



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

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Ref: 8EPR-EP

29 September 2005

Mr. Art Compton, Director
Planning, Prevention and Assistance Division
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Re: **TMDL Approvals**
Big Spring TPA

Dear Mr. Compton:

We have completed our review of the total maximum daily loads (TMDLs) as submitted by your office for the Big Spring TMDL Planning Area (TPA). The TMDLs are included in the document entitled Big Spring Watershed Water Quality Restoration Plan and Total Maximum Daily Loads transmitted to us for review and approval in correspondence dated March 30, 2005 and signed by you. In accordance with the Clean Water Act (33 U.S.C. 1251 *et. seq.*), we approve all aspects of the TMDLs for the following water body/pollutant combinations:

Big Spring Creek (MT41S004_010) - PCBs
Big Spring Creek (MT41S004_020) - nutrients (phosphorus)
Big Spring Creek (MT41S004_020) - PCBs
Big Spring Creek (MT41S004_020) - Siltation

Insufficient information has been provided to facilitate approval of TMDLs for the following water body/pollutant combinations and as such, we are taking no action on these at this time. Further, we anticipate the State will be addressing these waterbody/pollutant combinations at a later date.

Lower Cottonwood Creek (MT41S004_052) – Nutrients
Lower Cottonwood Creek (MT41S004_052) – Dissolved Oxygen
Casino Creek (MT41S004_040) – Nutrients

Enclosure 1 to this letter provides a summary of the elements of the TMDLs and Enclosure 2 provides details of our review of the TMDLs.



Based on our review, we feel the separate TMDL elements listed in Enclosure 2 for the water body/pollutant combinations listed above in Big Spring Creek adequately address the pollutants of concern, taking into consideration seasonal variation and a margin of safety. In approving these TMDLs, EPA affirms that the TMDLs have been established at a level necessary to attain and maintain the applicable water quality standards and has the necessary components of an approvable TMDL.

EPA has been in contact with the United States Fish and Wildlife Service (FWS) regarding whether and, if so, how the EPA's approval of the Big Spring TMDLs may affect the continued existence of any endangered or threatened species listed under the Endangered Species Act (ESA) or the designated critical habitat of any such species. EPA has not determined that today's approval may have such an affect. Therefore, consistent with the terms of a consent decree in the lawsuit of Friends of the Wild Swan, et al., v. U.S. Environmental Protection Agency, et al., Civil Action No. CV99-87-M-LBE, United States District Court for the District of Montana, Missoula Division, EPA has decided to approve these TMDLs contingent upon the outcome of consultation with the FWS.

Thank you for your submittal. If you have any questions concerning this approval, feel free to contact Ron Steg of my staff at (406) 457-5024.

Sincerely,

Original signed by Terry Anderson for

Max H. Dodson
Assistant Regional Administrator
Ecosystems Protection and Remediation

Enclosures

cc: Claudia Massman, Attorney
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EPA REGION VIII MONTANA OFFICE TMDL REVIEW FORM

Document Name:	Water Quality Assessment and TMDLs for the Big Spring Creek Planning Area (March 2005)
Submitted by:	MTDEQ
Date Received:	March 30, 2005
Review Date:	May 16, 2005
Reviewer:	Ron Steg
Formal or Informal Review?	FORMAL

This document provides a standard format for the EPA Montana Office to provide comments to the Montana Department of Environmental Quality on TMDL documents provided to the EPA for either official formal, or informal review. All TMDL documents are measured against the following 12 review criteria:

1. Water Quality Impairment Status
2. Water Quality Standards
3. Water Quality Targets
4. Significant Sources
5. Total Maximum Daily Load
6. Allocation
7. Margin of Safety and Seasonality
8. Monitoring Strategy
9. Restoration Strategy
10. Public Participation
11. Endangered Species Act Compliance
12. Technical Analysis

Each of the 12 review criteria are described below to provide the rationale for the review, followed by EPA's summary and comments/questions. **Comments/questions that need to be addressed are presented in bold.** This review is intended to ensure compliance with the Clean Water Act and also to ensure that the reviewed documents are technically sound and the conclusions are technically defensible.

1. Water Quality Impairment Status

Criterion Description – Water Quality Impairment Status

TMDL documents must include a description of the listed water quality impairments. While the 303(d) list identifies probable causes and sources of water quality impairments, the information contained in the 303(d) list is generally not sufficiently detailed to provide the reader with an adequate understanding of the impairments. TMDL documents should include a thorough description/summary of all available water quality data such that the water quality impairments are clearly defined and linked to the impaired beneficial uses and/or appropriate water quality standards.

