

**OSWAYO CREEK  
POTTER COUNTY**

**STREAM REDESIGNATION EVALUATION REPORT  
WATER QUALITY STANDARDS REVIEW**

**SEGMENT: BASIN, SOURCE TO CLARA CREEK  
(EXCLUDING SOUTH BRANCH OSWAYO CREEK)  
DRAINAGE LIST: P  
STREAM CODE: 57116**

**WATER QUALITY MONITORING AND ASSESSMENT SECTION (DSB)  
DIVISION OF WATER QUALITY ASSESSMENT AND STANDARDS  
BUREAU OF WATER SUPPLY AND WASTEWATER MANAGEMENT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**MARCH 1997  
REVISED JANUARY 2000**

## GENERAL WATERSHED DESCRIPTION

Oswayo Creek is a tributary of the Allegheny River. This report covers the portion of the basin from the source to Clara Creek excluding the South Branch Oswayo Creek which was covered by an earlier report (Figure 1). This candidate basin has a drainage area of 32.5 square miles and contains 66.6 stream miles. The  $Q_{7-10}$  of Oswayo Creek just above Clara Creek is estimated to be 3.33 cubic feet/second. This watershed is located in Clara, Allegany, Genesee, Hebron, Oswayo, and Sharon Townships and Oswayo Borough, Potter County. All streams in the candidate basin except one are currently designated Cold Water Fishes (CWF). The exception is Brizzee Hollow, which has a High Quality - Cold Water Fishes (HQ-CWF) designation. The South Branch Oswayo Creek was recommended for an Exceptional Value (EV) designation in an earlier report. It was included in the Buck Hill Creek rulemaking package (30 Pa.B. 3036, June 17, 2000). It was separated from this report while waiting for revisions of the Department's Antidegradation regulation. In response to a request from the Pennsylvania Fish and Boat Commission (PFBC), the basin was evaluated for redesignation as HQ-CWF. This evaluation is based on a field survey conducted in November 1996.

This basin contains the Borough of Oswayo and land use in the valley of the main stem is mostly agriculture and residential. The surrounding hillsides are mostly forested. Most of the candidate basin is privately owned. Extensive wetland areas are located in the floodplain of Oswayo Creek below Brizzee Hollow. The wetlands are a mixture of forested swamp, shrub swamp, and emergent marsh.

## WATER QUALITY AND USES

### Surface Water:

No long-term water quality data were available to allow a direct comparison to water quality criteria. Grab samples were taken at 7 stations throughout the watershed (Figure 1, Table 1). The grab sample results generally reflect good water quality except for alkalinities that were consistently less than 20 mg/l (Table 2). This indicates a very limited buffering capacity and probably results from natural conditions. No direct comparison to applicable water quality criteria can be made, however, due to the instantaneous nature of the samples. The indigenous aquatic community is a better indicator of long-term conditions and is used as a measure of ecological significance.

There is one NPDES permitted discharge in the candidate basin. That facility is the fish culture station operated by the PFBC. The NPDES number is 0039144, with a permitted flow of 3.5 million gallons/day (mgd) and an actual flow, based on an average over a six month period in 1996, of 2.9 mgd. The estimated  $Q_{7-10}$  of Oswayo Creek at the point of the discharge is 1.2 mgd.

### Aquatic Biota:

Overall habitat scores for aquatic biota fell into the Optimal or Suboptimal categories (Table 3). Instream habitat was generally good but poor riparian zone and bank conditions resulted in Suboptimal overall scores at some sampling stations.

Benthic macroinvertebrate samples were collected at 5 stations during the November 1996 survey. The results of these sampling efforts are presented in Table 4. Benthic macroinvertebrates were collected using sampling techniques adapted from the EPA Rapid Bioassessment Protocols. Taxonomic diversity was uneven. The three stations from the

uppermost portion of the basin had a mean of 13 total taxa per station. This probably results from low flow during dry conditions. The remaining stations had a mean of 36.5 total taxa per station, including several genera that are considered sensitive to water quality degradation.

A total of 28 species of fish were collected at three stations (Table 5). Wild brown trout were present at all stations. Other species such as creek chub, redbreast dace, mottled sculpin, and burbot indicate that cold water conditions occur year round. Streams within the candidate basin support all designated uses.

### **NATIONAL, STATE, REGIONAL, OR LOCAL SIGNIFICANCE**

There are no known portions of the Oswayo Creek basin which qualify as outstanding national, state, regional, or local resource waters under the Department's regulatory criteria.

