



Loading Analysis Plan and Supporting Data Acquisition Needed for the Big Darby Creek Basin

Total Maximum Daily Load Development



Big Darby Creek downstream from Scioto Darby Road (RM 19.5)

Ohio EPA Technical Report AMS/2014-DARBY-3

Division of Surface Water
Assessment and Modeling Section
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Introduction

This document provides an overview of the information considered in proposing the strategy to address water quality impairments in the Big Darby Creek watershed. These recommendations are based on data collected as part of a biological and water quality study in 2014 and 2015. A description of the project area, sites, data types and methods can be found in the Big Darby Creek watershed study plan document at epa.ohio.gov/portals/35/tmdl/BDCsp14.pdf. A summary of the study results can be found in the biological and water quality report at epa.ohio.gov/Portals/35/documents/BigDarby_2014_BWQR_Final.pdf.

Sites in the Big Darby Creek watershed were assessed for aquatic life use and recreation use. The public water supply use was not assessed since no surface waters are used as a public water supply in this study area. Aquatic life use and recreation use attainment are based on specific restoration targets. This document examines those targets and lays out proposals for addressing each impairment. Where appropriate, methods are outlined to develop total maximum daily loads (TMDL) for specific pollutants.

The Big Darby Creek watershed was previously assessed in 2001/2002 and the results of that survey are published at epa.ohio.gov/Portals/35/documents/BigDarbyTSD2004_A.pdf. A TMDL report was developed based on the results in the first survey and published in 2006 at epa.ohio.gov/portals/35/tmdl/DarbyTMDL_final_all_jan06.pdf.

Aquatic Life Use

Evaluation of Biocriteria

Attainment of Ohio EPA's biocriteria are based on fish and macroinvertebrate scores, as measured by the Index of Biotic Integrity (IBI), Modified Index of well-being (MIwb) and Invertebrate Community Index (ICI). Numeric goals for those indices are codified in rule (Ohio Administrative Code (OAC) 3745-1-07, Table 7-1) for exceptional warm water habitat (EWH), warm water habitat (WWH) and modified warmwater habitat (MWH). Coldwater habitat (CWH) does not have associated biocriteria. The numeric criteria that apply to the Big Darby Creek watershed is shown in Table 1. The attainment status for each site is shown in Figure 1 and the scores for impaired sites are shown in Table 2.

Table 1 – Biological criteria applicable in the Big Darby Creek watershed for aquatic life use designations.

| Ecoregion | Biological Index | Assessment Method ^{2,3} | Biological Criteria for the Applicable Aquatic Life Use Designations | | |
|---------------------------------|------------------|----------------------------------|--|-----|------------------|
| | | | WWH | EWH | MWH ⁴ |
| Eastern Corn Belt Plains (ECBP) | IBI | Headwater | 40 | 50 | 24 |
| | | Wading | 40 | 50 | 24 |
| | | Boat | 42 | 48 | 24 |
| | MIwb | Wading | 8.3 | 9.4 | 6.2 |
| | | Boat | 8.5 | 9.6 | 5.8 |
| | ICI | All ⁵ | 36 | 46 | 22 |

² The assessment method used at a site is determined by its drainage area (DA) according to the following: Headwater: DA ≤ 20 mi²; wading: DA >20 mi² and ≤ 500 mi²; boat: DA > 500 mi².

³ MIwb not applicable to drainage areas less than 20 mi² (headwater sites).

⁴ Biocriteria depend on type of MWH. MWH-C (due to channelization) is the only MWH type in the Darby Creek watershed.

⁵ Limited to sites with appropriate conditions for artificial substrate placement.



Figure 1 — Map summarizing ALU attainment status in the Big Darby Creek watershed in 2014.

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Table 2 – Aquatic life use attainment information for impaired sampling locations in the Big Darby Creek watershed, 2014.

| Station | Location | ALU | River Mile ^a | Drain. Area (mi ²) | IBI | MIwb ^b | ICI ^c | QHEI | Attain. Status | Causes | Sources |
|---|---|-----------|-------------------------|--------------------------------|------------------|-------------------|------------------|-------|----------------|----------------------------|---|
| 05060001 19 02 – Spain Creek – Big Darby Creek | | | | | | | | | | | |
| V07P58 | Spain Creek E. of North Lewisburg at mouth | EWH & CWH | 0.01 ^H | 9.6 | 58 | -- | 52 | 73.25 | PARTIAL | Direct habitat alterations | Loss of riparian habitat Channelization |
| | | | | | | | | | | Sedimentation/ siltation | Loss of riparian habitat Channelization |
| 05060001 19 04 – Sugar Run | | | | | | | | | | | |
| V06K08 | Sugar Run near Arnold at US Route 42 | WWH | 5.40 ^H | 11.4 | 34* | -- | G | 56.5 | PARTIAL | Nutrient enrichment | Agriculture, Golf Courses, Manure Runoff, Unsewered areas |
| | | | | | | | | | | Sedimentation/ siltation | Channelization |
| | | | | | | | | | | Flow alteration | Development |
| 05060001 20 02 – Proctor Run-Treacle Creek | | | | | | | | | | | |
| V06S11 | Treacle Creek upst. Winget Rd. covered bridge | EWH | 0.78 ^W | 36 | 45* | 8.55* | 26* | 40.5 | NON | Direct habitat alterations | Loss of riparian habitat Channelization |
| | | | | | | | | | | Organic enrichment | Grain spill Livestock (grazing or feeding operations) |
| | | | | | | | | | | Sedimentation/ siltation | Channelization Livestock (grazing or feeding operations) |
| 05060001 20 03 – Headwaters Little Darby Creek | | | | | | | | | | | |
| V06S05 | Little Darby Creek N.E. of Mechanicsburg at Irwin Rd. | EWH | 34.70 ^W | 26 | 46 ^{NS} | 8.50* | 50 | 72 | PARTIAL | Direct habitat alterations | Channelization |
| | | | | | | | | | | Sedimentation/ siltation | |

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| Station | Location | ALU | River Mile ^a | Drain. Area (mi ²) | IBI | MIwb ^b | ICI ^c | QHEI | Attain. Status | Causes | Sources |
|---|--|-----------------|-------------------------|--------------------------------|-----|-------------------|------------------|-------|----------------|---|---|
| 05060001 20 04 – Spring Fork | | | | | | | | | | | |
| V06G15 | Spring Fork S.W. of Rosedale at Guy Cemetery Rd. | EWB | 10.08 ^H | 15 | 56 | -- | G* | 57.5 | PARTIAL | Direct habitat alterations Sedimentation/ siltation | Loss of riparian habitat Channelization Channelization |
| 05060001 20 05 – Barron Creek-Little Darby Creek | | | | | | | | | | | |
| V06Q08 | Wamp Ditch S. of Chuckery at Finley Guy Rd. | WWH | 0.10 ^H | 5.5 | 50 | -- | F* | 54.5 | PARTIAL | Direct habitat alterations Nutrient enrichment Sedimentation/ siltation | Loss of riparian habitat Channelization Agriculture Channelization |
| 05060001 22 01 – Hellbranch Run | | | | | | | | | | | |
| 203345 | Hamilton Run near Alton, upst. McCoy Run | WWH | 0.80 ^H | 6.6 | 24* | -- | MG ^{NS} | 47.5 | NON | Direct habitat alterations Sedimentation/ siltation | Channelization |
| V07P15 | Hamilton Run near Alton at US Route 40 | WWH | 0.41 ^H | 9.7 | 22* | -- | MG ^{NS} | 58.25 | NON | Direct habitat alterations Sedimentation/ siltation | Channelization |
| 203348 | McCoy Run near Alton at mouth | WWH Recommended | 0.10 ^H | 3.1 | 26* | -- | MG ^{NS} | 44 | NON | Direct habitat alterations Sedimentation/ siltation | Channelization |
| V07P14 | Clover Groff Run near Alton at Alton Rd. | WWH | 0.14 ^H | 9.9 | 26* | -- | MG ^{NS} | 47.25 | NON | Direct habitat alterations Sedimentation/ siltation Flow alteration | Channelization Urban runoff |
| 05060001 22 02 – Gay Run – Big Darby Creek | | | | | | | | | | | |
| V07K18 | Smith Ditch (31.67) N.W. of Darbydale at Biggert Rd. | EWB | 0.20 ^H | 7.8 | 52 | -- | G* | 77 | PARTIAL | Natural conditions (flow or habitat) | Natural sources |

a River Mile (RM) represents the Point of Record for the station and may not be the actual sampling RM.

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c A narrative evaluation of the qualitative sample based on attributes such as EPT taxa richness, number of sensitive taxa and community composition was used when quantitative data was not available or considered unreliable. VP=Very Poor; P=Poor; LF=Low Fair; F=Fair; MG=Marginally Good; G=Good; VG=Very Good; E=Exceptional

ns Nonsignificant departure from biocriteria (≤ 4 IBI or ICI units, or ≤ 0.5 MIwb units).

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units). Underlined scores are in the Poor or Very Poor range.

H Headwater site (draining ≤ 20 miles²).

W Wading site (non-boat site draining >20 miles²).

All 34 (100 percent) of the locations evaluated on the Big Darby Creek mainstem are in full attainment of the existing aquatic life use designations. This is an improvement from the 2001 survey, when 26 of 35 (74.2 percent) sites were in full attainment of the designated aquatic life use. All but one of the 14 sampling locations (92.9 percent) on Little Darby Creek are in full attainment, which also is a slight improvement from the 2001 survey, when 13 of 16 (81.3 percent) sites achieved full attainment. Results for tributaries to Big and Little Darby creeks are more variable, but overall positive. Of the 45 locations situated on 26 tributaries to Big and Little Darby creeks, 35 locations (77.8 percent) are in full attainment, five locations (11.1 percent) are in partial attainment and five locations (11.1 percent) are in non-attainment of the existing or recommended aquatic life use designations. Most of these locations and/or stream reaches were sampled both in 2001 and 2014.