- Satisfies Criterion
- Satisfies Criterion with stipulations provided below that must be addressed.
- Satisfies Criterion. Questions or comments provided below should be considered.
- Partially satisfies criterion. Questions or comments provided below need to be addressed.
- Criterion not satisfied. Questions or comments provided below need to be addressed.
- Not a required element in this case. Comments or questions provided for informational purposes.

Six water quality limited segments (WQLS) in the Big Spring TPA appeared on Montana's 1996 and/or 2004 303(d) lists: Upper Big Spring Creek, Lower Big Spring Creek, Beaver Creek, Casino Creek, Upper Cottonwood Creek, and Lower Cottonwood Creek. A summary of the 303(d) list status through 2004 and the current water quality impairment status is provided in the table below.

Waterbody	Year Listed	Listed Probable Causes	Current Status
Big Spring Creek (MT41S004_010) headwaters to confluence with E. Fork	1996	Nutrients Other habitat alterations Suspended solids	Impaired for PCBs PCB TMDL required.
	2004	Fully supporting all beneficial uses	
Big Spring Creek (MT41S004_020) confluence of E. Fork to mouth	1996	Noxious aquatic plants Nutrients Other habitat alterations Siltation	Impaired for sediment, nutrients, PCBs Sediment TMDL required Nutrient TMDL required PCB TMDL required
	2004	PCB Nutrients Siltation Other habitat alterations Riparian degradation Fish habitat degradation	
Beaver Creek (MT41S004_030)	1996	Nutrients Suspended solids	Not Impaired No TMDL required
	2004	Bank erosion Riparian degradation Other habitat alterations Nutrients Siltation Fish habitat alteration Dewatering	
Casino Creek (MT41S004_040)	1996	Nutrients Suspended solids	Impaired for nutrients

Waterbody	Year Listed	Listed Probable Causes	Current Status
	2004	Nutrients Other habitat alterations Riparian degradation	Nutrient TMDL required
Upper Cottonwood Creek (MT41S004_051)	1996	Nutrients Organic enrichment/DO Suspended solids	Not Impaired
	2004	Fully supporting beneficial uses	No TMDL required
Lower Cottonwood Creek (MT41S004_052)	1996	Nutrients Organic enrichment/DO Suspended solids	Impaired for nutrients, dissolved oxygen Nutrient/Dissolved Oxygen TMDL required
	2004	Nutrients Siltation Organic enrichment/low DO Flow alteration Dewatering Other habitat alterations Riparian degradation Fish habitat degradation	

2. Water Quality Standards

Criterion Description – Water Quality Standards

The TMDL document must include a description of all applicable water quality standards for all affected jurisdictions. TMDLs result in maintaining and attaining water quality standards. Water quality standards are the basis from which TMDL's are established and the TMDL targets are derived, including the numeric, narrative, use classification, and antidegradation components of the standards.

- Satisfies Criterion
- Satisfies Criterion with stipulations provided below that must be addressed.
- Satisfies Criterion. Questions or comments provided below should be considered.
- Partially satisfies criterion. Questions or comments provided below need to be addressed.
- Criterion not satisfied. Questions or comments provided below need to be addressed.
- Not a required element in this case. Comments or questions provided for informational purposes.

The applicable water quality standards are adequately summarized in Section 3.2.

3. Water Quality Targets

Criterion Description – Water Quality Targets

Quantified targets or endpoints must be provided to address each listed pollutant/water body combination. Target values must represent achievement of applicable water quality standards and support of associated beneficial uses. For pollutants with numeric water quality standards, the numeric criteria are generally used as the TMDL target. For pollutants with narrative standards, the narrative standard must be translated into a measurable value. At a minimum, one target is required for each pollutant/water body combination. It is generally desirable, however, to include several targets that represent achievement of the standard and support of beneficial uses (e.g., for a sediment impairment issue it may be appropriate to include targets representing water column sediment such as TSS, embeddeness, stream morphology, up-slope conditions, and a measure of biota).

- Satisfies Criterion
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- Not a required element in this case. Comments or questions provided for informational purposes.

