1**TMDL:** Hardies Creek Watershed, Wisconsin

Date:

# DECISION DOCUMENT HARDIES CREEK WATERSHED SEDIMENT TMDL

Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations at 40 C.F.R. Part 130 describe the statutory and regulatory requirements for approvable TMDLs. Additional information is generally necessary for EPA to determine if a submitted TMDL fulfills the legal requirements for approval under Section 303(d) and EPA regulations, and should be included in the report package. Use of the verb "must" below denotes information that is required to be submitted because it relates to elements of the TMDL required by the CWA and by regulation. Use of the term "should" below denotes information that is generally necessary for EPA to determine if a submitted TMDL is approvable. These TMDL review guidelines are not themselves regulations. They are an attempt to summarize and provide guidance regarding currently effective statutory and regulatory requirements relating to TMDLs. Any differences between these guidelines and EPA's TMDL regulations should be resolved in favor of the regulations themselves.

# 1.Identification of Waterbody, Pollutant of Concern, Pollutant Sources, and Priority Ranking

The TMDL report should identify the waterbody as it appears on the State's/Tribe's 303(d) list. The waterbody should be identified/georeferenced using the National Hydrography Dataset (NHD), and the TMDL should clearly identify the pollutant for which the TMDL is being established. In addition, the TMDL should identify the priority ranking of the waterbody and specify the link between the pollutant of concern and the water quality standard (see section 2 below).

The TMDL report should include an identification of the point and nonpoint sources of the pollutant of concern, including location of the source(s) and the quantity of the loading, e.g., lbs/ per day. The TMDL should provide the identification numbers of the NPDES permits within the waterbody. Where it is possible to separate natural background from nonpoint sources, the TMDL should include a description of the natural background. This information is necessary for EPA's review of the load and wasteload allocations, which are required by regulation.

The TMDL report should also contain a description of any important assumptions made in developing the TMDL, such as:

- (1) the spatial extent of the watershed in which the impaired waterbody is located;
- (2) the assumed distribution of land use in the watershed (e.g., urban, forested, agriculture);
- (3) population characteristics, wildlife resources, and other relevant information affecting the characterization of the pollutant of concern and its allocation to sources;
- (4) present and future growth trends, if taken into consideration in preparing the TMDL (e.g., the TMDL could include the design capacity of a wastewater treatment facility); and
- (5) an explanation and analytical basis for expressing the TMDL through *surrogate measures*, if applicable. *Surrogate measures* are parameters such as percent fines and

turbidity for sediment impairments; chlorophyl  $\underline{a}$  and phosphorus loadings for excess algae; length of riparian buffer; or number of acres of best management practices.

## Comments:

The Wisconsin Department of Natural Resources (WDNR) developed a sediment TMDL for Hardies Creek. By implementing measures to reduce the sediment loading, the TMDL will also address the degraded habitat impairment in the creek. <u>Table 1</u> below identifies the waterbody segment covered by the TMDL report as it appears on the Wisconsin 2006 303(d) list. According to Wisconsin's 303(d) list for 2006, the impaired waterbody segment is identified with a high priority ranking.

Table 1

WBIC	TMDL_ID	Segment Name	County	Impairment	Priority	Segment Size
1686900	181	Hardies Creek	Trempealeau	degraded habitat	high	3.54 miles
				sediment		

Hardies Creek is approximately five miles long and is located in the southwest portion of Trempealeau County in western Wisconsin (See Figure A-1 of Appendix A in the final TMDL report). Land use in the watershed is dominated by forest (71.9%), agricultural land (pasture and crops) (17.9%), and grassland (9.2%) (See Figure A-1 of Appendix A in the final TMDL report).

According to WDNR, there are no point sources discharging sediment into Hardies Creek. Nonpoint sources identified in the TMDL report as contributing to the impairments in Hardies Creek include streambank erosion, direct cattle access to the stream and poor agricultural practices. Streambank erosion is considered to be the major source of sedimentation to the stream. High velocity runoff events carved out the sediment along the creek producing severely exposed banks. Heavy pasturing and overgrazing can further contribute to stream bank instability.