Proposed Actions

Ohio EPA considers many factors when deciding how to address impairments. For some projects, no TMDL is required. The sites within the watershed may be in attainment or the impairment is being addressed by another program/entity so no further action by the Division of Surface Water is necessary. Additionally, the cause of impairment may be natural (i.e., flow or habitat), in which case no action is required. For those needing a TMDL, the complexity of each impairment—including the primary origin of the pollutant, its delivery mechanisms and the waterbody kinetics involved—will determine the complexity needed in a model. Ohio EPA must also take into consideration ongoing efforts in the watershed, previous TMDL analyses, the questions to be answered by a model and the amount of effort required to complete the model. Depending on the method selected, the Agency may be required to return to the watershed and collect additional data and it is possible the modeling approach may change. A summary of Ohio EPA's preliminary modeling approaches is presented in Table 3.

Results from the 2014 survey indicate substantial recovery from impairments documented during the 2001 survey in both Big and Little Darby creeks and within many of the tributaries to those streams. Multiple and interrelated factors are likely responsible for this; these may include, but are not limited to, gradual natural rehabilitation of previously modified stream segments, reduced siltation, improved surface water quality, recovery from spills and improved performance of National Pollutant Discharge Elimination System (NPDES) permitted facilities. Negative impacts associated with channelization and direct habitat alterations such as excess siltation and sedimentation smothering natural substrates are the most common drivers of biological impairment throughout the study area. Localized areas of nutrient and organic enrichment stemming from row crop agriculture, unrestricted livestock access and other residential and commercial sources are likely driving biological impairment at several locations. Many of the negative impacts stemming from municipal point sources resulting in impairment to biological communities have effectively been abated since the 2001 survey. In the 2014 Biological and Water Quality Study of the Big Darby Creek Watershed (Ohio EPA, 2014), only two sites are listed as being impaired by nutrient enrichment (phosphorus): the Sugar Run site V06K08 and the Wamp Ditch site V06Q08.

The assessment detailed in this loading analysis plan is a follow up to a survey that was completed in 2001-2002 (Ohio EPA, 2004). The earlier assessment culminated in a final Ohio EPA TMDL report published in 2006. Due to phosphorus-related nutrient impairment, a number of NPDES dischargers were recommended to receive a total phosphorus limit of 1.0 mg/L, with a few wastewater treatment plants (WWTPs) receiving a lower limit. At that time, there were no phosphorus limits for WWTPs in the Darby watershed. WWTPs that received a phosphorus limit are listed in Table 4.

Additionally, the following upgrades and changes have been made to NPDES permitted facilities and unsewered communities since the 2001-2002 survey. It is important to note that not all upgrades and changes were completed as a result of the 2006 TMDL but are nonetheless significant in their potential effects on water quality.

- The Oak Hills mobile home park (MHP) WWTP has been decommissioned and connected to the Darbydale WWTP.
- The Pleasant Acres MHP is under new ownership. They are actively working to connect the facility to the Darbydale WWTP.
- Improvements have been made to the Ohio Department of Rehabilitation and Correction, Pickaway Correctional Institution WWTP (PTIs 2005/2017), West Jefferson WWTP (PTIs 2016), Plain City WWTP (PTIs 2005, 2010), Darbydale WWTP (upgrades 2017/2018) and the Mechanicsburg WWTP (I/I improvements, with tertiary filtration/alum added in 2012).
- Plain City has determined that they will not tie into Columbus. They are doing a fairly immediate no net load increase expansion to 1.0 million gallons per day (MGD) and are asking for wasteload allocations (WLAs) for several flows up to 4.0 MGD. A full antidegradation review will be required. Since Big Darby Creek is an outstanding state water, there is 70 percent set aside of remaining assimilative capacity. A QUAL2K model might be needed to determine what is protective. Ohio EPA compliance and enforcement staff are currently working to address wet weather issues and facility Significant Non-Compliance (SNC) for effluent violations including total ammonia nitrogen.
- RANCO is currently pursuing shutting down the groundwater treatment facility at their former Plain City plant. This would result in formerly treated groundwater seeping into Robinson Run. The modeling section has done a review of applicability of antidegradation. The proposal is still in review.
- The first Big Darby Creek construction general permit (CGP) was issued on September 12, 2006. The CGP adds watershed specific conditions that exceed the statewide CGP for the Big Darby Creek watershed. These conditions include sediment basin sizing and monitoring requirements; riparian setback/mitigation requirements; and groundwater recharge/mitigation requirements. An option has been added for calculating a recharge value when using infiltrating green infrastructure practices on-site. The 2014 study did not emphasize follow-up to this permit; therefore, additional and targeted sampling is recommended to assess changes to water quality since its issuance.

Stream restoration efforts include:

- Big Darby Creek Headwaters Restoration Project, 2008
[\[epa.ohio.gov/Portals/35/tmdl/Implementation/BigDarby_BigDarbyHeadwaters.pdf\]](http://epa.ohio.gov/Portals/35/tmdl/Implementation/BigDarby_BigDarbyHeadwaters.pdf)
- Clover Groff Stream Restoration
[\[epa.ohio.gov/Portals/35/tmdl/Implementation/BigDarby_CloverGroffStreamRestoration1.pdf\]](http://epa.ohio.gov/Portals/35/tmdl/Implementation/BigDarby_CloverGroffStreamRestoration1.pdf) and
[\[epa.ohio.gov/Portals/35/tmdl/Implementation/BigDarby_CloverGroffStreamRestoration2.pdf\]](http://epa.ohio.gov/Portals/35/tmdl/Implementation/BigDarby_CloverGroffStreamRestoration2.pdf), 2010
- Hellbranch Stream Restoration, 2007
- Hamilton Run, 2010
- Pleasant Valley Quarry Stream/Wetland Restoration, 2006
[\[epa.ohio.gov/Portals/35/tmdl/Implementation/BigDarby_PleasantValleyStreamRestoration.pdf\]](http://epa.ohio.gov/Portals/35/tmdl/Implementation/BigDarby_PleasantValleyStreamRestoration.pdf)
- Honda HAM constructed wetlands, 2008
- ODNR and TNC Land Acquisitions in the West Jefferson area
- Appalachia Ohio Alliance Big Darby Creek Conservation Corridor Initiative. 2018, 2019

Other Conservation Easements and Covenants: 13 total easements; 181.4 protected acres

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Table 3 – Summary of ALU impairments and potential modeling approaches

| Station | Station Name | River Mile | Attain. Status (2001) | Causes (2001) | Actions (2006 TMDL) | Attain. Status (2014) | Causes (2014) | Action (2014) | Method (2014) |
|---|---|------------|-----------------------|---|---|-----------------------|---|-------------------------|-------------------------------------|
| HUC 05060001 19 02 – Spain Creek – Big Darby Creek | | | | | | | | | |
| V07P58 | Spain Creek E. of North Lewisburg at Mouth | 0.01 | FULL | N/A | Floodplain setback TSS, bedload Total phosphorus, DO Groundwater recharge | PARTIAL | Direct habitat alterations Sedimentation/siltation | Other Other | 2006 TMDL 2006 TMDL |
| HUC 05060001 19 04 – Sugar Run | | | | | | | | | |
| V06K08 | Sugar Run near Arnold at US Route 42 | 5.4 | PARTIAL | Nutrients Hydrology Direct habitat alteration | Total phosphorus Groundwater recharge TSS, bedload Habitat, floodplain setback | PARTIAL | Nutrient enrichment Sedimentation/siltation Flow alteration | Other Other Other | 2006 TMDL 2006 TMDL 2006 TMDL |
| HUC 05060001 20 02 – Proctor Run – Treacle Creek | | | | | | | | | |
| V06S11 | Treacle Creek upst. Winget Rd. covered bridge | 0.78 | (NON) | Sedimentation Nutrients, DO | Habitat, floodplain setback TSS, bedload Total phosphorus Groundwater recharge | NON | Direct habitat alterations Organic enrichment Sedimentation/siltation | Other Other Other | 2006 TMDL Follow-up 2006 TMDL |
| HUC 05060001 20 03 – Headwaters Little Darby Creek | | | | | | | | | |
| V06S05 | Little Darby Creek N.E. of Mechanicsburg at Irwin Rd. | 34.7 | FULL | N/A | Floodplain setback TSS Total phosphorus Groundwater recharge | PARTIAL | Direct habitat alterations Sedimentation/siltation | Other Other | 2006 TMDL 2006 TMDL |
| HUC 05060001 20 04 – Spring Fork | | | | | | | | | |
| V06G15 | Spring Fork S.W. of Rosedale at Guy Cemetery Rd. | 10.08 | PARTIAL | Sedimentation Nutrients, DO | Habitat, floodplain setback TSS, bedload Total phosphorus | PARTIAL | Direct habitat alterations Sedimentation/siltation | Other Other | 2006 TMDL 2006 TMDL |

