7	2028.4
9/11	09:47	20.5	8.33	09:49	14.8	5.07	Φ	Post-Generation	2-6" open	2021.7	—
9/11	10:31	18.6	8.64	10:42	18.3	6.68	2	10:00 - 13:00	2-Closed	2021.6	—
9/11	13:40	21.1	8.24	13:42	19.1	6.36	Φ	Post-Generation	2-6" open	2021.6	2028.4
9/15	09:32	19.5	8.51	09:35	14.3	2.23	Φ	Pre-Generation	2-Closed	2021.6	—
9/15	10:32	19.3	8.54	10:35	17.9	6.81	2	10:00 - 13:00	2-6" open	2021.7	—
9/15	13:35	19.7	8.49	13:37	18.2	3.95	Φ	Post-Generation	2-Closed	2021.7	2028.4
9/18	09:32	17.5	8.89	09:34	14.4	5.00	Φ	Pre-Generation	2-6" open	2021.8	—
9/18	10:26	15.0	9.36	10:28	18.0	6.69	2	10:00 - 13:00	2-Closed	2021.7	2028.4
9/18	13:28	20.2	8.42	13:30	18.4	5.14	Φ	Post-Generation	2-6" open	2021.6	2028.4
9/19	10:34	19.2	8.55	10:36	18.0	6.46	2	10:00 - 13:00	2-Closed	2021.7	—
9/19	13:28	19.1	8.60	13:30	18.2	4.49	Φ	Post-Generation	2-6" open	2021.6	2028.4
9/20	08:28	16.7	9.04	08:30	14.4	5.35	Φ	Pre-Generation	2-Closed	2021.7	—
9/20	09:27	14.3	9.50	09:30	17.4	6.30	2	09:00 - 14:00	2-6" open	2021.6	2028.4
9/20	14:32	16.4	9.09	14:34	17.5	5.30	Φ	Post-Generation	2-Closed	2021.7	—
9/21	09:33	15.1	9.35	09:35	14.6	5.41	Φ	Pre-Generation	2-6" open	2021.7	—
9/21	10:27	14.2	9.53	10:29	17.3	6.62	2	10:00 - 13:00	2-Closed	2021.7	2028.4
9/21	13:30	16.1	9.16	13:32	17.8	5.55	Φ	Post-Generation	2-6" open	2021.7	—

DEO 18 06 12:54P DEE Creek 9/20 08:28 16.7 9.04 08:30 14.4 5.35 Φ Pre-Generation 2-Closed 2021.6 2028.4

{ Instrument Calibrated to 2000 ft. MSL)

DEEP CREEK STATION
DISSOLVED OXYGEN MONITORING LOG

DATE	INSTRUMENT CALIBRATION			DO MEASUREMENTS			NO. UNITS GENERATING	TIMES OF GENERATION	SLUICE GATE POSITION	NON-OPERATING TAILRACE ELEV	OPE TAI E
	CAL.	READINGS	DO (mg/l)	TIME	TEMP OC	DOWNTSTREAM FROM WEIR DO (mg/l)					
2006											
9/22	09:29	12.7	9.84	09:31	14.9	5.35	Φ	PRE-GENERATION	2-CLOSED 2-6"OPEN	2021.7	—
9/22	10:32	13.9	9.60	10:34	17.4	7.30	2	10:00 - 13:00	2-CLOSED 2-6"OPEN	2021.7	2021
9/22	13:29	16.5	9.07	13:31	17.7	6.03	Φ	POST GENERATION	2-CLOSED 2-6"OPEN	2021.7	2021
9/25	09:27	17.8	8.82	09:29	15.4	2.33	Φ	PRE-GENERATION	2-CLOSED 2-6"OPEN	2021.8	—
9/25	10:27	16.7	9.04	10:29	17.0	6.84	2	10:00 - 13:00	2-CLOSED 2-6"OPEN	2021.6	—
9/25	13:27	17.5	8.88	13:28	17.3	4.45	Φ	POST GENERATION	2-CLOSED 2-6"OPEN	2021.6	2021
9/29	09:28	14.9	7.38	09:35	14.9	5.64	0	PRE-Generation	2-CLOSED 2-6"OPEN	2021.6	—
9/29	10:24	13.7	9.58	10:32	16.8	7.42	2	10:00 - 13:00	2-CLOSED 2-6"OPEN	2021.7	—
9/29	13:27	15.2	9.33	13:29	17.1	6.52	Φ	Post GENERATION	2-CLOSED 2-6"OPEN	2021.8	—

