



APPENDIX 3

303(d) Reports

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010 **Assessment Record:** MT76O001_010 **Status:** Not Started

ASSESSMENT UNIT INFORMATION

Reporting Cycle: 2010
Assessment Unit: MT76O001_010
Name: Flathead River
Location Description: FLATHEAD RIVER, headwaters to Flathead Lake
Water Type: RIVER **Size (Miles/Acres):** 53.71 MILES
Use Class: B-1
Hydrologic Unit Code: 17010208
Basin: Columbia
Watershed: Flathead
County: FLATHEAD CO
Ecoregion: Canadian Rockies, Northern Rockies
TMDL Planning Area: Flathead - Stillwater
HUC Name: Flathead Lake
LAT/LONG: End of AU, Start of AU

MONITORING INFORMATION

Date Assessed: 08/30/2006
Assessed By: Cook, Adam
Next Scheduled Monitoring Date:

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76O001_010

Status: Not Started

CITATIONS

Citation	Location	Biological Data	Habitat Data	Chemistry Data
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Comments:

DATA MATRIX

Biological Data

Comments:

DATA MATRIX

Habitat Data

Comments:

DATA MATRIX

Chemistry Data

Comments:

SUMMARY

Listing History 2006

This waterbody has an assessment unit ID but lacks data and information to make a beneficial use support determination.

Listing History 2008

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76O001_010

Status: Not Started

Listing History 2010

Listing History 2012

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76O001_010

Status: Not Started

Overall Condition of Segment

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76O001_010

Status: Not Started

USE SUPPORT DECISION

Use Class	B-1	Biology Score		Habitat Score		Chemistry Score		Total Score	0
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Trophic Status:

Trophic Trend:

Uses	SCD	Method, Data, and Information Used	Assessment Type and Confidence	Use Support	Partial Flag	Use Support	Threatened	Test Used
Aquatic Life				Not Assessed	No		No	
Cold Water Fishery				Not Assessed	No		No	
Agricultural				Not Assessed	No		No	NA
Industrial				Not Assessed	No		No	NA
Drinking Water				Not Assessed	No		No	NA
Primary Contact Recreation				Not Assessed	No		No	NA

ADB- Method Number and Description

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76O001_010

Status: Not Started

IMPAIRMENT INFORMATION

Uses	Cause (Confidence): Source(Confirmed)	Observed Effects
Aquatic Life		
Cold Water Fishery		
Agricultural		
Industrial		
Drinking Water		
Primary Contact Recreation		
ADB- Cause Number and Description	ADB- Source Number and Description	ADB- Observed Effect Number and Description

DELISTINGS

Cause	Delisting Reason	Delisting Date	Comments

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76O001_010

Status: Not Started

CATEGORY INFORMATION

Previous Cycle

Cycle	2008
Category	3 - Waters for which there is insufficient data to assess the use support of any applicable beneficial use, so no use support determinations have been made.
User Defined Category	N/A

Current Cycle

Cycle	2010
Category	3 - Waters for which there is insufficient data to assess the use support of any applicable beneficial use, so no use support determinations have been made.
User Defined Category	N/A

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010 **Assessment Record:** MT76J001_010 **Status:** Not Started

ASSESSMENT UNIT INFORMATION

Reporting Cycle: 2010
Assessment Unit: MT76J001_010
Name: South Fork Flathead River
Location Description: SOUTH FORK FLATHEAD RIVER, Hungry Horse Dam to mouth
Water Type: RIVER **Size (Miles/Acres):** 5.31 MILES
Use Class: B-1
Hydrologic Unit Code: 17010209
Basin: Columbia
Watershed: Flathead
County: FLATHEAD CO
Ecoregion: Canadian Rockies
TMDL Planning Area: Flathead Headwaters
HUC Name: South Fork Flathead
LAT/LONG: End of AU, Start of AU

MONITORING INFORMATION

Date Assessed: 08/29/2006
Assessed By: Cook, Adam
Next Scheduled Monitoring Date:

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76J001_010

Status: Not Started

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76J001_010

Status: Not Started

CITATIONS

Citation	Location	Biological Data	Habitat Data	Chemistry Data
Hanzel, Delano A. (1967), Northwest Montana Fishery Study: Survey of Cutthroat Trout and Dolly Varden in the Flathead River and Tributaries Above Flathead Lake: July 1, 1965 to June 30, 1966, F-7-R-15 Job # III	DEQ Metcalf Stacks			common ions, pH, conductivity, miscellaneous; quantitative physical data
Domrose, Robert J. (1974), Northwest Montana Fisheries Study: Fish Management Surveys, F-7-R-19 through F-7-R-23 Job # I-b	DEQ Metcalf Stacks	fish		common ions, pH, conductivity, miscellaneous; quantitative physical data
Perry, Sue ; Graham, Patrick J. (1981), The Impact of Hungry Horse Dam on the Aquatic Invertebrates of the Flathead River	DEQ Metcalf Stacks	macroinvertebrates		common ions, pH, conductivity, miscellaneous; major nutrients; metals; quantitative physical data
Fraley, John J. ; Graham, Patrick J. (1982), The Impacts of Hungry Horse Dam on the Fishery of the Flathead River- Final Report	DEQ Metcalf Stacks	fish		quantitative physical data
Perry, Sue ; Graham, Patrick J. (1982), Impacts of Hungry Horse Dam on the Invertebrates in the Flathead River- Final Report	DEQ Metcalf Stacks	fish; macroinvertebrates	riparian &/or instream surveys & physical features	common ions, pH, conductivity, miscellaneous
Fraley, John J. ; McMullin, Steve L. ; Graham, Patrick J. (1986), Effects of Hydroelectric Operations on the Kokanee Population in the Flathead River System, Montana	DEQ Metcalf Stacks	fish	riparian &/or instream surveys & physical features	quantitative physical data
Zubik, Raymond J. ; Fraley, John J. (1987), Determination of Fishery Losses in the Flathead System Resulting from the Construction of Hungry Horse Dam	DEQ Metcalf Stacks	fish	riparian &/or instream surveys & physical features	common ions, pH, conductivity, miscellaneous; quantitative physical data

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76J001_010

Status: Not Started

Citation	Location	Biological Data	Habitat Data	Chemistry Data
Montana Department of Fish, Wildlife, and Parks (1991), Dewatered Streams List, 1991	DEQ Metcalf Stacks		riparian &/or instream surveys & physical features	common ions, pH, conductivity, miscellaneous; quantitative physical data
Hauer, F. Richard ; Gangemi, John T. ; Stanford, Jack A. (1994), Long-Term Influence of Hungry Horse Dam Operation on the Ecology of Macrozoobenthos of the Flathead River, Open File Report 133-94	DEQ Metcalf Stacks	fish; macroinvertebrates	riparian &/or instream surveys & physical features	quantitative physical data
Marotz, Brian ; Althen, Craig ; Gustafson, Daniel (1994), Hungry Horse Mitigation: Aquatic Modeling of the Selective Withdrawal System - Hungry Horse Dam, Montana	DEQ Metcalf Stacks			quantitative physical data
Stanford, Jack A. ; Ellis, Bonnie K. ; Craft, James A. ; Poole, Geoffrey C. (1997), Water Quality Data and Analyses to Aid in the Development of Revised Water Quality Targets for Flathead Lake, Montana : Phase 1 of a Cooperative Study to Determine Total Maximum Daily Loads of Nitrogen and Phosphorus	DEQ Metcalf Stacks	algae; chlorophyll	riparian &/or instream surveys & physical features	common ions, pH, conductivity, miscellaneous; major nutrients; quantitative physical data
Deleray, Mark ; Knotek, Ladd ; Rumsey, Scott ; Weaver, Thomas M. (1999), Flathead Lake and River System Fisheries Status Report, F-78-R-1 through F-78-R-5, Element 1, Project 1 & 2	DEQ Metcalf Stacks	fish	riparian &/or instream surveys & physical features	metals; quantitative physical data
Montana Department of Fish, Wildlife, and Parks (2002), Montana Rivers Information System (MRIS): Montana Fisheries Information System (MFISH) - http://maps2.nris.mt.gov/scripts/esrimap.dll?name=M FISH&Cmd=INST	Assessment Record	algae; fish; macroinvertebrates; wildlife	Land use; photo points; riparian &/or instream surveys & physical features	benthic sediment data; common ions, pH, conductivity, miscellaneous; quantitative physical data

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010 **Assessment Record:** MT76J001_010 **Status:** Not Started

Citation	Location	Biological Data	Habitat Data	Chemistry Data
Montana State Library Natural Resouce Information System ; Montana State University (2006), Montana View at http://montanaview.org/	DEQ Metcalf Multimedia Case	chlorophyll; fecal coliforms; macroinvertebrates; other bacteriological data	photo points; riparian &/or instream surveys & physical features	benthic sediment data; bioaccumulation; common ions, pH, conductivity, miscellaneous; imagery data; major nutrients; metals; organics; quantitative physical data

Comments: Good data. Fishery surveys are detailed.