Excessive runoff, hydrologic loadings and streambank erosion contribute to the increase in sedimentation in Hardies Creek. Sedimentation is the suspected cause of habitat degradation and the depressed fish and macroinvertebrate communities (low numbers and low diversity) in Hardies Creek. Fine sediments covering the stream substrate reduce suitable habitat for fish and other biological communities by filling in pools and reducing available cover for juvenile and adult fish. Sedimentation of riffle areas compromises reproductive success of fish communities by covering the gravel substrate necessary for spawning conditions. The filling in of riffle areas also affects the fish communities' food source, macroinvertebrates, which have difficulty thriving in areas with predominately sand substrate as opposed to a substrate composed of gravel, cobble/rubble, and sand mixture. In addition, sedimentation can increase turbidity in the water column, causing reduced light penetration necessary for photosynthesis in aquatic plants, reduced feeding efficiency of visual predators and filter feeders, and a lower respiratory capacity of aquatic macroinvertebrates due to clogged gill surfaces. Sedimentation of the substrate can also cause an increase in other contaminant levels, such as nutrients, which are attached to sediment particles and transported into the stream during runoff events. Therefore, reductions in runoff rates and solids loads from nonpoint sources such as streambank erosion are necessary to address the degraded habitat impairment in Hardies Creek and reduce the impacts on the aquatic life, so the stream can meet water quality standards (WQS).

U.S. EPA finds that the TMDL document submitted by WDNR satisfies all requirements of this first element.

# 2. Description of the Applicable Water Quality Standards and Numeric Water Quality Target

The TMDL report must include a description of the applicable State/Tribal water quality standard, including the designated use(s) of the waterbody, the applicable numeric or narrative water quality criterion, and the antidegradation policy. (40 C.F.R. §130.7(c)(1)).

EPA needs this information to review the loading capacity determination, and load and wasteload allocations, which are required by regulation.

The TMDL report must identify a numeric water quality target(s) – a quantitative value used to measure whether or not the applicable water quality standard is attained. Generally, the pollutant of concern and the numeric water quality target are, respectively, the chemical causing the impairment and the numeric criteria for that chemical (e.g., chromium) contained in the water quality standard. The TMDL expresses the relationship between any necessary reduction of the pollutant of concern and the attainment of the numeric water quality target. Occasionally, the pollutant of concern is different from the pollutant that is the subject of the numeric water quality target (e.g., when the pollutant of concern is phosphorus and the numeric water quality target is expressed as Dissolved Oxygen (DO) criteria). In such cases, the TMDL report should explain the linkage between the pollutant of concern and the chosen numeric water quality target.

## Comments:

WDNR identified the narrative standard set forth at Section NR 102.04 (1) intro and (a) of the Wisconsin Administrative Code (WAC) as the applicable standard for excessive sedimentation. This standard states in part, "To preserve and enhance the quality of waters, standards are established to govern water management decisions. Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development, or other activities shall be controlled so that all waters including mixing zone and effluent channels meet the following conditions at all times and under all flow conditions: (a) Substances that will cause objectionable deposits on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state." The goal of the Hardies Creek TMDL is to re-establish a balanced and sustainable aquatic community consistent with the water quality standards designated uses. The designated uses applicable to the Hardies Creek impaired segments are set forth at Section NR 102.04 (3) intro, (a), and (c) of the WAC (Page 3 of the final TMDL report). The applicable aquatic life designated uses to Hardies Creek are warm water sport fish and cold water communities.

WDNR established a numeric target of 0.1 ft/yr lateral recession rate of sediment for the Hardies Creek in order to meet the narrative WQS and support the corresponding aquatic designated uses by restoring the biological communities in the stream to their potential. A lateral recession rate is the thickness of soil eroded from a bank surface in an average year. The target recession rate of 0.1 ft/year, chosen for the entire stream, falls in the middle of the NRCS "moderate" erosion category (Page 8 of the final TMDL report).

Although sediment has been determined to be the pollutant of concern, WDNR will be monitoring the aquatic communities to determine the effectiveness of the TMDL implementation, as the aquatic life is the designated use being affected. Various measures, such as biotic indices and sustainable fishery year classes (II and III), will be used as surrogate targets in order to assess whether the goal of meeting the designated uses for each stream will be met.

U.S. EPA finds that the TMDL document submitted by WDNR satisfies all requirements of this second element.

# 3. Loading Capacity - Linking Water Quality and Pollutant Sources

A TMDL must identify the loading capacity of a waterbody for the applicable pollutant. EPA regulations define loading capacity as the greatest amount of a pollutant that a water can receive without violating water quality standards (40 C.F.R. §130.2(f)).

