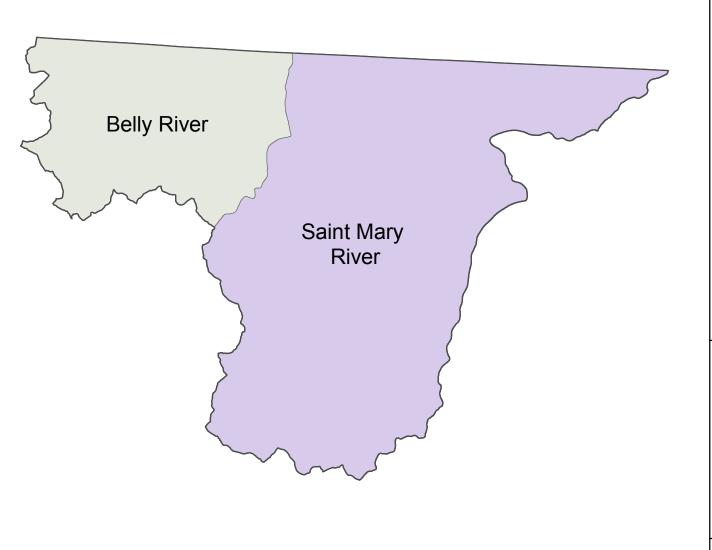
Appendix A Index for Impaired Waters Sub-Basin Reports

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	10020001	Red Rock	Missouri	10060006	Big Muddy
	10020002	Beaverhead		10060007	Brush Lake
oni	10020003	Ruby		10070001	Yellowstone Headwaters
Upper Missouri	10020004	Big Hole	ne	10070002	Upper Yellowstone
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	10040100	Upper Musselshell	ت ا	10100004	O'Fallon
Musselshell	10040201	Middle Musselshell		101100003	Upper Little Missouri
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ISS	10040203	Box Elder	<u> iss</u>	10110202	Middle Little Missouri
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	10050004		Kootenai	17010103	Lower Kootenai
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	10050006	Sage		17010105	Moyie
	10050007	Lodge	Upper	17010201	Upper Clark Fork
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	10050011	Whitewater		17010206	North Fork Flathead
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	10050013	Frenchman	Flathead	17010208	Flathead Lake
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	10050016	Porcupine		17010211	Swan
Lower	10060001	Prairie Elk-Wolf	Lower	17010204	Middle Clark Fork
Missouri	10060002	Red Water	Clark Fork	17010212	Lower Flathead
	10060003	Poplar	I OIK	17010213	Lower Clark Fork A - 1 of 196



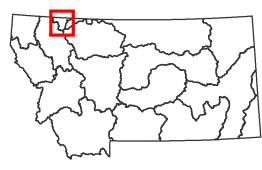
St Mary Sub-Major Basin

Missouri River Basin

USGS HUC

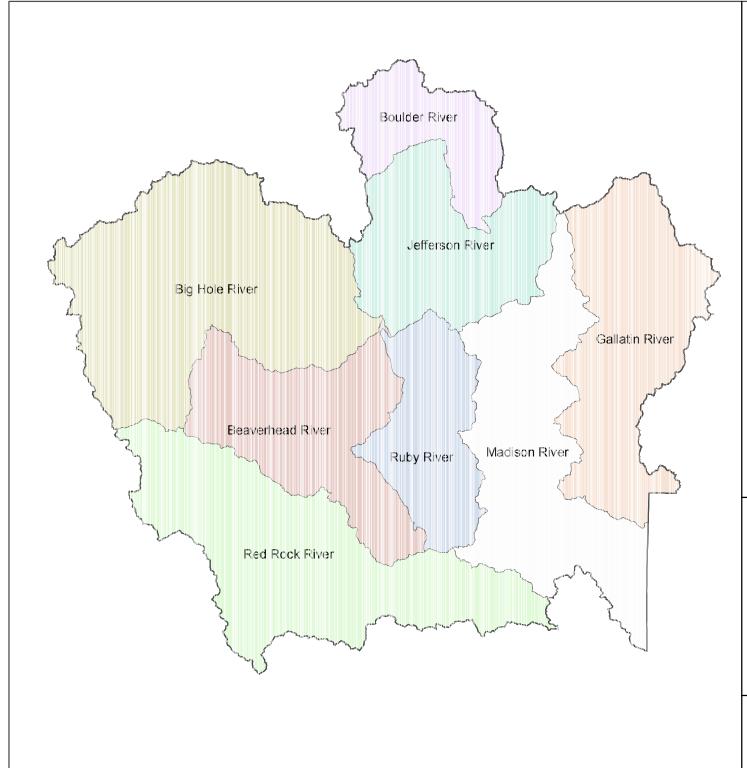
HUC NAME

10010001 10010002 Belly River Saint Mary River



Montana Department of Environmental Quality
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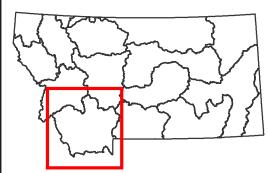
Appendix A: In	npaired Wate	rs													
HUC 10010002	St. Mary	Wa	atershed	St.	Mary										
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Cut Bank - Two Medicine	MT40T002_010	DIVIDE CREEK, headwaters to the mouth (Saint Mary River)	4C	10.1	MILES	A-1	P	Р		F	F	Х	Х	Alterations in wetland habitats Other anthropogenic substrate alterations	Channelization Highways, Roads, Bridges, Infrasturcture (New Construction) Site Clearance (Land Development or Redevelopment)



Upper Missouri Sub-Major Basin

Missouri River Basin

HUC NAME
Red Rock River
Beaverhead River
Ruby River
Big Hole River
Jefferson River
Boulder River
Madison River
Gallatin River



Montana Department of Environmental Quality

Upper Missouri Tribs. **HUC** 10020001 Red Rock Watershed **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Lower Red Rock MT41A001 010 RED ROCK RIVER, Lima Dam to 5 48.6 MILES B-1 Ν F Ν Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Clark Canyon Reservoir vegetative covers Impacts from Abandoned Mine Lands (Inactive) Impacts from Hydrostructure Flow Low flow alterations Regulation/modification Physical substrate habitat alterations Irrigated Crop Production Sedimentation/Siltation Loss of Riparian Habitat Temperature, water Zinc RED ROCK RIVER, Lower Red F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Upper Red Rock MT41A001 020 30.5 MILES B-1 Rock Lake to Lima Dam vegetative covers Phosphorus (Total) Sedimentation/Siltation Temperature, water Total Kjehldahl Nitrogen (TKN) Other flow regime alterations Drought-related Impacts Lower Red Rock MT41A002_010 CLARK CANYON RESERVOIR 4C 4888 ACRES B-1 Р F F F Irrigated Crop Production Lower Red Rock MT41A003 010 MEDICINE LODGE CREEK. 5 F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones 32.2 MILES B-1 N N headwaters to mouth (Horse Prairie vegetative covers Irrigated Crop Production Creek) Low flow alterations Phosphorus (Total) Sedimentation/Siltation Temperature, water Lower Red Rock MT41A003_020 MUDDY CREEK, headwaters to 9.3 MILES B-1 Ρ Ρ F F Turbidity Agriculture mouth (Sheep Creek-Red Rock Streambank Modifications/destablization River) T13S R10W MT41A003_090 Lower Red Rock HORSE PRAIRIE CREEK, MILES B-1 N N F Ν Arsenic Impacts from Abandoned Mine Lands 41 4 headwaters to mouth (Clark Canyon (Inactive) Cadmium Res) Irrigated Crop Production Copper Lead Low flow alterations Mercury Lower Red Rock BLOODY DICK CREEK, headwaters 5 MILES B-1 Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones MT41A003 100 32.3 to mouth (Horse Prairie Creek) vegetative covers Phosphorus (Total) Total Kiehldahl Nitrogen (TKN) F SHEEP CREEK, Muddy Creek to Ρ F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Lower Red Rock MT41A003_150 9.8 MILES B-1 mouth (Red Rock River) vegetative covers Irrigated Crop Production Excess Algal Growth Other Recreational Pollution Sources Low flow alterations Nonnative Fish, Shellfish, or Zooplankton Sedimentation/Siltation

HUC 10020001 Red Rock Watershed Upper Missouri Tribs.

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Upper Red Rock	MT41A004_010	PRICE CREEK, headwaters to the mouth (Red Rock River)	5	8.6	MILES	B-1	N	N		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Other flow regime alterations Sedimentation/Siltation	Flow Alterations from Water Diversions Grazing in Riparian or Shoreline Zones
Upper Red Rock	MT41A004_030	FISH CREEK, headwaters to mouth (Metzel Creek)	5	6.9	MILES	B-1	Р	Р		F	F	F	P	Alteration in stream-side or littoral vegetative covers Chlorophyll-a Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Unspecified Unpaved Road or Trail
Upper Red Rock	MT41A004_040	CORRAL CREEK, headwaters to mouth (Red Rock Creek)	5	4.4	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Unspecified Unpaved Road or Trail
Upper Red Rock	MT41A004_050	EAST FORK CLOVER CREEK, headwaters to mouth (Clover Creek	5	5.5	MILES	B-1	Р	Р		F	F	F	P	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones
Upper Red Rock	MT41A004_060	HELL ROARING CREEK, headwaters to mouth (Red Rock River)	4C	9	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers	Grazing in Riparian or Shoreline Zones
Upper Red Rock	MT41A004_070	LONG CREEK, headwaters to mouth (Red Rock River)	5	19.5	MILES	B-1	N	N		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Other flow regime alterations Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Irrigated Crop Production Unspecified Unpaved Road or Trail
Upper Red Rock	MT41A004_080	O'DELL CREEK, headwaters to mouth (Lower Red Rock Lake)	5	14.3	MILES	B-1	N	N		F	F	F	P	Alteration in stream-side or littoral vegetative covers Turbidity	Agriculture Grazing in Riparian or Shoreline Zones Loss of Riparian Habitat
Upper Red Rock	MT41A004_090	PEET CREEK, headwaters to mouth (Red Rock River)	n 5	8.4	MILES	B-1	Р	Р		F	F	F	P	Alteration in stream-side or littoral vegetative covers Other flow regime alterations Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Animal Feeding Operations (NPS) Grazing in Riparian or Shoreline Zones Irrigated Crop Production
Upper Red Rock	MT41A004_100	TOM CREEK, headwaters to the mouth (Upper Red Rock Lake)	5	6.7	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Low flow alterations Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Irrigated Crop Production
Upper Red Rock	MT41A004_110	RED ROCK CREEK, headwaters to the mouth (Upper Red Rock Lake)	5	13.7	MILES	B-1	Р	Р		Х	Х	Х	Х	Alteration in stream-side or littoral vegetative covers Turbidity	Agriculture Grazing in Riparian or Shoreline Zones Loss of Riparian Habitat

Appendix A: Impaired Waters HUC 10020001 Red Rock Watershed Upper Missouri Tribs. **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Upper Red Rock MT41A004 130 JONES CREEK, headwaters to 5 7.1 MILES B-1 N N F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Winslow Creek vegetative covers Irrigated Crop Production Excess Algal Growth Other flow regime alterations Phosphorus (Total) Sedimentation/Siltation MT41A004_140 F F Alteration in stream-side or littoral Channelization Upper Red Rock BEAN CREEK, headwaters to the 5 5.7 MILES B-1 N N Mouth (Red Rock River) T4S R3E vegetative covers Flow Alterations from Water Diversions Low flow alterations Grazing in Riparian or Shoreline Zones Sedimentation/Siltation Upper Red Rock MT41A005_020 LOWER RED ROCK LAKE 1126 ACRES B-1 N N X X Other flow regime alterations Agriculture Grazing in Riparian or Shoreline Zones Sedimentation/Siltation

X X

Other flow regime alterations

Sedimentation/Siltation

2206.1 ACRES B-1 N N

MT41A005_030

Upper Red Rock

UPPER RED ROCK LAKE

Low Water Crossing Rangeland Grazing Upstream Source

Rangeland Grazing Upstream Source

Grazing in Riparian or Shoreline Zones

Agriculture

HUC 10020002 Beaverhead Watershed Upper Missouri Tribs. **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Beaverhead MT41B001 010 BEAVERHEAD RIVER, Clark 5 11.8 MILES B-1 Ν F Ν Alteration in stream-side or littoral Agriculture Canyon Dam to Grasshopper Creek vegetative covers Dam or Impoundment Impacts from Abandoned Mine Lands Low flow alterations (Inactive) Irrigated Crop Production BEAVERHEAD RIVER, Beaverhead MT41B001_020 5 62.7 MILES B-1 N N F F Alteration in stream-side or littoral Agriculture Grasshopper Creek to mouth vegetative covers Grazing in Riparian or Shoreline Zones (Jefferson River) Low flow alterations Irrigated Crop Production Physical substrate habitat alterations Loss of Riparian Habitat Sedimentation/Siltation Site Clearance (Land Development or Temperature, water Redevelopment) Beaverhead MT41B002 010 GRASSHOPPER CREEK, 47.7 MILES B-1 Р F F Alteration in stream-side or littoral Agriculture headwaters to the mouth vegetative covers Grazing in Riparian or Shoreline Zones (Beaverhead River) Cadmium Irrigated Crop Production Copper Mine Tailings Low flow alterations Streambank Modifications/destablization Beaverhead MT41B002 020 FARLIN CREEK, headwaters to 5 6 MILES B-1 Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones mouth (Grasshopper Creek) T6S vegetative covers R12W Sedimentation/Siltation MT41B002_030 BLACKTAIL DEER CREEK, F F Alteration in stream-side or littoral Channelization Beaverhead 5 39.9 MILES B-1 N N headwaters to mouth (Beaverhead vegetative covers Flow Alterations from Water Diversions River) Low flow alterations Grazing in Riparian or Shoreline Zones Sedimentation/Siltation Highway/Road/Bridge Runoff (Nonconstruction Related) Temperature, water Irrigated Crop Production Livestock (Grazing or Feeding Operations) MT41B002_040 Beaverhead EAST FORK BLACKTAIL DEER 4C 17.1 MILES B-1 Ρ F F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones CREEK, headwaters to mouth vegetative covers (Blacktail Deer Creek) MT41B002 060 WEST FORK BLACKTAIL DEER MILES Ρ Alteration in stream-side or littoral Forest Roads (Road Construction and Use) Beaverhead 5 15.9 B-1 F Ν CREEK, headwaters to mouth vegetative covers Grazing in Riparian or Shoreline Zones (Blacktail Deer Creek-Beaverhead Arsenic Mine Tailings River) Chlorophyll-a Sedimentation/Siltation Beaverhead MT41B002_070 WEST FORK DYCE CREEK, MILES B-1 Р F F Alteration in stream-side or littoral Forest Roads (Road Construction and Use) vegetative covers headwaters to mouth (Dyce Creek) Grazing in Riparian or Shoreline Zones Manganese Impacts from Abandoned Mine Lands Sedimentation/Siltation (Inactive) Total Kjehldahl Nitrogen (TKN) Placer Mining Silviculture Harvesting

HUC 10020002	Beaverhead	Wa	atershed	Up _l	per Mis	souri ⁻	Tribs	S.							
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Beaverhead	MT41B002_080	SPRING CREEK, headwaters to mouth (Beaverhead River)	5	14.8	MILES	B-1	Р	Р		Р	F	N	P	Alteration in stream-side or littoral vegetative covers Arsenic Chlorophyll-a Low flow alterations	Agriculture Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production
														Nitrogen (Total) Sedimentation/Siltation	
Beaverhead	MT41B002_090	RATTLESNAKE CREEK, from the Dillon PWS off-channel well located in T7S R10W S11 to the mouth at the Beaverhead River	5	6.8	MILES	B-1	P	Р		F	F	N	F	Alteration in stream-side or littoral vegetative covers Cadmium Copper Lead Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Irrigated Crop Production Subsurface (Hardrock) Minining
Beaverhead	MT41B002_091	RATTLESNAKE CREEK, headwaters to the Dillon PWS off- channel well located in T7S R10W S11	5	21.3	MILES	A-1	P	P		F	F	N	F	Alteration in stream-side or littoral vegetative covers Cadmium Copper Lead Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Irrigated Crop Production Subsurface (Hardrock) Minining
Beaverhead	MT41B002_100	FRENCH CREEK, headwaters to mouth (Rattlesnake Creek)	5	6.5	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Forest Roads (Road Construction and Use Grazing in Riparian or Shoreline Zones
Beaverhead	MT41B002_110	CLARK CANYON CREEK, headwaters to the mouth (Beaverhead River) T9S R10W	5	8	MILES	B-1	P	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones
Beaverhead	MT41B002_120	RESERVOIR CREEK, headwaters to mouth (Grasshopper Creek)	5	12.3	MILES	B-1	P	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones
Beaverhead	MT41B002_131	STONE CREEK, below confluence with unnamed creek in NE, S34, T6S, R7W near Beaverhead/Madison county line	5	7.3	MILES	B-1	P	Р		Р	F	N	P	Alteration in stream-side or littoral vegetative covers Arsenic Chlorophyll-a	Agriculture Crop Production (Crop Land or Dry Land) Surface Mining Unspecified Unpaved Road or Trail

Nitrate/Nitrite (Nitrite + Nitrate as N)

Phosphorus (Total) Sedimentation/Siltation

Upper Missouri Tribs. **HUC** 10020002 Beaverhead Watershed **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Beaverhead MT41B002 132 STONE CREEK, above confluence 5 MILES B-1 Р F F Ν Alteration in stream-side or littoral Agriculture with unnamed creek in NE, S34, vegetative covers Grazing in Riparian or Shoreline Zones T6S, R7W Low flow alterations Highway/Road/Bridge Runoff (Non-Nitrates construction Related) Sedimentation/Siltation Highways, Roads, Bridges, Infrasturcture (New Construction) Turbidity Irrigated Crop Production Grazing in Riparian or Shoreline Zones Beaverhead MT41B002 140 DYCE CREEK, confluence of East 4.1 MILES B-1 Р F F Alteration in stream-side or littoral and West Forks to Grasshopper vegetative covers Irrigated Crop Production Creek Low flow alterations Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN) MT41B002_160 STEEL CREEK, headwaters to MILES B-1 N N Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Beaverhead 5 3.7 Ν Ν mouth (Scudder Creek) T6S R12W vegetative covers Subsurface (Hardrock) Minining Arsenic Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation Solids (Suspended/Bedload) TAYLOR CREEK, headwaters to MT41B002_170 MILES B-1 Ρ F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Beaverhead 11.5 mouth (Grasshopper Creek) vegetative covers Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN) SCUDDER CREEK, headwaters to MT41B002_180 MILES B-1 Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Beaverhead 5 4.7 the mouth (Grasshopper Creek) T6S vegetative covers R12W SEC 15,16 Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)

HUC10020003RubyWatershedUpper Missouri Tribs.