The targets are summarized in Enclosure 1. With the exception some of the sediment targets for Big Spring Creek, they appear to be appropriate. Three targets were used for sediment in Big Spring Creek; clinger taxa, periphyton siltation index, and percent surface fines less than 2 mm. While the clinger taxa and periphyton siltation index targets were commonly used by MTDEQ and EPA in Montana at the time this TMDL document was prepared, it has subsequently been determined that they may not provide an accurate linkage between the aquatic life beneficial use and sediment. Note, however, that the target metrics, % *Clinger Taxa* and *Periphyton Siltation Index*, were chosen in this case because of the large amount of biologic data and the broad spatial and temporal distribution of the data. This allowed specific internal trends of biologic integrity, both latitudinal and longitudinal, to be identified. Given the extent of biologic data on Big Spring Creek, it was felt that these indicators, used in conjunction with substrate indicators (% surface fines <2mm) were appropriate for use as targets in Big spring Creek. Please refer to Figures 4-4 through 4-8 for spatial coverage and trends analysis.

4. Significant Sources

Criterion Description – Significant Sources

TMDLs must consider all significant sources of the stressor of concern. All sources or causes of the stressor must be identified or accounted for in some manner. The detail provided in the source assessment step drives the rigor of the allocation step. In other words, it is only possible to specifically allocate quantifiable loads or load reductions to each significant source when the relative load contribution from each source has been estimated. Ideally, therefore, the pollutant load from each significant source should be quantified. This can be accomplished using site-specific monitoring data, modeling, or application of other assessment techniques. If insufficient time or resources are available to accomplish this step, a phased/adaptive management approach can be employed so long as the approach is clearly defined in the document.

- Satisfies Criterion
- Satisfies Criterion with stipulations provided below that must be addressed.
- Satisfies Criterion. Questions or comments provided below should be considered.
- Partially satisfies criterion. Questions or comments provided below need to be addressed.
- Criterion not satisfied. Questions or comments provided below need to be addressed.
- Not a required element in this case. Comments or questions provided for informational purposes.

The three primary pollutants addressed in this document include PCBs, nutrients/dissolved oxygen, and sediment. Comments pertaining to each are provided below.

PCBs

The primary source of PCB loading to Big Spring Creek is from the Big Spring Trout Hatchery and PCBs contained in stream bottom substrates.

Nutrients/DO

The primary anthropogenic source of nutrients in Big Spring Creek is the Lewistown WWTP. The source assessment for nutrients in Big Spring Creek appears to be adequate.

Insufficient information was provided in Casino and Lower Cottonwood Creeks to adequately identify sources and/or determine the relative importance of potential sources.

Sediment

The primary anthropogenic sources of sediment to Big Spring Creek include bank erosion, urban non-point sources, and tributary inputs.

5. TMDL

Criterion Description – Total Maximum Daily Load

TMDLs include a quantified pollutant reduction target. According to EPA reg (see 40 C.F.R. 130.2(i)) TMDLs can be expressed as mass per unit of time, toxicity, % load reduction, or other measure. TMDLs must address, either singly or in combination, each listed pollutant/water body combination.

- Satisfies Criterion
- Satisfies Criterion with stipulations provided below that must be addressed.
- Satisfies Criterion. Questions or comments provided below should be considered.
- Partially satisfies criterion. Questions or comments provided below need to be addressed.
- Criterion not satisfied. Questions or comments provided below need to be addressed.
- Not a required element in this case. Comments or questions provided for informational purposes.

TMDLs have been prepared for PCBs in two segments of Big Spring Creek, and nutrients and siltation in one segment of Big Spring Creek. These TMDLs appear to be appropriate and are described in Enclosure 1. **Insufficient information has been presented for the necessary TMDLs for Casino Creek (nutrients) and Lower Cottonwood Creek (nutrients and dissolved oxygen).**

6. Allocation

Criterion Description – Allocation

TMDLs apportion responsibility for taking actions or allocate the available assimilative capacity among the various point, nonpoint, and natural pollutant sources. Allocations may be expressed in a variety of ways such as by individual discharger, by tributary watershed, by source or land use category, by land parcel, or other appropriate scale or dividing of responsibility. A performance based allocation approach, where a detailed strategy is articulated for the application of BMPs, may also be appropriate for non point sources.

In cases where there is substantial uncertainty regarding the linkage between the proposed allocations and achievement of water quality standards, it may be necessary to employ a phased or adaptive management approach (e.g., establish a monitoring plan to determine if the proposed allocations are, in fact, leading to the desired water quality improvements).