### **ECOLOGICAL OR RECREATIONAL SIGNIFICANCE**

Following EPA methodology, a subsample was randomly selected from the macroinvertebrate samples (Table 6). Selected benthic macroinvertebrate community metrics derived from these subsamples were compared to reference stations in the same ecoregion with comparable drainage areas (Table 7). Stations 1OC, 2BH, and 3HH were compared to Nelson Branch Hammersley Fork (R2) and Stations 6OC and 11OC were compared to Hammersley Fork (R3). All of the candidate and reference stations are located in the Unglaciaded Allegheny High Plateau subecoregion. See Table 1 for more details on the exact location of each reference station. These reference streams are currently designated Exceptional Value (EV) in Chapter 93. All sampling was conducted over a three week period to minimize the effects of seasonal variation. This comparison was done using the following metrics which were selected as being indicative of community health: taxa richness; modified EPT index (total number of intolerant Ephemeroptera, Plecoptera, and Trichoptera taxa); modified Hilsenhoff Biotic Index; percent dominant taxon; and percent modified mayflies.

Based on these five metrics, all of the stations in the candidate basin had Biological Condition Scores that did not meet the regulatory threshold of 83% of the reference station score required for redesignation to HQ-CWF.

Data from the Pennsylvania Natural Diversity Inventory (PNDI) and the PFBC document the presence of three aquatic species of special concern in the candidate basin. Both Ohio lamprey (*Ichthyomyzon bdellium*) and burbot (*Lota lota*) were collected in 1996 at several stations in Oswayo Creek. There is also a 1977 record of Mountain brook lamprey (*Ichthyomyzon greeleyi*) from the same area. Burbot and Mountain brook lamprey are classified as Pennsylvania Endangered and Threatened respectively. Ohio brook lamprey is listed as a Candidate species.

The main stem of Oswayo Creek from the lower property line of the PFBC fish culture station (approximately RMI 27.0) to Clara Creek is classified by the PFBC as a "Class A" Wild Trout Water. The "Class A" classification was subject to public notice and comment by the PFBC. This designation includes 5.5 stream miles.

## **PUBLIC RESPONSE AND PARTICIPATION SUMMARY**

The Department provided public notice of this redesignation evaluation to and requested any technical data from the general public through publication in the Pennsylvania Bulletin on December 25, 1999 (29 Pa.B 6524). A similar notice was also published in the Olean Times Herald (NY) on December 27, 1999. In addition, Allegany, Clara, Genesee, Hebron, Oswayo, and Sharon Townships and Oswayo Borough were all notified of the evaluation in a letter dated December 23, 1999. The Potter County Planning Commission was also notified at the same time. No data on water chemistry, instream habitat, or the aquatic community were received in response to these notifications.

The Department sent copies of the draft stream evaluation report to Allegany, Clara, Genesee, Hebron, and Sharon Townships, Oswayo Borough, and Potter County Planning Commission on May 19, 2000 requesting any comments by June 23, 2000. No comments were received during that period.

## **RECOMMENDATION**

Based on applicable regulatory criteria, the Department recommends the following designations:

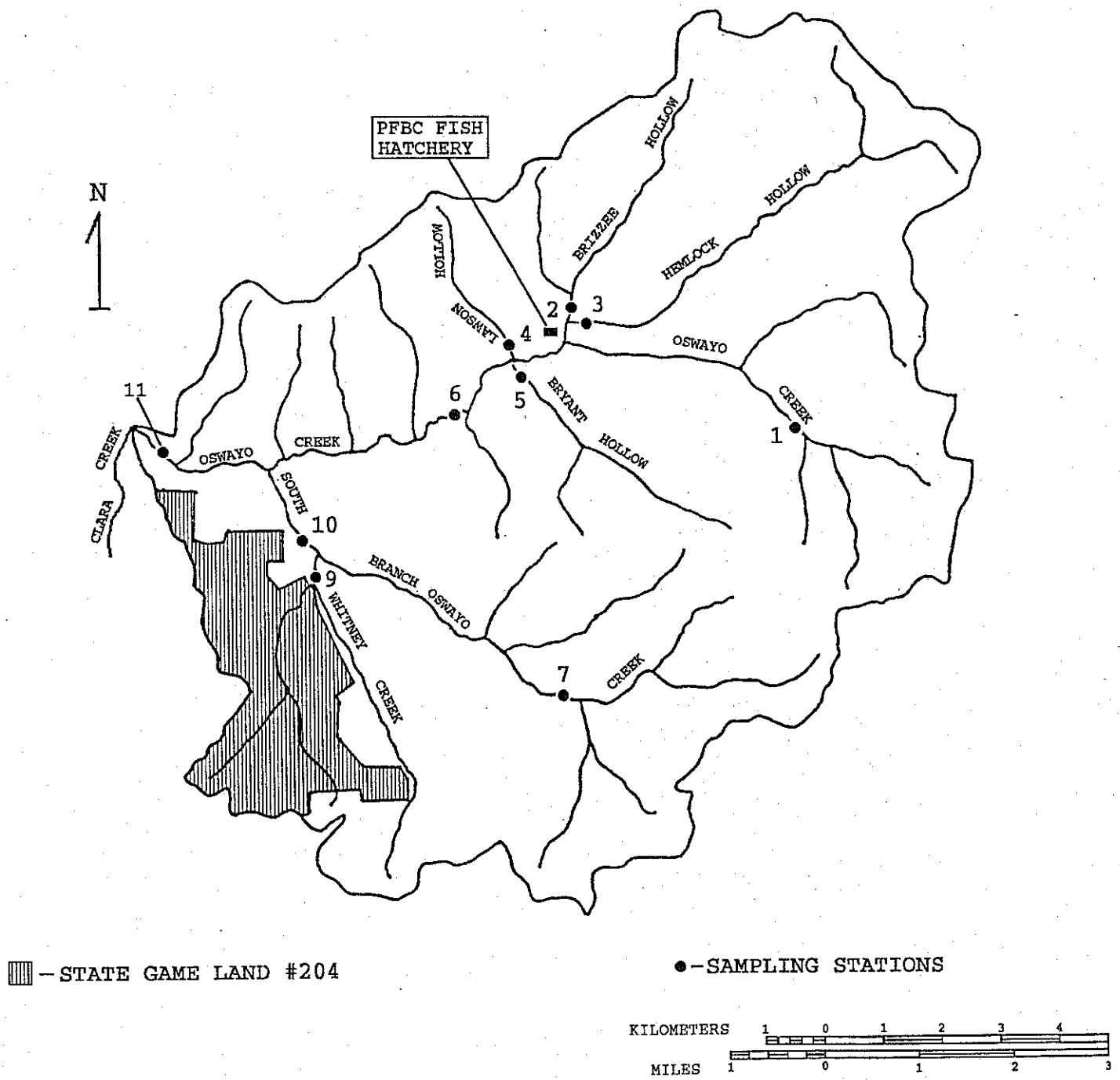
Oswayo Creek basin (Source to Brizzee Hollow)  
- retain current CWF designation

Brizzee Hollow basin (source to mouth)  
- retain current HQ-CWF designation

Oswayo Creek basin (Brizzee Hollow to Clara Creek, except South Branch Oswayo Creek)  
- change current CWF designation to HQ-CWF  
- based on "Class A" Wild Trout Waters

The redesignation of the basin from Brizzee Hollow to Clara Creek to HQ-CWF affects 26.3 stream miles. This proposed designation would provide the same degree of protection to the candidate basin as the original request from the PFBC.

FIGURE 1.  
STATION LOCATIONS  
OSWAYO CREEK  
POTTER COUNTY



▨ - STATE GAME LAND #204

● - SAMPLING STATIONS



**TABLE 1**  
**STATION LOCATIONS**  
**OSWAYO CREEK**  
**POTTER COUNTY**

<u>STATION</u>	<u>LOCATION</u>
1OC	Oswayo creek approximately 15 meters upstream of road T412 Allegany Township Lat: 41 54 34 Long: 77 57 26 RMI: 30.0
2BH	Brizzee Hollow Run approximately 0.2 miles upstream of Hemlock Hollow Run Oswayo Township Lat: 41 55 45 Long: 78 00 17 RMI: 0.4
3HH	Hemlock Hollow Run approximately 20 meters upstream of State Road (SR) 4025 Oswayo Township Lat: 41 55 37 Long: 78 00 15 RMI: 0.1
4LH	Lawson Hollow approximately 10 meters upstream of Route 244 Oswayo Township Lat: 41 55 19 Long: 78 01 03 RMI: 0.09
5BH	Bryant Hollow approximately 0.05 miles upstream of the mouth Oswayo Township Lat: 41 55 13 Long: 78 01 01 RMI: 0.05
6OS	Oswayo Creek approximately 25 meters upstream of road T354 Hebron Township Lat: 41 54 35 Long: 78 01 44 RMI: 25.5
11OC	Oswayo Creek approximately 25 meters upstream of road T351 Clara Township Lat: 41 54 33 Long: 78 05 35 RMI: 21.3
R2	Nelson Branch Hammersley Fork (23718) approximately 0.03 miles upstream from the mouth. Potter County, Eulalia Township Lat: 41 28 16 Long: 77 52 58 RMI: 0.03
R3	Hammersley Fork (23715) approximately 0.82 miles upstream from the mouth Clinton County, Leidy Township Lat: 41 27 23 Long: 77 52 30 RMI: 0.82