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| Station | Station Name | River Mile | Attain. Status (2001) | Causes (2001) | Actions (2006 TMDL) | Attain. Status (2014) | Causes (2014) | Action (2014) | Method (2014) | | | |
|---|--|------------|-----------------------|----------------------|----------------------|-----------------------|--------------------------------------|---------------|---------------|--|--|--|
| | | | | | Groundwater recharge | | | | | | | |
| HUC 05060001 20 05 – Barron Creek – Little Darby Creek | | | | | | | | | | | | |
| V06Q08 | Wamp Ditch S. of Chuckery at Finley Guy Rd. | 0.1 | PARTIAL | Sedimentation | TSS, bedload | PARTIAL | Direct habitat alterations | Other | 2006 TMDL | | | |
| | | | | Nutrients, DO | Total phosphorus | | Nutrient enrichment | Other | 2006 TMDL | | | |
| | | | | Groundwater recharge | | | Sedimentation/siltation | Other | 2006 TMDL | | | |
| HUC 05060001 22 01 – Hellbranch Run | | | | | | | | | | | | |
| 203345 | Hamilton Run near Alton, upst. McCoy Run | 0.8 | - | - | - | NON | Direct habitat alterations | Other | 2006 TMDL | | | |
| | | | | | | | Sedimentation/siltation | Other | 2006 TMDL | | | |
| V07P15 | Hamilton Run near Alton at US Route 40 | 0.41 | NON | Siltation | TSS, bedload | NON | Direct habitat alterations | Other | 2006 TMDL | | | |
| | | | | Nutrients, DO, NH3 | Total phosphorus | | Sedimentation/siltation | Other | 2006 TMDL | | | |
| | | | | Groundwater recharge | | | | | | | | |
| 203348 | McCoy Run near Alton at mouth | 0.1 | - | - | - | NON | Direct habitat alterations | Other | 2006 TMDL | | | |
| | | | | | | | Sedimentation/siltation | Other | 2006 TMDL | | | |
| V07P14 | Clover Groff Run near Alton at Alton Rd. | 0.14 | - | - | - | NON | Direct habitat alterations | Other | 2006 TMDL | | | |
| | | | | | | | Sedimentation/siltation | Other | 2006 TMDL | | | |
| | | | | | | | Flow alteration | Other | 2006 TMDL | | | |
| HUC 05060001 22 02 – Gay Run – Big Darby Creek | | | | | | | | | | | | |
| V07K18 | Smith Ditch (31.67) N.W. of Darbydale at Biggert Rd. | 0.2 | PARTIAL | DO | Total phosphorus | PARTIAL | Natural conditions (flow or habitat) | N/A | N/A | | | |
| | | | | Groundwater recharge | | | | | | | | |
| | | | | | | | | | | | | |

¹ Due to space limitations there are several abbreviations used to describe the analysis or remediation method. Those abbreviations are defined as follows:

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| Abbreviation | Definition/interpretation |
|--------------|--|
| 2006 TMDL | A new TMDL is not necessary at this time as the 2006 TMDL covers the cause of impairment listed in this watershed. |
| Follow-up | Follow-up assessment is required to determine if attainment status has changed or to clarify the listed cause of impairment. |
| N/A | The cause of impairment is due to natural conditions; therefore, no action is required. |

Table 4 – Phosphorus Limits for WWTPs in the Darby Creek Watershed

| Facility | HUC 12 | OEPA Permit Number | Total Phosphorus Limit, mg/L |
|--|-------------|--------------------|------------------------------|
| Flat Branch WWTP | 50600011901 | 1PP00006*ID | 1.0 |
| North Lewisburg WWTP | 50600011902 | 1PB00039*HD | 0.6 |
| Fairbanks Middle & HS | 50600011905 | 4PT00123*DD | 1.0 |
| Plain City WWTP | 50600011905 | 4PB00016*ID | 0.7 |
| Mechanicsburg WWTP | 50600012003 | 1PB00037*ED | 1.0 |
| Green Meadows MHP | 50600012004 | 4PV00000*GD | 1.0 |
| B & B Lodge | 50600012006 | 4PV00107*ED | 1.0 |
| West Jefferson WWTP | 50600012006 | 4PB00024*ID | 1.0 |
| Aqua Ohio Water Co Inc - Lake Darby WWTP | 50600012102 | 4PU00001*ID | 1.0 |
| Green Tree MHP | 50600012102 | 4PY00001*GD | 1.0 |
| Pickaway Correctional Institution | 50600012203 | 4PP00003*GD | 1.0 |

All but one impairment identified in the 2014 assessment has been addressed with the appropriate method in the 2006 TMDL. Organic enrichment on Treacle Creek (WAU 20 02) is the one impairment identified in 2014 that may not have been addressed in the previous TMDL. Nutrients and low dissolved oxygen were impairments identified in the 2001-2002 assessment at this site; they were addressed with a total phosphorus TMDL in 2006. The sources of organic enrichment (2014) are from a grain spill (at the Winget Road bridge) and regular access of livestock (namely cattle) to the stream and upstream of the grain spill. These impacts are exacerbated by habitat alteration (a second cause of impairment at the same site location). There is low re-oxygenation due to poor stream habitat (no in-stream structure, one bank of riparian vegetation removed) and some pooling effect due to woody debris constriction of the channel. This is just downstream of the Winget Road bridge and near the mouth of Treacle Creek (confluence with Little Darby Creek). The stream has been channelized downstream of this bridge so that the woody debris dams are more permanent (i.e., they are never exported out of the channel during higher flow events).

Since much of the grain spill has now dissipated (biochemical decomposition) as it showed signs of lessening in areal extent in the year following the 2014 assessment organic enrichment on Treacle Creek, Ohio EPA recommends follow-up at this site to see if the stream has recovered from the spill. Furthermore, updated implementation of the habitat and floodplain setback as well as the bedload TMDLs are recommended to address more chronic issues at this site. Establishing cattle exclusion fences where necessary and establishing more substantial riparian buffers throughout the Treacle Creek sub-watershed will help to improve conditions here and elsewhere throughout this stream.

Recreation Use

Evaluation of Criteria

Attainment of recreation use goals is based on numeric criteria for *Escherichia coli* (*E. coli*) as an indicator bacterium. These criteria, shown in Table 9, are also the targets used for TMDLs.

Table 10 lists attainment of recreation use based on criteria at the time of assessment, which were different than the current standards. However, any TMDLs created for those assessment units will use the updated values in Table 9.

About half of the HUC-12s within the study area have existing TMDLs for recreation use; however, these TMDLs were calculated for fecal coliform which is no longer used as the standard in Ohio. For this reason, existing TMDLs will be recalculated for *E. coli* in the Multi-watershed Bacteria TMDL project. The remaining recreation use impairments in the Big Darby Creek watershed, listed in Table 10 below, will also be included in the Multi-watershed Bacteria TMDL project. The project entails the development of TMDLs for over 400 watershed assessment units throughout the state of Ohio to address recreation use impairment. Additional information regarding this project is available at: epa.ohio.gov/dsw/tmdl/index.

Table 9 – Water quality criteria for recreation use

| Recreation Use | <i>Escherichia coli</i> (colony forming units per 100 mL) | |
|----------------------------|---|--|
| | 90-day geometric mean | Statistical threshold value ¹ |
| Bathing water | 126 | 410 ^a |
| Primary contact recreation | 126 | 410 |

| | | |
|------------------------------|------|------|
| Secondary contact recreation | 1030 | 1030 |
|------------------------------|------|------|

¹ These criteria shall not be exceeded in more than 10 percent of the samples taken during any ninety-day period.

^a A beach action value of 235 *E. coli* colony counts per 100 mL shall be used for the purpose of issuing beach and bathing water advisories.

Table 10 – Recreation use attainment information for impaired sampling locations in the Big Darby Creek watershed, May 1 through October 31, 2014.

| Station | Station Name | River Mile | # Samples | Geometric Mean | Maximum Value | Attainment Status | Possible Source(s) |
|---|--|------------|-----------|----------------|---------------|-------------------|---------------------------|
| HUC 05060001 19 01 – Headwaters Big Darby Creek | | | | | | | |
| V07P60 | Flat Branch SE of Middleburg, near U.S. Rt. 33 | 0.9 | 7 | <u>291</u> | <u>2800</u> | NON | AG |
| HUC 05060001 19 02 – Spain Creek – Big Darby Creek | | | | | | | |
| V07P59 | NE of North Lewisburg @ North Lewisburg Rd. | 76.53 | 5 | <u>313</u> | 470 | NON | AG, HSTS |
| V06K03 | N.W. of Milford Center at Collins Rd. | 69.34 | 5 | <u>313</u> | <u>500</u> | NON | AG, HSTS |
| V07P58 | Spain Creek E. of North Lewisburg at mouth | 0.01 | 8 | <u>267</u> | <u>630</u> | NON | AG, HSTS, WWTP |
| HUC 05060001 19 03 – Buck Run | | | | | | | |
| V06P07 | Buck Run S of Marysville @ Sam Reed Rd. | 2.16 | 7 | <u>223</u> | <u>650</u> | NON | AG, HSTS |
| HUC 05060001 19 04 – Sugar Run | | | | | | | |
| V07S13 | Sugar Run near Plain City @ Cemetery Pike | 0.43 | 7 | <u>403</u> | <u>5200</u> | NON | AG, HSTS, Livestock |
| HUC 05060001 19 05 – Robinson Run – Big Darby Creek | | | | | | | |
| V07S12 | Big Darby Creek SE of Bridgeport @ St. Rt. 38 | 62.6 | 5 | <u>176</u> | <u>380</u> | NON | AG, HSTS, WWTPs |
| V06W04 | Big Darby Creek at Plain City, upst. U.S. Rt. 42 and Ranco | 54.1 | 5 | <u>214</u> | <u>360</u> | NON | AG, HSTS |
| V07S09 | Big Darby Creek S of Plain City @ Cemetery Pike | 51.1 | 7 | <u>132</u> | 250 | NON | AG, WWTP, Urban |
| V06W05 | Robinson Run N. of Plain City @ U.S. Rt. 42 | 0.73 | 7 | <u>298</u> | <u>1500</u> | NON | AG, HSTS |
| HUC 05060001 20 01 – Headwaters Treacle Creek | | | | | | | |
| V06G20 | Treacle Creek NE of Mechanicsburg @ St. Rt. 161 | 6 | 5 | <u>1073</u> | <u>3600</u> | NON | AG, HSTS, Livestock |
| HUC 05060001 20 02 – Proctor Run – Treacle Creek | | | | | | | |
| V06S11 | Treacle Creek upst. Winget Rd. covered bridge | 0.78 | 7 | <u>1040</u> | <u>1700</u> | NON | AG, HSTS, Livestock |
| HUC 05060001 20 03 – Headwaters Little Darby Creek | | | | | | | |
| V06S10 | Little Darby Creek dst. Mechanicsburg WWTP @ Wing Rd. | 38.78 | 7 | <u>1659</u> | <u>14000</u> | NON | AG, HSTS, WWTP, Livestock |
| HUC 05060001 20 04 – Spring Fork | | | | | | | |
| V06G15 | Spring Fork S.W. of Rosedale at Guy Cemetery Rd. | 10.08 | 7 | <u>202</u> | <u>730</u> | NON | AG, HSTS, Livestock |
| HUC 05060001 20 05 – Barron Creek – Little Darby Creek | | | | | | | |
| V06S04 | Little Darby Creek W. of Chuckery @ Axe Handle Rd. | 29.46 | 5 | <u>328</u> | <u>1400</u> | NON | AG, HSTS |