The pollutant loadings may be expressed as either mass-per-time, toxicity or other appropriate measure (40 C.F.R. §130.2(i)). If the TMDL is expressed in terms other than a daily load, e.g., an annual load, the report should explain why it is appropriate to express the TMDL in the unit of measurement chosen. The TMDL report should describe the method used to establish the cause-and-effect relationship between the numeric target and the identified pollutant sources. In many instances, this method will be a water quality model.

The TMDL report should contain documentation supporting the TMDL analysis, including the basis for any assumptions; a discussion of strengths and weaknesses in the analytical process; and results from any water quality modeling. EPA needs this information to review the loading capacity determination, and load and wasteload allocations, which are required by regulation.

TMDLs must take into account *critical conditions* for steam flow, loading, and water quality parameters as part of the analysis of loading capacity. (40 C.F.R. §130.7(c)(1) ). TMDLs should define applicable *critical conditions* and describe their approach to estimating both point and nonpoint source loadings under such *critical conditions*. In particular, the TMDL should discuss the approach used to compute and allocate nonpoint source loadings, e.g., meteorological conditions and land use distribution.

## Comments:

WDNR's goal for the Hardies Creek TMDL is to restore the biological communities in the stream to their corresponding aquatic designated uses (water sport fish and cold water), as consistent with the water quality standards. In order to meet the narrative WQS and support the corresponding aquatic designated uses, WDNR is targeting reductions in sediment stream bank erosion. To achieve this, WDNR used a recession rate target of 0.1 ft/year for the entire stream. This rate falls in the middle of the NRCS "moderate" erosion category: "Bank is predominately bare with some rills and vegetative overhang. Some exposed tree roots but no slumps or slips." (Page 8 of the final TMDL report). The recession rate target of 0.1 ft/year was used as the basis to calculate the total load capacity of sediment for the impaired Hardies Creek segment. The total load capacity of sediment and the overall reduction for Hardies Creek are summarized in the <u>Table 2</u> below and <u>Table 3</u> of the final TMDL report.

Table 2

WBIC	TMDL_ID	Segment Name	Existing Conditions (tons/day)	% Load Reduction	WLA (tons/day)	LA (tons/day)	TMDL (tons/day)
1686900	181	Hardies Creek	2.6	70%	0	0.79	0.79

WDNR used direct measurements of bank erosion to assess the nonpoint sources of sediment in Hardies Creek. Quantitative habitat measurements of bank erosion were used as input values. The total sediment load generated from streambank erosion was calculated by estimating eroding area from quantitative habitat measurements taken at four sites and

integrating those estimates along intermediate stream reaches. Estimates of lateral recession rates for streambanks were based on reference sources (Page 5 of the final TMDL report) and best professional judgment. Dry soil densities used in the calculations were 100 pounds per cubic foot, the average value for sandy loam in Wisconsin. Sandy loam was determined to be the dominant soil type along the stream, according to the NRCS State Soil Geographic (STATSGO) database. Erosion (lbs/yr) was calculated for each quantitative station by multiplying average annual lateral recession rate, eroding area, and soil bulk density. The existing sediment load to Hardies Creek (2.6 tons/year) was estimated by summing up the existing erosion values for each of the four stream sections (Table D-2 in Appendix D of the final TMDL report). The sediment allowable load to Hardies Creek (0.79 tons/day) was estimated by summing up the target erosion values for each of the four stream sections (Table D-3 in Appendix D of the final TMDL report). See Appendix D of the final TMDL report for additional information on the streambank erosion calculations for Hardies Creek.

WDNR has determined that an overall reduction of 70% in sediment will improve the water quality and restore the appropriate aquatic communities in Hardies Creek. It is expected that once streambanks are stabilized, there will be some naturally occurring erosion and a 0.1 recession rate reflects a reasonable target to achieve. In addition, biotic integrity scores for fish and macroinvertebrate communities are expected to increase as measures are taken to reduce sedimentation and embeddedness of the substrate, and increase stability of exposed banks.

The critical conditions for sediment in Hardies Creek are mainly related to sediment entry through stream bank erosion events that occur during spring runoff or summer thunderstorms events. Once in the system, the effects of sediment impact the aquatic communities year-round. The Hardies Creek TMDL addressed the critical conditions by basing the sediment load calculations and target reductions directly on stream bank erosion.

