

Appendix G
Comment Response Document
2008 Integrated List

Commentor: EPA Region III

I. General Comments

1. ICE and Macroinvertebrate Protocols

EPA has been working with the Pennsylvania Department of Environmental Protection (DEP) for the last few years on its Instream Comprehensive Evaluation (ICE) and macroinvertebrate protocols. Both agencies have discussed and resolved EPA's concerns with DEP's field, lab, metrics, and scoring thresholds. Overall, DEP has done a fine job developing and testing various protocols. These protocols represent great improvements in Pennsylvania's bioassessment/biocriteria program and should lead to more accurate Clean Water Act Section 303(d) listings and better information for total maximum daily load (TMDL) development.

DEP is now using genus level rather than family level assessments, and they have done a good job breaking out true limestone and low gradient streams. DEP has developed indices of biotic integrity (IBIs) for each stream type to maximize the discriminatory ability of the metrics. DEP has used the new freestone IBI to develop a new method for determining candidacy of exceptional value or high quality and ways to better protect these streams. In the future, we may see more classification of the freestone streams and more work on biological condition gradients and tiered aquatic life uses. EPA will also continue to work with DEP on the fish indicators. We would like to recognize DEP's efforts since the last reporting cycle and cooperation in trying to understand and address EPA's concerns.

Response:

Our collaboration with EPA has been extremely helpful and we hope to continue to work together as DEP moves forward to develop new biological protocols.

2. Assessment of All Uses

DEP has followed through on its commitment to assess all of Pennsylvania's wadeable waters to satisfy an MOU with EPA, and we commend DEP on its efforts. As explained in the Narrative Report, this commitment was met primarily through the focus on aquatic life use surveys since they are an efficient assessment, making it possible to canvas the state within a ten-year period, and a good indicator of chronic pollution problems. EPA agrees with this approach and is pleased that DEP is now focusing on development assessment methodologies, programs and partnerships to help increase the assessment of the other uses, primarily the recreational and human health uses. We encourage DEP to move forward with the assessment of all designated uses, especially when considering the percentage of water assessed for non-aquatic life uses and the number of segments identified in Category 1 of the 2008 Integrated Report. We would like to see the number of waters in full attainment increase with the implementation of Pennsylvania's ongoing programs and methodologies, and EPA hopes that both agencies can continue further discussions on this issue.

Response:

Assessment of uses other than aquatic life is a priority. The difficulty lies in the fact that

assessing these other uses requires expensive and time consuming methods. Fish consumption use assessment requires costly tissue analyses, recreational use needs five samples over thirty days collected twice during the bathing season, and potable water supplies needs repeated chemical sampling over at least a year. DEP will continue to explore alternative assessment methods such as bacteria modeling, ways better utilize volunteer groups, and seek outside agency information such as beach closures from the Department of Health.

3. Underlying Database Structure

For the past year, EPA and DEP have been working together on trying to resolve data submission issues that have arisen due to the incorporation of Pennsylvania's underlying data and data structure into EPA's National assessment and listing database system. There had been some difficulties in accommodating Pennsylvania's data because of the size of segments in the underlying data, and also due to DEP's approach to conducting field surveys at nonfixed monitoring stations (which effectually dictates the differing lengths and identification of assessment units over multiple reporting cycles). It seems that the group has come up with some solutions for the time being; however, there are broader issues that both agencies will need to sort out in terms of the effect that DEP's assessment/database approach has on other CWA programs. For instance, there have been questions raised regarding how much flexibility is allowed under the current segmentation structure for large-scale watershed planning and management activities, assignment of waterbody-TMDL allocations, water quality trading programs, etc. We will continue working with Pennsylvania in testing the ease at which assessment and listing data is used in these contexts, and we appreciate your continued cooperation.

Response:

DEP has been on the leading edge of electronic information management for surface water assessment data and reporting. The current DEP design is flexible and built around the national standard of the NHD streams GIS layer. It is unfortunate that EPA's national assessment database and reporting schemes are locked into the waterbody concept. It has led to inflexibility and inconsistent reporting across states. DEP will continue to work with EPA to make the two systems work together to the extent possible. However, DEP feels it should not be penalized for incorporating new technology into its data management system.

4. Lakes Data

On a related note, EPA would like to mention that both stream and lakes data need to be submitted following the approval of Pennsylvania's 2008 Integrated Report. As EPA is undergoing the processing of states' 2006 data, we have encountered some issues with Pennsylvania's data submission since lakes were not included. Please ensure that the submission of 2008 data is complete.