**TABLE 2**  
**WATER CHEMISTRY<sup>1</sup>**  
**OSWAYO CREEK, POTTER COUNTY**  
**NOVEMBER 20, 1996**

STATION	1OC	2BH	3HH	4LH	5BYH	6OC	11OC
<b>Field Parameters</b>							
Temp (°C)	5.1	4.5	4.7	7.2	7.1	5.8	5.3
pH	7.6	7.7	8.3	8.2	7.9	7.8	7.8
Cond (µmhos)	72	62	46	69	59	63	66
Diss. O <sub>2</sub>	NO DATA DUE TO METER MALFUNCTION						
<b>Laboratory Parameters</b>							
pH	6.3	6.3	6.2	6.3	6.3	6.3	6.4
Alkalinity	17.2	14.2	10.6	17.8	12.6	15.2	15.6
Acidity	0	0	0	0	0	0	0
Hardness	22	21	14	22	18	17	17
T Diss. Sol.	36	36	50	52	98	92	58
Susp. Sol.	<2	<2	<2	<2	<2	<2	<2
NH <sub>3</sub> -N	<.02	<.02	<.02	<.02	<.02	0.05	<.02
NO <sub>2</sub> -N	<.004	<.004	<.004	<.004	<.004	<.004	<.004
NO <sub>3</sub> -N	0.75	0.31	0.35	0.24	0.77	0.51	0.59
Total P	<.02	<.02	<.02	<.02	<.02	<.02	<.02
Ca	6.74	6.15	4.6	6.5	5.74	6.13	6.25
Mg	2.5	2.0	1.5	2.1	1.9	2.1	2.2
Cl	3.0	2.0	1.0	2.0	1.0	2.0	2.0
SO <sub>4</sub>	<10	11	<10	10	10	<10	<10
As*	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
As Diss*	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Cd*	< 0.2	< 0.2	< 0.2	< 0.2	0.5	< 0.2	< 0.2
Cd Diss*	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
hex Cr*	<10	<10	<10	<10	<10	<10	<10
Cr*	<50	<50	<50	<50	<50	<50	<50
Cu*	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Cu Diss*	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Fe*	67	85	21	43	35	96	99
Pb*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Pb Diss*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Mn*	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Ni*	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Ni Diss*	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Zn*	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Zn Diss*	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Al*	44.2	60.5	31.4	54.2	42.4	52.3	43.9
fecal coliforms			10			20	20

<sup>1</sup> - Except for pH & conductance and indicated otherwise, all values are concentrations in mg/l  
\* - Concentrations in µg/l

**TABLE 3  
HABITAT ASSESSMENT SUMMARY  
OSWAYO CREEK  
POTTER COUNTY**

HABITAT PARAMETER	STATIONS <sup>1</sup>						
	1OC	2BH	3HH	6OC	11OC	R2	R3
1. instream cover	17	15	16	12	16	18	14
2. epifaunal substrate	18	17	17	13	17	18	16
3. embeddedness	17	18	14	13	13	17	17
4. velocity/depth	16	13	16	16	15	17	12
5. channel alterations	18	18	18	18	18	19	18
6. sediment deposition	17	16	16	13	16	18	18
7. riffle frequency	18	17	16	12	12	17	14
8. channel flow status	18	19	17	18	18	18	18
9. bank condition	16	17	14	10	12	16	17
10. bank vegetation protection	17	17	15	11	14	18	18
11. grazing/disruptive pressures	16	16	16	8	16	19	17
12. riparian vegetation zone width	10	12	11	4	17	19	18
Total Score	198	195	186	148	184	214	197
Rating	OPT	OPT	SUB	SUB	SUB	OPT	OPT

<sup>1</sup> Refer to Figure 1. and Table 1. for station locations.