10

1-301-387-5809

Dec 18 06 12:54P Deep Creek

**DEEP CREEK HYDROELECTRIC STATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER APPROPRIATION PERMIT NO. GA92S009 (06)
ANNUAL REPORT 2006**

APPENDIX E - ZEBRA MUSSEL MONITORING REPORT

Dec 18 06 12:55p

Deek Creek

1-301-387-5809

p. 11

CPU Laboratory
Reading Airport Building

(610) 375-5046



Zebra Mussel Monitoring Report

(official use only - leave blank)
ZM Monitoring Network #:1.) Mike Stemple

(COLLECTOR'S NAME)

2.) Brookfield Power

(COMPANY OR AFFILIATION)

3.) 301-387-6616

(PHONE NUMBER)

4.) 14 Riverview Terrace OAKLAND
(ADDRESS)5.) Deep Creek Power Plant
(NAME OF STATION)

Physical / Chemical / and Biological Data

6.) _____
(STATION LATITUDE)

7.) _____

(STATION LONGITUDE)

8.) _____

(RIVER MILE INDEX)

9.) Date and time this data was collected (circle year, month, day, & hour)

Year: '98 '99 '00 '01 06Month: 01 02 03 04 05 06 07 08 09 10 11 12Day: 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31Hour: _____ (if before 7am) 07 08 09 10 11 12 (noon) 13 (1pm) 14 (2pm) 15 (3pm) 16 (4pm) 17 18 _____ (if after 6pm)10.) 61°F 11.) _____
(TEMPERATURE °C) (pH)12.) _____
(DISSOLVED OXYGEN mg/l)13.) _____
(CONDUCTIVITY umhos/cm³)14.) _____
(TOTAL CALCIUM mg/l)15.) _____
(SECCHI DEPTH meters)16.) _____
(CURRENT VELOCITY meters/sec)17.) _____
(WATER DEPTH meters)

18.) How far above the natural substrate is the sampler? (in meters) _____

19.) How many days was the sampler exposed to the water prior to collecting this data? _____

3120.) Are zebra mussels present at this site? (X NO) (YES) . if yes, comment below and notify the
Zebra Mussel Monitoring Coordinator immediately.21.) Other organisms observed on the sampler / site? (please list) NONE22.) Comments (if more space is needed, continue on the back of this form):



Zebra Mussel Monitoring Report

(Official use only - leave blank)
ZM Monitoring Network #:

- 1.) Randy Garber
(COLLECTOR'S NAME)
- 2.) Brookfield Power
(COMPANY OR AFFILIATION)
- 3.) 301-387-6616
(PHONE NUMBER)
- 4.) 14 Riverview Terrace OAKLAND MD
(ADDRESS)
- 5.) Deep Creek Power Plant
(NAME OF STATION)

Physical / Chemical / and Biological Data

- 6.) _____
(STATION LATITUDE)
- 7.) _____
(STATION LONGITUDE)
- 8.) _____
(RIVER MILE INDEX)

- 9.) Date and time this data was collected (circle year, month, day, & hour)

Year: '98 '99 '00 '01 06

Month: 01 02 03 04 05 06 07 08 09 10 11 12

Day: 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Hour: _____ (if before 7am) 07 08 09 10 11 12 (noon) 13 (1pm) 14 (2pm) 15 (3pm) 16 (4pm) 17 18 _____ (if after 8pm)

- 10.) 51°F
(TEMPERATURE °C)
- 11.) _____
(pH)
- 12.) _____
(DISSOLVED OXYGEN mg/l)
- 13.) _____
(CONDUCTIVITY umhos/cm³)

- 14.) _____
(TOTAL CALCIUM mg/l)
- 15.) _____
(SECCHI DEPTH meters)
- 16.) _____
(CURRENT VELOCITY meters/sec)
- 17.) _____
(WATER DEPTH meters)

- 18.) How far above the natural substrate is the sampler? (in meters)

- 19.) How many days was the sampler exposed to the water prior to collecting this data?