Allocating load reductions to specific sources is generally the most contentious and politically sensitive component of the TMDL process. It is also the step in the process where management direction is provided to actually achieve the desired load reductions. In many ways, it is a prioritization of restoration activities that need to occur to restore water quality. For these reasons, every effort should be made to be as detailed as possible and also, to base all conclusions on the best available scientific principles.

- Satisfies Criterion
- Satisfies Criterion with stipulations provided below that must be addressed.
- Satisfies Criterion. Questions or comments provided below should be considered.
- Partially satisfies criterion. Questions or comments provided below need to be addressed.
- Criterion not satisfied. Questions or comments provided below need to be addressed.
- Not a required element in this case. Comments or questions provided for informational purposes.

TMDLs, and associated allocations, have been prepared for PCBs in two segments of Big Spring Creek, and nutrients and siltation in one segment of Big Spring Creek. The allocations appear to be appropriate/adequate and are described in Enclosure 1. **No allocations are presented for the necessary TMDLs for Casino Creek (nutrients) and Lower Cottonwood Creek (nutrients and dissolved oxygen).**

7. Margin of Safety and Seasonality

Criterion Description – Margin of Safety/Seasonality

A margin of safety (MOS) is a required component of the TMDL that accounts for the uncertainty about the relationship between the pollutant loads and the quality of the receiving water body (303(d)(1)(c)). The MOS can be implicitly expressed by incorporating a margin of safety into conservative assumptions used to develop the TMDL. In other cases, the MOS can be built in as a separate component of the TMDL (in this case, quantitatively, a TMDL = WLA + LA + MOS). In all cases, specific documentation describing the rationale for the MOS is required.

Seasonal considerations, such as critical flow periods (high flow, low flow), also need to be considered when establishing TMDLs, targets, and allocations.

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- Criterion not satisfied. Questions or comments provided below need to be addressed.
- Not a required element in this case. Comments or questions provided for informational purposes.

TMDLs have been prepared for PCBs in two segments of Big Spring Creek, and nutrients and siltation in one segment of Big Spring Creek. The margins of safety for each are described below:

PCBs

The TMDL and allocations for PCBs are based on achievement of the target value for PCB sediment quality. DEQ conservatively selected the lowest Probable Effect Level (PEL) from the literature as the target. Additionally, it is stated that this target may be revised based on a pending Ecological Risk Assessment.

Nutrients

An explicit margin of safety (10%) is incorporated into the nutrient allocations.

Siltation

The TMDL and associated allocations are performance-based. In other words, it is DEQ's hypothesis that if the performance-based actions are implemented, the targets will be met. The only means by which to ensure that targets will be met through the proposed performance-based approach would be to conduct follow-up monitoring and apply adaptive management. If the monitoring strategy presented in Section 5.1.5 were implemented, it would likely provide an adequate margin of safety.

The *Big Springs Watershed Partnership* has a proven track record of restoration planning and implementation through collaboration with a variety of local, state and federal agencies and organizations. Tables 4-3 and 5-6 highlight locally driven riparian improvement projects on Big Spring Creek and a variety of its tributaries. Water quality and riparian improvements include: implementation of BMPs, restoration of stream channels, and enhancement of riparian vegetation. The extent of stream and riparian improvement projects attest to the commitment of local agencies and organizations to improve water quality, and provides reasonable assurance that such efforts will continue to be implemented and monitored for success.

8. Monitoring Strategy

Criterion Description – Monitoring Strategy

Many TMDL's are likely to have significant uncertainty associated with selection of appropriate numeric targets and estimates of source loadings and assimilative capacity. In these cases, a phased TMDL approach may be necessary. For Phased TMDLs, it is EPA's expectation that a monitoring plan will be included as a component of the TMDL documents to articulate the means by which the TMDL will be evaluated in the field, and to provide supplemental data in the future to address any uncertainties that may exist when the document is prepared.

At a minimum, the monitoring strategy should:

- *Articulate the monitoring hypothesis and explain how the monitoring plan will test it.*
- *Address the relationships between the monitoring plan and the various components of the TMDL (targets, sources, allocations, etc.).*
- *Explain any assumptions used.*
- *Describe monitoring methods.*
- *Define monitoring locations and frequencies, and list the responsible parties.*

- Satisfies Criterion
- Satisfies Criterion with stipulations provided below that must be addressed.
- Satisfies Criterion. Questions or comments provided below should be considered.
- Partially satisfies criterion. Questions or comments provided below need to be addressed.
- Criterion not satisfied. Questions or comments provided below need to be addressed.
- Not a required element in this case. Comments or questions provided for informational purposes.