**TABLE 4**  
**BENTHIC MACROINVERTEBRATE TAXA LIST**  
**OSWAYO CREEK**  
**POTTER COUNTY**  
**NOVEMBER 19-20, 1996**

TAXA	STATION						
	10C	2BH	3HH	60S	110C	R2	R3
<b>Ephemeroptera (mayflies)</b>							
Baetidae; <i>Acentrella</i>					P	P	P
<i>Baetis</i>				R			
Caenidae; <i>Caenis</i>					P		
Ephemerellidae; <i>Ephemerella</i>		R		C	R	C	A
<i>Eurylophella</i>					P	R	
Ephemeridae; <i>Ephemerella</i>				R	R	R	P
Heptageniidae; <i>Epeorus</i>		P	R	P		P	P
<i>Stenacron</i>				P	R		
<i>Stenonema</i>				A	C	P	C
Leptophlebiidae; <i>Paraleptophlebia</i>		R		A		C	A
Oligoneuridae; <i>Isonychia</i>				R		A	A
<b>Plecoptera (stoneflies)</b>							
Capniidae; <i>Allocapnia</i>		A	A	P	R		
<i>Paracapnia</i>		P		P			
Chloroperlidae; <i>Alloperla</i>				R			
<i>Sweltsa</i>		A	R	R		P	R
Leuctridae; <i>Leuctra</i>						P	P
Peltoperlidae; <i>Peltoperla/Tallaperla</i>						P	
Perlidae; <i>Acroneuria</i>						A	A
<i>Agnatina</i>						R	P
<i>Paragnatina</i>						R	R
Perlodidae; <i>Diploperla</i>						P	P
<i>Isogenoides</i>							P
<i>Isoperla</i>		A		P		R	R
<i>Malirekus</i>						P	
Pteronarcyidae; <i>Pteronarcys</i>					R	C	R
Taeniopterygidae; <i>Taeniopteryx</i>		P		P	R	R	P
<i>Strophopteryx</i>		R		R		R	
<b>Tricoptera (caddisflies)</b>							
Glossosomatidae; <i>Glossosoma</i>				R			
Helicopsychidae; <i>Helicopsyche</i>					P		
Hydropsychidae; <i>Cheumatopsyche</i>				C	P	A	A
<i>Diplectrona</i>						P	
<i>Hydropsyche</i>				A		A	C
Lepidostomatidae; <i>Lepidostoma</i>						C	A
Limnephilidae sp.				R			
Odontoceridae; <i>Psilotreta</i>				C	C		P
Philopotamidae; <i>Chimarra</i>							R
<i>Dolophioides</i>		P		P		A	C
Psychomyiidae; <i>Lype</i>					R		
Rhyacophilidae; <i>Rhyacophila</i>		P	P	C		P	R
Uenoidae; <i>Neophylax</i>		P	C	P	P		
<b>Diptera (true flies)</b>							
Athericidae; <i>Atherix</i>				R	P	P	P

TAXA	STATION						
	1OC	2BH	3HH	6OS	11OC	R2	R3
Ceratopogonidae; <i>Bezzia</i>					A		
Dolichopodidae sp.							R
Empididae; <i>Chelifera</i>						R	
Ephydriidae sp.			P				
Psychodidae; <i>Pericoma</i>					R		
Simuliidae; <i>Prosimulium</i>	C		P				
<i>Simulium</i>	C			P			
Tipulidae; <i>Antocha</i>				P	C	R	
<i>Dicranota</i>				P			
<i>Hexatoma</i>				C	P	P	C
<i>Limnophila</i>				P			
<i>Ormosia</i>	R						
<i>Tipula</i>	R				P	P	
Chironomidae spp.	VA	A	A	A	VA	C	P
<b>Megaloptera</b>							
Corydalidae; <i>Nigronia</i>				R	C	C	P
Sialidae; <i>Sialis</i>					P		
<b>Odonata (dragon-, damselflies)</b>							
Gomphidae; <i>Lanthus</i>					R	P	P
<i>Stylogomphus</i>					R		
<b>Coleoptera (aquatic beetles)</b>							
Curculionidae	R						
Dytiscidae			R				
Elmidae; <i>Optioservus</i>	R	P		A	VA	A	A
<i>Dubiraphia</i>				R	P		
<i>Oulimnius</i>						P	R
<i>Promoresia</i>	R				R		
Psephenidae; <i>Psephenus</i>					R		P
<i>Ectopria</i>					P		
<b>Non-Insect Taxa</b>							
Turbellaria (flat-worms)							
<i>Cura</i>				R	R		
Oligochaeta (segmented worms)				P			P
Lumbricidae	P	C	P				
Tubificidae	C		P		P		
Hydracarina (mites)				R			
Asellidae; <i>Caecidotea</i>				P			
Amphipoda (scuds)							
Gammaridae; <i>Stygonectes</i>	P		R				
Decapoda (crayfish)							
Cambaridae sp.				R			
<i>Orconectes</i>					P		
Gastropoda (univalves, snails)							
Ancylidae; <i>Ferrissia</i>					C		
Planorbidae	R						
Lymnaeidae		R					
Total Number of Taxa	12	16	12	38	35	36	34