| HUC 05060001 20 06 – Thomas Ditch – Little Darby Creek | | | | | | | |
|--|---|-------|---|-------------|-------------|-----|-----------------|
| 601130 | Little Darby Creek at Georgesville @Alkire Rd | 0.07 | 5 | <u>234</u> | 480 | NON | AG, HSTS |
| HUC 05060001 21 01 – Worthington Ditch – Big Darby Creek | | | | | | | |
| V06W08 | Big Darby Creek at Amity @ Amity Pike | 49.46 | 5 | <u>408</u> | <u>3100</u> | NON | AG, HSTS, WWTP |
| HUC 05060001 21 02 – Silver Ditch – Big Darby Creek | | | | | | | |
| 603100 | Big Darby Creek N of West Jefferson @ Hubbard Rd. | 41.75 | 6 | <u>225</u> | <u>440</u> | NON | AG, HSTS |
| V06W19 | Big Darby Creek E of West Jefferson, dst. Darbycrest | 38.33 | 5 | <u>258</u> | <u>950</u> | NON | AG, HSTS, WWTPs |
| 601140 | Big Darby Creek at Georgesville @Alkire Rd. | 34.15 | 4 | <u>144</u> | 240 | NON | AG |
| HUC 05060001 22 01 – Hellbranch Run | | | | | | | |
| V07P11 | Hellbranch Run N of Harrisburg @ Lambert Rd. | 0.98 | 5 | <u>451</u> | <u>1300</u> | NON | AG, HSTS |
| HUC 05060001 22 02 – Gay Run – Big Darby Creek | | | | | | | |
| V07S05 | Big Darby Creek at Darbydale @ McKinley Bridge | 29.2 | 5 | <u>610</u> | <u>5200</u> | NON | AG, WWTP |
| V07G73 | Big Darby Creek upst. Gay Run, adj. Harrisburg-Georgesville Rd. | 27.95 | 6 | <u>187</u> | <u>710</u> | NON | AG, WWTPs |
| 203265 | Gay Run SW of Darbydale @ Boyd Rd. | 2.2 | 5 | <u>1445</u> | <u>5300</u> | NON | HSTS |
| HUC 05060001 22 03 – Greenbrier Creek – Big Darby Creek | | | | | | | |
| V07S03 | Big Darby Creek W of Orient @ St. Rt. 762 | 23.75 | 6 | <u>154</u> | <u>1100</u> | NON | AG, HSTS |
| V07P41 | Big Darby Creek S of Orient @ Darby Creek Rd. | 19.1 | 6 | <u>161</u> | <u>580</u> | NON | AG, HSTS |

Proposed Actions

Concentrations of *E. coli* exceeding the water quality standard are due to both pervasive and direct sources. Two predominant pathways exist for pathogen delivery to water bodies. The first pathway is pathogen-rich discharge, including material such as poorly treated or untreated effluent from wastewater treatment plants, combined sewer overflows, sanitary sewer overflows, household sewage treatment systems and livestock access to streams. This is delivered to the stream by direct discharge. The second pathway is pathogen-rich runoff/drainage from nonpoint sources. The associated delivery mechanism is precipitation-driven wash-off. This type of transport involves the delivery of pathogen-rich material by overland flow during precipitation and runoff events (e.g., summer storms, snowmelt, etc.).

Due to these mechanisms of delivery, the sources of pathogens in surface waters can be determined to a certain extent via the level of stream flow observed. Therefore, Ohio EPA proposes using the load duration curve (LDC) framework for recreation use TMDLs. LDCs are an empirical method of determining TMDL pollutant loading and needed reductions. The main advantage of the use of LDCs is in this method's ability to differentiate loads from various types of sources based on stream flow regime. While this is a fairly simple modeling method, relationships between bacteria source contributions and flow regimes are straight forward. In-stream processes and interactions between sources are simplified, mitigating the major weaknesses of the technique. Figure 3 shows an example LDC with corresponding TMDL calculations represented in Table 11. Ohio EPA will handle recreation use impairment via LDC TMDLs.

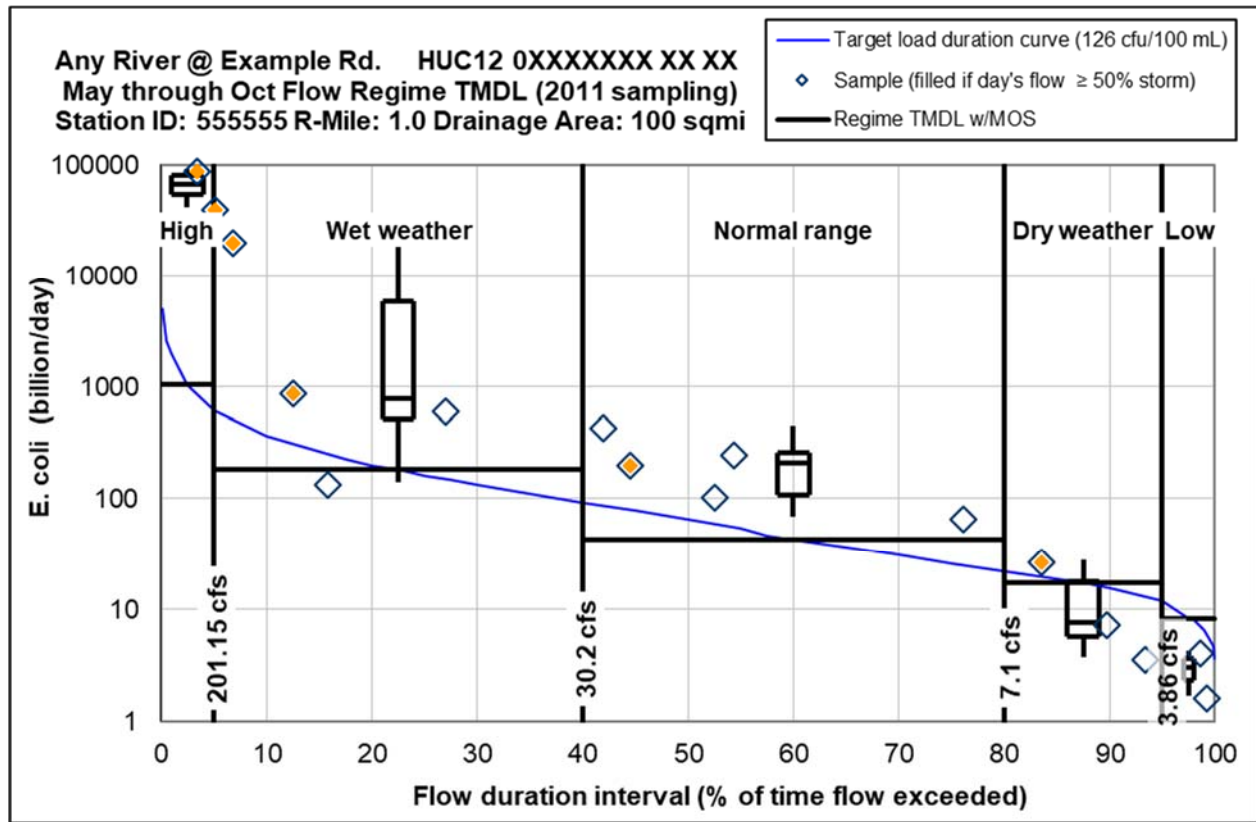


Figure 3 – Example load duration curve.