DATA MATRIX
Biological Data

Comments:

DATA MATRIX
Habitat Data

Comments:

DATA MATRIX
Chemistry Data

Comments:

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76J001_010

Status: Not Started

DATA EVALUATION

Data Evaluation - Drinking Water

SCD: No

Comments Insufficient metals data to assess.

Score/Information	Category	Description
Insufficient Data	Technical Components	Probable impairments to drinking water were not measured.

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76J001_010

Status: Not Started

DATA EVALUATION

Data Evaluation - Recreation

SCD: Yes

Comments Reach is listed as chronically dewatered for 5.3 miles, one measure of excessive fecal coliform af 252 colonies/100mL.

Score/Information	Category	Description
Sufficient Credible Data	Technical Components	Observations of algae blooms, odors, turbidity, aesthetics, etc., were well documented. Probable sources of impairment identified; probable causes of impairment measured or well documented (toxins, dewatering, etc). Fecal coliform data collected.
	Spatial/Temporal Coverage	Limited water quality data or documentation; however, data indicates severe impairment.
	Data Quality	Data precision & sensitivity moderate. QA/QC protocols were followed.
	Data Currency	It is likely that the data reflects current conditions.

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010 **Assessment Record:** MT76J001_010 **Status:** Not Started

DATA EVALUATION

Data Evaluation - Aquatic Life & Fisheries (Streams) Chemistry Criteria

SCD: No **Chemistry Score:** 2

Comments Good chemistry data. Sufficient number of parameters are measured. The data is older. Score is a high 2.

Score/Information	Category	Description
2	Technical Components	Usually grab or composite water quality samples. Sediment contamination data (e.g., metal scans).
	Spatial/Temporal Coverage	Short period of record, however good spatial coverage.
3	Data Quality	Data has moderate precision and sensitivity. Qualified professional provides training; the individual collecting the samples is well trained.
	Data Currency	Data is older than ideal, but there are no indications that the condition it reflects have changed significantly.

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76J001_010

Status: Not Started

SUMMARY

Listing History 2006

This use attainment record has not been updated. Please refer to the TMDL document (<http://www.deq.mt.gov/wqinfo/TMDL/finalReports.asp>) for more recent information and status of this waterbody segment.

Listing History 2008

Listing History 2010

Listing History 2012

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76J001_010

Status: Not Started

Overall Condition of Segment

Aquatic Life/Cold Water Fishery: The lack of habitat data impedes the assessment of this reach. Reach will be assessed at the next available opportunity. Overall score was a 5. Primary Contact (recreation): Reach is listed as chronically dewatered for 5.3 miles, one measure of excessive fecal coliform at 252 colonies/100mL.

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76J001_010

Status: Not Started

USE SUPPORT DECISION

Use Class	B-1	Biology Score	3	Habitat Score	0	Chemistry Score	2	Total Score	5
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Trophic Status:

Trophic Trend:

Uses	SCD	Method, Data, and Information Used	Assessment Type and Confidence	Use Support	Partial Flag	Use Support	Threatened	Test Used
Aquatic Life	No			Not Assessed	No		No	
Cold Water Fishery	No			Not Assessed	No		No	
Agricultural	Yes		PHYSICAL/CHEMICAL-FAIR	Fully Supporting	No		No	NA
Industrial	Yes		PHYSICAL/CHEMICAL-FAIR	Fully Supporting	No		No	NA
Drinking Water	No			Not Assessed	No		No	NA
Primary Contact Recreation	Yes		PHYSICAL/CHEMICAL-FAIR	Not Supporting	Yes		No	NA

ADB- Method Number and Description

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76J001_010

Status: Not Started

IMPAIRMENT INFORMATION

Uses	Cause (Confidence): Source(Confirmed)	Observed Effects
Aquatic Life		
Cold Water Fishery		
Agricultural		
Industrial		
Drinking Water		
Primary Contact Recreation	319 ():	
ADB- Cause Number and Description	ADB- Source Number and Description	ADB- Observed Effect Number and Description
319-Other flow regime alterations		

DELISTINGS

Cause	Delisting Reason	Delisting Date	Comments

Montana DEQ - Water Quality Standards Attainment Record

Reporting Cycle: 2010

Assessment Record: MT76J001_010

Status: Not Started

CATEGORY INFORMATION

Previous Cycle

Cycle 2008
Category 4C - Identified threats or impairments result from pollution categories such as dewatering or habitat modification and, thus, the calculation of a Total Maximum Daily Load (TMDL) is not required
User Defined Category N/A

Current Cycle

Cycle 2010
Category 4C - Identified threats or impairments result from pollution categories such as dewatering or habitat modification and, thus, the calculation of a Total Maximum Daily Load (TMDL) is not required
User Defined Category N/A