VA - very abundant, > 99 organisms  
A - abundant, 25-99 organisms  
C - common, 10-24 organisms  
P - present, 3-9 organisms  
R - rare, < 3 organisms

**TABLE 5**  
**FISHES**  
**OSWAYO CREEK**  
**POTTER COUNTY**

SPECIES	STATION <sup>1</sup>		
	2BH <sup>3</sup>	60C <sup>2</sup>	110C <sup>2</sup>
Lamprey (unidentified), <i>Ichthyomyzon sp.</i>		X	
Brown trout, <i>Salmo trutta</i>	X	X	X
Brook trout, <i>Salvelinus fontinalis</i>		X	X
Rainbow trout, <i>Oncorhynchus mykiss</i>			X
Central stoneroller, <i>Campostoma anomalum</i>			X
Redside dace, <i>Clinostomus elongatus</i>		X	X
Common shiner, <i>Luxilus cornutus</i>		X	X
Pearl dace, <i>Margariscus margarita</i>			X
River chub, <i>Nocomis micropogon</i>		X	X
Rosyface shiner, <i>Notropis rubellus</i>			X
Bluntnose minnow, <i>Pimephales notatus</i>		X	X
Blacknose dace, <i>Rhinichthys atratulus</i>		X	X
Longnose dace, <i>Rhinichthys cataractae</i>		X	X
Creek chub, <i>Semotilus atromaculatus</i>	X	X	X
Golden redhorse, <i>Moxostoma erythrurum</i>		X	
White sucker, <i>Catostomus commersoni</i>	X	X	X
Hog sucker, <i>Hypentelium nigricans</i>			X
Trout-perch, <i>Percopsis omiscomaycus</i>			X
Pumpkinseed, <i>Lepomis gibbosus</i>			X
Largemouth bass, <i>Micropterus salmoides</i>			X
Smallmouth bass, <i>Micropterus dolomieu</i>			X
Greenside darter, <i>Etheostoma blennioides</i>		X	X
Rainbow darter, <i>Etheostoma caeruleum</i>		X	X
Fantail darter, <i>Etheostoma flabellare</i>		X	X
Johnny darter, <i>Etheostoma nigrum</i>		X	X
Blackside darter, <i>Percina maculata</i>			X
Burbot, <i>Lota lota</i>		X	X
Mottled sculpin, <i>Cottus bairdi</i>		X	X

1 - See Figure 1 and Table 1 for station locations

2 - Data from PA Fish and Boat Commission survey (8/5/96)

3 - Data from DEP survey (11/20/96)

**TABLE 6**  
**SEMI-QUANTITATIVE BENTHIC MACROINVERTEBRATE DATA**  
**OSWAYO CREEK**  
**POTTER COUNTY**  
**NOVEMBER 19-20, 1996**