U.S. EPA finds that the TMDL document submitted by WDNR satisfies all requirements of this third element.

## 4. Load Allocations (LAs)

EPA regulations require that a TMDL include LAs, which identify the portion of the loading capacity attributed to existing and future nonpoint sources and to natural background. Load allocations may range from reasonably accurate estimates to gross allotments (40 C.F.R. §130.2(g)). Where possible, load allocations should be described separately for natural background and nonpoint sources.

## Comments:

The load allocation (LA) for Hardies Creek is the same as the total loading capacity (<u>Table 2</u> above and <u>Table 3</u> of the final TMDL report), as WDNR established there are no point sources discharging sediment into the stream (WLA = 0) and the margin of safety (MOS) is implicit. Nonpoint sources (NPS) identified in the TMDL report as contributing to the impairments in Hardies Creek include streambank erosion, direct cattle access to the stream and poor agricultural practices. Streambank erosion is considered to be the major source of sedimentation to the stream. High velocity runoff events carved out the sediment along the creek producing severely exposed banks. Heavy pasturing and overgrazing can further contribute to stream bank instability.

U.S. EPA finds that the TMDL document submitted by WDNR satisfies all requirements of this fourth element.

## 5. Wasteload Allocations (WLAs)

EPA regulations require that a TMDL include WLAs, which identify the portion of the loading capacity allocated to individual existing and future point source(s) (40 C.F.R. §130.2(h), 40 C.F.R. §130.2(i)). In some cases, WLAs may cover more than one discharger, e.g., if the source is contained within a general permit.

The individual WLAs may take the form of uniform percentage reductions or individual mass based limitations for dischargers where it can be shown that this solution meets WQSs and does not result in localized impairments. These individual WLAs may be adjusted during the NPDES permitting process. If the WLAs are adjusted, the individual effluent limits for each permit issued to a discharger on the impaired water must be consistent with the assumptions and requirements of the adjusted WLAs in the TMDL. If the WLAs are not adjusted, effluent limits contained in the permit must be consistent with the individual WLAs specified in the TMDL. If a draft permit provides for a higher load for a discharger than the corresponding individual WLA in the TMDL, the State/Tribe must demonstrate that the total WLA in the TMDL will be achieved through reductions in the remaining individual WLAs and that localized impairments will not result. All permitees should be notified of any deviations from the initial individual WLAs contained in the TMDL. EPA does not require the establishment of a new TMDL to reflect these revised allocations as long as the total WLA, as expressed in the TMDL, remains the same or decreases, and there is no reallocation between the total WLA and the total LA.

## Comments:

According to WDNR, there are no point sources discharging sediments into Hardies Creek. Therefore the waste load allocation is zero (WLA = 0).

U.S. EPA finds that the TMDL document submitted by WDNR satisfies all requirements of this fifth element.

## 6. Margin of Safety (MOS)

The statute and regulations require that a TMDL include a margin of safety (MOS) to account for any lack of knowledge concerning the relationship between load and wasteload allocations and water quality (CWA §303(d)(1)(C), 40 C.F.R. §130.7(c)(1)). EPA's 1991 TMDL Guidance explains that the MOS may be implicit, i.e., incorporated into the TMDL through conservative assumptions in the analysis, or explicit, i.e., expressed in the TMDL as loadings set aside for the MOS. If the MOS is implicit, the conservative assumptions in the analysis that account for the MOS must be described. If the MOS is explicit, the loading set aside for the MOS must be identified.

## Comments:

WDNR included an implicit margin of safety by choosing a more conservative lateral recession rate of 0.1 ft/yr as the target. WDNR considered a lateral recession rate of 0.2 ft/yr as a possible target because the upstream reach of Hardies Creek that is not currently impaired has a recession rate of 0.2 ft/yr. However, this lateral recession rate of 0.2 ft/yr lies on the high end

of the "moderate" category for rates in the NRCS technical bulletin (Pages 5 and 8 of the final TMDL report). Even though the recessional rate of 0.1 ft/yr calls for a 50% reduction in the portion of Hardies Creek that is not impaired, WDNR believes that by choosing this number the state is being more protective of the downstream reaches that are affected by cumulative sedimentation.

U.S. EPA finds that the TMDL document submitted by WDNR satisfies all requirements of this sixth element.