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Ruby	MT41C001_010	RUBY RIVER, Ruby Dam to the mouth (Beaverhead River)	5	47.9	MILES	B-1	Р	Р		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Low flow alterations Phosphorus (Total) Sedimentation/Siltation Temperature, water	Flow Alterations from Water Diversions Grazing in Riparian or Shoreline Zones Irrigated Crop Production
Ruby	MT41C001_020	RUBY RIVER, the East, West, and Middle Forks to Ruby Reservoir	5	37.9	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Unspecified Unpaved Road or Trail
Ruby	MT41C002_010	WISCONSIN CREEK, headwaters to mouth (Ruby River)	5	13.8	MILES	B-1	P	P		F	F	F	P	Alteration in stream-side or littoral vegetative covers Arsenic Copper Lead Low flow alterations Mercury Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Irrigated Crop Production Mine Tailings Unspecified Unpaved Road or Trail
Ruby	MT41C002_020	MILL CREEK, headwaters to mouth (Ruby River)	5	19.6	MILES	B-1	Р	P		F	F	F	P	Alteration in stream-side or littoral vegetative covers Low flow alterations Phosphorus (Total) Sedimentation/Siltation Temperature, water Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production Unspecified Unpaved Road or Trail
Ruby	MT41C002_030	INDIAN CREEK, headwaters to mouth (Mill Creek-Ruby River)	4A	11.3	MILES	B-1	Р	Р		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Low flow alterations Sedimentation/Siltation	Channelization Grazing in Riparian or Shoreline Zones Irrigated Crop Production Unspecified Unpaved Road or Trail
Ruby	MT41C002_040	ALDER GULCH, headwaters to mouth (Ruby River)	5	18.8	MILES	B-1	N	N		F	F	F	P	Alteration in stream-side or littoral vegetative covers Chlorophyll-a Lead Manganese Mercury Physical substrate habitat alterations Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Dredge Mining Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Mill Tailings Mine Tailings Placer Mining
Ruby	MT41C002_050	RAMSHORN CREEK, headwaters to mouth (Ruby River)	5	11.8	MILES	B-1	N	N		F	F	F	P	Alteration in stream-side or littoral vegetative covers Lead Low flow alterations Phosphorus (Total) Sedimentation/Siltation	Channelization Grazing in Riparian or Shoreline Zones Irrigated Crop Production Mine Tailings Placer Mining Unspecified Unpaved Road or Trail

HUC 10020003 Ruby Watershed Upper Missouri Tribs.

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Ruby	MT41C002_060	CURRANT CREEK, headwaters to mouth (Ramshorn Creek) T4S, R4W, S35	5	3.7	MILES	B-1	N	N		F	F	F	F	Alteration in stream-side or littoral vegetative covers Copper Lead Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Mine Tailings Unspecified Unpaved Road or Trail
Ruby	MT41C002_090	CALIFORNIA CREEK, headwaters to mouth (Ruby River), T5S R4W	5	10.9	MILES	B-1	Р	P		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Placer Mining
Ruby	MT41C002_100	GARDEN CREEK, headwaters to the mouth (Ruby Reservoir)	5	7.3	MILES	B-1	P	P		F	F	F	F	Alteration in stream-side or littoral vegetative covers Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Unspecified Unpaved Road or Trail
Ruby	MT41C002_110	MORMON CREEK, headwaters to mouth (Upper end of Ruby River Reservoir)	5	7.8	MILES	B-1	P	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones
Ruby	MT41C003_020	COAL CREEK, headwaters to mout (Middle Fork Ruby River)	h 4A	8.3	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones
Ruby	MT41C003_030	COTTONWOOD CREEK, headwaters to mouth (Ruby River)	5	10.4	MILES	B-1	P	Р		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Low flow alterations Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Channelization Irrigated Crop Production Rangeland Grazing Unspecified Unpaved Road or Trail
Ruby	MT41C003_040	EAST FORK RUBY RIVER, headwaters to mouth (Ruby River)	5	8.3	MILES	B-1	P	P		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones
Ruby	MT41C003_050	WARM SPRINGS CREEK, headwaters to mouth (Ruby River)	4A	8.6	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Agriculture Grazing in Riparian or Shoreline Zones Unspecified Unpaved Road or Trail
Ruby	MT41C003_060	SWEETWATER CREEK, headwaters to mouth (Ruby River)	5	23	MILES	B-1	N	N		F	F	F	P	Alteration in stream-side or littoral vegetative covers Chlorophyll-a Low flow alterations Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation Temperature, water	Irrigated Crop Production Rangeland Grazing Unspecified Unpaved Road or Trail

HUC 10020003 Ruby **Watershed** Upper Missouri Tribs.

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Ruby	MT41C003_080	WEST FORK RUBY RIVER, headwaters to mouth (Ruby River)	4A	7.4	MILES	B-1	F	Р		F	F	F	F	Sedimentation/Siltation	Rangeland Grazing
Ruby	MT41C003_090	MIDDLE FORK RUBY RIVER, Divide Creek to mouth (Ruby River)	5	10.5	MILES	B-1	Р	P		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones Unspecified Unpaved Road or Trail
Ruby	MT41C003_110	POISON CREEK, headwaters to mouth (Ruby River) T11S R3W	5	5.3	MILES	B-1	Р	P		F	F	F	F	Alteration in stream-side or littoral vegetative covers Cadmium Lead Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	Natural Sources Placer Mining Rangeland Grazing
Ruby	MT41C003_120	BASIN CREEK, headwaters to mouth (Middle Fork Ruby River) T11S R3W	5	4.5	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones
Ruby	MT41C003_130	BURNT CREEK, headwaters to mouth (Ruby River) T10S R3W	5	5	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones
Ruby	MT41C003_140	HAWKEYE CREEK, headwaters to mouth (Middle Fork Ruby River)	5	3.6	MILES	B-1	Р	Р		F	F	F	F	Phosphorus (Total)	Grazing in Riparian or Shoreline Zones Source Unknown
Ruby	MT41C003_150	SHOVEL CREEK, headwaters to mouth (Cabin Creek-Middle Fork Ruby River)	4A	4	MILES	B-1	F	Р		F	F	F	F	Sedimentation/Siltation	Rangeland Grazing

Appendix A: Impaired Waters Huc 10020004 Big Hole Watershed Upr

HUC 10020004	Big Hole	Wa	itershed	Uppe	er Mis	souri ⁻	Tribs.								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lower Big Hole	MT41D001_010	BIG HOLE RIVER, Divide Creek to the mouth (Jefferson River)	5	51.4	MILES	B-1	N	N		F	F	N	P	Cadmium Copper Lead Low flow alterations Physical substrate habitat alterations Temperature, water Zinc	Acid Mine Drainage Dam Construction (Other than Upstream Flood Control Projects) Grazing in Riparian or Shoreline Zones Habitat Modification - other than Hydromodification Highway/Road/Bridge Runoff (Non- construction Related) Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production Streambank Modifications/destablization
Middle Big Hole	MT41D001_020	BIG HOLE RIVER between Divide Creek and Pintlar Creek	5	43.8	MILES	A-1	N	N		F	F	N	P	Alteration in stream-side or littoral vegetative covers Copper Lead Low flow alterations Physical substrate habitat alterations Temperature, water	Acid Mine Drainage Agriculture Grazing in Riparian or Shoreline Zones Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production Rangeland Grazing
Upper Big Hole	MT41D001_030	BIG HOLE RIVER above Pintlar Creek	5	55.5	MILES	A-1	P	P		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Low flow alterations Temperature, water	Agriculture Highways, Roads, Bridges, Infrasturcture (New Construction) Irrigated Crop Production Loss of Riparian Habitat Rangeland Grazing
Lower Big Hole	MT41D002_010	TRAPPER CREEK, headwaters to mouth (Big Hole River)	5	17.4	MILES	B-1	N	N		F	F	N	P	Alteration in stream-side or littoral vegetative covers Copper Lead Low flow alterations Physical substrate habitat alterations Sedimentation/Siltation Zinc	Acid Mine Drainage Channelization Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive) Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Mine Tailings Unspecified Unpaved Road or Trail

HUC 10020004

Big Hole

Units Use AL CWF WWF AG Ind DW Rec Source Name **TMDL Planning Area** ID305B Waterbody Category Size Cause Name

Upper Missouri Tribs.

Watershed

		Name/Location				Class	s								
Lower Big Hole	MT41D002_020	CAMP CREEK, headwaters to mouth (Big Hole River)	5	14.3	MILES	B-1	P	P	Р	· F	P	N	P	Alteration in stream-side or littoral vegetative covers Arsenic Low flow alterations Phosphorus (Total) Sedimentation/Siltation Solids (Suspended/Bedload)	Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production Unspecified Unpaved Road or Trail
Lower Big Hole	MT41D002_030	CANYON CREEK, headwaters to mouth (Big Hole River)	4C	17.8	MILES	B-1	Х	Χ	Х	F	F	Х	Р	Low flow alterations	Agriculture Irrigated Crop Production
Lower Big Hole	MT41D002_040	DIVIDE CREEK, headwaters to mouth (Big Hole River)	5	12.2	MILES	B-1	P	Р	F	F	F	F	P	Alteration in stream-side or littoral vegetative covers Low flow alterations Phosphorus (Total) Sedimentation/Siltation Temperature, water Total Kjehldahl Nitrogen (TKN)	Agriculture Flow Alterations from Water Diversions
Lower Big Hole	MT41D002_050	MOOSE CREEK, headwaters to mouth (Big Hole River at Maiden Rock)	4C	12.3	MILES	B-1	Х	Х	Х	F	F	X	Р	Low flow alterations	Irrigated Crop Production
Lower Big Hole	MT41D002_060	GROSE CREEK, headwaters to mouth (Big Hole River)	5	3.4	MILES	B-1	P	Р	F	F	F	F	Р	Alteration in stream-side or littoral vegetative covers Other flow regime alterations Phosphorus (Total) Sedimentation/Siltation	Agriculture Crop Production (Crop Land or Dry Land) Unspecified Unpaved Road or Trail
Lower Big Hole	MT41D002_070	SASSMAN GULCH, headwaters to mouth (Big Hole River)	5	6.5	MILES	B-1	N	N	F	F	F	F	F	Arsenic	Impacts from Abandoned Mine Lands (Inactive)
Lower Big Hole	MT41D002_090	BIRCH CREEK, headwaters to the National Forest Boundary	5	12.8	MILES	B-1	Р	Р	F	F	F	F	F	Alteration in stream-side or littoral vegetative covers Low flow alterations Physical substrate habitat alterations Sedimentation/Siltation	Agriculture Grazing in Riparian or Shoreline Zones Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Streambank Modifications/destablization
Lower Big Hole	MT41D002_100	BIRCH CREEK, National Forest Boundary to mouth (Big Hole River)	4C	10.4	MILES	B-1	N	N	F	F	F	F	N	Alteration in stream-side or littoral vegetative covers Low flow alterations Other anthropogenic substrate alterations Physical substrate habitat alterations	Channelization Dam or Impoundment Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production
Lower Big Hole	MT41D002_110	WILLOW CREEK, headwaters to mouth (Big Hole River) T4S R9W	4C	21	MILES	B-1	X	Х	Х		Х	Х	Р	Low flow alterations	Agriculture Irrigated Crop Production

Appendix A: Impaired Waters HUC 10020004 Big Hole Watershed Upper Missouri Tribs.

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lower Big Hole	MT41D002_120	WICKIUP CREEK, headwaters to mouth (Camp Creek) T1S R8W	5	4.1	MILES	B-1	N	N		F	F	N	F	Alteration in stream-side or littoral vegetative covers Bottom Deposits Copper Lead Mercury Phosphorus (Total)	Forest Roads (Road Construction and Use Grazing in Riparian or Shoreline Zones Subsurface (Hardrock) Minining
Lower Big Hole	MT41D002_140	SOAP CREEK, headwaters to mout (Big Hole River) T1S R9W S 23	n 5	8.3	MILES	B-1	Р	P		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Irrigated Crop Production Unspecified Unpaved Road or Trail
Middle Big Hole	MT41D002_150	CHARCOAL CREEK, headwaters to mouth (Big Hole River)	5	3.8	MILES	A-1	Р	Р		F	F	F	F	Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Unspecified Unpaved Road or Trail
Lower Big Hole	MT41D002_160	ROCHESTER CREEK, headwaters to mouth (Big Hole River) T3S R7W		15.7	MILES	B-1	P	P		F	F	N	F	Arsenic Copper Lead Mercury Physical substrate habitat alterations Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Subsurface (Hardrock) Minining
ower Big Hole	MT41D002_180	LOST CREEK, headwaters to mouth (located in the Lower Big Hole Watershed) T4S R9W SEC 17	n 5	7.8	MILES	B-1	P	P		P	F	N	F	Alteration in stream-side or littoral vegetative covers Arsenic Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	Mine Tailings Rangeland Grazing Unspecified Unpaved Road or Trail
Middle Big Hole	MT41D003_020	JERRY CREEK, headwaters to mouth (Big Hole River)	5	12.3	MILES	A-1	N	N		F	F	N	P	Alteration in stream-side or littoral vegetative covers Copper Excess Algal Growth Lead Low flow alterations Physical substrate habitat alterations	Acid Mine Drainage Agriculture Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production On-site Treatment Systems (Septic System and Similar Decencentralized Systems) Rangeland Grazing Silviculture Activities Site Clearance (Land Development or Redevelopment)
Middle Big Hole	MT41D003_030	DELANO CREEK, headwaters to mouth (Jerry Creek)	5	2.3	MILES	A-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones

HUC 10020004	Big Hole	Wa	itershed	Uppe	r Mis	souri 7	ribs.								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size I	Jnits	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Middle Big Hole	MT41D003_040	DEEP CREEK, headwaters to mouth (Big Hole River)	n 5	7.9	MILES	A-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Low flow alterations Sedimentation/Siltation	Irrigated Crop Production Rangeland Grazing Streambank Modifications/destablization
Middle Big Hole	MT41D003_050	FRENCH CREEK, headwaters to mouth (Deep Creek)	5	9.4	MILES	A-1	X	X		X	F	N	Х	Arsenic	Acid Mine Drainage Atmospheric Depositon - Toxics Contaminated Sediments Impacts from Abandoned Mine Lands (Inactive)
Middle Big Hole	MT41D003_070	CALIFORNIA CREEK, headwaters to mouth (French Creek-Deep Creek)	5	10.9 I	MILES	B-1	N	N		N	P	N	P	Alteration in stream-side or littoral vegetative covers Arsenic Iron Low flow alterations Other anthropogenic substrate alterations Physical substrate habitat alterations Sedimentation/Siltation Turbidity	Agriculture Atmospheric Depositon - Toxics Contaminated Sediments Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Natural Sources Placer Mining Rangeland Grazing Silviculture Activities Unspecified Unpaved Road or Trail
Middle Big Hole	MT41D003_080	OREGON CREEK, headwaters to mouth (California Creek-French Creek-Deep Creek)	5	1.8	MILES	A-1	N	N		N	F	N	F	Alteration in stream-side or littoral vegetative covers Arsenic Copper Lead Other anthropogenic substrate alterations Physical substrate habitat alterations Sedimentation/Siltation	Acid Mine Drainage Agriculture Atmospheric Depositon - Toxics Channelization Dredge Mining Erosion from Derelict Land (Barren Land Forest Roads (Road Construction and U Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive) Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Mine Tailings Natural Sources Silviculture Activities Streambank Modifications/destablization Unspecified Unpaved Road or Trail

HUC 10020004

TMDL Planning Area

Middle Big Hole

Middle Big Hole

Middle Big Hole

Big Hole

ID305B

MT41D003 170

MT41D003_200

MT41D003 210

Waterbody

PINTLAR CREEK, headwaters to

WISE RIVER, headwaters to mouth

PATTENGAIL CREEK, headwaters

to mouth (Wise River)

mouth (Big Hole River)

(Big Hole River)

Name/Location Class Middle Big Hole MT41D003 090 SIXMILE CREEK, headwaters to 5 3.1 MILES A-1 Р F F F Physical substrate habitat alterations Rangeland Grazing mouth (California Creek) Sedimentation/Siltation Silviculture Activities Streambank Modifications/destablization Unspecified Unpaved Road or Trail SEVENMILE CREEK, headwaters to F Alteration in stream-side or littoral Natural Sources Middle Big Hole MT41D003 110 6.3 MILES A-1 F 5 mouth (Deep Creek) vegetative covers Rangeland Grazing Sedimentation/Siltation Streambank Modifications/destablization Middle Big Hole MT41D003_120 TWELVEMILE CREEK, headwaters 8.9 MILES A-1 Р Р F F Sedimentation/Siltation Grazing in Riparian or Shoreline Zones to mouth (Deep Creek) Silviculture Harvesting Middle Big Hole CORRAL CREEK, headwaters to F Alteration in stream-side or littoral Natural Sources MT41D003_130 5 5.1 MILES A-1 Р Р F mouth (Deep Creek) vegetative covers Rangeland Grazing Physical substrate habitat alterations Silviculture Activities Sedimentation/Siltation FISHTRAP CREEK, confluence of F Flow Alterations from Water Diversions Middle Big Hole MT41D003_160 5 5.1 MILES A-1 Ρ F Alteration in stream-side or littoral West & Middle Forks to mouth (Big vegetative covers Grazing in Riparian or Shoreline Zones Hole River) Low flow alterations

AL CWF WWF AG

Ind DW

F

F F

Cause Name

Phosphorus (Total) Sedimentation/Siltation

Low flow alterations

Temperature, water

vegetative covers

vegetative covers

Sedimentation/Siltation

Low flow alterations

Other flow regime alterations

Physical substrate habitat alterations

Alteration in stream-side or littoral

Physical substrate habitat alterations

Alteration in stream-side or littoral

Physical substrate habitat alterations

Source Name

Upper Missouri Tribs.