61

- 20.) Are zebra mussels present at this site? (NO) (YES) - if yes, comment below and notify the Zebra Mussel Monitoring Coordinator immediately.

- 21.) Other organisms observed on the sampler / site? (please list) NONE

- 22.) Comments (if more space is needed, continue on the back of this form):

- 22.) Comments (if more space is needed, continue on the back of this form):

GPU Laboratory
Reading Airport Building

(610) 375-5046



Zebra Mussel Monitoring Report

ZM Monitoring Network #

- | | | |
|---|--|---|
| 1.) <u>Randy Garletts</u>
(COLLECTOR'S NAME) | | ZM Monitoring Network #: |
| 2.) <u>Brookfield Power</u>
(COMPANY OR AFFILIATION) | | 3.) <u>301-387-6616</u>
(PHONE NUMBER) |
| 4.) <u>14 Riverview Terrace OAKLAND MD</u>
(ADDRESS) | | |
| 5.) <u>Deep Creek Power Plant</u>
(NAME OF STATION) | | |

Physical / Chemical / and Biological Data

- | | | | | | | | |
|---|--|--------|--|------|--|------|---------------------------------------|
| 6.) | (STATION LATITUDE) | 7.) | (STATION LONGITUDE) | 8.) | (RIVER MILE INDEX) | | |
| 9.) Date and time this data was collected (circle year, month, day, & hour) | | | | | | | |
| Year: | '98 '99 '00 '01 (06) | Month: | 01 02 03 04 05 06 07 08 09 (10) 11 12 | Day: | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 | | |
| Hour: | (if before 7am) 07 08 09 10 11 12 (noon) 13 (1pm) 14 (2pm) 15 (3pm) 16 (4pm) 17 18 _____ (if after 6pm) | | | | | | |
| 10.) | 48° F
(TEMPERATURE °C) | 11.) | (pH) | 12.) | (DISSOLVED OXYGEN mg/l) | 13.) | (CONDUCTIVITY umhos/cm ³) |
| 14.) | 15.
(TOTAL CALCIUM mg/l) | 15.) | (SECCHI DEPTH meters) | 16.) | (CURRENT VELOCITY meters/sec) | 17.) | (WATER DEPTH meters) |

8.) How far above the natural substrate is the sampler? (in meters) _____

9.) How many days was the sampler exposed to the water prior to collecting this data? **153**

10.) Are zebra mussels present at this site? (NO) (YES) - if yes, comment below and notify the Zebra Mussel Monitoring Coordinator immediately.

11.) Other organisms observed on the sampler / site? (please list) **NONE**

- 22.) Comments (if more space is needed, continue on the back of this form): _____

GPU Laboratory
Reading Airport Building

(610) 375-5046



Zebra Mussel Monitoring Report

(official use only - leave blank)
ZM Monitoring Network #:

- | | | |
|-----|-------------------------------|---------------------------|
| 1.) | <u>Mike Steaple</u> | ZMF Monitoring Network #: |
| | (COLLECTOR'S NAME) | |
| 2.) | <u>Brookfield Power</u> | 3.) |
| | (COMPANY OR AFFILIATION) | <u>301-387-6616</u> |
| 4.) | <u>14 Riverview Terrance</u> | (PHONE NUMBER) |
| | (ADDRESS) | <u>OAKLAND MD</u> |
| 5.) | <u>Deep Creek Power Plant</u> | |
| | (NAME OF STATION) | |

Physical / Chemical / and Biological Data

- 6.) _____ 7.) _____ 8.) _____
(STATION LATITUDE) (STATION LONGITUDE) (RIVER MILE INDEX)

- 9.) Date and time this data was collected (circle year, month, day, & hour)

Year: '98 '99 '00 '01 '02

Month: 01 02 03 04 05 06 07 08 09 10 11 12

Day: 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Hour: _____ (if before 7am) 07 08 09 10 11 12 (noon) 13 (1pm) 14 (2pm) 15 (3pm) 16 (4pm) 17 18 _____ (if after 6pm)