Table 11 – Example TMDL table calculations (from above load duration curve).

| TMDL and duration intervals | High 0-5% | Wet weather 5-40% | Normal range 40-80% | Dry weather 80-95% | Low 95-100% |
|--------------------------------------|--------------|----------------------|------------------------|-----------------------|----------------|
| Samples Per Regime | 2 | 4 | 5 | 3 | 2 |
| Median Sample load | 66807 | 781 | 209.25 | 7.72 | 2.99 |
| Total Load Reduction Required | 98.9% | 82.8% | 84.7% | NA | NA |
| Total Maximum Daily Load | 1036.68 | 182.09 | 43.25 | 17.26 | 8.35 |
| Margin of Safety: 20% | 207.34 | 36.42 | 8.65 | 3.45 | 1.67 |
| Allowance for Future Growth | 62.20 | 10.93 | 2.60 | 1.04 | 0.50 |
| Load Allocation | 740.71 | 127.29 | 27.63 | 8.98 | 2.58 |
| Wasteload Allocation Total | 26.43 | 7.46 | 4.37 | 3.80 | 3.60 |
| MS4 | 23.01 | 4.04 | 0.96 | 0.38 | 0.19 |
| Example Town WWTP XPX00XXX | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 |

References

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Appendix A

Table A1. Summary of ALU attainment status from 2001 and 2014, including Ohio EPA’s prior efforts to address impairments.

| Station | Station Name | River Mile | Attain. Status (2001) | Causes (2001) | Actions (2001) | Attain. Status (2014) | Causes (2014) |
|---|---|------------|-----------------------|--|---|-----------------------|---------------|
| HUC 05060001 19 01 – Headwaters Big Darby Creek | | | | | | | |
| V06K07 | Headwaters @ Private Residence | 83.2 | (FULL) | N/A | N/A | FULL | N/A |
| V06K06 | S of East Liberty @ Co. Rd. 152 | 82.5 | FULL | N/A | Habitat, floodplain setback TSS, bedload Groundwater recharge Total phosphorus | - | - |
| 300621 | S of E Liberty, upst lane off Old U.S. 33 | 81.9 | - | - | - | FULL | N/A |
| V06K05 | Lane off Old U.S. Rt. 33 (Showe Property) | 81.6 | - | - | - | FULL | N/A |
| 300620 | NE of Middleburg, 0.4 mi upst. St. Rt. 287 | 81.1 | - | - | - | FULL | N/A |
| V07P62 | NE of Middleburg @ St. Rt. 287 | 80.75 | (NON) | Direct habitat alteration Siltation Changes in hydrology Nutrients, OE/DO | Habitat, floodplain setback TSS, bedload Groundwater recharge Total phosphorus | FULL | N/A |
| V07S57 | SE of Middleburg @ Co. Rd. 157 | 79.23 | FULL | N/A | Habitat, floodplain setback TSS, bedload Groundwater recharge Total phosphorus | FULL | N/A |
| V06G34 | Flat Branch @ O'Dell Rd. | 3.2 | FULL | N/A | Floodplain setback TSS, bedload Groundwater recharge Total phosphorus | - | - |
| V06G35 | Flat Branch upst. T.R.C. Trib, Adj. St. Rt. 739 | 2.2 | (FULL) | NA | NA | - | - |
| V07P60 | Flat Branch SE of Middleburg, near U.S. Rt. 33 | 0.9 | FULL | N/A | Floodplain setback TSS, bedload Groundwater recharge Total phosphorus | FULL | N/A |
| 203124 | Trib to Flat Branch (1.50) @ Mouth | 0.1 | (FULL) | NA | Floodplain setback TSS, bedload Groundwater recharge Total phosphorus | - | - |
| HUC 05060001 19 02 – Spain Creek – Big Darby Creek | | | | | | | |

| | | | | | | | | |
|--------|--|-------|---------|---------------------------|-----------------------------|---------|----------------------------|-------------------------|
| V07P61 | SE of Middleburg @ Co. Rd. 153 | 78.44 | PARTIAL | Direct Habitat Alteration | Habitat, floodplain setback | FULL | N/A | |
| | | | | | TSS, bedload | | | |
| | | | | Nutrients, OE/DO | Total phosphorus, DO | | | |
| | | | | Hydrology | Groundwater recharge | | | |
| | | | | Metals | NA | | | |
| V07P59 | NE of North Lewisburg @ North Lewisburg Rd. | 76.53 | PARTIAL | Direct Habitat Alteration | Habitat, floodplain setback | FULL | N/A | |
| | | | | | TSS, bedload | | | |
| | | | | Nutrients, OE/DO | Total phosphorus, DO | | | |
| | | | | Hydrology | Groundwater recharge | | | |
| | | | | Metals | NA | | | |
| V06K03 | NE of Milford Center @ Collins Rd. | 69.34 | FULL | N/A | Habitat, floodplain setback | FULL | N/A | |
| | | | | | | | | TSS, bedload |
| | | | | | | | | Total phosphorus, DO |
| | | | | | | | | Groundwater recharge |
| V06G33 | L. Darby Creek (B. Darby Headwaters) @ St. Rt. 287 | 3.61 | FULL | N/A | Habitat, floodplain setback | FULL | N/A | |
| | | | | | | | | TSS, bedload |
| | | | | | | | | Total phosphorus, DO |
| | | | | | | | | Groundwater recharge |
| V06W15 | (B. Darby Headwaters) @ Cratty Rd. | 0.34 | FULL | N/A | Habitat, floodplain setback | FULL | N/A | |
| | | | | | | | | TSS, bedload |
| | | | | | | | | Total phosphorus, DO |
| | | | | | | | | Groundwater recharge |
| V06G32 | Trib to Big Darby Creek (74.91) @ Cratty Rd. | 0.2 | FULL | NA | Habitat, floodplain setback | - | - | |
| | | | | | | | | TSS, bedload |
| | | | | | | | | Total phosphorus, DO |
| | | | | | | | | Groundwater recharge |
| V06G30 | Spain Creek W of North Lewisburg @ Mingo-Lewisburg Rd. | 5.7 | FULL | N/A | Floodplain setback | - | - | |
| | | | | | | | | TSS |
| | | | | | | | | Total phosphorus, DO |
| | | | | | | | | Groundwater recharge |
| V06G31 | Spain Creek W of North Lewisburg @ Gilbert Rd. | 3.7 | FULL | N/A | Habitat, floodplain setback | FULL | N/A | |
| | | | | | | | | TSS, bedload |
| | | | | | | | | Total phosphorus, DO |
| | | | | | | | | Groundwater recharge |
| V07P58 | Spain Creek E of North Lewisburg @ Mouth | 0.01 | FULL | N/A | Floodplain setback | PARTIAL | Direct habitat alterations | |
| | | | | | | | TSS, bedload | Sedimentation/siltation |
| | | | | | | | Total phosphorus, DO | |
| | | | | | | | Groundwater recharge | |

| | | | | | | | |
|--------------------------------------|--|------|---------|-----|---|---|-------------|
| V06G29 | Pleasant Run S of North Lewisburg @ Dunn-Burton Rd. | 4.1 | FULL | N/A | Habitat, floodplain setback TSS, bedload Total phosphorus, DO Groundwater recharge | - | - |
| V07P56 | Pleasant Run NE of Woodstock @ Mouth | 0.01 | FULL | N/A | Habitat, floodplain setback TSS, bedload Total phosphorus, DO Groundwater recharge | FULL | N/A |
| V06G32 | Trib to Big Darby Creek (74.91) @ Cratty Rd. | 0.2 | FULL | N/A | Habitat, floodplain setback TSS, bedload Total phosphorus, DO Groundwater recharge | - | - |
| V06G12 | Trib to Big Darby Creek (69.40) @ Middleburg-Plain City Rd. | 0.4 | FULL | N/A | Habitat, floodplain setback TSS, bedload Total phosphorus, DO Groundwater recharge | - | - |
| V06G11 | Hay Run W of Milford Center @ Middleburg-Plain City Rd. | 0.2 | FULL | N/A | Habitat, floodplain setback TSS, bedload Total phosphorus, DO Groundwater recharge | - | - |
| HUC 05060001 19 03 – Buck Run | | | | | | | |
| V06G09 | Buck Run @ Allen Center-Pottersburg Rd. | 10.4 | NON | | Direct habitat alteration Metals Nutrients, OE/DO Groundwater recharge | Habitat, floodplain setback NA Total phosphorus, DO TSS, bedload | FULL N/A |
| V06P05 | Buck Run W of Marysville @ St. Rt. 245 | 7.8 | PARTIAL | | Direct habitat alteration Metals Nutrients, OE/DO Groundwater recharge | Habitat, floodplain setback NA Total phosphorus, DO TSS, bedload | FULL N/A |
| V06G10 | Buck Run N of Milford Center @ Coleman- Brake Rd. | 5 | (FULL) | | | | - - |
| V07P53 | Buck Run at Bridgeport @ Mouth | 0.01 | PARTIAL | | Direct habitat alteration Metals Nutrients, OE/DO Groundwater recharge | Floodplain setback NA Total phosphorus, DO TSS, bedload | FULL N/A |