Use

Units

Watershed

5

4C

5

18

25.7

18.8

MILES A-1

MILES A-1

MILES

Р

Category Size

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

Grazing in Riparian or Shoreline Zones

Grazing in Riparian or Shoreline Zones

Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Loss of Riparian Habitat Rangeland Grazing

Highways, Roads, Bridges, Infrasturcture

Dam Construction (Other than Upstream

Highways, Roads, Bridges, Infrasturcture

Impacts from Abandoned Mine Lands

Impacts from Hydrostructure Flow

Regulation/modification Irrigated Crop Production Loss of Riparian Habitat Natural Sources

(Inactive)

Agriculture

Channelization

(New Construction)

Flood Control Projects)

(New Construction)

HUC 10020004 Big Hole Watershed Upper Missouri Tribs. **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Middle Big Hole MT41D003 220 ELKHORN CREEK, headwaters to 5 7.2 MILES A-1 Ν F F Arsenic Impacts from Abandoned Mine Lands mouth (Jacobson Creek-Wise River) (Inactive) Cadmium Mill Tailings Copper Mine Tailings Lead Sedimentation/Siltation Zinc GOLD CREEK, headwaters to Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Middle Big Hole MT41D003 230 5 4.8 MILES mouth (Wise River) vegetative covers Phosphorus (Total) Sedimentation/Siltation North Fork Big Hole NORTH FORK BIG HOLE RIVER, Р Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones MT41D004 010 5 23.3 MILES Х A-1 Χ headwaters to mouth (Big Hole vegetative covers Highway/Road/Bridge Runoff (Non-River) construction Related) Low flow alterations Sedimentation/Siltation Irrigated Crop Production Loss of Riparian Habitat Silviculture Activities MUSSIGBROD CREEK, headwaters F Alteration in stream-side or littoral Acid Mine Drainage North Fork Big Hole MT41D004 020 12.7 MILES A-1 N N Ν to mouth (North Fork Big Hole River) vegetative covers Agriculture Lead Grazing in Riparian or Shoreline Zones I ow flow alterations Impacts from Abandoned Mine Lands Other anthropogenic substrate alterations (Inactive) Physical substrate habitat alterations Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Loss of Riparian Habitat Natural Sources Rangeland Grazing North Fork Big Hole MT41D004 030 JOHNSON CREEK, headwaters to 13.9 MILES A-1 F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones mouth (North Fork Big Hole River) vegetative covers Irrigated Crop Production Low flow alterations Silviculture Harvesting Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN) F Sedimentation/Siltation North Fork Big Hole SCHULTZ CREEK, headwaters to MILES Р Forest Roads (Road Construction and Use) MT41D004 040 5 3.4 A-1 mouth (Johnson Creek) Grazing in Riparian or Shoreline Zones Silviculture Harvesting TIE CREEK, headwaters to mouth F Rangeland Grazing North Fork Big Hole MT41D004 060 5 15.2 MILES A-1 Р F Nitrogen (Total) (North Fork Big Hole River) Physical substrate habitat alterations Silviculture Activities Sedimentation/Siltation Unspecified Unpaved Road or Trail F Physical substrate habitat alterations Grazing in Riparian or Shoreline Zones North Fork Big Hole MT41D004 070 TRAIL CREEK, headwaters to 5 11.5 MILES A-1 Ν Ν F Joseph Creek Sedimentation/Siltation Impacts from Abandoned Mine Lands (Inactive) Silviculture Activities Streambank Modifications/destablization Unspecified Unpaved Road or Trail

HUC 10020004 Big Hole Watershed Upper Missouri Tribs. **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class North Fork Big Hole MT41D004 080 TRAIL CREEK, Joseph Creek to 5 10.1 MILES A-1 Р F F F Physical substrate habitat alterations Grazing in Riparian or Shoreline Zones mouth (North Fork Big Hole River) Sedimentation/Siltation Impacts from Abandoned Mine Lands (Inactive) Silviculture Activities Streambank Modifications/destablization Unspecified Unpaved Road or Trail Channelization North Fork Big Hole MT41D004 090 JOSEPH CREEK, headwaters to 5 6.8 MILES A-1 Р F Ν Copper mouth (Trail Creek-North Fork Big Highways, Roads, Bridges, Infrasturcture Lead Hole River) (New Construction) Physical substrate habitat alterations Impacts from Abandoned Mine Lands Sedimentation/Siltation (Inactive) Silviculture Harvesting North Fork Big Hole MT41D004_100 RUBY CREEK, headwaters to mouth MILES A-1 Р F F Alteration in stream-side or littoral Dredge Mining 15.75 (North Fork Big Hole River) vegetative covers Forest Roads (Road Construction and Use) Low flow alterations Grazing in Riparian or Shoreline Zones Physical substrate habitat alterations Impacts from Hydrostructure Flow Sedimentation/Siltation Regulation/modification Irrigated Crop Production Loss of Riparian Habitat Rangeland Grazing Silviculture Activities Unspecified Unpaved Road or Trail Upper Big Hole MT41D004 110 SWAMP CREEK, headwaters to 5 15.9 MILES A-1 Р Р F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones mouth (Big Hole River) vegetative covers Irrigated Crop Production Low flow alterations Loss of Riparian Habitat Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation F Alteration in stream-side or littoral Upper Big Hole MT41D004_120 ROCK CREEK, headwaters to 5 20.5 MILES A-1 Р F Agriculture mouth (Big Hole River) vegetative covers Grazing in Riparian or Shoreline Zones Low flow alterations Impacts from Hydrostructure Flow Nitrogen (Total) Regulation/modification Phosphorus (Total) Irrigated Crop Production Physical substrate habitat alterations Loss of Riparian Habitat Sedimentation/Siltation MINER CREEK, headwaters to 18.5 MILES A-1 Р Р F Sedimentation/Siltation Upper Big Hole MT41D004_140 5 - 1 Forest Roads (Road Construction and Use) mouth (Big Hole River) Grazing in Riparian or Shoreline Zones Upper Big Hole MT41D004 150 GOVERNOR CREEK, headwaters 5 17.5 MILES A-1 Ν F F Alteration in stream-side or littoral Agriculture to mouth (Big Hole River-South of vegetative covers Grazing in Riparian or Shoreline Zones Jackson) Copper Habitat Modification - other than Low flow alterations Hydromodification Other anthropogenic substrate alterations Impacts from Hydrostructure Flow Regulation/modification Physical substrate habitat alterations Irrigated Crop Production Loss of Riparian Habitat

HUC 10020004 Big Hole Watershed Upper Missouri Tribs.

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Upper Big Hole	MT41D004_160	PINE CREEK, headwaters to mouth (Andrus Creek-Governor Creek)	5	6.6	MILES	A-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total)	Rangeland Grazing
Upper Big Hole	MT41D004_170	FOX CREEK, headwaters to mouth (Governor Creek)	5	6.6	MILES	A-1	Р	Р		F	F	F	F	Phosphorus (Total)	Grazing in Riparian or Shoreline Zones
Upper Big Hole	MT41D004_180	WARM SPRINGS CREEK, headwaters to the mouth (Big Hole River-Near Jackson)	5	17.3	MILES	A-1	Р	Р		F	P	F	P	Alteration in stream-side or littoral vegetative covers Low flow alterations Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones Irrigated Crop Production Loss of Riparian Habitat
Upper Big Hole	MT41D004_190	STEEL CREEK, headwaters to mouth (Big Hole River)	5	15.3	MILES	A-1	N	N		F	F	N	P	Alteration in stream-side or littoral vegetative covers Cadmium Copper Low flow alterations Other anthropogenic substrate alterations Phosphorus (Total) Physical substrate habitat alterations	Acid Mine Drainage Agriculture Grazing in Riparian or Shoreline Zones Habitat Modification - other than Hydromodification Impacts from Abandoned Mine Lands (Inactive) Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Loss of Riparian Habitat Rangeland Grazing
Upper Big Hole	MT41D004_200	FRANCIS CREEK, headwaters to mouth (Steel Creek) T3S R15W	5	7.9	MILES	A-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones
Upper Big Hole	MT41D004_210	Mc VEY CREEK, headwaters to mouth (Big Hole River), T1S R15W	5	8.6	MILES	A-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones
Upper Big Hole	MT41D004_220	DOOLITTLE CREEK, tributary to the Big Hole River T1S, R14W	5	4.9	MILES	A-1	Р	Р		F	Р	F	Р	Alteration in stream-side or littoral vegetative covers Low flow alterations Sedimentation/Siltation	Agriculture Highways, Roads, Bridges, Infrasturcture (New Construction) Irrigated Crop Production
Middle Big Hole	MT41D004_230	SAWLOG CREEK, headwaters to mouth (Big Hole River)	5	5	MILES	A-1	N	N		F	F	N	F	Alteration in stream-side or littoral vegetative covers Arsenic Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Natural Sources Unspecified Unpaved Road or Trail

HUC 10020005 Jefferson Watershed Upper Missouri Tribs. **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Upper Jefferson MT41G001 010 JEFFERSON RIVER, headwaters to 83.6 MILES B-1 Ν Р Ν Copper Dam or Impoundment mouth (Missouri River) Impacts from Abandoned Mine Lands Lead (Inactive) Low flow alterations Impacts from Hydrostructure Flow Physical substrate habitat alterations Regulation/modification Sedimentation/Siltation Irrigated Crop Production Solids (Suspended/Bedload) Loss of Riparian Habitat Temperature, water Natural Sources Streambank Modifications/destablization BIG PIPESTONE CREEK, MILES Р Ρ F Alteration in stream-side or littoral Agriculture Upper Jefferson MT41G002 010 5 24.4 B-1 headwaters to mouth (Jefferson vegetative covers Channelization River) Cause Unknown Dam or Impoundment Nitrogen (Total) Forest Roads (Road Construction and Use) Other anthropogenic substrate alterations Grazing in Riparian or Shoreline Zones Phosphorus (Total) Habitat Modification - other than Physical substrate habitat alterations Hydromodification Temperature, water Highway/Road/Bridge Runoff (Nonconstruction Related) Total Suspended Solids (TSS) Highways, Roads, Bridges, Infrasturcture (New Construction) Irrigated Crop Production Loss of Riparian Habitat Municipal Point Source Discharges Sediment Resuspension (Clean Sediment) Source Unknown Streambank Modifications/destablization Unspecified Unpaved Road or Trail MT41G002_020 HALFWAY CREEK, headwaters to 5 7.6 MILES B-1 Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Upper Jefferson mouth (Big Pipestone Creekvegetative covers Loss of Riparian Habitat Jefferson River) Sedimentation/Siltation Unspecified Unpaved Road or Trail Upper Jefferson MT41G002 030 HELLS CANYON CREEK, 13.2 MILES B-1 Р F F Low flow alterations Flow Alterations from Water Diversions headwaters to mouth (Jefferson Physical substrate habitat alterations Grazing in Riparian or Shoreline Zones River) Sedimentation/Siltation Irrigated Crop Production Natural Sources Silviculture Activities Unspecified Unpaved Road or Trail Alteration in stream-side or littoral Channelization Upper Jefferson MT41G002_040 LITTLE PIPESTONE CREEK, 5 12 MILES R-1 F headwaters to mouth (Big Pipestone vegetative covers Grazing in Riparian or Shoreline Zones Creek) Nitrogen (Total) Highway/Road/Bridge Runoff (Non-Phosphorus (Total) construction Related) Sedimentation/Siltation

HUC 10020005 Jefferson Upper Missouri Tribs. Watershed

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lower Jefferson	MT41G002_050	NORTH WILLOW CREEK, headwaters to mouth (Willow Creek)	5	10.8	MILES	B-1	N	N		F	F	N	Р	Alteration in stream-side or littoral vegetative covers Lead Low flow alterations Mercury Physical substrate habitat alterations	Agriculture Channelization Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production
															Natural Sources Subsurface (Hardrock) Minining
Lower Jefferson	MT41G002_060	SOUTH BOULDER RIVER, headwaters to mouth (Jefferson River)	5	21.8	MILES	B-1	Р	Р		F	F	F	P	Arsenic Copper Lead Low flow alterations Mercury	Acid Mine Drainage Contaminated Sediments Impacts from Abandoned Mine Lands (Inactive) Impacts from Hydrostructure Flow Regulation/modification
										_	_			Phosphorus (Total)	Mine Tailings
Lower Jefferson	MT41G002_080	WILLOW CREEK, North and South Fork confluence to mouth (Jefferson River)	5	17.6	MILES	B-1	N	F		F	F	F	P	Low flow alterations Temperature, water Zinc	Acid Mine Drainage Flow Alterations from Water Diversions Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production
Lower Jefferson	MT41G002_090	NORWEGIAN CREEK, headwaters to mouth (Willow Creek Reservoir)	5	8.8	MILES	B-1	N	N		F	F	N	F	Alteration in stream-side or littoral vegetative covers Arsenic Phosphorus (Total) Sedimentation/Siltation Temperature, water Total Kjehldahl Nitrogen (TKN)	Animal Feeding Operations (NPS) Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production
Upper Jefferson	MT41G002_100	FISH CREEK, headwaters to mouth (Jefferson River)	5	26.6	MILES	B-1	N	N		F	F	F	N	Alteration in stream-side or littoral vegetative covers Low flow alterations Sedimentation/Siltation	Flow Alterations from Water Diversions Forest Roads (Road Construction and U Grazing in Riparian or Shoreline Zones Irrigated Crop Production
Upper Jefferson	MT41G002_110	CHERRY CREEK, headwaters to mouth (Jefferson River)	5	8.9	MILES	B-1	N	N		F	F	F	N	Alteration in stream-side or littoral vegetative covers Low flow alterations Sedimentation/Siltation Zinc	Flow Alterations from Water Diversions Grazing in Riparian or Shoreline Zones Irrigated Crop Production Loss of Riparian Habitat Source Unknown
Lower Jefferson	MT41G002_130	SOUTH WILLOW CREEK, headwaters to mouth (Willow Creek)	5	14.8	MILES	B-1	N	N		F	F	F	P	Alteration in stream-side or littoral vegetative covers Excess Algal Growth Low flow alterations Physical substrate habitat alterations Sedimentation/Siltation Zinc	Agriculture Grazing in Riparian or Shoreline Zones Highway/Road/Bridge Runoff (Non- construction Related) Irrigated Crop Production Natural Sources

Jefferson

MT41G002_150

MT41G002 160

HUC 10020005

Lower Jefferson

Upper Jefferson

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Upper Jefferson MT41G002 140 WHITETAIL CREEK, headwaters to 24 MILES B-1 Р F F Alteration in stream-side or littoral Flow Alterations from Water Diversions mouth (Jefferson river) T3N R5W vegetative covers Irrigated Crop Production Aluminum Rangeland Grazing Ammonia (Un-ionized) Subsurface (Hardrock) Minining Chlorophyll-a Upstream Source Copper

Lead

Silver

F

F

F

F

Low flow alterations

Phosphorus (Total)
Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

vegetative covers
Phosphorus (Total)
Sedimentation/Siltation

Sedimentation/Siltation

Nitrate/Nitrite (Nitrite + Nitrate as N)

Total Kjehldahl Nitrogen (TKN)

Alteration in stream-side or littoral

Upper Missouri Tribs.