- 10.) 51° F
(TEMPERATURE °C) 11.) _____ (pH)
12.) _____ (DISSOLVED OXYGEN mg/l) 13.) _____ (CONDUCTIVITY umhos/cm³)
14.) _____ (TOTAL CALCIUM mg/l) 15.) _____ (SECCHI DEPTH meters)
16.) _____ (CURRENT VELOCITY meters/sec) 17.) _____ (WATER DEPTH meters)
18.) _____ (if after 6pm)

- 3.) How far above the natural substrate is the sampler? (in meters) _____
19.) How many days was the sampler exposed to the water prior to collecting this data? 184
4.) Are zebra mussels present at this site? (X NO) (YES) - if yes, comment below and notify the
Zebra Mussel Monitoring Coordinator Immediately.
5.) Other organisms observed on the sampler / site? (please list) NONE

- 2.1 Comments (if more space is needed, continue on the back of this form): Removed for winter

CPU Laboratory
Reading Airport Building
(610) 375-5046



Zebra Mussel Monitoring Report

(official use only - leave blank)
ZM Monitoring Network #:

1.) Mike Stemple
(COLLECTOR'S NAME)

2.) Brook Field Power
(COMPANY OR AFFILIATION)

3.) 301-387-6616
(PHONE NUMBER)

4.) 14 Riverview Terrace
(ADDRESS)

OAKLAND MD

5.) Deep Creek Power Plant
(NAME OF STATION)

Physical / Chemical / and Biological Data

6.) _____ 7.) _____ 8.) _____
(STATION LATITUDE) (STATION LONGITUDE) (RIVER MILE INDEX)

9.) Date and time this data was collected (circle year, month, day, & hour)

Year: '98 '99 '00 '01 (06)

Month: 01 02 03 04 05 (06) 07 08 09 10 11 12

Day: (01) 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Hour: _____ (if before 7am) (07) 08 09 10 11 12 (noon) 13 (1pm) 14 (2pm) 15 (3pm) 16 (4pm) 17 18 _____ (if after 6pm)

10.) 61°F 11.) _____ 12.) _____ 13.) _____
(TEMPERATURE °C) (pH) (DISSOLVED OXYGEN mg/l) (CONDUCTIVITY umhos/cm³)

14.) _____ 15.) _____ 16.) _____ 17.) _____
(TOTAL CALCIUM mg/l) (SECCHI DEPTH meters) (CURRENT VELOCITY meters/sec) (WATER DEPTH meters)

8.) How far above the natural substrate is the sampler? (in meters) _____

19.) How many days was the sampler exposed to the water prior to collecting this data? 31

10.) Are zebra mussels present at this site? (NO) (YES) - if yes, comment below and notify the Zebra Mussel Monitoring Coordinator immediately.

11.) Other organisms observed on the sampler / site? (please list) NONE

12.) Comments (if more space is needed, continue on the back of this form):

GPU Laboratory
Reading Airport Building
(610) 375-5046



Zebra Mussel Monitoring Report

(official use only - leave blank)
ZM Monitoring Network #:

- 1.) Randy Gacketts
(COLLECTOR'S NAME)
- 2.) Brookfield Power
(COMPANY OR AFFILIATION)
- 3.) 301-387-6616
(PHONE NUMBER)
- 4.) 14 Riverview Terrace Oakland M.
(ADDRESS)
- 5.) Deep Creek Power Plant
(NAME OF STATION)

Physical / Chemical / and Biological Data

- 6.) _____
(STATION LATITUDE)
- 7.) _____
(STATION LONGITUDE)
- 8.) _____
(RIVER MILE INDEX)
- 9.) Date and time this data was collected (circle year, month, day, & hour)