TAXA	STATION						
	10C	2BH	3HH	60S	110C	R2	R3
<b>Ephemeroptera (mayflies)</b>							
Baetidae; <i>Acentrella</i>						2	2
Caenidae; <i>Caenis</i>					2		
Ephemerellidae; <i>Ephemerella</i>		1		6		6	16
<i>Eurylophella</i>					1		
Ephemeridae; <i>Ephemera</i>					1		
Heptageniidae; <i>Epeorus</i>		2	1				1
<i>Stenacron</i>				1			
<i>Stenonema</i>				10		1	2
Leptophlebiidae; <i>Paraleptophlebia</i>		1		20		2	14
Oligoneuriidae; <i>Isonychia</i>						13	19
<b>Plecoptera (stoneflies)</b>							
Capniidae; <i>Allocapnia</i>		24	65	2			
<i>Paracapnia</i>		1		1			
Chloroperlidae; <i>Sweltsa</i>		27	1	1			
Leuctridae; <i>Leuctra</i>						2	
Perlidae; <i>Acroneuria</i>						10	8
Perlodidae; <i>Diploperla</i>						1	1
<i>Isogenoides</i>							4
<i>Isoperla</i>		14		1		1	
<i>Malirekus</i>						1	
Taeniopterygidae; <i>Taeniopteryx</i>		2		1	1		1
<b>Tricoptera (caddisflies)</b>							
Hydropsychidae; <i>Cheumatopsyche</i>				7		15	9
<i>Diplectrona</i>						1	
<i>Hydropsyche</i>				19		37	4
Lepidostomatidae; <i>Lepidostoma</i>						4	13
Odontoceridae; <i>Psilotreta</i>					3		
Philopotamidae; <i>Chimarra</i>							1
<i>Dolophilodes</i>		4				16	5
Psychomiidae; <i>Lype</i>							
Rhyacophilidae; <i>Rhyacophila</i>		1	2	5		1	
Uenoidae; <i>Neophylax</i>			5	1			
<b>Diptera (true flies)</b>							
Athericidae; <i>Atherix</i>						1	1
Ceratopogonidae; <i>Bezzia</i>					9		
Ephydriidae sp.			2				
Simuliidae; <i>Prosimulium</i>	7						
<i>Simulium</i>	8						
Tipulidae; <i>Antocha</i>				4	4		
<i>Dicranota</i>				2			
<i>Hexatoma</i>				2	1		2
<i>Limnophila</i>				1			
<i>Ormosia</i>	1						
<i>Tipula</i>					2	1	
Chironomidae spp.	103	16	26	8	43	1	1

TAXA	STATION						
	1OC	2BH	3HH	6OS	11OC	R2	R3
<b>Megaloptera</b>							
Corydalidae; <i>Nigronia</i>					3	3	2
Sialidae; <i>Sialis</i>					1		
<b>Odonata (dragon-, damselflies)</b>							
Gomphidae; <i>Lanthus</i>						1	
<i>Stylogomphus</i>					1		
<b>Coleoptera (aquatic beetles)</b>							
Curculionidae	1						
Elmidae; <i>Optioservus</i>		3		34	56	6	12
<i>Dubiraphia</i>				1	1		
Psephenidae; <i>Psephenus</i>							2
<b>Non-Insect Taxa</b>							
Oligochaeta (segmented worms)				1			1
Lumbricidae	1	8	5				
Tubificidae	3		4		1		
Amphipoda (scuds)							
Gammaridae; <i>Stygonectes</i>	2						
Gastropoda (univalves, snails)							
Ancylidae; <i>Ferrissia</i>					5		
Planorbidae	1						

**TABLE 7**  
**RBP METRIC COMPARISON**  
**OSWAYO CREEK, POTTER COUNTY**

METRIC	STATION						
	1OC	2BH	3HH	6OC	11OC	R2	R3
1. TAXA RICHNESS	9	13	9	21	17	22	21
Cand/Ref (%)	41	59	41	100	81	***	***
Biol. Cond. Score	0	0	0	6	6	6	6
2. MOD. EPT INDEX	0	10	5	11	4	14	13
Cand/Ref (%)	0	71	36	85	31	***	***
Biol. Cond. Score	0	4	0	6	0	6	6
3. MOD. HBI	5.9	2.8	4.2	3.4	4.8	3.1	2.2
Cand-Ref	2.8	-0.3	1.1	1.2	2.6	***	***
Biol. Cond. Score	0	6	4	2	0	6	6
4. % DOMINANT TAXA	81	26	59	27	41	29	16
Cand-Ref	52	-3	30	11	25	***	***
Biol. Cond. Score	0	6	0	4	0	6	6
5. % MOD. MAYFLYS	0	4	1	29	1	19	45
Ref-Cand	19	15	18	16	44	***	***
Biol. Cond. Score	4	4	4	4	0	6	6
TOTAL BIOLOGICAL CONDITION SCORE	4	20	8	22	6	30	30
% COMPARABILITY TO REFERENCE	13	67	27	73	20	***	***

Note: Stations 1OC, 2BH, AND 3HH compared to R2  
Stations 6OC and 11OC compared to R3