Response:

Streams and lakes data will be submitted as a package in 2008.

II. Assessment Methodology

Recreational Use Data

Comment:

There appears to be an unfinished sentence (page 9) as follows: “Beach closings are used...”.

Response:

Sentence will be completed and the discussion expanded as follows follows.

“Beach closings are used as another method to determine recreational use attainment. E. coli data are collected from beaches on a weekly schedule during the bathing season. A beach closure is triggered when a single grab sample exceeds 235 cfus/mL. In order for a beach to meet recreational use attainment, no more than twice during a bathing season can 3 sets of consecutive grab samples, separated by 7 days, exceed 235 cfus/mL. Also, no more than twice during a bathing season can two running geometric means exceed 126 cfus/mL.”

III. Listings

Category 1

Comment:

1. Category 1 in 2008 for streams is labeled “2006” (i.e., “2006 Pennsylvania Integrated Water Quality Monitoring and Assessment Report – Streams...”). Category 1 in 2008 for lakes is labeled “2008 Pennsylvania Integrated Water Quality Monitoring and Assessment Report – Lakes...”. Please correct this minor discrepancy.

Response:

The title in the report generator now reads 2008.

Category 4a

Comment:

2. Category 4a in 2008 for streams is labeled “2006” (i.e., “2006 Pennsylvania Integrated Water Quality Monitoring and Assessment Report – Streams...”). Category 4a in 2008 for lakes is labeled “2008 Pennsylvania Integrated Water Quality Monitoring and Assessment Report – Lakes...”. Please correct this minor discrepancy.

Response:

The title in the report generator now reads 2008.

Category 4b

Comment:

3. Assessment Methodology, page 10 contains the following Category 4b notation:
“*Waters listed on 4B in this 2006 Report...though no such waters are listed in 2006.”
This note should be carefully checked to ensure that it reflects the current, 2008 reporting cycle.

Response:

Yes, the narrative still applies in 2008 because only documented (with the removal of Evitts Creek explained below) compliance problems appear on the 2008 List 4b.

Comment:

4. Little Paint Creek appears in 2008 Category 4a (*this should read 4b not 4a*) as 1.38 miles in segment length. In 2006, it appears in the same category as 0.09 miles in length. Source, cause, assessment ID, and date listed fields are the same for this segment in 2006 and 2008. Please review the segment length for accuracy.

Response:

The 1.38 miles listed in 2008 is correct.

Comment:

5. Please submit supporting data for the Evitts Creek (HUC: 02070002) for salinity/TDS/chlorides.

Response:

The Evitts Creek compliance issue was resolved before the assessment survey. The biologist assessing the stream was unaware of the resolution. Field sampling indicates the stream is impaired so the assessment will be moved from List 4b (compliance problem) to List 5 (impaired requiring a TMDL). However, this is a complex stream segment subject to low flows, an upstream reservoir outlet, and a discharge from a wastewater treatment plant. Following discussions with biologists it was felt that further investigation is needed before assigning specific sources and causes to the impairment. For now the source will be reported as “Source Unknown” and cause as “Cause Unknown”. Biologists will return to the segment for the purpose of discerning what possible combination of sources and causes should be listed. The record will be changed once this is known.

Category 4c

Comment:

6. For Pennsylvania’s 2002 Section 303(d) list, DEP submitted a companion document equivalent to Category 4c, along with supporting data and rationale, and this document identified lakes and impoundments that did not support their designated uses, but also were not affected by a pollutant and did not require a TMDL. This separate listing was based on the reasoning that such impairments were caused by the physical presence of dams and the effects of impoundments, particularly those related to stratification and seasonal turnover processes. EPA assumes that these lakes were carried over from the

past listing cycles. EPA also assumes that the underlying basis, data, and information for the 2002 lake listings still apply. Please confirm whether this is the case.

Response:

The 2008 Integrated List uses the following narrative to explain these lake listings in Category 4c. It is found in the first paragraph on page 38 of the narrative posted on the web site.

“The major sources of aquatic life use impairment in lakes are “other”, and agriculture. “Other” is the source used for lakes on List 4c which are impaired but not requiring a TMDL. These lakes show short term fluctuations in DO or pH but support a healthy fish community. The primary stressors are nutrients, suspended solids, organic enrichment/low DO, and pH. Low DO and high pH problems are associated with summer lake stratification.”