Monitoring goals include:

Sediment

- Monitoring to evaluate targets and target attainment
- Conducting further assessment of sources
- Evaluation of BMP implementation and effectiveness

PCBs

- Assessing the success of remediation activities at the hatchery
- Monitoring to evaluate targets and target attainment
- Conducting further assessment of sources

Nutrients

- Monitoring to evaluate targets and target attainment
- Collecting supplemental flow information
- Conducting further assessment of sources

The monitoring strategies presented in the subject document are conceptual, but generally address the relationships between the monitoring plan and the various components of the TMDL (targets, sources, allocations, etc.). If these conceptual monitoring strategies were implemented, they would likely result in sufficient information to track attainment of targets and allow for adaptive management.

9. Restoration Strategy

Criterion Description – Restoration Strategy

At a minimum, sufficient information should be provided in the TMDL document to demonstrate that if the TMDL were implemented, water quality standards would be attained or maintained. Adding additional detail regarding the proposed approach for the restoration of water quality is not currently a regulatory requirement, but is considered a value added component of a TMDL document.

- Satisfies Criterion
- Satisfies Criterion. Questions or comments provided below should be considered.
- Partially satisfies criterion. Questions or comments provided below need to be addressed.
- Criterion not satisfied. Questions or comments provided below need to be addressed.
- Not a required element in this case. Comments or questions provided for informational purposes.

Conceptual restoration strategies are provided for each of the water body/pollutant combinations for which TMDLs have been prepared.

10. Public Participation

Criterion Description – Public Participation

The fundamental requirement for public participation is that all stakeholders have an opportunity to be part of the process. Public participation should fit the needs of the particular TMDL.

- Satisfies Criterion
- Satisfies Criterion with stipulations provided below that must be addressed.
- Satisfies Criterion. Questions or comments provided below should be considered.
- Partially satisfies criterion. Questions or comments provided below need to be addressed.
- Criterion not satisfied. Questions or comments provided below need to be addressed.
- Not a required element in this case. Comments or questions provided for informational purposes.

Public involvement activities are described in Section 9.0 and appear to be adequate.

11. Technical Analysis

Criterion Description – Technical Analysis

*TMDLs must be supported by an appropriate level of technical analysis. It applies to **all** of the components of a TMDL document. It is vitally important that the technical basis for **all** conclusions be articulated in a manner that is easily understandable and readily apparent to the reader. Of particular importance, the cause and effect relationship between the pollutant and impairment and between the selected targets, sources, TMDLs, and allocations needs to be supported by an appropriate level of technical analysis.*

- Satisfies Criterion
- Satisfies Criterion with stipulations provided below that must be addressed.
- Satisfies Criterion. Questions or comments provided below should be considered.
- Partially satisfies criterion. Questions or comments provided below need to be addressed.
- Criterion not satisfied. Questions or comments provided below need to be addressed.
- Not a required element in this case. Comments or questions provided for informational purposes.

The level of technical analysis for the PCB related issues appears to be very thorough. However, the lack of source assessment information (i.e., identification of specific sources and quantification of loads from each of the significant sources) is only marginally adequate for the nutrient and sediment TMDLs. Future TMDL analyses should include a more thorough consideration of pollutant sources.

12. Endangered Species Act Compliance

Criterion Description – Endangered Species Act Compliance

EPA's approval of a TMDL may constitute an action subject to the provisions of Section 7 of the Endangered Species Act ("ESA"). EPA will consult, as appropriate, with the US Fish and Wildlife Service (USFWS) to determine if there is an effect on listed endangered and threatened species pertaining to EPA's approval of the TMDL. The responsibility to consult with the USFWS lies with EPA and is not a requirement under the Clean Water Act for approving TMDLs. States are encouraged, however, to participate with FWS and EPA in the consultation process and, most importantly, to document in its TMDLs the potential effects (adverse or beneficial) the TMDL may have on listed as well as candidate and proposed species under the ESA.

- Satisfies Criterion
- Satisfies Criterion with stipulations provided below that must be addressed.
- Satisfies Criterion. Questions or comments provided below should be considered.
- Partially satisfies criterion. Questions or comments provided below need to be addressed.
- Criterion not satisfied. Questions or comments provided below need to be addressed.
- Not a required element in this case. Comments or questions provided for informational purposes.

EPA will address ESA issues.