#### 7. Seasonal Variation

The statute and regulations require that a TMDL be established with consideration of seasonal variations. The TMDL must describe the method chosen for including seasonal variations. (CWA  $\S303(d)(1)(C)$ , 40 C.F.R.  $\S130.7(c)(1)$ ).

#### Comments:

The TMDL report appropriately considers seasonal variation. Sediment enters Hardies Creek mainly through stream bank erosion events that occur during spring runoff or summer thunderstorms events. Once in the system, the effects of sediment impact year-round. WDNR has directly considered sediment loading seasonal variation by basing the Hardies Creek TMDL on stream bank erosion calculations that were based on survey measurements performed during summer and spring seasons.

U.S. EPA finds that the TMDL document submitted by WDNR satisfies all requirements of this seventh element.

## 8. Reasonable Assurances

When a TMDL is developed for waters impaired by point sources only, the issuance of a National Pollutant Discharge Elimination System (NPDES) permit(s) provides the reasonable assurance that the wasteload allocations contained in the TMDL will be achieved. This is because 40 C.F.R. 122.44(d)(1)(vii)(B) requires that effluent limits in permits be consistent with "the assumptions and requirements of any available wasteload allocation" in an approved TMDL.

When a TMDL is developed for waters impaired by both point and nonpoint sources, and the WLA is based on an assumption that nonpoint source load reductions will occur, EPA's 1991 TMDL Guidance states that the TMDL should provide reasonable assurances that nonpoint source control measures will achieve expected load reductions in order for the TMDL to be approvable. This information is necessary for EPA to determine that the TMDL, including the load and wasteload allocations, has been established at a level necessary to implement water quality standards.

EPA's August 1997 TMDL Guidance also directs Regions to work with States to achieve TMDL load allocations in waters impaired only by nonpoint sources. However, EPA cannot disapprove a TMDL for nonpoint source-only impaired waters, which do not have a demonstration of reasonable assurance that LAs will be achieved, because such a showing is not required by current regulations.

## Comments:

To ensure that the reduction goals of this TMDL are attained, WDNR has various programs in place that will assist with the implementation and maintenance of management measures to control sediment loadings from nonpoint source pollution to Hardies Creek.

The Environmental Quality Incentives Program (EQIP) is another option available to farmers. EQIP is a federal cost-share program administered by the Natural Resources Conservation Service (NRCS) that provides farmers with technical and financial assistance. Farmers may receive up to 75% reimbursement for installing and implementing run-off management practices.

Counties in the Hardies Creek watershed may also apply to the Targeted Runoff Management (TRM) grant program through the WDNR. The TRM program is a competitive grant program that provides financial competitive cost-sharing grants to support small-scale, 2-year projects to reduce nonpoint source pollution. TRM grants fund up to 70% of eligible project costs, with the grant amount capped at \$150,000 per grant. In the event that the Trempealeau County Land Conservation Department (LCD) receives and targets TRM cost-sharing funds in the Hardies Creek watershed, installation of streambank stabilization practices would greatly reduce sedimentation and benefit habitat.

U.S. EPA finds that the TMDL document submitted by WDNR satisfies all requirements of this eighth element.

## 9. Monitoring Plan to Track TMDL Effectiveness

EPA's 1991 document, *Guidance for Water Quality-Based Decisions: The TMDL Process* (EPA 440/4-91-001), recommends a monitoring plan to track the effectiveness of a TMDL, particularly when a TMDL involves both point and nonpoint sources, and the WLA is based on an assumption that nonpoint source load reductions will occur. Such a TMDL should provide assurances that nonpoint source controls will achieve expected load reductions and, such TMDL should include a monitoring plan that describes the additional data to be collected to determine if the load reductions provided for in the TMDL are occurring and leading to attainment of water quality standards.

### Comments:

WDNR intends to monitor Hardies Creek based on the rate of implementation of the TMDL; including sites where the implementation of Targeted Restoration Management (TRM) grants are aimed at mitigating the intense streambank erosion. Monitoring will continue until it is deemed that the stream has responded to the point where it is meeting its codified use or until funding for these studies is discontinued. In addition, WDNR intends to monitor selected streams on a 5 to 6 year interval as part of a baseline monitoring strategy to assess temporary conditions and note trends in overall stream quality. Monitoring will consist of metrics contained in the WDNR's baseline protocol for wadeable streams, such as the Index of Biological Integrity (IBI), the Hilsenhoff Biotic Index (HBI), the current habitat assessment tool, and sampling of water quality parameters at a subset of sites.