Comment:

7. Placement of waters into Category 4c seems to be applied inconsistently throughout the Commonwealth. In some cases, habitat/flow alteration-type impairments are identified as the sole impairment cause, and in other cases both habitat/flow and sediment are selected. In the future, where the underlying flow issues result in excess instream sedimentation, DEP biologists should identify both impairments - sediment in Category 5 and flow alteration in Category 4c.

Response:

Placement in Category 4c is done consistently through a Microsoft Access database query selection. All records are evaluated using the same logic. The query selects records with the following causes and moves them from Category 5 to 4c; Flow Alterations, Filling and Draining, Other Habitat Alterations, and Water/Flow Variability. There are no records with siltation as a cause on List 4c.

Category 5

Comment:

8. EPA had submitted bacteria data collected at several sites along the Lackawanna River, but we did not find any resulting recreation use impairments in Category 5 for this segment. Please explain whether this data was considered for use in the 2008 listing cycle, and why DEP did not identify any bacteria impairment listings in the draft report.

Response:

Bacteria were reported as E. coli in the study. Pennsylvania’s standards for contact recreation in inland waters are expressed as fecal coliform with E. coli only used to determine beach closings. As a result, the E. coli information on the Lackawanna River could not be used. DEP will follow-up with fecal coliform sampling the summer 2009 bathing season.

Comment:

9. EPA guidance explains that TMDLs should be developed within 8-13 years of the original listing date. However, a small handful of Category 5 listings identify TMDL dates beyond EPA's pace recommendation of 13 years. One example is Shoeneck Creek and its tributaries on page 8. Please adjust the TMDL date to be consistent with EPA's pace guidance, or provide justification on why additional time is needed prior to TMDL development.

Response:

The program algorithm that updates the prioritization date was corrected. There are no longer any TMDL priorities projected beyond 13 years.

Comment:

10. TMDL Issue - There are a number of 1996-listed waters identified in Category 5 of the draft 2008 report that already have approved TMDLs and delistings. Based on a very quick review, we found over 150 listings in Category 5, whereas only about 100 or less remaining 1996 listings still need TMDLs. Since this is the last cycle prior to EPA having to close out our CD requirements, it is important that the 1996 listings are corrected so we have an accurate documentation of actions taken on these listings. Please verify and correct the placement of these 1996-listed waters.

Response:

1. *An approved TMDL cutoff date of October 2007 was established to be consistent with past Integrated Lists. Some of the TMDLs listed on the draft List 4a were approved after this date. These have now been reset to appear on List 5 instead of 4a.*
2. *A good deal of quality assurance and updating was done to the TMDL GIS layer in response to the comment. A corrected List 5 and 4a resulted. Separate files of 1996 approved TMDLs (List 4a), 1996 records still requiring TMDLs or delistings (List 5), and a table of records with approved delistings were forwarded for review. These lists were produced to insure there is agreement on the status and actions taken for each 1996 record.*
3. *EPA provided an additional spreadsheet addressing specific records. The spreadsheet along with the DEP responses are included as Attachment 2.*

Comment:

In addition to the approval of Pennsylvania-submitted delistings, EPA also completed delisting reports for Shenango River for nutrients,

Response:

Shenango River was de-listed for nutrients for the 2008 report. There are unnamed tributaries to the Shenango with nutrient problems. These have 2002 or 2008 listing dates.

South Branch Bear Creek for priority organics,

Response:

South Branch Bear Creek was not de-listed in the 2008 draft but that has been corrected and the priority organics problem removed.

and Presque Isle Bay.

Response:

After reviewing the Tetra Tech report, DEP agrees with their findings. The 1996 listing for PCB's was moved to List 3 as not having enough information to assess.

Additional Comments and Responses related to Comment #10:

Example Category 5 Listing	Comment
Hermesprota Creek (HUC: 02040202): Aquatic Life (11377) - 2.15 miles for Urban Runoff/Storm Sewers Cause Unknown 1996	EPA approved this delisting in April 2007 <u>Response:</u> <i>It is now de-listed</i>
Schuylkill River (HUC: 02040203): Fish Consumption (13074) - 23.94 miles for Source Unknown PCB 1996	EPA established a PCB TMDL in April 2007 <u>Response:</u> <i>TMDL added to List 4a</i>
Schuylkill River (Unt 02197) (HUC: 02040203): Aquatic Life (8145) - 0.58 miles for Industrial Point Source Metals 1996	EPA approved this delisting in February 2007 <u>Response:</u> <i>It is now de-listed</i>
East Branch Red Clay Creek (HUC: 02040205): Fish Consumption (3109) - 6.44 miles for Source Unknown PCB 1996	EPA established a PCB TMDL in April 2007 <u>Response:</u> <i>TMDL added to List 4a</i>