APPROVED TMDLS
Big Spring TMDL Planning Area

4 pollutant TMDLs completed
11 determinations that no pollutant TMDL is needed
3 pollutant TMDLs yet to be developed/studied

Waterbody Name*	TMDL Parameter/ Pollutant	Water Quality Goal/Endpoint	TMDL	WLA/ LA	Supporting Documentation (not an exhaustive list of supporting documents)
Big Spring Creek (MT41S004_010)*	Nutrients	This pollutant was removed from Montana’s 303(d) list as a probable cause of impairment in 2002. No TMDL necessary.			“Water Quality Assessment and TMDLs for the Big Spring Creek Planning Area ”
	Suspended Solids	This pollutant was removed from Montana’s 303(d) list as a probable cause of impairment in 2002. No TMDL necessary.			“
	PCB**	Fish tissue PCB concentrations <0.025 ppm Stream bottom sediment PCB concentrations <0.187 ppm	100% reduction in PCB loading. 79% reduction in stream bottom sediment concentrations.	Loading reductions allocated to Big Springs Trout Hatchery. Allocation alternatives to address PCB load in bottom sediments are currently under investigation.	“
Big Spring Creek (MT41S004_020)*	Nutrients	TN <0.500 mg/l TP <0.035 mg/l Chlorophyll a <100 mg/m ² summer mean and <150 mg/m ² summer max	Flow-based for phosphorous (e.g., 20.8 lbs/day at average summer flow of 110 cfs)	WLA = flow-based (e.g., 49% reduction at average summer flow of 110 cfs) LA = 0% reduction	“
	Siltation	Periphyton siltation index <25 % clinger taxa >50% % surface fines < 2mm <20%	Sum of the performance-based allocations	WLA = 0 LA = performance-based actions resulting in reducing eroding stream banks, reducing TSS loading by 60%, and providing flushing flow events below the dam.	“
	PCB	Fish tissue PCB concentrations <0.025 ppm Stream bottom sediment PCB concentrations <0.187 ppm	100% reduction in PCB loading. 79% reduction in stream bottom sediment concentrations.	Loading reductions allocated to Big Springs Trout Hatchery. Allocation alternatives to address PCB load in bottom sediments are currently under investigation.	“

Waterbody Name*	TMDL Parameter/ Pollutant	Water Quality Goal/Endpoint	TMDL	WLA/ LA	Supporting Documentation (not an exhaustive list of supporting documents)
Beaver Creek* (MT41S004-030)	Nutrients	Justification for no need of a nutrient TMDL. Narrative criteria for nutrients (nitrogen and phosphorus) currently met.			“
	Suspended Solids	Justification for no need of suspended solids TMDL. Narrative criteria for sediment currently met.			“
	Siltation	Justification for no need of suspended solids TMDL. Narrative criteria for sediment currently met.			“
Casino Creek (MT41S004_040)*	Nutrients	TN <0.500 mg/l TP <0.035 mg/l Chlorophyll a <100 mg/m ² summer mean and <150 mg/m ² summer max	Not completed. Insufficient data.	Not completed. Insufficient data.	“
	Suspended Solids	This pollutant was removed from Montana’s 303(d) list as a probable cause of impairment in 2002. No TMDL necessary.			“
Upper Cottonwood Creek (MT41S004_051)*	Nutrients	This pollutant was removed from Montana’s 303(d) list as a probable cause of impairment in 2002. No TMDL necessary.			“
	Suspended Solids	This pollutant was removed from Montana’s 303(d) list as a probable cause of impairment in 2002. No TMDL necessary.			“
	Dissolved Oxygen	This pollutant was removed from Montana’s 303(d) list as a probable cause of impairment in 2002. No TMDL necessary.			“
Lower Cottonwood Creek (MT41S004_052)*	Nutrients	<30% streambed coverage of filamentous algae Chlorophyll a <100 mg/m ² summer mean and <150 mg/m ² summer max	Not completed. Insufficient data.	Not completed. Insufficient data.	“
	Suspended Solids	Justification for no need of suspended solids TMDL. Narrative criteria for sediment currently met.			“
	Siltation	Justification for no need of suspended solids TMDL. Narrative criteria for sediment currently met.			“
	Dissolved Oxygen	> 4mg/l	Not completed. Insufficient data.	Not completed. Insufficient data.	“

* An asterisk indicates the water body has been included on the State's Section 303(d) list of water bodies in need of TMDLs.

**Water body was not previously listed for this pollutant. This pollutant was added as a cause of impairment on Montana’s 2004 303(d) list.