U.S. EPA finds that the TMDL document submitted by WDNR satisfies all requirements of this ninth element.

## 10. Implementation

EPA policy encourages Regions to work in partnership with States/Tribes to achieve nonpoint source load allocations established for 303(d)-listed waters impaired by nonpoint sources. Regions may assist States/Tribes in developing implementation plans that include reasonable assurances that nonpoint source LAs established in TMDLs for waters impaired solely or primarily by nonpoint sources will in fact be achieved. In addition, EPA policy recognizes that other relevant watershed management processes may be used in the TMDL process. EPA is not required to and does not approve TMDL implementation plans.

## Comments:

The submitted TMDL report does not contain a formal implementation plan. An implementation plan is not required as a condition for TMDL approval under the current U.S. EPA regulations. However, the Wisconsin Department of Natural Resources (WDNR) has identified ongoing activities which have been identified under the reasonable assurance section.

U.S. EPA finds that this section has been adequately addressed.

# 11. Public Participation

EPA policy is that there should be full and meaningful public participation in the TMDL development process. The TMDL regulations require that each State/Tribe must subject calculations to establish TMDLs to public review consistent with its own continuing planning process (40 C.F.R. §130.7(c)(1)(ii) ). In guidance, EPA has explained that final TMDLs submitted to EPA for review and approval should describe the State's/Tribe's public participation process, including a summary of significant comments and the State's/Tribe's responses to those comments. When EPA establishes a TMDL, EPA regulations require EPA to publish a notice seeking public comment (40 C.F.R. §130.7(d)(2)).

Provision of inadequate public participation may be a basis for disapproving a TMDL. If EPA determines that a State/Tribe has not provided adequate public participation, EPA may defer its approval action until adequate public participation has been provided for, either by the State/Tribe or by EPA.

## Comments:

The public comment period for the Hardies Creek Watershed TMDL report was from August 3. 2007 through September 4, 2007. On August 3, 2007 a news release for the public notice of the TMDL report was sent to various entities including: newspapers, television stations, radio stations, interest groups, and interested individuals. The news release indicated the public comment period and how to obtain copies of the public notice and draft TMDL report. Copies of the **TMDL** report were available upon request and on WDNR's website: http://www.dnr.wi.gov/org/water/wm/wgs/303d/Draft TMDLs.html. 1 No comments from the public were received by WDNR during the public comment period.

U.S. EPA finds that the TMDL document submitted by WDNR satisfies all requirements of this eleventh element.

## 12. Report Letter

A report letter should be included with the TMDL report, and should specify whether the TMDL is being submitted for a *technical review* or *final review and approval*. Each final TMDL submitted to EPA should be accompanied by a report letter that explicitly states that the report is a final TMDL submitted under Section 303(d) of the Clean Water Act for EPA review and approval. This clearly establishes the State's/Tribe's intent to submit, and EPA's duty to review, the TMDL under the statute. The report letter, whether for technical review or final review and approval, should contain such identifying information as the name and location of the waterbody, and the pollutant(s) of concern.

### Comments:

U.S. EPA received the Hardies Creek sediment TMDL on January 28, 2008, accompanied by a report letter dated January 16, 2008. The report letter states that this is the final TMDL report for the impaired waterbody segment in the Hardies Creek watershed.

U.S. EPA finds that the TMDL document submitted by WDNR satisfies all requirements of this twelfth element.

#### 13. Conclusion

After a full and complete review, USEPA finds that the TMDL for Hardies Creek satisfies all of the elements of an approvable TMDL. This document addresses a total of **1** TMDL for **1** waterbody segment with a total of **2** impairments from the 2006 Wisconsin 303(d) list (See <u>Table 3</u> below).

Table 3

WBIC	TMDL_ID	Segment Name	Pollutant	Impairment(s) Addressed
1686900	181	Hardies Creek	sediment	degraded habitat sediment

1EPA's approval of this TMDL extends to the waterbodies which are identified in this document and the TMDL document with the exception of any portions of the waterbodies that are within Indian Country, as defined in 18 U.S.C. Section 1151. EPA is taking no action to approve or disapprove the State's TMDL with respect to those portions of the waters at this time. EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities under Section 303(d) for those waters.