MILES B-1

MILES B-1 N N

Р

Watershed

2.5

4.8

CHARCOAL CREEK, headwaters to

FITZ CREEK, headwaters to mouth

mouth (Pony Creek)

(Little Whitetail Creek)

Grazing in Riparian or Shoreline Zones

Grazing in Riparian or Shoreline Zones

Unspecified Unpaved Road or Trail

Boulder

MT41E001_030

BOULDER RIVER, Cottonwood

Creek to the mouth (Jefferson River)

HUC 10020006

Boulder

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Boulder MT41E001 010 BOULDER RIVER, headwaters to 5 22.2 MILES B-1 Р F Ν Cadmium Acid Mine Drainage Basin Creek Copper Impacts from Abandoned Mine Lands (Inactive) Iron Lead Zinc Boulder MT41E001_021 BOULDER RIVER. Basin Creek to 9.5 MILES B-1 Ν N F Ν Alteration in stream-side or littoral Acid Mine Drainage Town of Boulder vegetative covers Channelization Cadmium Habitat Modification - other than Copper Hydromodification Iron Highways, Roads, Bridges, Infrasturcture (New Construction) Lead Impacts from Abandoned Mine Lands Silver (Inactive) Zinc Mill Tailings Mine Tailings Alteration in stream-side or littoral Acid Mine Drainage Boulder MT41E001 022 BOULDER RIVER, Town of Boulder 32.9 MILES B-1 N N F Ν to Cottonwood Creek vegetative covers Contaminated Sediments Copper Grazing in Riparian or Shoreline Zones Iron Habitat Modification - other than Hydromodification Lead Low flow alterations Impacts from Abandoned Mine Lands (Inactive)

N N

F Ν Sedimentation/Siltation

Alteration in stream-side or littoral

Temperature, water

vegetative covers

Low flow alterations

Temperature, water

Sedimentation/Siltation

Silver

Zinc

Arsenic

Copper

Lead

Zinc

Cadmium

Upper Missouri Tribs.

Watershed

5

12.7

MILES B-1

Impacts from Hydrostructure Flow

Forest Roads (Road Construction and Use)

Grazing in Riparian or Shoreline Zones

Impacts from Abandoned Mine Lands

Impacts from Hydrostructure Flow

Highways, Roads, Bridges, Infrasturcture

Regulation/modification

Irrigated Crop Production

Loss of Riparian Habitat

Contaminated Sediments

Acid Mine Drainage

(New Construction)

Regulation/modification

Irrigated Crop Production Mill Tailings

(Inactive)

Appendix A: Impaired Waters HUC 10020006 Boulder Watershed Upper Missouri Tribs.

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Boulder	MT41E002_010	UNCLE SAM GULCH, headwaters to the mouth (Cataract Creek)	5	2.6	MILES	B-1	N	N		P	P	N	F	Alteration in stream-side or littoral vegetative covers Arsenic Cadmium Copper Lead Nitrogen, Nitrate Other flow regime alterations Sedimentation/Siltation Turbidity Zinc	Acid Mine Drainage Agriculture Forest Roads (Road Construction and Use Habitat Modification - other than Hydromodification Impacts from Abandoned Mine Lands (Inactive) Silviculture Activities Subsurface (Hardrock) Minining
Boulder	MT41E002_020	CATARACT CREEK, headwaters to the mouth (Boulder River)	5	12.2	MILES	B-1	N	N		P	F	N	F	Arsenic Cadmium Copper Lead Mercury Nitrogen, Nitrate Sedimentation/Siltation Zinc	Acid Mine Drainage Contaminated Sediments Forest Roads (Road Construction and Use Impacts from Abandoned Mine Lands (Inactive) Loss of Riparian Habitat Mine Tailings Rangeland Grazing Silviculture Activities Silviculture Harvesting
3oulder	MT41E002_030	BASIN CREEK, headwaters to the mouth (Boulder River)	5	15.5	MILES	B-1	N	N		P	F	N	F	Alteration in stream-side or littoral vegetative covers Arsenic Copper Lead Mercury Sedimentation/Siltation Zinc	Acid Mine Drainage Contaminated Sediments Forest Roads (Road Construction and Use Impacts from Abandoned Mine Lands (Inactive) Loss of Riparian Habitat Mine Tailings Rangeland Grazing Silviculture Activities Silviculture Harvesting
Boulder	MT41E002_040	HIGH ORE CREEK, headwaters to the mouth (Boulder River)	5	6.6	MILES	B-1	N	N		P	P	N	F	Alteration in stream-side or littoral vegetative covers Arsenic Cadmium Copper Lead Mercury Sedimentation/Siltation Temperature, water Total Suspended Solids (TSS) Zinc	Acid Mine Drainage Channelization Contaminated Sediments Forest Roads (Road Construction and Use Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive) Loss of Riparian Habitat Mine Tailings Rangeland Grazing Silviculture Activities

HUC 10020006 Boulder Upper Missouri Tribs. Watershed

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Boulder	MT41E002_050	LOWLAND CREEK, headwaters to the mouth (Boulder River)	5	13.6	MILES	B-1	N	N		F	F	F	F	Alteration in stream-side or littoral vegetative covers Aluminum Copper Physical substrate habitat alterations Silver	Channelization Dredge Mining Impacts from Abandoned Mine Lands (Inactive) Streambank Modifications/destablization
Boulder	MT41E002_061	ELKHORN CREEK, headwaters to Wood Gulch	5	8	MILES	B-1	N	N		P	F	N	Р	Alteration in stream-side or littoral vegetative covers Arsenic Cadmium Copper Lead Low flow alterations Sedimentation/Siltation Zinc	Acid Mine Drainage Channelization Dredge Mining Grazing in Riparian or Shoreline Zones Habitat Modification - other than Hydromodification Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive)
Boulder	MT41E002_062	ELKHORN CREEK, Wood Gulch to the mouth (Boulder River)	5	4.2	MILES	B-1	N	N		P	F	N	N	Cadmium Copper Lead Low flow alterations Sedimentation/Siltation Zinc	Acid Mine Drainage Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production
Boulder	MT41E002_070	BISON CREEK, headwaters to the mouth (Boulder River)	5	23.1	MILES	B-1	N	N		F	F	F	F	Alteration in stream-side or littoral vegetative covers Copper Iron Nitrates	Agriculture Channelization Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive)
Boulder	MT41E002_080	LITTLE BOULDER RIVER, the North Fork to the mouth (Boulder River)	5	3.5	MILES	B-1	N	N		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Cause Unknown Copper Physical substrate habitat alterations Zinc	Agriculture Dredge Mining Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive) Source Unknown
Boulder	MT41E002_090	NORTH FORK LITTLE BOULDER RIVER, headwaters to the mouth (Little Boulder)	5	11.6	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation Total Kiehldahl Nitrogen (TKN)	Forest Roads (Road Construction and Use Grazing in Riparian or Shoreline Zones
Boulder	MT41E002_100	MUSKRAT CREEK, headwaters to the mouth (Boulder River)	5	12.7	MILES	B-1	N	N		F	F	N	F	Alteration in stream-side or littoral vegetative covers Copper Lead	Impacts from Abandoned Mine Lands (Inactive) Rangeland Grazing

Boulder

HUC 10020006

Category Size Source Name **TMDL Planning Area** ID305B Waterbody Units Use AL CWF WWF AG Ind DW Rec Cause Name

Upper Missouri Tribs.

Watershed

Timbe Fidining Alou	150005	Name/Location	outogory	OIZO	Oillio	Class		••••	••••	7.0			1100		
Boulder	MT41E002_110	McCARTHY CREEK, headwaters to the mouth (Boulder River)	5	6.7	MILES	B-1	Р	P		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Fish-Passage Barrier Low flow alterations Phosphorus (Total) Sedimentation/Siltation	Dam or Impoundment Flow Alterations from Water Diversions Grazing in Riparian or Shoreline Zones Sediment Resuspension (Clean Sediment) Source Unknown
Boulder	MT41E002_130	NURSERY CREEK, headwaters to mouth (Muskrat Creek-Boulder River)	5	1.1	MILES	B-1	Р	Р		F	F	F	F	Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Agriculture Forest Roads (Road Construction and Use) Natural Sources Watershed Runoff following Forest Fire
Boulder	MT41E002_140	BIG LIMBER GULCH, headwaters to mouth (Cataract Creek-Boulder River)	5	2.4	MILES	B-1	Х	X		F	F	N	Х	Lead Mercury	Acid Mine Drainage Impacts from Abandoned Mine Lands (Inactive)

HUC 10020007 Madison Watershed Upper Missouri Tribs. **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Lower Madison MT41F001 010 MADISON RIVER, Ennis Dam to the 45.8 MILES B-1 Ρ F Ν Alteration in stream-side or littoral Agriculture mouth (Missouri River) vegetative covers Dam Construction (Other than Upstream Copper Flood Control Projects) Lead Dam or Impoundment Impacts from Abandoned Mine Lands Sedimentation/Siltation (Inactive) Temperature, water Impacts from Hydrostructure Flow Regulation/modification Natural Sources Lower Madison MT41F002 020 ELK CREEK, headwaters to the 15.9 MILES B-1 Р F Alteration in stream-side or littoral Agriculture mouth (Madison River) vegetative covers Animal Feeding Operations (NPS) Nitrates Grazing in Riparian or Shoreline Zones Other anthropogenic substrate alterations Habitat Modification - other than Phosphorus (Total) Hydromodification Physical substrate habitat alterations Irrigated Crop Production Sedimentation/Siltation Loss of Riparian Habitat Temperature, water Natural Sources Turbidity Non-irrigated Crop Production Streambank Modifications/destablization MT41F002 030 HOT SPRINGS CREEK, headwaters MILES B-1 X X Acid Mine Drainage Lower Madison 15.2 F Ν Arsenic to the mouth (Madison River) Low flow alterations Flow Alterations from Water Diversions Impacts from Abandoned Mine Lands (Inactive) Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Middle Madison MT41F004_010 BLAINE SPRING CREEK, 5 10.5 MILES B-1 Р F F **Excess Algal Growth** Aquaculture (Permitted) headwaters to mouth at the Madison Low flow alterations Streambank Modifications/destablization River Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN) 0'DELL SPRING CREEK, MILES Р F Alteration in stream-side or littoral Agriculture Middle Madison MT41F004 020 5 12.3 B-1 Ν headwaters to the mouth (Madison vegetative covers Channelization River) Arsenic Grazing in Riparian or Shoreline Zones High Flow Regime Habitat Modification - other than Other anthropogenic substrate alterations Hydromodification Impacts from Hydrostructure Flow Physical substrate habitat alterations Regulation/modification Irrigated Crop Production Source Unknown Р F Low flow alterations Impacts from Hydrostructure Flow MT41F004_040 INDIAN CREEK, Lee Metcalf 4C MILES Р Middle Madison 5.5 B-1 Wilderness boundary to the mouth Regulation/modification (Madison River) Irrigated Crop Production

HUC 10020007 Madison Watershed Upper Missouri Tribs. **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Middle Madison MT41F004 050 JACK CREEK, headwaters to the 5 16.4 MILES B-1 Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones vegetative covers mouth (Madison River) Irrigated Crop Production Low flow alterations Natural Sources Physical substrate habitat alterations Streambank Modifications/destablization Sedimentation/Siltation Channelization Middle Madison MT41F004_060 NORTH MEADOW CREEK, 5 12.2 MILES B-1 F F F F Low flow alterations headwaters to the mouth (Enis Irrigated Crop Production Phosphorus (Total) Lake) Physical substrate habitat alterations Natural Sources Sedimentation/Siltation Streambank Modifications/destablization MT41F004 070 SOUTH MEADOW CREEK. F F Aquatic Plants - Native Agriculture Middle Madison 5 11.1 MILES B-1 N N headwaters to the mouth (Enis Chlorophyll-a Impacts from Abandoned Mine Lands Lake) (Inactive) Irrigated Crop Production Physical substrate habitat alterations Middle Madison MT41F004 080 RUBY CREEK, headwaters to the 4C 15.1 MILES B-1 F F Р Low flow alterations Impacts from Hydrostructure Flow mouth (Madison River) Regulation/modification Irrigated Crop Production Middle Madison MT41F004 100 WEST FORK MADISON RIVER, 5 33.3 MILES B-1 N N F Ν Alteration in stream-side or littoral Agriculture headwaters to the mouth (Madison vegetative covers Flow Alterations from Water Diversions River) Arsenic Forest Roads (Road Construction and Use) Cadmium Impacts from Hydrostructure Flow Lead Regulation/modification Low flow alterations Irrigated Crop Production Other anthropogenic substrate alterations Natural Sources Physical substrate habitat alterations Rangeland Grazing Temperature, water Source Unknown Streambank Modifications/destablization Unspecified Unpaved Road or Trail Grazing in Riparian or Shoreline Zones Middle Madison MT41F004 110 ELK RIVER, headwaters to the 5 14.3 MILES B-1 F F **Bottom Deposits** mouth (West Fork Madison River) Unspecified Unpaved Road or Trail F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Middle Madison GAZELLE CREEK, headwaters to 4C F Р MT41F004 120 9.2 MILES B-1 the mouth (West Fork Madison vegetative covers Silviculture Harvesting River) Middle Madison MT41F004 130 MOORE CREEK, springs to mouth 5 15.2 MILES B-1 X X F Ν Arsenic Acid Mine Drainage (Ennis Lake) Fecal Coliform Agriculture Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Natural Sources ANTELOPE CREEK, headwaters to Middle Madison MT41F004 140 9 MILES B-1 N N F F Alteration in stream-side or littoral Agriculture mouth (Cliff Lake) vegetative covers Channelization Low flow alterations Flow Alterations from Water Diversions Sedimentation/Siltation Grazing in Riparian or Shoreline Zones Loss of Riparian Habitat Unspecified Unpaved Road or Trail

Upper Missouri Tribs. **HUC** 10020007 Madison Watershed **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Middle Madison MT41F004 150 BUFORD CREEK, the headwaters 5 4 MILES B-1 Р F Ν Arsenic Grazing in Riparian or Shoreline Zones to the confluence with West Fork Natural Sources Sedimentation/Siltation Madison River F Cause Unknown Acid Mine Drainage Middle Madison MT41F005 030 ENNIS LAKE 5 3780.8 ACRES B-1 Ρ Ν Chromium (total) Habitat Modification - other than Hydromodification Low flow alterations Impacts from Abandoned Mine Lands Other anthropogenic substrate alterations (Inactive) Physical substrate habitat alterations Impacts from Hydrostructure Flow Regulation/modification Natural Sources Source Unknown Upper Madison MT41F006_010 SOUTH FORK MADISON RIVER, 17.5 MILES B-1 F Ν Arsenic Natural Sources headwaters to Hebgen Lake Upper Madison RED CANYON CREEK, headwaters F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones MT41F006_020 5.6 MILES B-1 to the mouth (Hebgen Lake) vegetative covers Natural Sources Low flow alterations Silviculture Activities Physical substrate habitat alterations Sedimentation/Siltation WATKINS CREEK, headwaters to Alteration in stream-side or littoral Upper Madison MT41F006 030 4C 7.1 MILES B-1 N N F F Agriculture the mouth (Hebgen Lake) vegetative covers Grazing in Riparian or Shoreline Zones Low flow alterations Loss of Riparian Habitat Other anthropogenic substrate alterations Streambank Modifications/destablization Physical substrate habitat alterations

HUC 10020008 Gallatin Upper Missouri Tribs. Watershed

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lower Gallatin	MT41H001_010	GALLATIN RIVER, Spanish Creek to the mouth (Missouri River)	4C	50.5	MILES	B-1	Р	N		F	Р	F	N	Low flow alterations	Irrigated Crop Production
Lower Gallatin	MT41H002_010	CAMP CREEK, headwaters to the mouth (Gallatin River)	5	26.9	MILES		P	P		F	F	F	P	Alteration in stream-side or littoral vegetative covers Fecal Coliform Low flow alterations Nitrogen (Total) Other anthropogenic substrate alterations Physical substrate habitat alterations Sedimentation/Siltation	Talada Godingo
Lower Gallatin	MT41H002_020	GODFREY CREEK, headwaters to White Ditch	5	7.2	MILES	B-1	P	Р		Р	F	F	N	Alteration in stream-side or littoral vegetative covers Excess Algal Growth Fecal Coliform Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	Agriculture Animal Feeding Operations (NPS) Grazing in Riparian or Shoreline Zones
Lower Gallatin	MT41H002_031	SOUTH COTTONWOOD CREEK, Middle Creek Assoc Ditch diversion to the mouth (Gallatin River)	4C	6.2	MILES	B-1	Р	Р		F	F	F	Р	Low flow alterations	Irrigated Crop Production
Lower Gallatin	MT41H003_010	EAST GALLATIN RIVER, confluence of Rocky and Bear Creeks to Bridger Creek	5	7.3	MILES	B-1	P	Р		F	F	F	F	Nitrogen (Total) Phosphorus (Total)	Grazing in Riparian or Shoreline Zones Municipal (Urbanized High Density Area) Residential Districts Yard Maintenance
Lower Gallatin	MT41H003_020	EAST GALLATIN RIVER, Bridger Creek to Smith Creek	5	25.5	MILES	B-1	P	P		F	F	F	P	Alteration in stream-side or littoral vegetative covers Excess Algal Growth Low flow alterations Nitrogen (Total) Phosphorus (Total) pH	Grazing in Riparian or Shoreline Zones Irrigated Crop Production Municipal Point Source Discharges Yard Maintenance
Lower Gallatin	MT41H003_030	EAST GALLATIN RIVER, Smith Creek to the mouth (Gallatin River)	5	13.5	MILES	B-1	P	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Nitrogen (Total) pH	Grazing in Riparian or Shoreline Zones Municipal Point Source Discharges
Lower Gallatin	MT41H003_040	SOURDOUGH CREEK, Limestone Creek to the mouth (East Gallatin River)	5	4.7	MILES	B-1	N	N		F	F	F	P	Alteration in stream-side or littoral vegetative covers Chlorophyll-a Escherichia coli Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Channelization Grazing in Riparian or Shoreline Zones Irrigated Crop Production Loss of Riparian Habitat Septage Disposal Yard Maintenance