Comment (10 continued):

Several listings which EPA had on record as originally listed in 1996 and coming due for TMDLs in 2009 are not included in Category 5. Some of these listings are included in Category 4a, although our records do not indicate TMDLs have been approved and established for them. Please correct or explain why the following are not included in Category 5:

Abandoned Mine Drainage Listings

- Beaver Run – We have supporting data for Beaver Run that was previously identified in SWP 17C, #5318.

Response:

Portions of Beaver Run were delisted as a result of the “supporting data” mentioned above. Segments of the original 1996 listing that remained required a TMDL. The TMDL has been completed and those remaining segments are now on 4a with an approved TMDL.

- Clarks Run

Response:

Segment was resurveyed in 2005. The biologist determined impairments were not due to AMD/Metals as originally listed but rather Erosion from Derelict Land/Siltation. As a result, the 1996 AMD/Metals problem was dropped. See Attachment 1 for a copy of the field form and note comment at the bottom

- Coal Brook

Response:

Listed on 4a with an approved TMDL.

- Hazel Creek

Response:

It is spelled Hazle Creek on the streams layer. It is on List 5 requiring a TMDL under ID 2872.

- Nicely Run

Response:

It is found on List 5 requiring a TMDL under ID 11976. It was resurveyed and the biologist found the same problems but failed to retain the original 1996 listing date for the AMD problem. The AMD problem now reflects the correct 1996 listing date.

- Redbank Creek – We have supporting data for Redbank Creek that was previously identified in SWP 17C, #5303. Is this the same segment?

Yes, this section (5303) of Redbank Creek was on the 1996 list. However, other sections of Redbank Creek remain impaired and appear on List 5. These latter impairments first appeared on the 2002 303(d) list.

- Rock Run

Appears on List 4a with an approved TMDL.

- Shade Creek

Appears on List 5 requiring a TMDL as ID 2152.

- Sinnemahoning Creek – We received chemistry data from the TMDL program. Should we assume that this data supports this removal of this waterbody from Category 5?

Yes, the data support removal of the 1996 AMD listing. The reach is still impaired for habitat problems. The habitat problems did not appear on the 1996 list and since “Other Habitat Alterations” is pollution the record is on List 4c.

- Streets Run

It is on List 5 requiring a TMDL as ID 14612. A resurvey found the same AMD problems but the biologist did not retain the original 1996 listing date. The AMD problem now reflects the correct 1996 listing date.

- West Branch Susquehanna (should be three segments listed; two segments appear in Category 5)

Response:

This third missing segment from the 1996 list was located in the old State Water Plan watershed 10D. However, the exact location of the supposed three mile impairment could not be discerned from the narrative description in the old database entry. There were several other impaired reaches where the exact locations of the impairments could not be discerned when the old assessment database was converted to a GIS interface. The streams were never entered into the GIS or new database. They were tracked separately in “Part C” of the old 305(b) Reports and subsequent Integrated Lists. However, the lower section of the West Branch is under study for a TMDL. The study area will include the general area where this missing segment would be located.

Comment:

10. Please correct the original listing date for Southampton Creek (Unt 02453). The 1996 Section 303(d) lists first identified this segment as having nutrient impairments from municipal point sources and turbidity/suspended solids impairments from industrial point sources. The listing date was carried through correctly to the 2004 Integrated Report, but the 2006 and 2008 incorrectly identify a 2004 listing date.

Response:

Listing date has been corrected to read 1996.