| HUC 05060001 19 04 – Sugar Run | | | | | | | |
|--|--|-------|---------|---|-----------------------------|---------|---|
| V06G06 | Sugar Run upst. East Tributary @ Rolling Meadows Golf Course | 7.5 | FULL | N/A | TSS | - | - |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V07S42 | Sugar Run SE of Marysville @ Taylor Rd. (Co. Rd. 33) | 6.94 | FULL | N/A | Total phosphorus | - | - |
| | | | | | Groundwater recharge | | |
| | | | | | TSS, bedload | | |
| | | | | | Habitat, floodplain setback | | |
| V06K08 | Sugar Run at Arnold @ U.S. Rt. 42 | 5.4 | PARTIAL | Nutrients Hydrology Direct habitat alteration | Total phosphorus | PARTIAL | Nutrient enrichment Sedimentation/siltation Flow alteration |
| | | | | | Groundwater recharge | | |
| | | | | | TSS, bedload | | |
| | | | | | Habitat, floodplain setback | | |
| V07S13 | Sugar Run near Plain City @ Cemetery Pike | 0.43 | FULL | N/A | Total phosphorus | FULL | N/A |
| | | | | | Groundwater recharge | | |
| | | | | | TSS, bedload | | |
| | | | | | Habitat, floodplain setback | | |
| 203164 | Trib. to Sugar Run (7.39) @ Mouth | 0.1 | FULL | NA | Habitat, floodplain setback | - | - |
| | | | | | Groundwater recharge | | |
| | | | | | TSS, bedload | | |
| | | | | | Total phosphorus | | |
| HUC 05060001 19 05 – Robinson Run – Big Darby Creek | | | | | | | |
| V07P54 | Big Darby Creek @ Milford Center Cemetery | 66.1 | PARTIAL | Fish and mussel kill | Habitat, floodplain setback | FULL | N/A |
| | | | | | TSS, bedload | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V06W16 | Big Darby Creek upst. Buck Run, adj. Middleburg-Plain City Rd. | 64.36 | - | - | - | FULL | N/A |
| V07S56 | Big Darby Creek at Bridgeport, just upst. Confl. Buck Run | 63.8 | PARTIAL | Nutrients, DO | - | - | - |
| V07S12 | Big Darby Creek SE of Bridgeport @ St. Rt. 38 | 62.6 | PARTIAL | | Floodplain setback | FULL | N/A |
| | | | | | TSS | | |
| | | | | | Nutrients, DO | | |
| | | | | | Groundwater recharge | | |
| V07P51 | Big Darby Creek SE of Unionville Center, adj. Robinson Rd. | 58.8 | - | - | - | FULL | N/A |
| V06W04 | Big Darby Creek at Plain City, upst. U.S. Rt. 42 and Ranco | 54.1 | FULL | N/A | Floodplain setback | FULL | N/A |
| | | | | | TSS, bedload | | |

| | | | | | | | |
|--|--|-------|---------|-----|-----------------------------|------|-----|
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| | | | | | Floodplain setback | | |
| V06W03 | Big Darby Creek at Plain City @ End of Rickard Rd. | 53.9 | FULL | N/A | TSS | - | - |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V06W06 | Big Darby Creek just upst. Plain City WWTP | 52.11 | (FULL) | NA | NA | - | - |
| | | | | | Floodplain setback | | |
| V07S10 | Big Darby Creek @ RR Bridge dst. Plain City WWTP | 52 | PARTIAL | | TSS, bedload | - | - |
| | | | | | Nutrients, DO | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V07S09 | Big Darby Creek S of Plain City @ Cemetery Pike | 51.1 | - | - | - | FULL | N/A |
| 203167 | Prairie Run near Bridgeport @ Middleburg-Plain City Rd | 0.3 | FULL | N/A | Total phosphorus | - | - |
| | | | | | Groundwater recharge | | |
| | | | | | Direct habitat alteration | | |
| V06G08 | Robinson Run N of Plain City @ St. Rt. 736 (Middle Crossing) | 2.1 | NON | | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | FULL | N/A |
| | | | | | Nutrients, DO | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| | | | | | Direct habitat alteration | | |
| V06W05 | Robinson Run N of Plain City @ U.S. Rt. 42 | 0.73 | PARTIAL | | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | FULL | N/A |
| | | | | | Nutrients, DO | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| | | | | | Direct habitat alteration | | |
| V06G05 | Sweeny Run at Plain City, near Mouth | 0.2 | PARTIAL | | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | FULL | N/A |
| | | | | | Nutrients, DO | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| HUC 05060001 20 01 – Headwaters Treacle Creek | | | | | | | |
| | | | | | Habitat, floodplain setback | | |
| V06G18 | Treacle Creek NNW of Mechanicsburg @ Parkview Rd. | 11.77 | PARTIAL | | Sedimentation | FULL | N/A |
| | | | | | Nutrients | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| | | | | | Habitat, floodplain setback | | |
| V06G19 | Treacle Creek NE of Mechanicsburg @ Eagle Rd. | 8.3 | FULL | N/A | TSS | - | - |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V06G20 | | 6 | FULL | N/A | Habitat, floodplain setback | FULL | N/A |

| | | | | | | | |
|---|---|-------|---------|-----|-----------------------------|------|----------------------------|
| | Treacle Creek NE of Mechanicsburg @ St. Rt. 161 | | | | TSS, bedload | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V06G24 | Howard Run SE of Woodstock @ McMahill Rd. | 0.6 | FULL | N/A | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | - | - |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| HUC 05060001 20 02 – Proctor Run – Treacle Creek | | | | | | | |
| V06S11 | Treacle Creek @ Winget Rd. Covered Bridge | 0.78 | (NON) | | Habitat, floodplain setback | | Direct habitat alterations |
| | | | | | TSS, bedload | NON | Organic enrichment |
| | | | | | Nutrients, DO | | Sedimentation/siltation |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V06G21 | Proctor Run SW of Woodstock @ Park Rd. | 4.9 | PARTIAL | | Habitat, floodplain setback | | |
| | | | | | TSS | FULL | N/A |
| | | | | | Nutrients, DO | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V06G22 | Proctor Run S of Woodstock @ St. Rt. 559 | 3.1 | FULL | N/A | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | - | - |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V06G23 | Proctor Run SE of Woodstock @ McMahill Rd. | 1.6 | FULL | N/A | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | FULL | N/A |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| HUC 05060001 20 03 – Headwaters Little Darby Creek | | | | | | | |
| V06S12 | L. Darby Creek W. of Mechanicsburg @ Allison Rd. | 41.21 | PARTIAL | | Floodplain setback | | |
| | | | | | TSS | | |
| | | | | | Nutrients, DO | - | - |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| | | | | | Toxicity (unknown) | | |
| 302733 | L. Darby Creek at Mechanicsburg @ W. Sandusky St. | 40.1 | - | - | - | FULL | N/A |
| V06S08 | L. Darby Creek at Mechanicsburg @ St. Rt. 29 | 39.57 | PARTIAL | | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | | |
| | | | | | Nutrients, DO | - | - |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| | | | | | Toxicity (unknown) | | |
| | | | | | N/A | | |

| | | | | | | | | |
|---|---|-------|---------|-----|-----------------------------|---------|----------------------------|-------------------------|
| V06Q07 | L. Darby Creek upst. Mechanicsburg WWTP | 39.3 | - | - | - | FULL | N/A | |
| V06S10 | L. Darby Creek dst. Mechanicsburg WWTP @ Wing Rd. | 38.78 | PARTIAL | | Floodplain setback | FULL | N/A | |
| | | | | | Sedimentation | | | TSS |
| | | | | | Nutrients, DO | | | Total phosphorus |
| | | | | | Toxicity (unknown) | | | N/A |
| V06S05 | L. Darby Creek NE of Mechanicsburg @ Irwin Rd. | 34.7 | FULL | N/A | Floodplain setback | PARTIAL | Direct habitat alterations | |
| | | | | | TSS | | Sedimentation/siltation | |
| | | | | | Total phosphorus | | | |
| | | | | | Groundwater recharge | | | |
| V06Q04 | L. Darby Creek 0.2 mi upst. Rosedale-Milford Center Rd. | 33.2 | (FULL) | NA | NA | - | - | |
| V06G27 | Clover Run @ Road to Maple Grove Cemetery | 0.6 | FULL | N/A | Floodplain setback | FULL | N/A | |
| | | | | | TSS, bedload | | | |
| | | | | | Total phosphorus | | | |
| | | | | | Groundwater recharge | | | |
| V06G25 | Lake Run NE of Mechanicsburg @ St. Rt. 4 | 0.95 | FULL | N/A | Habitat, floodplain setback | FULL | N/A | |
| | | | | | TSS | | | |
| | | | | | Total phosphorus | | | |
| | | | | | Groundwater recharge | | | |
| V06G26 | Jumping Run N of Mechanicsburg @ St. Rt. 559 | 0.27 | PARTIAL | | Habitat, floodplain setback | FULL | N/A | |
| | | | | | Sedimentation | | | TSS, bedload |
| | | | | | Nutrients, DO | | | Total phosphorus |
| | | | | | Toxicity (unknown) | | | N/A |
| HUC 05060001 20 04 – Spring Fork | | | | | | | | |
| V06G13 | Spring Fork S of Mechanicsburg @ Wren Rd. | 15.9 | PARTIAL | | Habitat, floodplain setback | FULL | N/A | |
| | | | | | Sedimentation | | | TSS, bedload |
| | | | | | Nutrients, DO | | | Total phosphorus |
| | | | | | | | | Groundwater recharge |
| V06G14 | Spring Fork S of Mechanicsburg @ SR 29 | 13.3 | FULL | N/A | Habitat, floodplain setback | - | - | |
| | | | | | TSS, bedload | | | |
| | | | | | Total phosphorus | | | |
| | | | | | Groundwater recharge | | | |
| V06G15 | Spring Fork SW of Rosedale @ Guy Cemetery Rd. | 10.08 | PARTIAL | | Habitat, floodplain setback | PARTIAL | Direct habitat alterations | |
| | | | | | Sedimentation | | TSS, bedload | Sedimentation/siltation |
| | | | | | Nutrients, DO | | Total phosphorus | |