Gallatin

ID305B

MT41H003 081

MT41H003 090

MT41H003 100

MT41H003 110

Waterbody

Jackson and Timberline Creeks to

BEAR CREEK, headwaters to the

THOMPSON CREEK (or Thompson

Spring), headwaters to mouth (East

DRY CREEK, headwaters to the

BRIDGER CREEK, headwaters to

the mouth (East Gallatin River)

mouth (East Gallatin River)

mouth (East Gallatin River)

mouth (Rocky Creek

MT41H003_080)

Gallatin River)

HUC 10020008

Lower Gallatin

Lower Gallatin

Lower Gallatin

Lower Gallatin

TMDL Planning Area Category Size Name/Location Class Lower Gallatin MT41H003 050 JACKSON CREEK, headwaters to 5 MILES B-1 Ρ F F Alteration in stream-side or littoral Crop Production (Crop Land or Dry Land) the mouth (Rocky Creek) vegetative covers Grazing in Riparian or Shoreline Zones Chlorophyll-a Phosphorus (Total) Sedimentation/Siltation SMITH CREEK, confluence of Ross Lower Gallatin MT41H003_060 5 6.8 MILES B-1 Р N F Χ Alteration in stream-side or littoral Agriculture and Reese Creeks to the mouth vegetative covers (East Gallatin River) Fecal Coliform Nitrates Physical substrate habitat alterations Sedimentation/Siltation Lower Gallatin MT41H003 070 REESE CREEK, headwaters to the 8.3 MILES B-1 Р F F Fecal Coliform Agriculture mouth (Smith Creek) Nitrates Phosphate Solids (Suspended/Bedload) Lower Gallatin MT41H003 080 ROCKY CREEK, confluence of 7.9 MILES B-1 Ρ Ρ F Х Alteration in stream-side or littoral Agriculture

AL CWF WWF AG

Ind DW Rec

Р F

F F

F

F F

F

Cause Name

vegetative covers

vegetative covers

vegetative covers

vegetative covers

Cause Unknown

Nitrogen (Total) Phosphorus (Total)

Chlorophyll-a

Phosphorus (Total)

Sedimentation/Siltation

Chlorophyll-a Nitrogen (Total) Sedimentation/Siltation

Excess Algal Growth Phosphorus (Total) Sedimentation/Siltation Solids (Suspended/Bedload)

Other flow regime alterations Sedimentation/Siltation

Alteration in stream-side or littoral

Alteration in stream-side or littoral

Alteration in stream-side or littoral

Physical substrate habitat alterations

Total Kjehldahl Nitrogen (TKN)

Other anthropogenic substrate alterations

Source Name

Channelization

Agriculture

Channelization

Source Unknown

Non-winter Resorts)

(New Construction)

Highways, Roads, Bridges, Infrasturcture

Grazing in Riparian or Shoreline Zones

Grazing in Riparian or Shoreline Zones

Grazing in Riparian or Shoreline Zones

Impacts from Resort Areas (Winter and

Unspecified Unpaved Road or Trail

Unspecified Unpaved Road or Trail

Upper Missouri Tribs.

Use

Units

10.1

7.4

16.3

18.4

5

MILES B-1

MILES B-1

MILES B-1

MILES

Р

Ρ Р

Р

Р

B-1

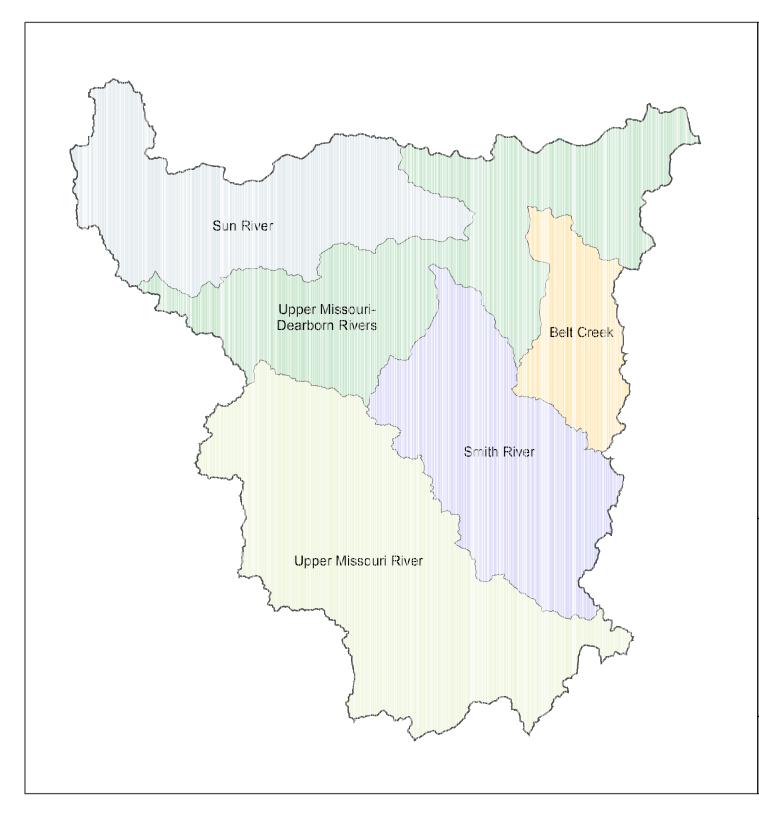
Watershed

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

HUC 10020008 Gallatin Watershed Upper Missouri Tribs.

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lower Gallatin	MT41H003_120	STONE CREEK, headwaters to the mouth (Bridger Creek)	5	5.6	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Silviculture Harvesting
Lower Gallatin	MT41H003_131	HYALITE CREEK, headwaters to the Bozeman water supply intake	5	17.1	MILES	A-1	Р	Р		F	F	F	Р	Phosphorus (Total) Total Kjehldahl Nitrogen (TKN)	Rangeland Grazing Silviculture Harvesting Unspecified Unpaved Road or Trail
Lower Gallatin	MT41H003_132	HYALITE CREEK, Bozeman water supply intake to the mouth (East Gallatin River)	4C	21	MILES	B-1	Х	Х		Х	Х	Х	Р	Low flow alterations	Irrigated Crop Production
Upper Gallatin	MT41H005_010	SQUAW CREEK, headwaters to the mouth (Gallatin River)	5	13.7	MILES	B-1	Р	Р		F	F	Х	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Physical substrate habitat alterations	Forest Roads (Road Construction and Use) Natural Sources Silviculture Activities
Upper Gallatin	MT41H005_020	TAYLOR CREEK, Lee Metcalf Wilderness boundary to the mouth (Gallatin River)	5	17.4	MILES	B-1	Р	Р		Х	Р	Х	F	Physical substrate habitat alterations Sedimentation/Siltation Solids (Suspended/Bedload)	Silviculture Activities Site Clearance (Land Development or Redevelopment)
Upper Gallatin	MT41H005_030	CACHE CREEK, headwaters to the mouth (Taylor Fork)	5	3.9	MILES	B-1	Р	Р		F	F	X	F	Alteration in stream-side or littoral vegetative covers Physical substrate habitat alterations Sedimentation/Siltation Solids (Suspended/Bedload)	Agriculture Forest Roads (Road Construction and Use) Silviculture Activities
Upper Gallatin	MT41H005_040	WEST FORK GALLATIN RIVER, Confluence Mid & N Forks West Gallatin to mouth (Gallatin River)	5	3.7	MILES	B-1	Р	N		F	F	F	N	Chlorophyll-a Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	On-site Treatment Systems (Septic System and Similar Decencentralized Systems) Silviculture Activities Site Clearance (Land Development or Redevelopment)
Upper Gallatin	MT41H005_050	MIDDLE FORK OF WEST FORK GALLATIN RIVER, headwaters to mouth (West Fork Gallatin River)	5	6	MILES	B-1	Р	Р		F	F	F	N	Alteration in stream-side or littoral vegetative covers Fecal Coliform Nitrate/Nitrite (Nitrite + Nitrate as N) Solids (Suspended/Bedload)	Animal Feeding Operations (NPS) Highway/Road/Bridge Runoff (Non- construction Related) Highways, Roads, Bridges, Infrasturcture (New Construction) On-site Treatment Systems (Septic Systems and Similar Decencentralized Systems)
Upper Gallatin	MT41H005_060	SOUTH FORK OF WEST FORK GALLATIN RIVER, headwaters to mouth (West Fork Gallatin River)	5	13.8	MILES	B-1	P	Р		F	F	F	P	Alteration in stream-side or littoral vegetative covers Chlorophyll-a Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Physical substrate habitat alterations Sedimentation/Siltation	Forest Roads (Road Construction and Use) On-site Treatment Systems (Septic Systems and Similar Decencentralized Systems) Silviculture Activities Site Clearance (Land Development or Redevelopment)



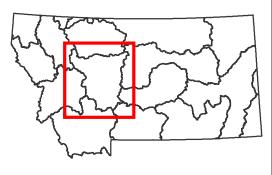
Missouri-Sun-Smith **Sub-Major Basin**

Missouri River Basin

USGS HUC HUC NAME

Upper Missouri River 10030101 Upper Missouri-Dearborn Rivers 10030102

Smith River 10030103 10030104 Sun River 10030105 Belt Creek



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Appendix A: I	mpaired Water	·s													
HUC 10030101	Upper Missouri	v	/atershed	Mis	souri-S	Sun-Sr	nith								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Missouri River	MT41I001_011	MISSOURI RIVER, headwaters to Toston Dam	5	21	MILES	B-1	Р	Р		F	F	N	F	Arsenic Low flow alterations	Grazing in Riparian or Shoreline Zones Irrigated Crop Production

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Missouri River	MT41I001_011	MISSOURI RIVER, headwaters to Toston Dam	5	21	MILES	B-1	P	Р		F	F	N	F	Arsenic Low flow alterations Nitrogen (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Irrigated Crop Production Municipal Point Source Discharges Natural Sources Non-irrigated Crop Production
Missouri River	MT41I001_012	MISSOURI RIVER, Toston Dam to Canyon Ferry Reservoir	5	24.4	MILES	B-1	Р	Р		F	Р	N	F	Alteration in stream-side or littoral vegetative covers Cadmium Copper Lead Low flow alterations Sedimentation/Siltation	Agriculture Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production
Canyon Ferry	MT41I002_010	AVALANCHE GULCH, headwaters to mouth (Canyon Ferry Reservoir)	4C	16.5	MILES	B-1	Х	Χ		Х	Р	Χ	Р	Low flow alterations	Agriculture Irrigated Crop Production
Canyon Ferry	MT41l002_020	BATTLE CREEK, headwaters to the mouth (Sixteenmile Creek-Missouri River)		20.4	MILES	B-1	Р	Р		F	F	F	P	Alteration in stream-side or littoral vegetative covers Low flow alterations Phosphorus (Total) Sedimentation/Siltation Temperature, water	Grazing in Riparian or Shoreline Zones Irrigated Crop Production
Canyon Ferry	MT411002_030	BEAVER CREEK, headwaters to the mouth (Canyon Ferry Reservoir)	e 5	14.4	MILES	B-1	N	N		F	P	N	P	Cadmium Chromium (total) Lead Low flow alterations Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Silver Zinc	Agriculture Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production
Canyon Ferry	MT41I002_041	CONFEDERATE GULCH, headwaters to Hunter Gulch	5	9.8	MILES	B-1	N	P		F	F	X	P	Alteration in stream-side or littoral vegetative covers Cadmium Nitrates Other flow regime alterations Physical substrate habitat alterations	Agriculture Channelization Dredge Mining Highway/Road/Bridge Runoff (Non- construction Related) Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive) Placer Mining
Canyon Ferry	MT41I002_042	CONFEDERATE GULCH, Hunter Gulch to the mouth (Canyon Ferry Reservoir)	5	5.1	MILES	B-1	N	N		X	N	Х	N	Low flow alterations Nitrates Phosphorus (Total) Physical substrate habitat alterations	Agriculture Dredge Mining Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production

HUC 10030101 Upper Missouri Watershed Missouri-Sun-Smith **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Canyon Ferry MT41I002 050 CROW CREEK, the National Forest 16.8 MILES B-1 Ν Ν F Ν Alteration in stream-side or littoral Agriculture boundary to the mouth (Missouri vegetative covers Grazing in Riparian or Shoreline Zones River) Low flow alterations Habitat Modification - other than Nitrogen (Total) Hydromodification Irrigated Crop Production Phosphorus (Total) Physical substrate habitat alterations Sedimentation/Siltation Copper Channelization Canyon Ferry MT41I002_060 CROW CREEK, Crow Creek Falls to 7.9 MILES B-1 Р Р F F F the National Forest boundary Impacts from Abandoned Mine Lands Lead (Inactive) Physical substrate habitat alterations Placer Mining Deep Creek MT41I002 070 DEEP CREEK, the National Forest 4A 18.1 MILES B-1 Р F F Low flow alterations Flow Alterations from Water Diversions Boundary to the mouth (Missouri Sedimentation/Siltation Loss of Riparian Habitat Streambank Modifications/destablization Canyon Ferry DRY CREEK, headwaters to the Р F F Alteration in stream-side or littoral Forest Roads (Road Construction and Use) MT41I002_080 16.7 MILES B-1 mouth (Missouri River) vegetative covers Grazing in Riparian or Shoreline Zones Low flow alterations Irrigated Crop Production Phosphorus (Total) Sedimentation/Siltation Temperature, water Canyon Ferry MT41I002_090 HELLGATE GULCH, headwaters to 11.5 MILES B-1 Ν F Ν Alteration in stream-side or littoral Agriculture the mouth (Canyon Ferry Reservoir) vegetative covers Grazing in Riparian or Shoreline Zones Mercury Highway/Road/Bridge Runoff (Non-Other anthropogenic substrate alterations construction Related) Physical substrate habitat alterations Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive) Mine Tailings Natural Sources Other Recreational Pollution Sources Silviculture Activities Canyon Ferry MT41I002_100 INDIAN CREEK, headwaters to the 5 7.9 MILES B-1 Χ F Ν Χ Acid Mine Drainage Arsenic mouty (Missouri River) Cadmium Dredge Mining Impacts from Abandoned Mine Lands Lead (Inactive) Mercury Mine Tailings Canyon Ferry MT41I002 110 MAGPIE CREEK (GULCH) from the 12.7 MILES B-1 Р F F Alteration in stream-side or littoral Forest Roads (Road Construction and Use) headwaters to the mouth (Canyon vegetative covers Grazing in Riparian or Shoreline Zones Ferry Reservoir) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)

Upper Missouri **HUC** 10030101 Watershed Missouri-Sun-Smith **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Canyon Ferry MT41I002 120 SIXTEENMILE CREEK, Lost Creek 5 46.5 MILES B-1 Ρ F F Alteration in stream-side or littoral Channelization to the mouth (Missouri River) vegetative covers Grazing in Riparian or Shoreline Zones Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN) Canyon Ferry MT41I002_130 WHITE GULCH, headwaters to the 5 13.2 MILES B-1 Р Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones mouth (Canyon Ferry Reservoir) vegetative covers Irrigated Crop Production Low flow alterations Placer Mining Sedimentation/Siltation Impacts from Abandoned Mine Lands Canyon Ferry MT41I002 140 WILSON CREEK 3.3 Miles above 3.3 MILES B-1 Χ Ν Mercury the mouth to the mouth (Crow (Inactive) Creek) Canyon Ferry MT41I002 150 CAVE GULCH, headwaters to 5 6.4 MILES B-1 Р F F Alteration in stream-side or littoral Channelization mouth (Canyon Ferry Reservoir) vegetative covers Placer Mining Phosphorus (Total) Source Unknown Sedimentation/Siltation Unspecified Unpaved Road or Trail Total Kjehldahl Nitrogen (TKN) Canyon Ferry MT41I002 170 EAST FORK INDIAN CREEK, 5 MILES B-1 Χ Ν Arsenic Acid Mine Drainage headwaters to mouth (Indian Creek) Cadmium Impacts from Abandoned Mine Lands (Inactive) Lead Mercury Missouri River MT41I003 010 CANYON FERRY RESERVOIR 35180 ACRES B-1 F F Ammonia (Un-ionized) Acid Mine Drainage Ν Ν Arsenic Agriculture Excess Algal Growth Impacts from Abandoned Mine Lands (Inactive) Thallium Internal Nutrient Recycling Municipal Point Source Discharges Natural Sources On-site Treatment Systems (Septic Systems and Similar Decencentralized Systems) Site Clearance (Land Development or Redevelopment) MT41I004_010 MISSOURI RIVER, Canyon Ferry MILES B-1 Р F F Nitrogen, Nitrate Dam Construction (Other than Upstream Missouri River 5 3.8 Dam to Hauser Lake Flood Control Projects) Oxygen, Dissolved Grazing in Riparian or Shoreline Zones Phosphorus (Total) Municipal Point Source Discharges Natural Sources On-site Treatment Systems (Septic Systems and Similar Decencentralized Systems) Source Unknown