11. We assume that Appendix E should captures all of the changes made between the 2006 and 2008 listing cycles, therefore close attention was paid on the changes outlined in the crosswalk. Please see our comments on individual waters:

Stream Name	Comments
Piney Fork/Catfish Run Watershed	Contrary to Appendix E, AMD/Metals were not removed as a Source/Cause in Category 5 in the 2008 report for either Piney Creek

	<p>or Catfish Run.</p> <p><u>Response:</u> <i>The Piney Fork/Catfish Run entry was removed from List 5. See footnote to this table. There is another Catfish Run in HUC 05010006 impaired by metals but the Catfish Run in question is in HUC 05020005.</i></p>
Halfmoon Creek	<p>The listing dates in the 2006 and 2008 reports are not the same. The 2006 list date is 1998, and the 2008 list date is 2008. Please retain 1998 as the original listing date.</p> <p><u>Response:</u> <i>Creek was resurveyed and the same impairments remain. However the biologist did not retain the original 1998 listing date. Record was edited to reflect the 1998 date.</i></p>
Walnut Creek (UNT 2426)	<ol style="list-style-type: none"> 1. Should this be UNT 62458, not UNT 2426? 2. The listing dates in the 2006 and 2008 reports are not the same. The 2006 list date is 2004, and the 2008 list date is 2008. Please retain 2004 as the original listing date. 3. Please submit the 2007 biological survey cited in Appendix E. <p><u>Response:</u> <i>The assessment of the Walnut Creek watershed was recently revised by the regional biologist to better reflect both the old and newer information. The de-listed unnamed tributary, 62458, is now again on Category 5 as impaired. This revised assessment will be used in the 2008 Integrated List. The 2004 listing dates for the unnamed tributaries 62455 through 62458 were retained.</i></p>
Red Run	<p>In the 2008 report, the original listing date is 2004 and the TMDL date is 2021. This 17-year gap is greater than the EPA's guidance to developing TMDLs by 8-13 years from the original listing date. Please adjust the TMDL date accordingly or provide justification on why more than 13 years is needed before a TMDL.</p> <p><u>Response:</u> <i>This problem relates back to the prioritization algorithm mentioned earlier in this document. The algorithm was corrected and the TMDL date is now 2017.</i></p>
Pine Run & unnamed tributary	<p>Supporting data was not provided to justify that the stream is now attaining WQS for the Agriculture/Organic Enrichment Source/Cause. Please provide a copy of the macroinvertebrate data</p>

	cited in Appendix E. <i>* See response below.</i>
Kistler Run	Supporting data was not provided to justify that the stream is now attaining WQS for the Agriculture/Siltation Source/Cause. Please provide a copy of the macroinvertebrate data cited in Appendix E. <i>* See response below.</i>
Unnamed Tributary to Ontelaunee Creek	Supporting data was not provided to justify that the stream is now attaining WQS for the Agriculture/Siltation Source/Cause. Please provide a copy of the macroinvertebrate data cited in Appendix E. <i>* See response below.</i>
Unnamed Tributary to Maiden Creek	Supporting data was not provided to justify that the stream is now attaining WQS for the Agriculture/Siltation Source/Cause. Please provide a copy of the macroinvertebrate data cited in Appendix E. <i>* See response below.</i>
Step Run	Should the 2008 Assessment ID be 14261, not 14216? <u>Response:</u> <i>It should be 14261. The delisting table will be corrected.</i>

** Response:*

Pine Run & unnamed tributary, Kistler Run, Unnamed Tributary to Ontelaunee Creek, and Unnamed Tributary to Maiden Creek

For all the above listed streams, annotated maps were submitted to EPA as a delisting package. Each map shows a station with an IBI (Index of Biotic Integrity) score based on the Riffle/Run Freestone streams biological protocol found in the DEP 2007 Assessment Methodology. See the Department's web site for details supporting the IBI, a peer reviewed and public participated protocol. The protocol applies an IBI equal to or greater than 63 as the threshold for attainment of aquatic life use. All stations on the maps have IBIs equal to or greater than 63, justifying delisting.

Macroinvertebrate lists for Piney and Catfish Run were included separately in the delisting package because these streams were assessed using a different less intensive method; Family level macroinvertebrate assessments. This method is sometimes used to de-list AMD streams as agreed to in the past (although this should be the last year this protocol is used). There is best professional judgment (BPJ) applied with this method that requires an evaluation of the taxa list and that is why they were included in the delisting package.

Enclosure 2
EPA COMMENTS ON PENNSYLVANIA'S DRAFT 2008 NARRATIVE REPORT
MAY 23, 2008

Wetlands

DEP has considerably expanded its Wetlands Protection Program/Wetlands Assessment section since 2006. This expansion includes more details on DEP's jurisdiction for protection of wetlands and introduces the Environmental Review Committee. The 2006 report provided total creation and restoration of wetlands in acres. What is the current acreage as of 2008 (i.e., extent of wetland gains and losses around the Commonwealth)?

Response:

Data on current acreage is not presently available from the Wetlands Program.