| | | | | | | | |
|---|---|-------|---------|-----|-----------------------------|------|-----|
| V06Q10 | Spring Fork SE of Rosedale @ Rosedale-Milford Center Rd. | 7.8 | PARTIAL | | Groundwater recharge | FULL | N/A |
| | | | | | Habitat, floodplain setback | | |
| | | | | | Sedimentation | | |
| | | | | | Nutrients, DO | | |
| V06Q09 | Spring Fork at Plumwood @ St. Rt. 38 | 3.3 | FULL | N/A | Groundwater recharge | - | - |
| | | | | | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | | |
| | | | | | Total phosphorus | | |
| V06G16 | Bales Fork near Plumwood @ Rosedale-Milford Center Rd. | 0.4 | FULL | N/A | Groundwater recharge | FULL | NA |
| | | | | | Floodplain setback | | |
| | | | | | TSS | | |
| | | | | | Total phosphorus | | |
| HUC 05060001 20 05 – Barron Creek – Little Darby Creek | | | | | | | |
| V06S04 | L. Darby Creek W of Chuckery @ Axe Handle Rd. | 29.46 | PARTIAL | | Groundwater recharge | FULL | N/A |
| | | | | | Habitat, floodplain setback | | |
| | | | | | Sedimentation | | |
| | | | | | Nutrients, DO | | |
| V06Q03 | L. Darby Creek dst. Chuckery, adj. to St. Rt. 38 | 26.5 | FULL | N/A | Groundwater recharge | - | - |
| | | | | | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | | |
| | | | | | Total phosphorus | | |
| V06S03 | L. Darby Creek E of Rosedale @ Rosedale-Plain City Rd. | 24.46 | FULL | N/A | Groundwater recharge | FULL | N/A |
| | | | | | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | | |
| | | | | | Total phosphorus | | |
| V06Q02 | L. Darby Creek E of Rosedale @ Finley-Guy Rd. | 23.1 | FULL | N/A | Groundwater recharge | - | - |
| | | | | | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | | |
| | | | | | Total phosphorus | | |
| V06Q01 | L. Darby Creek NE of Plumwood @ Bradley Rd. | 20.5 | FULL | N/A | Groundwater recharge | FULL | N/A |
| | | | | | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | | |
| | | | | | Total phosphorus | | |
| V06Q11 | Barron Creek E of Rosedale, upst. Rosedale-Plain City Rd. | 2.1 | FULL | N/A | Groundwater recharge | - | - |
| | | | | | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | | |
| | | | | | Total phosphorus | | |

| | | | | | | | |
|---|--|-------|---------|-----|---|---------|--|
| V06G17 | Barron Creek E of Rosedale @ St. Rt. 38 | 0.2 | FULL | N/A | N/A | FULL | N/A |
| V06Q08 | Wamp Ditch S of Chuckery @ Finley Guy Rd. | 0.1 | PARTIAL | | Habitat, floodplain setback Sedimentation Nutrients, DO | PARTIAL | Direct habitat alterations Nutrient enrichment Sedimentation/siltation |
| HUC 05060001 20 06 – Thomas Ditch – Little Darby Creek | | | | | | | |
| V07S34 | L. Darby Creek SE of Plumwood @ Little Darby Rd. Ford | 17.25 | (FULL) | NA | NA | FULL | N/A |
| V07P67 | L. Darby Creek NW of West Jefferson @ U.S. Rt. 42 | 15.3 | FULL | N/A | Floodplain setback TSS Total phosphorus Groundwater recharge | FULL | N/A |
| 302704 | L. Darby Creek NW of West Jefferson, 1.9 mi dst. U.S. Rt. 42 | 13.35 | - | - | - | FULL | N/A |
| V07P65 | L. Darby Creek at West Jefferson @ Taylor Blair Rd. | 8.2 | - | - | - | FULL | N/A |
| V06G28 | L. Darby Creek at West Jefferson @ Middle Pike | 7.35 | - | - | - | FULL | N/A |
| V06W11 | L. Darby Creek at West Jefferson @ U.S. Rt. 40 | 6.5 | FULL | N/A | Floodplain setback TSS Total phosphorus Groundwater recharge | - | - |
| V07P64 | L. Darby Creek @ End of Roberts Rd. | 3.95 | FULL | N/A | Floodplain setback TSS Total phosphorus Groundwater recharge | FULL | N/A |
| 601130 | L. Darby Creek at Georgesville @ Alkire Rd. | 0.07 | FULL | N/A | Habitat, floodplain setback TSS, bedload Total phosphorus Groundwater recharge | FULL | N/A |
| HUC 05060001 21 01 – Worthington Ditch – Big Darby Creek | | | | | | | |
| V06W08 | Big Darby Creek at Amity @ Amity Pike | 49.46 | PARTIAL | | Direct habitat alteration Sedimentation Nutrients, Organic enrichment, DO | FULL | N/A |
| V06G03 | Yutzly Ditch @ Plain City-Georgesville Rd. | 0.52 | (FULL) | NA | NA | - | - |

| | | | | | | | |
|--|---|-------|---------|-----------------------------------|-----------------------------|------|-----------------|
| V06G04 | Worthington Ditch N. of Amity @ Plain City-Georgesville Rd. | 0.24 | NON | Direct habitat alteration | Habitat, floodplain setback | FULL | N/A |
| | | | | Sedimentation | Bedload | | |
| | | | | Nutrients, Organic enrichment, DO | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V06G64 | Ballenger Jones Ditch @ Plain City-Georgesville Rd. | 0.18 | FULL | N/A | Floodplain setback | FULL | N/A |
| | | | | | Bedload | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V06G02 | Fitzgerald Ditch @ Plain City-Georgesville Rd. | 0.55 | PARTIAL | Direct habitat alteration | Habitat, floodplain setback | FULL | N/A |
| | | | | Sedimentation | Bedload | | |
| | | | | Nutrients, Organic enrichment, DO | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| HUC 05060001 21 02 – Silver Ditch – Big Darby Creek | | | | | | | |
| 603100 | Big Darby Creek N of West Jefferson @ Hubbard Rd. | 41.75 | FULL | N/A | Floodplain setback | FULL | N/A |
| | | | | | Bedload | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| 600830 | Big Darby Creek E of West Jefferson @ U.S. Rt. 40 | 38.9 | FULL | N/A | Floodplain setback | FULL | N/A |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| | | | | | | | |
| V06W19 | Big Darby Creek E of West Jefferson, dst. Darbycrest | 38.33 | - | - | - | FULL | N/A |
| 601140 | Big Darby Creek at Georgesville @ Alkire Rd. | 34.15 | FULL | N/A | Floodplain setback | FULL | N/A |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| | | | | | | | |
| HUC 05060001 22 01 – Hellbranch Run | | | | | | | |
| 203243 | Hellbranch Run NW of Galloway, 0.6 Miles dst. Alton Rd. | 9.4 | PARTIAL | | Habitat, floodplain setback | FULL | NA |
| | | | | Siltation | TSS, bedload | | |
| | | | | Nutrients, DO, NH3 | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V07S50 | Hellbranch Run S of Galloway @ Kunz Rd. | 7.29 | PARTIAL | | Habitat, floodplain setback | FULL | N/A |
| | | | | Siltation | TSS, bedload | | |
| | | | | Nutrients, DO, NH3 | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V07G01 | Hellbranch Run dst. Oakhurt Knolls WWTP | 5.8 | PARTIAL | | Habitat, floodplain setback | FULL | Flow alteration |
| | | | | Siltation | TSS, bedload | | |

| | | | | | Nutrients, DO, NH3 | Total phosphorus | | |
|--------|--|------|---------|-----|-----------------------------|------------------|-----|----------------------------|
| V07S48 | Hellbranch Run NE of Darbydale @ Beatty Rd. | 3.76 | FULL | N/A | Groundwater recharge | | | |
| | | | | | Floodplain setback | | | |
| | | | | | TSS | - | - | |
| | | | | | Total phosphorus | | | |
| V07P11 | Hellbranch Run N of Harrisburg @ Lambert Rd. | 0.98 | FULL | NA | Groundwater recharge | | | |
| | | | | | Floodplain setback | | | |
| | | | | | TSS | FULL | N/A | |
| | | | | | Total phosphorus | | | |
| V07S47 | Hellbranch Run dst. Timberlake WWTP | 0.9 | PARTIAL | N/A | Groundwater recharge | | | |
| | | | | | Floodplain setback | | | |
| | | | | | TSS | FULL | N/A | |
| | | | | | Total phosphorus | | | |
| V07G06 | Hamilton Run S of Hilliard @ Walker Rd. | 3.34 | NON | | Siltation | | | |
| | | | | | Nutrients, DO, NH3 | | | |
| | | | | | TSS | FULL | N/A | |
| | | | | | Total phosphorus | | | |
| 203345 | Hamilton Run near Alton, upst. McCoy Ditch | 0.8 | - | - | Groundwater recharge | | | |
| | | | | | Floodplain setback | | | |
| | | | | | TSS | NON | | Direct habitat alterations |
| | | | | | Total phosphorus | | | Sedimentation/siltation |
| V07P15 | Hamilton Run near Alton @ U.S. Rt. 40 | 0.41 | NON | | Habitat, floodplain setback | | | |
| | | | | | Siltation | | | Direct habitat alterations |
| | | | | | Nutrients, DO, NH3 | | | Sedimentation/siltation |
| | | | | | TSS, bedload | NON | | |
| 203348 | McCoy Run near Alton @ Mouth | 0.1 | - | - | Groundwater recharge | | | |
| | | | | | Floodplain setback | | | |
| | | | | | TSS | NON | | Direct habitat alterations |
| | | | | | Total phosphorus | | | Sedimentation/siltation |
| 203358 | Clover Groff Run @ Park adj. Frazell Rd. | 5.0 | - | - | Groundwater recharge | | | |
| | | | | | Floodplain setback | | | |
| | | | | | TSS | FULL | N/A | |
| | | | | | Total phosphorus | | | |
| V07G05 | Clover Groff Run @ Roberts Rd. | 4.75 | NON | | Siltation | | | |
| | | | | | Nutrients, DO, NH3 | | | |
| | | | | | TSS | - | - | |
| | | | | | Total phosphorus | | | |
| 300738 | Clover Groff Run @ Timberbrook WTP, Hickory Hill Drive | 3.6 | - | - | Groundwater recharge | | | |
| | | | | | Floodplain setback | | | |
| | | | | | TSS | FULL | N/A | |
| | | | | | Total phosphorus | | | |
| V07S52 | Clover Groff Run at Alton @ U.S. Rt. 40 | 0.78 | NON | | Habitat, floodplain setback | | | |
| | | | | | Siltation | | | |
| | | | | | Nutrients, DO, NH3 | | | |
| | | | | | TSS, bedload | - | - | |
| | | | | | Groundwater recharge | | | |
| | | | | | Floodplain setback | | | |
| | | | | | TSS | | | |
| | | | | | Total phosphorus | | | |