App	endix A: Ir	mpaired Waters		
HUC	10030101	Upper Missouri	Watershed	Missouri-Sun-Smith

HUC 10030101	Upper Missouri	Wa	tershed	Mı	ssouri-S	Sun-Sn	nith								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Missouri River	MT41l004_030	MISSOURI RIVER, Holter Dam to Little Prickly Pear Creek	5	2.9	MILES	B-1	P	P		F	F	F	F	Other flow regime alterations Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones Municipal Point Source Discharges Natural Sources On-site Treatment Systems (Septic Systems and Similar Decencentralized Systems) Upstream Impoundments (e.g., PI-566 NRCS Structures)
Holter	MT41I005_011	BEAVER CREEK, headwaters to Nelson	5	13.3	MILES	B-1	Р	P		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Chlorophyll-a Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones
Holter	MT41I005_012	BEAVER CREEK, Nelson to the mouth (Missouri River below Hauser Dam)	5	5.3	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Irrigated Crop Production
Canyon Ferry	MT41I005_020	TROUT CREEK, headwaters to the mouth (Hauser Lake)	5	20.1	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Loss of Riparian Habitat Unspecified Unpaved Road or Trail
Holter	MT41I005_030	FALLS GULCH, headwaters to mouth (Holter Lake) T14N, R3W, Sec. 29	5	3.3	MILES	B-1	N	N		F	Х	N	X	Mercury	Impacts from Abandoned Mine Lands (Inactive)
Holter	MT41I005_040	VIRGINIA CREEK, headwaters to the mouth (Canyon Creek)	5	8.2	MILES	B-1	Р	Р		F	F	N	F	Copper Lead Zinc	Impacts from Abandoned Mine Lands (Inactive)
Holter	MT411005_051	LITTLE PRICKLY PEAR CREEK, North and South Forks to Clark Creek	5	20	MILES	B-1	P	P		F	F	F	F	Alteration in stream-side or littoral vegetative covers Other flow regime alterations Physical substrate habitat alterations Sedimentation/Siltation Temperature, water	Agriculture Flow Alterations from Water Diversions Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Loss of Riparian Habitat Silviculture Activities
Holter	MT41I005_052	LITTLE PRICKLY PEAR CREEK, Clark Creek to the mouth (Missouri River)	5	16.1	MILES	B-1	N	N		F	F	F	F	Alteration in stream-side or littoral vegetative covers Other flow regime alterations Physical substrate habitat alterations Temperature, water	Channelization Flow Alterations from Water Diversions Highways, Roads, Bridges, Infrasturcture (New Construction) Loss of Riparian Habitat
Holter	MT411005_060	FOOL HEN CREEK, headwaters to mouth (Virgina Creek-Canyon Creek- Little Prickly Pear Creek)	5	1.7	MILES	B-1	N	N		N	Х	N	X	Cadmium Copper Lead Mercury Silver	Impacts from Abandoned Mine Lands (Inactive) Mill Tailings Subsurface (Hardrock) Minining
Holter	MT41I005_080	WOODSIDING GULCH headwaters to mouth (Little Prickly Pear Creek) T13N R4W Sec 33	5	2.2	MILES	B-1	Р	Р		F	F	F	F	Phosphorus (Total)	Forest Roads (Road Construction and Use)

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

HUC 10030101	Upper Missouri	W	atershed	l Mi	ssouri-S	Sun-Sn	nith								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Missouri River	MT41I006_010	PRICKLY PEAR CREEK, Lake Helena to Hauser Lake	5	4.1	MILES	B-1	X	Х		X	Х	N	X	Arsenic	Acid Mine Drainage Atmospheric Depositon - Toxics Contaminated Sediments Impacts from Abandoned Mine Lands (Inactive) Mine Tailings
.ake Helena	MT41I006_020	PRICKLY PEAR CREEK, Helena WWTP Discharge Ditch to Lake Helena	5	9.1	MILES	1	N	N	N	F	P	N	P	Alteration in stream-side or littoral vegetative covers Ammonia (Un-ionized) Arsenic Cadmium Copper Lead Low flow alterations Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Physical substrate habitat alterations Sedimentation/Siltation Temperature, water Zinc	Acid Mine Drainage Agriculture Contaminated Sediments Flow Alterations from Water Diversions Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Industrial Point Source Discharge Municipal Point Source Discharges
Lake Helena	MT41I006_030	PRICKLY PEAR CREEK, Highway 433 (Wylie Dr.) Crossing to Helene WWTP Discharge	5	6.1	MILES	1	N	N	N	P	P	N	P	Alteration in stream-side or littoral vegetative covers Ammonia (Un-ionized) Arsenic Cadmium Copper Lead Low flow alterations Nitrogen (Total) Phosphorus (Total) Physical substrate habitat alterations Sedimentation/Siltation Temperature, water Zinc	Acid Mine Drainage Contaminated Sediments Grazing in Riparian or Shoreline Zones Habitat Modification - other than Hydromodification Impacts from Abandoned Mine Lands (Inactive) Industrial Point Source Discharge Irrigated Crop Production On-site Treatment Systems (Septic Syste and Similar Decencentralized Systems)

HUC 10030101	Upper Missouri	Wa	itershed	М	issouri-S	Sun-Sn	nith								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lake Helena	MT41I006_040	PRICKLY PEAR CREEK, Lump Gulch to Montana Highway 433 (Wylie Dr.) Crossing	5	10.6	MILES	B-1	N	N		P	F	N	F	Alteration in stream-side or littoral vegetative covers Aluminum Antimony Arsenic Cadmium Copper Lead Physical substrate habitat alterations Sedimentation/Siltation Zinc	Acid Mine Drainage Channelization Contaminated Sediments Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive) Industrial Point Source Discharge
Lake Helena	MT41I006_050	PRICKLY PEAR CREEK, Spring Creek to Lump Gulch	5	7	MILES	B-1	N	N		P	F	N	F	Alteration in stream-side or littoral vegetative covers Arsenic Cadmium Copper Lead Physical substrate habitat alterations Sedimentation/Siltation Zinc	Acid Mine Drainage Impacts from Abandoned Mine Lands (Inactive) Mine Tailings Placer Mining Streambank Modifications/destablization
Lake Helena	MT41I006_060	PRICKLY PEAR CREEK, headwaters to Spring Creek	5	8.7	MILES	B-1	N	Р		P	F	N	F	Alteration in stream-side or littoral vegetative covers Cadmium Lead Physical substrate habitat alterations Total Suspended Solids (TSS)	Acid Mine Drainage Highways, Roads, Bridges, Infrasturcture (New Construction) Impacts from Abandoned Mine Lands (Inactive) Placer Mining Streambank Modifications/destablization
Lake Helena	MT41I006_070	GOLCONDA CREEK, headwaters to the mouth (Prickly Pear Creek) T 7N, R3W	5	3.7	MILES	B-1	N	N		F	F	N	X	Cadmium Copper Lead Zinc	Impacts from Abandoned Mine Lands (Inactive) Mine Tailings Subsurface (Hardrock) Minining

HUC 10030101	Upper Missouri	w	atershed	Miss	souri-S	Sun-Sn	nith								
FMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL (CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lake Helena	MT41I006_080	SPRING CREEK, Corbin Creek to the mouth (Prickly Pear Creek)	5	1.7	MILES	B-1	N	N		N	P	N	P	Alteration in stream-side or littoral vegetative covers Aluminum Arsenic Cadmium Copper Lead Low flow alterations Mercury Nitrogen (Total) Phosphorus (Total) Physical substrate habitat alterations Silver Total Suspended Solids (TSS) Zinc	Acid Mine Drainage Channelization Contaminated Sediments Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Mine Tailings
ake Helena	MT411006_090	CORBIN CREEK, headwaters to th mouth (Spring Creek)	e 5	2.5	MILES	B-1	N	N		P	P	N	N	Alteration in stream-side or littoral vegetative covers Arsenic Cadmium Copper Lead Silver Solids (Suspended/Bedload) Temperature, water Zinc pH	Agriculture Dam or Impoundment Mill Tailings Mine Tailings
.ake Helena	MT41I006_100	MIDDLE FORK WARM SPRINGS CREEK, headwaters to mouth (Warm Springs Creek-Prickly Pear Creek)	5	2.7	MILES	B-1	N	N		F	F	N	F	Alteration in stream-side or littoral vegetative covers Arsenic Cadmium Copper Lead Mercury Sedimentation/Siltation Zinc	Impacts from Abandoned Mine Lands (Inactive) Mine Tailings Unspecified Unpaved Road or Trail
ake Helena	MT41I006_110	WARM SPRINGS CREEK, the Middle Fork to the mouth (Prickly Pear Creek)	4A	3	MILES	B-1	Р	Р		F	F	N	F	Arsenic Cadmium Lead Sedimentation/Siltation Zinc	Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Mine Tailings Unspecified Unpaved Road or Trail

HUC 10030101	Upper Missouri	W	atershed	Miss	souri-S	Sun-Sn	nith								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lake Helena	MT41I006_120	CLANCY CREEK, headwaters to th mouth (Prickly Pear Creek)	e 5	11.6	MILES	B-1	N	N		F	F	N	F	Alteration in stream-side or littoral vegetative covers Arsenic Cadmium Copper Lead Mercury Other anthropogenic substrate alterations Sedimentation/Siltation Zinc	Acid Mine Drainage Animal Feeding Operations (NPS) Contaminated Sediments Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Unspecified Unpaved Road or Trail
Lake Helena	MT41I006_130	LUMP GULCH, headwaters to the mouth (Prickly Pear Creek)	5	14.5	MILES	B-1	N	N		F	F	N	X	Cadmium Copper Lead Mercury Total Suspended Solids (TSS) Zinc	Acid Mine Drainage Impacts from Abandoned Mine Lands (Inactive)
Lake Helena	MT41I006_141	TENMILE CREEK, headwaters to the Helena PWS intake above Rimini	5	6	MILES	A-1	P	P		F	F	N	F	Alteration in stream-side or littoral vegetative covers Arsenic Cadmium Copper Lead Mercury Sedimentation/Siltation Zinc	Acid Mine Drainage Forest Roads (Road Construction and Use) Highway/Road/Bridge Runoff (Non- construction Related) Impacts from Abandoned Mine Lands (Inactive) Mine Tailings
Lake Helena	MT41I006_142	TENMILE CREEK, the Helena PWS intake above Rimini to the Helena WT plant	S 4A	7.7	MILES	B-1	N	N		N	N	N	N	Arsenic Cadmium Copper Lead Low flow alterations Sedimentation/Siltation Zinc	Acid Mine Drainage Highway/Road/Bridge Runoff (Non- construction Related) Impacts from Abandoned Mine Lands (Inactive) Impacts from Hydrostructure Flow Regulation/modification

Upper Missouri **HUC** 10030101 Watershed Missouri-Sun-Smith **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Lake Helena MT41I006 143 TENMILE CREEK, the Helena WT 5 15.9 MILES B-1 Р F Ν Alteration in stream-side or littoral Acid Mine Drainage plant to the mouth (Prickly Pear vegetative covers Channelization Creek) Arsenic Habitat Modification - other than Cadmium Hydromodification Highways, Roads, Bridges, Infrasturcture Copper (New Construction) Lead Impacts from Abandoned Mine Lands Low flow alterations (Inactive) Mercury Impacts from Hydrostructure Flow Nitrogen (Total) Regulation/modification Nutrient/Eutrophication Biological Irrigated Crop Production Indicators Site Clearance (Land Development or Phosphorus (Total) Redevelopment) Sedimentation/Siltation Zinc Lake Helena MT41I006 150 SILVER CREEK, headwaters to the 21.6 MILES B-1 Ν Ρ Ν Arsenic Agriculture mouth (Lake Helena) DDE Dredge Mining Irrigated Crop Production Low flow alterations Mill Tailings Mercury Other anthropogenic substrate alterations Subsurface (Hardrock) Minining Lake Helena MT41I006 160 SEVENMILE CREEK, headwaters to 7.8 MILES B-1 Ρ Р F F Alteration in stream-side or littoral Agriculture the mouth (Tenmile Creek) vegetative covers Channelization Arsenic Grazing in Riparian or Shoreline Zones Copper Impacts from Abandoned Mine Lands Lead (Inactive) Low flow alterations Streambank Modifications/destablization Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation Lake Helena MT41I006_180 NORTH FORK WARM SPRINGS 5 MILES B-1 F Χ Ν Alteration in stream-side or littoral Agriculture 3.5 CREEK, headwaters to mouth vegetative covers Natural Sources (Warmsprings Creek-Prickly Pear) Arsenic Cadmium Organic Enrichment (Sewage) Biological Indicators Other anthropogenic substrate alterations Sedimentation/Siltation Zinc JACKSON CREEK, headwaters to Impacts from Abandoned Mine Lands Lake Helena MT41I006_190 2.5 MILES B-1 7inc mouth (McClellan Creek-Prickly (Inactive) Pear Creek)

HUC 10030101	Upper Missouri	Wa	itershed	Mis	souri-S	Sun-Sn	nith								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lake Helena	MT41I006_210	JENNIES FORK, headwaters to mouth (Silver Creek-Missouri River)	5	1.2	MILES	B-1	Р	Р		F	F	N	F	Lead Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation	Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Natural Sources Source Unknown Subsurface (Hardrock) Minining
Lake Helena	MT41l006_220	SKELLY GULCH tributary of Greenhorn Creek-Sevenmile Creek T10N R5W Sec 2	5	7.7	MILES	B-1	Р	Р		F	F	F	F	Arsenic Sedimentation/Siltation	Impacts from Abandoned Mine Lands (Inactive) Unspecified Unpaved Road or Trail
Lake Helena	MT41l006_230	GRANITE CREEK, headwaters to the mouth (Sevenmile Creek)	5	2	MILES	B-1	Х	X		Х	Х	N	Х	Arsenic Cadmium	Acid Mine Drainage Impacts from Abandoned Mine Lands (Inactive)
Lake Helena	MT41I007_010	LAKE HELENA	4A	1600	ACRES	6 B-1	P	Р		F	F	N	X	Arsenic Lead Nitrogen (Total) Phosphorus (Total)	Acid Mine Drainage Impacts from Abandoned Mine Lands (Inactive) Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Municipal Point Source Discharges Natural Sources
Missouri River	MT41I007_020	HOLTER LAKE (Missouri River Mainstem Reservoir.)	5	5500	ACRES	6 B-1	F	F		Х	F	X	P	Mercury	Rangeland Grazing Atmospheric Depositon - Toxics Historic Bottom Deposits (Not Sediment) Impacts from Abandoned Mine Lands (Inactive) Inappropriate Waste Disposal Placer Mining Source Unknown
Missouri River	MT41I007_040	HAUSER LAKE	5	3800	ACRES	8 B-1	P	P		X	F	X	F	DDT Endosulfan Endrin aldehyde Mercury Oxygen, Dissolved	Agriculture Highway/Road/Bridge Runoff (Non- construction Related) Impacts from Hydrostructure Flow Regulation/modification Natural Sources Silviculture Activities Source Unknown

HUC 10030102	Upper Missouri	-Dearborn Wa	itershed	Mis	souri-S	un-Sn	nith								
MDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
lissouri River	MT41Q001_011	MISSOURI RIVER, Sun River to	5	7.6	MILES	B-2	N	N		F	Р	N	F	Chromium (total)	Contaminated Sediments
		Rainbow Dam												Mercury Pentachlorobenzene	Dam Construction (Other than Upstrea Flood Control Projects)
														Physical substrate habitat alterations	Industrial Point Source Discharge
														Sedimentation/Siltation Selenium	Industrial/Commercial Site Stormwater Discharge (Permittted)
														Solids (Suspended/Bedload) Turbidity	Irrigated Crop Production
issouri River	MT41Q001_013	MISSOURI RIVER, Rainbow Dam to	5	10.2	MILES	B-3	N		N	F	Р	N	F	Arsenic	Contaminated Sediments
		the Morony Dam												Copper	Dam or Impoundment
														Pentachlorobenzene Sedimentation/Siltation	Impacts from Abandoned Mine Lands (Inactive)
														Temperature, water	Industrial Point Source Discharge
														Turbidity	Natural Sources
														· a.s.a.,	Post-development Erosion and Sedimentation
ssouri River	MT41Q001_014	MISSOURI RIVER, Morony Dam to	5	60.6	MILES	B-3	N	N	Х	F	F	N	N	Aluminum	Agriculture
		the Marias River												Arsenic	Dam or Impoundment
														Cadmium	Industrial Point Source Discharge
														Chlorophyll-a	Streambank Modifications/destablizati
														Copper	
														Iron	
														Lead	
														Nitrogen (Total)	
														Phosphorus (Total)	
														Sedimentation/Siltation Zinc	
ssouri River	MT41Q001_021	MISSOURI RIVER, Little Prickly	5	21.3	MILES	B-1	Р	Р		F	F	N	F	Arsenic	Grazing in Riparian or Shoreline Zone
		Pear Creek to Sheep Creek												Nitrogen (Total) Other flow regime alterations	Impacts from Hydrostructure Flow Regulation/modification
														Sedimentation/Siltation	Irrigated Crop Production
															Natural Sources
ssouri River	MT41Q001_022	MISSOURI RIVER, Sheep Creek to	5	65.6	MILES	B-1	Р	Р		F	F	F	F	Sedimentation/Siltation	Agriculture
		the Sun River													Dam Construction (Other than Upstrea Flood Control Projects)
															Highway/Road/Bridge Runoff (Non- construction Related)
															Impacts from Hydrostructure Flow Regulation/modification
															Natural Sources
															Streambank Modifications/destablizati