Year: '98 '99 '00 '01 06

Month: 01 02 03 04 05 06 07 08 09 10 11 12

Day: 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Hour: _____ (if before 7am) 07 08 09 10 11 12 (noon) 13 (1pm) 14 (2pm) 15 (3pm) 16 (4pm) 17 18 _____ (if after 6pm)
- 10.) 51° F
(TEMPERATURE °C)
- 11.) _____
(pH)
- 12.) _____
(DISSOLVED OXYGEN mg/l)
- 13.) _____
(CONDUCTIVITY umhos/cm³)
- 4.) _____
(TOTAL CALCIUM mg/l)
- 15.) _____
(SECCHI DEPTH meters)
- 16.) _____
(CURRENT VELOCITY meters/sec)
- 17.) _____
(WATER DEPTH meters)
- 8.) How far above the natural substrate is the sampler? (in meters) _____
- 19.) How many days was the sampler exposed to the water prior to collecting this data? 61
- 1.) Are zebra mussels present at this site? (NO) (YES) - if yes, comment below and notify the Zebra Mussel Monitoring Coordinator immediately.
- 1.) Other organisms observed on the sampler / site? (please list) NONE
- 12.) Comments (if more space is needed, continue on the back of this form): _____

Dec 18 06 12:56p

Deek Creek

1-301-387-5809

p. 17

GPU Laboratory
Reading Airport Building
(610) 375-5046



Zebra Mussel Monitoring Report

(official use only - leave blank)
ZM Monitoring Network #:

- 1.) Randy Garleets
(COLLECTOR'S NAME)
- 2.) Brookfield Power
(COMPANY OR AFFILIATION)
- 3.) 301-387-6616
(PHONE NUMBER)
- 4.) 14 Riverview Terrace
OAKLAND M.D.
(ADDRESS)
- 5.) Deep Creek Power Plant
(NAME OF STATION)

Physical / Chemical / and Biological Data

- 6.) _____
- 7.) _____
- 8.) _____
- 9.) Date and time this data was collected (circle year, month, day, & hour)

Year: '98 '99 '00 '01 06
 Month: 01 02 03 04 05 06 07 08 09 10 11 12
 Day: 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
 Hour: _____ (if before 7am) 07 08 09 10 11 12 (noon) 13 (1pm) 14 (2pm) 15 (3pm) 16 (4pm) 17 18 _____ (if after 6pm)
- 10.) 67°F
(TEMPERATURE °C)
- 11.) _____
- 12.) _____
- 13.) _____
- 14.) _____
- 15.) _____
- 16.) _____
- 17.) _____
- 18.) How far above the natural substrate is the sampler? (in meters) _____
- 19.) How many days was the sampler exposed to the water prior to collecting this data? _____
- 20.) Are zebra mussels present at this site? (NO) (YES) - if yes, comment below and notify the Zebra Mussel Monitoring Coordinator Immediately. 92
- 21.) Other organisms observed on the sampler / site? (please list) NONE

- 22.) Comments (if more space is needed, continue on the back of this form):

Dec 18 06 12:56p

Deek Creek

1-301-387-5809

p. 18

GPU Laboratory
Reading Airport Building
(610) 375-5046



Zebra Mussel Monitoring Report

(official use only - leave blank)
ZM Monitoring Network #:

- | | | |
|-----|---|---|
| 1.) | <u>Mike Stemple</u>
(COLLECTOR'S NAME) | ZM Monitoring Network #: |
| 2.) | <u>Brookfield Power</u>
(COMPANY OR AFFILIATION) | 3.) <u>301-387-6616</u>
(PHONE NUMBER) |
| 4.) | <u>14 Riverview Terrance</u>
(ADDRESS) | <u>OAKLAND MD</u> |
| 5.) | <u>Deep Creek Power Plant</u>
(NAME OF STATION) | |

Physical / Chemical / and Biological Data

- 6.) _____ 7.) _____ 8.) _____
(STATION LATITUDE) (STATION LONGITUDE) (RIVER MILE INDEX)

- 9.) Date and time this data was collected (circle year, month, day, & hour)

Year: '98 '99 '00 '01 **'06**

Month: 01 02 03 04 05 06 07 08 09 10 11 12

Day: 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21

Hour: _____ (if before 7am) 07 08 09 10 11 12 (noon) 13 (1pm) 14 (2pm) 15 (3pm) 16 (4pm) 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

- 18.) How far above the natural substrate is the sampler? (in meters) _____

19.) How many days was the sampler exposed to the water prior to collecting this data? 123

0.) Are zebra mussels present at this site? (NO) (YES) - if yes, comment below and notify the Zebra Mussel Monitoring Coordinator immediately.

1.) Other organisms observed on the sampler / site? (please list) NONE

- 22.) **Comments (if more space is needed, continue on the back of this form):** _____