| | | | | | | | Direct habitat alterations |
|--|---|-------|---------|-----|-----------------------------|---------|--------------------------------------|
| | | | | | | | Sedimentation/siltation |
| | | | | | | | Flow alteration |
| V07P14 | Clover Groff Run at Alton @ Alton Rd. | 0.14 | - | - | - | NON | |
| HUC 05060001 22 02 – Gay Run – Big Darby Creek | | | | | | | |
| V07S06 | Big Darby Creek upst. Darbydale @ St. Rt. 665 | 30.17 | - | - | - | FULL | N/A |
| V07S05 | Big Darby Creek at Darbyville @ McKinley Bridge | 29.2 | (FULL) | N/A | | | |
| | | | | | Floodplain setback | | |
| | | | | | Total phosphorus | - | - |
| | | | | | Groundwater recharge | | |
| V07G70 | Big Darby Creek dst. Darbydale, upst. Trib @ Power Lines | 27.95 | - | - | - | FULL | N/A |
| V07S04 | Big Darby Creek upst. Gay Run, adj. Harrisburg-Georgesville Rd. | 26.8 | (FULL) | N/A | | FULL | N/A |
| | | | | | Floodplain setback | | |
| | | | | | Total phosphorus | FULL | N/A |
| | | | | | Groundwater recharge | | |
| V07G07 | Smith Ditch (31.67) @ Georgesville-Wrightsville Rd. | 2.1 | FULL | N/A | | | |
| | | | | | Habitat, floodplain setback | | |
| | | | | | Total phosphorus | - | - |
| | | | | | Groundwater recharge | | |
| V07K18 | Smith Ditch (31.67) NW of Darbydale @ Biggert Rd. | 0.2 | PARTIAL | | DO | PARTIAL | Natural conditions (flow or habitat) |
| | | | | | Habitat, floodplain setback | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V07G08 | Trib to Smith Ditch (0.06) NW of Darbydale @ Biggert Rd. | 0.2 | (FULL) | N/A | | | |
| | | | | | Habitat, floodplain setback | | |
| | | | | | Total phosphorus | - | - |
| | | | | | Groundwater recharge | | |
| 203265 | Gay Run SW of Darbydale @ Boyd Rd. | 2.2 | FULL | N/A | | | |
| | | | | | Floodplain setback | - | - |
| HUC 05060001 22 03 – Greenbrier Creek – Big Darby Creek | | | | | | | |
| 601110 | Big Darby Creek 0.5 mi. dst. Hellbranch Run and I-71 | 25.7 | FULL | | | FULL | N/A |
| V07S03 | Big Darby Creek W of Orient @ St. Rt. 762 | 23.75 | FULL | N/A | | FULL | N/A |
| | | | | | Floodplain setback | | |
| | | | | | TSS | | |
| | | | | | Total phosphorus | FULL | N/A |
| | | | | | Groundwater recharge | | |
| V07G23 | Big Darby Creek dst. PCI WWTP | 22.6 | FULL | N/A | | | |
| | | | | | Floodplain setback | | |
| | | | | | TSS, bedload | | |
| | | | | | Total phosphorus | - | - |
| | | | | | Groundwater recharge | | |

| | | | | | | | |
|--------|--|-------|---------|-----|-----------------------------|------|-----|
| V07W56 | Big Darby Creek dst. PCI WWTP, upst. Snake Island | 22.25 | - | - | - | FULL | N/A |
| V07P42 | Big Darby Creek near Gravel Pit @ End of Lane | 21.35 | - | - | - | FULL | N/A |
| V07G19 | Big Darby Creek @ Sportsman's Club, dst. Clarks Lake Trib. | 19.83 | - | - | - | FULL | NA |
| V07P41 | Big Darby Creek S of Orient @ Darby Creek Rd. | 19.1 | FULL | N/A | | FULL | N/A |
| | | | | | Floodplain setback | | |
| | | | | | TSS | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V07G16 | Big Darby Creek near Gulick Rd. dst. Trib | 15.7 | FULL | N/A | | - | - |
| | | | | | Floodplain setback | | |
| | | | | | TSS | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| 203267 | Springwater Run @ Harrisburg-Georgesville Rd. | 0.8 | PARTIAL | | Nutrients, DO | FULL | N/A |
| | | | | | Total phosphorus | | |
| | | | | | Habitat, floodplain setback | | |
| | | | | | Siltation | | |
| | | | | | TSS, bedload | | |
| | | | | | Groundwater recharge | | |
| 203269 | Trib to Big Darby Creek (23.61) S of Harrisburg @ Mouth | 0.1 | - | - | | FULL | N/A |
| 303391 | Trib to Big Darby Creek (23.77) S of Harrisburg @ Mouth | 0.1 | (NON) | | | - | - |
| | | | | | Habitat, floodplain setback | | |
| | | | | | Siltation | | |
| | | | | | TSS | | |
| | | | | | Nutrients, DO | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V07G04 | Trib to Big Darby Creek (20.20) @ Darby Creek Rd. | 0.8 | FULL | N/A | | - | - |
| | | | | | Habitat, floodplain setback | | |
| | | | | | TSS | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V07G14 | Trib to Big Darby Creek (18.41) S of Orient @ Mouth | 0.1 | PARTIAL | | | - | - |
| | | | | | Habitat, floodplain setback | | |
| | | | | | Siltation | | |
| | | | | | TSS, bedload | | |
| | | | | | Nutrients, DO | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V07G02 | Greenbrier Creek @ Scioto-Darby Rd. | 2.7 | FULL | N/A | | - | - |
| | | | | | Habitat, floodplain setback | | |
| | | | | | TSS, bedload | | |
| | | | | | Total phosphorus | | |
| | | | | | Groundwater recharge | | |
| V07G03 | Greenbrier Creek @ Burrow Rd. | 1.3 | FULL | N/A | | - | - |
| | | | | | Floodplain setback | | |
| | | | | | TSS | | |

| | | | | | | | |
|--|--|-------|--------|-----|------------------------------------|------|-----|
| | | | | | <u>Total phosphorus</u> | | |
| | | | | | <u>Groundwater recharge</u> | | |
| | | | | | <u>Floodplain setback</u> | | |
| V07G09 | Georges Run @ End of Lane off London Rd. | 0.5 | FULL | N/A | <u>TSS, bedload</u> | - | - |
| | | | | | <u>Total phosphorus</u> | | |
| | | | | | <u>Groundwater recharge</u> | | |
| HUC 05060001 22 04 – Lizard Run – Big Darby Creek | | | | | | | |
| V07G12 | Big Darby Creek NW of Darbyville, dst. Georges Run | 14.7 | (FULL) | NA | NA | - | - |
| | | | | | <u>Floodplain setback</u> | | |
| 601300 | Big Darby Creek at Darbyville @ St. Rt. 316 | 13.36 | FULL | N/A | <u>TSS, bedload</u> | FULL | N/A |
| | | | | | <u>Total phosphorus</u> | | |
| | | | | | <u>Groundwater recharge</u> | | |
| V07P39 | Big Darby Creek SE of Darbyville @ end of Darby Rd. | 11.3 | FULL | N/A | Floodplain setback | FULL | N/A |
| 302740 | Big Darby Creek ust. Trib (9.12) adj. London Rd | 9.2 | - | - | - | FULL | NA |
| V07G17 | Big Darby Creek SE of Darbyville, dst. Trib (8.80) | 8.7 | FULL | N/A | <u>Habitat, floodplain setback</u> | - | - |
| | | | | | <u>TSS, bedload</u> | | |
| 203274 | Big Darby Creek SE of Darbyville, E of Renick Cemetery | 7.4 | - | - | - | FULL | N/A |
| V07G18 | Big Darby Creek dst. Trib (5.86), dst. Island | 5.4 | (FULL) | | | - | - |
| | | | | | <u>Floodplain setback</u> | | |
| 600970 | Big Darby Creek near Fox @ St. Rt. 104 | 3.2 | FULL | N/A | <u>TSS, bedload</u> | FULL | N/A |
| V07S75 | Lizard Run at Darbyville, dst. Main St. | 0.2 | (NON) | DO | NA | - | - |
| V07K15 | Big Darby Creek N of Circleville @ Mouth | 0.1 | FULL | N/A | <u>Habitat, floodplain setback</u> | - | - |
| | | | | | <u>TSS, bedload</u> | | |