Upper Missouri-Dearborn **HUC** 10030102 Watershed Missouri-Sun-Smith **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Benton Lake MT41Q002 010 LAKE CREEK, headwaters to the 5 19.6 MILES B-3 Ν Ν Ν Cadmium Agriculture mouth (Benton Lake) Impacts from Hydrostructure Flow Other flow regime alterations Regulation/modification Salinity Irrigated Crop Production Sedimentation/Siltation Selenium Zinc COTTONWOOD CREEK, 1 mile F Cadmium Acid Mine Drainage Missouri Cascade MT41Q002 020 MILES Ν 5 3.9 B-1 N above Stockett to mouth (Sand Nickel Subsurface (Hardrock) Minining Coulee Creek-Missouri River) 7inc Missouri Cascade MT41Q002_030 NUMBER FIVE COULEE, 15.1 MILES B-1 Ν F Ν Х Aluminum Impacts from Abandoned Mine Lands headwaters to the mouth (Inactive) Cadmium (Cottonwood Creek-Sand Coulee Subsurface (Hardrock) Minining Lead Creek-Missouri River) Nickel Zinc Р MT41Q002 040 SAND COULEE CREEK, Number Ν Ν Ν Χ Lead Agriculture Missouri Cascade 5 17.1 MILES B-1 Five Coulee to the mouth (Missouri Impacts from Abandoned Mine Lands Salinity River) (Inactive) Zinc Subsurface (Hardrock) Minining BOX ELDER CREEK, Spring Creek F Nitrate/Nitrite (Nitrite + Nitrate as N) Grazing in Riparian or Shoreline Zones Missouri Choteau MT41Q002 050 5 15.9 MILES B-3 to mouth (Missouri River) Sedimentation/Siltation SAND COULEE from headwaters to 5 MILES Ν Ν Р Aluminum Impacts from Abandoned Mine Lands Missouri Cascade MT41Q002_060 5.3 B-1 Ν Х mouth Sand Coulee Creek-Missouri (Inactive) Cadmium River) Subsurface (Hardrock) Minining Nickel Salinity MT41Q003 010 DEARBORN RIVER. Falls Creek to 48.6 MILES B-1 Ν F F Р Temperature, water Impacts from Hydrostructure Flow Dearborn 5 Ν the mouth (Missouri River) Regulation/modification Grazing in Riparian or Shoreline Zones Dearborn MT41Q003_020 MIDDLE FORK OF THE 4A 13.5 MILES B-1 Р Р F F F Sedimentation/Siltation DEARBORN RIVER, headwaters to Habitat Modification - other than the mouth (Dearborn River) Hydromodification F Low flow alterations Flow Alterations from Water Diversions Dearborn MT41Q003 030 SOUTH FORK OF THE MILES B-1 Р Х F 15.8 DEARBORN RIVER, headwaters to Sedimentation/Siltation Grazing in Riparian or Shoreline Zones the mouth (Dearborn River) Habitat Modification - other than Hydromodification Dearborn MT41Q003 040 FLAT CREEK, Henry Creek to the MILES B-1 Ρ F Χ High Flow Regime Flow Alterations from Water Diversions 15.5 mouth (Dearborn River) Sedimentation/Siltation Grazing in Riparian or Shoreline Zones Habitat Modification - other than Hydromodification Excess Algal Growth Benton Lake MT41Q005 020 BENTON LAKE T22N R3E ACRES B-3 Agriculture 5600 Nitrogen (Total) Irrigated Crop Production Salinity Selenium Sulfates

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

HUC 10030103 Smith Watershed Missouri-Sun-Smith **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Smith MT41J001 010 SMITH RIVER, North and South 5 96 MILES B-1 Ρ F F Fecal Coliform Agriculture Forks to Hound Creek Low flow alterations Irrigated Crop Production Phosphorus (Total) Rangeland Grazing Smith MT41J001_020 SMITH RIVER, Hound Creek to the 25.4 MILES B-1 Ρ Ν F F Alteration in stream-side or littoral Agriculture mouth (Missouri River) vegetative covers Grazing in Riparian or Shoreline Zones Low flow alterations Irrigated Crop Production Other anthropogenic substrate alterations Rangeland Grazing Phosphorus (Total) Physical substrate habitat alterations Temperature, water SMITH RIVER NORTH FORK from MILES B-1 F F F Chlorophyll-a Source Unknown Smith MT41J002 011 5 19.5 F Lake Sutherlin to the mouth Fecal Coliform Nitrogen (Total) Phosphorus (Total) F F Alteration in stream-side or littoral Smith MT41J002_020 HOUND CREEK, Spring Creek to 5 6.2 MILES B-1 Р Grazing in Riparian or Shoreline Zones the mouth (Smith River) vegetative covers Chlorophyll-a Total Kjehldahl Nitrogen (TKN) Fecal Coliform Placer Mining MT41J002_030 SHEEP CREEK, headwaters to the MILES B-1 Χ F Ν Ν Smith 5 36.9 Χ mouth (Smith River) Mercury Source Unknown BEAVER CREEK, headwaters to the Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Smith MT41J002_040 5 19.6 MILES B-1 mouth (Smith River) vegetative covers Chlorophyll-a Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN) Fecal Coliform Smith MT41J002_050 BENTON GULCH, headwaters to 12.7 MILES B-1 Х Х Х Х Source Unknown the mouth (Smith River) Smith MT41J002 060 ELK CREEK, headwaters to mouth 5 9.7 MILES B-1 Ρ Р F F Low flow alterations Irrigated Crop Production (Camas Creek) Phosphorus (Total) Livestock (Grazing or Feeding Operations) Sedimentation/Siltation Temperature, water Total Kiehldahl Nitrogen (TKN) MT41J002 070 THOMPSON GULCH, headwaters Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Smith 5 10.5 MILES B-1 to the mouth (Smith River) vegetative covers Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN) F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Smith MT41J002_081 NEWLAN CREEK, Newlan 5 8 MILES B-1 Р Р F Reservoir to the mouth (Smith River) vegetative covers Irrigated Crop Production Fecal Coliform Low flow alterations Sedimentation/Siltation

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

Temperature, water

HUC 10030103	Smith	Wa	atershed	Mi	ssouri-S	Sun-Sn	nith								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Smith	MT41J002_082	NEWLAN CREEK, headwaters to Newlan Reservoir	5	13.8	MILES	B-1	P	P		F	P	F	F	Alteration in stream-side or littoral vegetative covers Cadmium Phosphorus (Total) Sedimentation/Siltation Solids (Suspended/Bedload) Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones Impacts from Abandoned Mine Lands (Inactive) Transfer of Water from an Outside Watershed
Smith	MT41J002_100	LITTLE CAMAS CREEK, headwaters to mouth (Camas Creek)	5	4	MILES	B-1	Р	Р		F	F	F	Р	Chlorophyll-a Nitrogen (Total) Temperature, water	Rangeland Grazing
Smith	MT41J002_110	CAMAS CREEK, junction of Big and Little Camas Creeks to mouth (Smitl River)		13.8	MILES	B-1	Х	Х		Х	Х	X	N	Fecal Coliform	Source Unknown
Smith	MT41J002_120	MOOSE CREEK, headwaters to the mouth (Sheep Creek)	5	10.9	MILES	B-1	Р	Р		F	F	F	F	Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones

Watershed **HUC** 10030104 Sun Missouri-Sun-Smith **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Sun MT41K001 010 SUN RIVER, Gibson Dam to Muddy 4A 80.3 MILES B-1 Ν F F Alteration in stream-side or littoral Agriculture vegetative covers Creek Channelization Other flow regime alterations Grazing in Riparian or Shoreline Zones Sedimentation/Siltation Impacts from Hydrostructure Flow Regulation/modification Temperature, water Ρ Agriculture Sun MT41K001_020 SUN RIVER, Muddy Creek to the 4A 17.1 MILES B-3 N Ν Р F Nitrogen (Total) mouth (Missouri River) Other flow regime alterations Channelization Irrigated Crop Production Phosphorus (Total) Sedimentation/Siltation Rangeland Grazing Total Suspended Solids (TSS) MT41K002 010 MUDDY CREEK, headwaters to the MILES F Р Nitrogen (Total) Agriculture Sun 4A 31.8 Ν N mouth (Sun River) Phosphorus (Total) Channel Erosion/Incision from Upstream Hydromodifications Salinity Habitat Modification - other than Sedimentation/Siltation Hydromodification Selenium Streambank Modifications/destablization Sulfates Temperature, water Total Dissolved Solids F Alteration in stream-side or littoral Channel Erosion/Incision from Upstream Sun MT41K002 020 FORD CREEK, from mouth 2 miles MILES B-1 Ρ F upstream (Smith Creek-Elk Creekvegetative covers Hydromodifications Sun River) Other anthropogenic substrate alterations Grazing in Riparian or Shoreline Zones Sedimentation/Siltation Streambank Modifications/destablization MT41K004 030 FREEZEOUT LAKE 3500 ACRES B-2 Р Aquatic Plants - Native Agriculture Sun Phosphorus (Total) Irrigated Crop Production Selenium Source Unknown Sulfates

Total Dissolved Solids

Appendix A: Impaired Waters															
HUC 10030105	Belt	Wa	tershed	Miss	ouri-S	un-Sn	nith								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Belt	MT41U002_050	BIG OTTER CREEK, headwaters to the mouth (Belt Creek)	5	30.8	MILES	B-1	Р	P		Х	F	Х	F	Alteration in stream-side or littoral vegetative covers Nitrates Physical substrate habitat alterations Sedimentation/Siltation	Channelization Grazing in Riparian or Shoreline Zones Highways, Roads, Bridges, Infrasturcture (New Construction)

Belt

HUC 10030105

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Belt MT41U001 011 BELT CREEK, Carpenter Creek to 5 39.1 MILES B-1 Ν Ρ Ν Alteration in stream-side or littoral Acid Mine Drainage vegetative covers Big Otter Creek Channelization Arsenic Grazing in Riparian or Shoreline Zones Chromium (total) Highways, Roads, Bridges, Infrasturcture Copper (New Construction) Lead Impacts from Abandoned Mine Lands (Inactive) Salinity Sedimentation/Siltation Zinc Belt MT41U001 012 BELT CREEK Big Otter Creek to the 38.7 MILES B-2 Р Alteration in stream-side or littoral Acid Mine Drainage vegetative covers mouth (Missouri River) Channelization Arsenic Grazing in Riparian or Shoreline Zones Chromium (total) Highways, Roads, Bridges, Infrasturcture Copper (New Construction) Lead Impacts from Abandoned Mine Lands (Inactive) Other anthropogenic substrate alterations Salinity Sedimentation/Siltation Zinc Belt MT41U002 010 CARPENTER CREEK, headwaters 6 MILES B-1 Ν N Χ Ν Χ Cadmium Acid Mine Drainage to the mouth (Belt Creek) Impacts from Abandoned Mine Lands Copper (Inactive) Lead Mine Tailings Mercury Acid Mine Drainage Belt MT41U002 020 GALENA CREEK, headwaters to the 3.3 MILES B-1 N N Ν Ν Antimony mouth (Dry Fork Belt Creek) Mine Tailings Arsenic Cadmium Copper Lead Zinc Belt MT41U002 030 DRY FORK BELT CREEK, 5 18.1 MILES B-1 N N F Ν Cadmium Acid Mine Drainage headwaters to the mouth (Belt Contaminated Sediments Copper Creek) Lead Highway/Road/Bridge Runoff (Nonconstruction Related) Sedimentation/Siltation Mine Tailings Zinc Post-development Erosion and Sedimentation Belt MT41U002_040 LITTLE BELT CREEK, the mouth 14.6 MILES B-1 Р Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones vegetative covers three miles upstream Irrigated Crop Production

Watershed

Missouri-Sun-Smith

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

Chlorophyll-a

Low flow alterations
Phosphorus (Total)
Sedimentation/Siltation
Total Kjehldahl Nitrogen (TKN)

Loss of Riparian Habitat

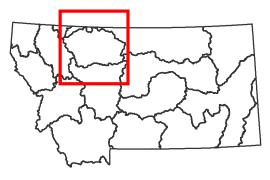
Cut Bank Creek Willow Creek Two Medicine River Marias River Teton River

Marias Sub-Major Basin

Missouri River Basin

JSGS HUC	HUC NAME

Two Medicine River Cut Bank Creek Marias River Willow Creek Teton River



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Appendix A: In	Appendix A: Impaired Waters														
HUC 10030201	Two Medicine	Wa	atershed	Mari	ias										
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Cut Bank - Two Medicine	MT41M002_080	BIRCH CREEK, Blacktail Creek to the mouth (Two Medicine River)	5	34.1	MILES	B-1	Р	I		F	F	F	Р	Low flow alterations Nitrate/Nitrite (Nitrite + Nitrate as N)	Irrigated Crop Production
Cut Bank - Two Medicine	MT41M002_100	SOUTH FORK DUPUYER CREEK, Bob Marshall Wilderness boundary to mouth (Dupuyer Creek)	4C	4.6	MILES	B-1	N	N		F	F	F	F	Cause Unknown	Source Unknown
Cut Bank - Two Medicine	MT41M002_110	DUPUYER CREEK, North & South Forks to the mouth (Birch Creek)	5	37.6	MILES	B-1	N	I		F	F	F	Р	Low flow alterations Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation Temperature, water	Agriculture Crop Production (Crop Land or Dry Land) Flow Alterations from Water Diversions Irrigated Crop Production

Appendix A: Impaired Waters HUC 10030202 Cut Bank Watershed Marias **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Cut Bank - Two Medicine MT41L001 010 OLD MAIDS COULEE, headwaters 16.4 MILES B-1 N I Ν F Ν Ammonia (Total) Crop Production (Crop Land or Dry Land) to the mouth (Cutbank Creek) Chloride Municipal Point Source Discharges Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Specific Conductance Total Dissolved Solids CUT BANK CREEK, Blackfeet Cut Bank - Two Medicine MT41L001_040 5 23.1 MILES B-2 N N F F Low flow alterations Flow Alterations from Water Diversions Reservation boundary to the mouth Nitrate/Nitrite (Nitrite + Nitrate as N) Irrigated Crop Production (Marias River) Temperature, water Municipal Point Source Discharges

Non-irrigated Crop Production

Appendix A: Impaired Waters HUC 10030203 Marias Watershed Marias **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Marias - Willow MT41P002 030 PONDERA CREEK/COULEE, 5 118.5 MILES B-2 P P X X X Χ Alteration in stream-side or littoral Agriculture vegetative covers headwaters to the mouth (Marias River) Physical substrate habitat alterations Salinity CORRAL CREEK, headwaters to Phosphorus (Total) Agriculture Marias - Willow MT41P002 050 5 19.2 MILES B-2 P P X X X Xmouth at Government-Cottonwood Creeks

Appendix A: Impaired Waters HUC 10030204 Willow Watershed Marias **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Marias - Willow MT41P004 020 EAGLE CREEK, headwaters to 5 45.7 MILES B-2 Ρ Χ Χ Χ Alteration in stream-side or littoral Agriculture vegetative covers mouth at Tiber Reservoir Grazing in Riparian or Shoreline Zones Nitrogen (Total) Phosphorus (Total) Physical substrate habitat alterations OILMONT WETLAND, T35N R1W ACRES B-2 P Alteration in stream-side or littoral Highways, Roads, Bridges, Infrasturcture Marias - Willow MT41P005_010 9 Χ Ν X Sec31 vegetative covers (New Construction) Arsenic Petroleum/natural Gas Activities