Attachment 1
Clarks Run

Field Form: Wadeable Streams

version: 1.0 6/3/2008 11:16:39 AM

Assessment ID: 58318 HUC ID: 05030104
 Station ID: 20050729-1230-gkenderes HUC Name: Beaver. Pennsylvania.
 Survey Type: Statewide Surface Water Assessment Program

Residential	10 %	Commercial	0 %	Industrial	0 %	Cropland	0 %	Pasture	0 %
Abd. Mining	20 %	Old Fields	5 %	Forest	60 %	Other	5 %		

- 1. Abundance obviously low.
- 2. Seven or fewer Families in the collection
- 3. Three or fewer mayfly individuals; excluding Baetidae, Caenidae, and Siphonuridae
- 4. Stoneflies collectively present
- 5. Mayflies and caddisflies are collectively abundant; excluding Baetidae, Caenidae, Siphonuridae, Hydropsychidae, and Polycentropodidae
- 6. July thru September: at least 4 EPT Families with Hilsenhoff of 4 or less November Thru May: at least 6
- 7. 4 or more Families with Hilsenhoff of 3 or less
- 8. 6 or more Families with Hilsenhoff of 4 or less
- 9. Dominant Family with Hilsenhoff of 4 or less
- 10. Dominant Family with Hilsenhoff greater than 5 (Criteria 7 and 8 negate this criterion)
- 11. 7 or more families with Hilsenhoff of 6 or more (Criteria 7 and 8 negate this criterion)
- 12. Sample dominated by families with a mean Hilsenhoff of 5 or less
- 13. Sample dominated by families with a mean Hilsenhoff of 6 or more
- 14. [#3 Riff/Run: embeddedness or #3 Glide/Pool: Substrate Character]+ #6 Sediment Deposition 24 or less (20 or less for warm water, low gradient streams)
- 15. #9 Condition of banks + #10 Bank Vegetation 24 or less (20 or less for warm water, low gradient streams)
- 16. Total Habitat score 140 or less for forested, cold water, high gradient streams (120 or less for warm water low gradient streams)
- 17. Special Conditions. (Left Box OK, Right Box Impaired) DESCRIBE IN COMMENTS

Not Impaired Impaired Biology Impaired Habitat Rock Pick Influenced Assessment? Impact is Localized Reevaluate Designated Use?

1 Instream Cover	13	2 Epifaunal Sustrate	14	<table border="1"> <tr><td>Total</td></tr> <tr><td>168</td></tr> </table>	Total	168
Total						
168						
3 Embeddedness	12	4 Velocity/Depth Regimes	14			
5 Channel Alterations	14	6 Sediment Deposition	15			
7 Frequency of Riffles	15	8 Channel Flow Status	16			
9 Condition of Banks	14	10 Bank Vegetation	15			
11 Grazing or Disruptive	15	12 Riparian Vegetation	11			

pH:	8.1	DO (mg/l):	9.4	<table border="1"> <tr><td>Chem Sample IDs</td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>	Chem Sample IDs		
Chem Sample IDs							
Temp (C):	20.5	Flow (cfs):	0				
Cond (umhos):	819	Alkalinity (mg/l):	0				

COMMENTS

Location Quad - Beaver Falls Clarks Run (Stream code 34015) SWP 20B From Homewood PA take 3rd Ave. to Midvale Road and cross stream and pull off along Foxwood Road pass stop sign - Sampled upstream of bridge 50 feet.

Land Use PA Turnpike runs through watershed. Areas of reclaimed strip mine land and forested areas. Other: Roads follow and cross stream.

Special Condition Impairment Stream cuts through reclaimed strip mine lands, with shrubs and small trees covering land. Erosion from Derelict Land/ Siltation. Stream heavy in silt.

Invertebrates, Habitat, and Fish 8 taxa identified including Turbellaria, Gammaridae, Baetidae, Elmidae, Hydropsychidae, Philopotamidae, Chironomidae, and Tipulidae. Dominant taxa Hydropsychidae. ~20 Blacknose Dace observed in nearby pool.

Attachment 2: Additional Comments with Responses Related to Comment 10

#	<u>Listing Count</u>	<u>Listing Info</u>	<u>Page</u>	<u>Comments</u>	<u>Response</u>
1	1	Brodhead Creek (Unt 04929) HUC: 02040104 Aquatic Life (10754) - 2.86 miles Package Plants Suspended Solids	1	This was not on the 1996 list (similar to listings in 2004's decision rationale Appx A, "Clarification of Listing Dates for Some Category 5 Waters").	The correct listing date appears to be 2002. The records were changed
2	1	Mill Creek (Unt 01958) HUC: 02040203 Aquatic Life (7856) - 2.66 miles Agriculture Nutrients	6	Non-AMD delisting of Pequea/Mill Creek mentioned in 2007 annual report (to Mid-Atlantic Environmental Law Center re: American Littoral Society and PENNPIRG v. EPA).	Mill Creek Unt 1958 was surveyed in 2002 and found to be impaired for Agriculture/Siltation and Erosion from Derelict Land/Siltation. This 2002 survey with listing date of 2004 now replaces the old erroneous record.
3	1	zz_Unknown NHD Name: 02040203000826 HUC: 02040203 Aquatic Life (7856) - 0.34 miles Agriculture Nutrients	6	This was not on the 1996 list (similar to listings in 2004's decision rationale Appx A, "Clarification of Listing Dates for Some Category 5 Waters").	Segment was surveyed in 2002. Segment is now impaired for Erosion from Derelict Land/Siltation and Agriculture/Siltation. Listing dates are 2004.
4	1	zz_Unknown NHD Name: 02040203003347 HUC: 02040203 Fish Consumption (13074) - 0.25 miles PCBs	6	Please check that this listing does not belong in Category 4a (may have been addressed by the Schuylkill River PCB TMDL).	The river splits around an island and the split was missed when the TMDL was entered. The TMDL now includes this split and since it overlaps with the impairment this reach will move from List 5 to List 4a.

<u>#</u>	<u>Listing Count</u>	<u>Listing Info</u>	<u>Page</u>	<u>Comments</u>	<u>Response</u>
5	1	South Branch Naaman Creek HUC: 02040205 Aquatic Life (7952) - 0.29 miles Agriculture Nutrients	7	Please check that this listing does not belong in Category 4a (addressed by Christina River TMDL).	Removed impairment from the database.
6	1	Alder Run HUC: 02050201 Aquatic Life (11116) - 11.61 miles Abandoned Mine Drainage Metals	8	Please check that this listing does not belong in Category 4a. AMD TMDL development mentioned in 2007 annual report (to Mid-Atlantic Environmental Law Center re: American Littoral Society and PENNPIRG v. EPA).	TMDL entered. 1996 record now in Category 4a
7	1	zz_Unknown NHD Name: 02050302000366 HUC: 02050302 Aquatic Life (7905) - 0.38 miles Combined Sewer Overflow Organic Enrichment/Low D.O..	11	Please check that this listing does not belong in Category 4a.	The river splits around an island and the split was missed when the TMDL was entered. The TMDL now includes this split and since it overlaps with the impairment this reach will move from Category 5 to 4a
8	1	zz_Unknown NHD Name: 02050302000366 HUC: 02050302 Aquatic Life (7905) - 0.38 miles Urban Runoff/Storm Sewers	11	Please check that this listing does not belong in Category 4a.	The river splits around an island and the split was missed when the TMDL was entered. The TMDL now includes this split and since it overlaps with the impairment this reach will move from Category 5 to 4a
9	1	Coon Run HUC: 05010003 Aquatic Life (7751) - 2.52 miles Industrial Point Source Metals	11	TMDL was done for metals; please check that this listing does not belong in Category 4a. Also, "TMDL not required" mentioned in 2007 annual report (to Mid-Atlantic Environmental Law Center re: American Littoral Society and PENNPIRG v. EPA).	TMDL entered. 1996 record now in Category 4a

<u>#</u>	<u>Listing Count</u>	<u>Listing Info</u>	<u>Page</u>	<u>Comments</u>	<u>Response</u>
10	1	Elk Creek HUC: 05010005 Aquatic Life (4241) - 0.98 miles Abandoned Mine Drainage Metals	12	AMD TMDL development mentioned in 2007 annual report (to Mid-Atlantic Environmental Law Center re: American Littoral Society and PENNPIRG v. EPA). Also, multiple Elk Creek mention in Category 4a inventory.	TMDL entered. 1996 record now in Category 4a
11	1	Elk Creek (Unt 50518) HUC: 05010005 Aquatic Life (4309) - 2.82 miles Abandoned Mine Drainage Metals	12	AMD TMDL development mentioned in 2007 annual report (to Mid-Atlantic Environmental Law Center re: American Littoral Society and PENNPIRG v. EPA). Also, multiple Elk Creek mention in Category 4a inventory.	TMDL entered. 1996 record now in Category 4a
12	1	Elk Creek (Unt 50520) HUC: 05010005 Aquatic Life (7740) - 0.72 miles Abandoned Mine Drainage Metals	13	AMD TMDL development mentioned in 2007 annual report (to Mid-Atlantic Environmental Law Center re: American Littoral Society and PENNPIRG v. EPA). Also, multiple Elk Creek mention in Category 4a inventory.	TMDL entered. 1996 record now in Category 4a
13	1	Elk Creek (Unt 50521) HUC: 05010005 Aquatic Life (7740) - 0.78 miles Abandoned Mine Drainage Metals	13	AMD TMDL development mentioned in 2007 annual report (to Mid-Atlantic Environmental Law Center re: American Littoral Society and PENNPIRG v. EPA). Also, multiple Elk Creek mention in Category 4a inventory.	TMDL entered. 1996 record now in Category 4a
14	1	Sawmill Run HUC: 05030101 Aquatic Life (8737) - 0.78 miles Abandoned Mine Drainage Metals	24	AMD TMDL development mentioned in 2007 annual report (to Mid-Atlantic Environmental Law Center re: American Littoral Society and PENNPIRG v. EPA). Also, multiple Sawmill Run mention in Category 4a inventory.	TMDL entered. 1996 record now in Category 4a

<u>#</u>	<u>Listing Count</u>	<u>Listing Info</u>	<u>Page</u>	<u>Comments</u>	<u>Response</u>
15	1	Sawmill Run HUC: 05030101 Aquatic Life (8744) - 0.59 miles Abandoned Mine Drainage Metals	24	AMD TMDL development mentioned in 2007 annual report (to Mid-Atlantic Environmental Law Center re: American Littoral Society and PENNPIRG v. EPA). Also, multiple Sawmill Run mention in Category 4a inventory.	TMDL entered. 1996 record now in Category 4a
16	1	zz_Unknown NHD Name: 05030101001873 HUC: 05030101 Fish Consumption (3161) - 0.85 miles Source Unknown Chlordane	24	Please check that this listing does not belong in Category 4a.	The river splits around an island and the split was missed when the TMDL was entered. The TMDL now includes this split and since it overlaps with the impairment this reach will move from Category 5 to 4a
17	1	zz_Unknown NHD Name: 05030101001873 HUC: 05030101 Fish Consumption (3161) - 0.85 miles Source Unknown PCB	24	Please check that this listing does not belong in Category 4a.	Same explanation as above.
18	1	zz_Unknown NHD Name: 05030101001874 HUC: 05030101 Fish Consumption (3161) - 0.81 miles Source Unknown Chlordane	24	Please check that this listing does not belong in Category 4a.	Same explanation as above.
19	1	zz_Unknown NHD Name: 05030101001874 HUC: 05030101 Fish Consumption (3161) - 0.81 miles Source Unknown PCB	24	Please check that this listing does not belong in Category 4a (i.e., part of the Chartiers or Ohio River TMDLs).	Same explanation as above.
20	1	zz_Unknown NHD Name: 05030101003428 HUC: 05030101 Fish Consumption (3161) - 1.66 miles Source Unknown Chlordane	24	Please check that this listing does not belong in Category 4a (i.e., part of the Chartiers or Ohio River TMDLs).	Same explanation as above.

<u>#</u>	<u>Listing Count</u>	<u>Listing Info</u>	<u>Page</u>	<u>Comments</u>	<u>Response</u>
21	1	zz_Unknown NHD Name: 05030101003428 HUC: 05030101 Fish Consumption (3161) - 1.66 miles Source Unknown PCB	24	Please check that this listing does not belong in Category 4a (i.e., part of the Chartiers or Ohio River TMDLs).	Same explanation as above.
22	1	zz_Unknown NHD Name: 05030101003476 HUC: 05030101 Fish Consumption (3161) - 2.17 miles Source Unknown Chlordane	25	Please check that this listing does not belong in Category 4a (i.e., part of the Chartiers or Ohio River TMDLs).	Same explanation as above.
23	1	zz_Unknown NHD Name: 05030101003476 HUC: 05030101 Fish Consumption (3161) - 2.17 miles Source Unknown PCB	25	Please check that this listing does not belong in Category 4a (i.e., part of the Chartiers or Ohio River TMDLs).	Same explanation as above.