Other flow regime alterations

HUC 10030205 Teton Watershed Marias **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Teton MT41O001 010 TETON RIVER, Muddy Creek to the 4A 110.6 MILES B-3 F F Low flow alterations Agriculture mouth (Marias River) Salinity Channelization Sedimentation/Siltation Flow Alterations from Water Diversions Sulfates Highways, Roads, Bridges, Infrasturcture (New Construction) Total Dissolved Solids Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Streambank Modifications/destablization MT41O001 020 TETON RIVER, Deep Creek to Alteration in stream-side or littoral Agriculture Teton 5 42 MILES B-2 Muddy Creek vegetative covers Channelization Low flow alterations Crop Production (Crop Land or Dry Land) Salinity Flow Alterations from Water Diversions Sulfates Grazing in Riparian or Shoreline Zones Temperature, water Highways, Roads, Bridges, Infrasturcture Total Dissolved Solids (New Construction) Total Suspended Solids (TSS) Impacts from Hydrostructure Flow Regulation/modification Municipal Point Source Discharges Rangeland Grazing Streambank Modifications/destablization MT41O001 030 TETON RIVER. North and South 4C 29.5 MILES B-1 Р F F Alteration in stream-side or littoral Channelization Teton Forks to Deep Creek vegetative covers Flow Alterations from Water Diversions Low flow alterations Impacts from Hydrostructure Flow Regulation/modification Streambank Modifications/destablization MT41O002 010 WILLOW CREEK, headwaters to F F Alteration in stream-side or littoral Agriculture Teton 4A 18.9 MILES B-1 vegetative covers the mouth (Deep Creek) Streambank Modifications/destablization Alterations in wetland habitats Sedimentation/Siltation DEEP CREEK. Willow Creek to the Ρ Alteration in stream-side or littoral Teton MT41O002 020 4A 9 MILES B-1 Р Р Р Agriculture mouth (Teton River) vegetative covers Flow Alterations from Water Diversions Alterations in wetland habitats Impacts from Hydrostructure Flow Low flow alterations Regulation/modification Nitrogen (Total) Loss of Riparian Habitat Streambank Modifications/destablization Phosphorus (Total) Sedimentation/Siltation MT41O002 042 BLACKLEAF CREEK, Cow Creek to 4C MILES B-2 P F F Alteration in stream-side or littoral Highways, Roads, Bridges, Infrasturcture Teton 19.8 the mouth (Muddy Creek) (New Construction) vegetative covers Other flow regime alterations Loss of Riparian Habitat

HUC 10030205	Teton	Wat	ershed	Maria	as										
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Jnits	Use Class	AL C	WF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Teton	MT41O002_060	TETON SPRING CREEK, the city of Choteau to mouth (Teton River)	4A	4.5	MILES	B-1	Р	P		F	P	Р	P	Alteration in stream-side or littoral vegetative covers Alterations in wetland habitats Nitrogen (Total) Sedimentation/Siltation	Channelization Impacts from Hydrostructure Flow Regulation/modification Loss of Riparian Habitat Septage Disposal Source Unknown Streambank Modifications/destablization
Teton	MT41O002_070	TETON SPRING CREEK, headwaters to city of Choteau	4A	8.5	MILES	B-1	Р	P		F	F	Р	Р	Alteration in stream-side or littoral vegetative covers Low flow alterations Sedimentation/Siltation Temperature, water	Flow Alterations from Water Diversions Impacts from Hydrostructure Flow Regulation/modification Loss of Riparian Habitat
Teton	MT41O004_020	PRIEST BUTTE LAKE	4A	300	ACRES	B-2	N		N	N	N	N	Р	Salinity Selenium Sulfates Total Dissolved Solids	Agriculture Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production

Bullwhacker-Dog Creeks Fort Peck Reservoir Arrow Creek Big Dry Creek Judith River Little Dry Creek

Middle Missouri Sub-Major Basin

Missouri River Basin

USGS HUC HUC NAME

10040101 10040102 10040103 10040104 10040105

10040106

Bullwhacker-Dog Creeks Arrow Creek

Judith River Fort Peck Reservoir Big Dry Creek Little Dry Creek

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Appendix A: Impaired Waters														
HUC 10040101	Bullwhacker-Dog	1	Natershed	l Mi	ddle Mis	ssouri								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Missouri River	MT41T001_010	MISSOURI RIVER, the Marias R to the Bullwhacker Creek	iver 5	103.9	MILES	B-3	P	Р	F	F	F	Р	Alteration in stream-side or littoral vegetative covers Copper Lead Physical substrate habitat alterations	Agriculture Grazing in Riparian or Shoreline Zones Source Unknown
Bullwhacker - Dog	MT41T002_020	DOG CREEK, Cutbank Creek to mouth (Missouri River)	the 5	25.3	MILES	C-3	N	N				F	Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones

Appendix A: Impaired Waters HUC 10040102 Middle Missouri Arrow Watershed **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Animal Feeding Operations (NPS) Judith - Arrow MT41R001_010 COFFEE CREEK, headwaters to the 37.8 MILES C-3 N Ν Nitrate/Nitrite (Nitrite + Nitrate as N) mouth (Arrow Creek) Selenium Crop Production (Crop Land or Dry Land) **Total Dissolved Solids** Natural Sources MT41R001_020 ARROW CREEK, Surprise Creek to 5 64.8 MILES C-3 P Р F Iron Natural Sources Judith - Arrow the mouth (Missouri River)

HUC 10040103 Judith Watershed Middle Missouri

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Judith - Arrow	MT41S001_010	JUDITH RIVER, Big Spring Creek to the mouth (Missouri River)	4C	72.3	MILES	B-2	P	Х	Р	F	F	F	Х	Alteration in stream-side or littoral vegetative covers Physical substrate habitat alterations	Agriculture Grazing in Riparian or Shoreline Zones Loss of Riparian Habitat Rangeland Grazing
Judith - Arrow	MT41S001_020	JUDITH RIVER, Ross Fork to Big Spring Creek	5	15.9	MILES	B-1	Р	Р		F	F	X	P	Alteration in stream-side or littoral vegetative covers Cause Unknown Nitrate/Nitrite (Nitrite + Nitrate as N) Physical substrate habitat alterations Sedimentation/Siltation	Animal Feeding Operations (NPS) Grazing in Riparian or Shoreline Zones Loss of Riparian Habitat Natural Sources Source Unknown
Judith - Arrow	MT41S002_010	DRY WOLF CREEK, headwaters to the mouth (Wolf Creek)	5	30.5	MILES	C-3	Р		P				X	Alteration in stream-side or littoral vegetative covers Nitrogen, Nitrate Phosphorus (Total) Salinity Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones Non-irrigated Crop Production
Judith - Arrow	MT41S002_020	WOLF CREEK, Dry Wolf Creek to the mouth (Judith River)	5	44.5	MILES	C-3	N		N				F	Iron Selenium Total Dissolved Solids	Crop Production (Crop Land or Dry Land) Crop Production with Subsurface Drainage Natural Sources Source Unknown
Judith - Arrow	MT41S002_030	WARM SPRING CREEK, 5 miles above mouth to mouth (Judith River)	5	5	MILES	C-3	Р		P	X	X	X	X	Alteration in stream-side or littoral vegetative covers Nitrogen, Nitrate Other anthropogenic substrate alterations Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Agriculture Grazing in Riparian or Shoreline Zones Streambank Modifications/destablization
Judith - Arrow	MT41S002_050	SAGE CREEK, headwaters to mouth (Judith River)	5	63	MILES	C-3	Р		Р				F	Iron Nitrate/Nitrite (Nitrite + Nitrate as N) Nitrogen (Total)	Animal Feeding Operations (NPS) Natural Sources Source Unknown
Judith - Arrow	MT41S002_070	ROSS FORK JUDITH RIVER, headwaters to mouth (Judith River)	5	51.3	MILES	B-1	N	N		F	F	P	F	Alteration in stream-side or littoral vegetative covers BOD, Biochemical oxygen demand Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation	Channelization Loss of Riparian Habitat Permitted Runoff from Confined Animal Feeding Operations (CAFOs) Source Unknown
Judith - Arrow	MT41S002_080	SOUTH FORK JUDITH RIVER, headwaters to mouth	5	20.9	MILES	B-1	Р	Р		F	F	Х	X	Physical substrate habitat alterations Sedimentation/Siltation	Forest Roads (Road Construction and Use Grazing in Riparian or Shoreline Zones Site Clearance (Land Development or Redevelopment)
Judith - Arrow	MT41S002_100	LAST CHANCE CREEK, headwaters to mouth (Moccasin Creek)	5	5.4	MILES	C-3	N		N				Х	Cyanide Iron Selenium Thallium	Acid Mine Drainage Impacts from Abandoned Mine Lands (Inactive) Mine Tailings

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

Watershed **HUC** 10040103 Judith Middle Missouri **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Big Springs MT41S004 010 BIG SPRING CREEK, East Fork Big 1.9 MILES B-2 Р F F Polychlorinated biphenyls Aquaculture (Permitted) Spring Creek to Casino Creek Contaminated Sediments BIG SPRING CREEK, East Fork to F Alteration in stream-side or littoral Agriculture Big Springs MT41S004 020 28.7 MILES B-1 Р F mouth (Judith River) vegetative covers Aquaculture (Permitted) Nitrogen (Total) Channelization Phosphorus (Total) Contaminated Sediments Polychlorinated biphenyls Dam or Impoundment Sedimentation/Siltation Grazing in Riparian or Shoreline Zones Loss of Riparian Habitat Streambank Modifications/destablization Unspecified Urban Stormwater Big Springs MT41S004 040 CASINO CREEK, headwaters to 11.6 MILES B-1 Р F F Alteration in stream-side or littoral Animal Feeding Operations (NPS) mouth (Big Spring Creek) vegetative covers Grazing in Riparian or Shoreline Zones Chlorophyll-a Loss of Riparian Habitat Nitrogen (Total) Site Clearance (Land Development or Phosphorus (Total) Redevelopment) COTTONWOOD CREEK, county Р Alteration in stream-side or littoral Flow Alterations from Water Diversions MT41S004_052 13.3 MILES B-1 Р Р Big Springs 5 road bridge at T14N R18E Sec18 to vegetative covers Grazing in Riparian or Shoreline Zones mouth (Big Spring Creek) Excess Algal Growth Loss of Riparian Habitat Nitrate/Nitrite (Nitrite + Nitrate as N) Source Unknown Nitrogen (Total) Other flow regime alterations Oxygen, Dissolved Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)

HUC 10040104 Fort Peck Reservoir Watershed Middle Missouri **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Missouri River MT40E001 010 MISSOURI RIVER, Bullwhacker 5 49.8 MILES B-3 F Ν Χ Alteration in stream-side or littoral Agriculture Creek to Fort Peck Reservoir vegetative covers Grazing in Riparian or Shoreline Zones Arsenic Impacts from Abandoned Mine Lands Copper (Inactive) Landusky MT40E002 010 MONTANA GULCH, headwaters 5 2 MILES C-3 N Ν Arsenic Acid Mine Drainage (Gold Bug & Yellow Boy Mine Adits) Impacts from Abandoned Mine Lands Cadmium to mouth (Rock Creek) (Inactive) Copper рΗ ARMELLS CREEK, headwaters to Cadmium Impacts from Abandoned Mine Lands Fort Peck Area Tributaries MT40E002 022 5 13.4 MILES C-3 N Ν (Inactive) Deer Creek Copper Mercury Zinc рΗ Coal Mining Fort Peck Area Tributaries MT40E002_040 COW CREEK, Als Creek to the 31.5 MILES C-3 N Ν Aluminum mouth (Missouri River) Copper Natural Sources Iron Lead Landusky MT40E002 050 ALDER GULCH, headwaters to MILES C-3 Alteration in stream-side or littoral Acid Mine Drainage vegetative covers Ruby Creek, T26N R24E SEC 13 Impacts from Abandoned Mine Lands TO T26N R25E SEC 16 Cadmium (Inactive) Mine Tailings Copper Lead Mercury Selenium Zinc рΗ Fort Peck Area Tributaries MT40E002 060 RUBY CREEK, 1 mi below Zortman MILES C-3 N Aluminum Impacts from Abandoned Mine Lands (Alder & Ruby Gulch junction) to (Inactive) Cadmium mouth at CK Creek Copper Lead Mercury Selenium Zinc рΗ Cadmium Impacts from Abandoned Mine Lands MT40E002_070 RUBY GULCH, headwaters to 1 Mi 2.8 MILES C-3 N Ν Landusky Below Zortman, MT T25N R25E (Inactive) Chromium (total) SEC 16 TO SEC 7 Mine Tailings Copper Lead Mercury Selenium Zinc рΗ

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

HUC 10040104 Fort Peck Reservoir Watershed Middle Missouri **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Landusky MT40E002 090 ROCK CREEK, headwaters to 5 37.6 MILES C-3 Р Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones mouth (Missouri River) vegetative covers Impacts from Abandoned Mine Lands Cadmium (Inactive) Copper Fecal Coliform Lead Mercury Selenium Zinc рΗ Р Alteration in stream-side or littoral Rangeland Grazing Landusky MT40E002_100 MILL GULCH, tributary to Rock 5 3 MILES C-3 P Creek near Landusky vegetative covers Surface Mining Copper Lead Mercury Nitrogen, Nitrate Selenium рΗ Landusky MT40E002 110 SULLIVAN CREEK, tributary to 4C .7 MILES C-3 N Ν Ν Alteration in stream-side or littoral Open Pit Mining vegetative covers Rock Creek in the Little Rocky Subsurface (Hardrock) Minining Mountains near Landusky Fish-Passage Barrier Surface Mining Other flow regime alterations Physical substrate habitat alterations Fort Peck Area Tributaries MT40E002 130 FARGO COULEE, headwaters to 23.2 MILES C-3 N Ν Alteration in stream-side or littoral Natural Sources mouth at Amells Creek vegetative covers Source Unknown Aluminum Iron Lead Phosphorus (Total) Total Kjehldahl Nitrogen (TKN) TIMBER CREEK, headwaters to the Natural Sources Redwater MT40E003_010 81 MILES C-3 P Phosphorus (Total) mouth (Big Dry Creek arm of Fort Total Kjehldahl Nitrogen (TKN) Source Unknown Peck Res) Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Redwater MT40E003 020 NELSON CREEK, headwaters to the 5 22.7 MILES C-3 P mouth (Big Dry Creek arm of Fort vegetative covers Source Unknown Peck Res) Cadmium Copper Nitrogen, Nitrate Sulfates Missouri River MT40E004_010 FORT PECK RESERVOIR 245000 ACRES B-2 X X Χ Ν Aquatic Plants - Native Agriculture Lead Atmospheric Depositon - Toxics Mercury Historic Bottom Deposits (Not Sediment) Impacts from Abandoned Mine Lands (Inactive)

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

Appendix A: II	mpaired Wate	ers												
HUC 10040105	Big Dry	w	atershed	N	/liddle Mis	ssouri								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CW	F WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Big and Little Dry	MT40D001_010	BIG DRY CREEK, Steves Fork to mouth (Fort Peck Reservoir)	5	96.1	MILES	C-3	Р	P				Р	Alteration in stream-side or littoral vegetative covers Ammonia (Un-ionized) Nitrogen, Nitrate Phosphorus (Total) Total Kjehldahl Nitrogen (TKN)	Agriculture Municipal Point Source Discharges

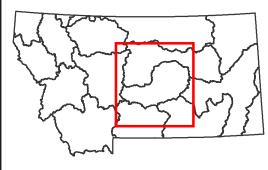
Lower Musselshell River Box Elder Creek (Musselshell R) Flatwillow Creek Middle Musselshell River Upper Musselshell River

Musselshell Sub-Major Basin

Missouri River Basin

USGS	HUC	HUC	NAME

10040201 Upper Musselshell River 10040202 Middle Musselshell River 10040203 Flatwillow Creek 10040204 Box Elder Creek (Musselshell R) 10040205 Lower Musselshell River



Montana Department of Environmental Quality

HUC 10040201 Upper Musselshell Watershed Musselshell **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Upper/Middle Musselshell MT40A001 010 MUSSELSHELL RIVER, North & 5 53.1 MILES B-2 Р F F Alteration in stream-side or littoral Agriculture South Fork confluence to Deadmans vegetative covers Channelization Basin Diversion Canal Low flow alterations Irrigated Crop Production Nitrogen (Total) Phosphorus (Total) Physical substrate habitat alterations Sedimentation/Siltation Upper/Middle Musselshell MT40A001_020 MUSSELSHELL RIVER. Deadmans 94.4 MILES C-3 P Р Alteration in stream-side or littoral Agriculture Basin Div. Canal to HUC boundary vegetative covers Grazing in Riparian or Shoreline Zones near Roundup Low flow alterations Irrigated Crop Production Nitrogen (Total) Non-irrigated Crop Production Phosphorus (Total) Physical substrate habitat alterations Sedimentation/Siltation NORTH FORK MUSSELSHELL Grazing in Riparian or Shoreline Zones Upper/Middle Musselshell MT40A002_010 4C 34.4 MILES B-1 Р Р F F Chlorophyll-a RIVER, headwaters to confluence Natural Sources with the South Fork Musselshell Upper/Middle Musselshell MT40A002 030 TRAIL CREEK, headwaters to 9.3 MILES B-1 F Chlorophyll-a Rangeland Grazing 5 mouth (North Fork Musselshell Sedimentation/Siltation Silviculture Harvesting River) Source Unknown MILL CREEK, headwaters to mouth MILES B-1 Р Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Upper/Middle Musselshell MT40A002 040 48 (North Fork Musselshell River) vegetative covers Silviculture Harvesting Chlorophyll-a Source Unknown Sedimentation/Siltation Careless Creek MT40A002 050 CARELESS CREEK, Junction with 15.5 MILES C-3 P Alteration in stream-side or littoral Channel Erosion/Incision from Upstream 4A Deadmans Basin Canal to Mouth vegetative covers Hydromodifications (Musselshell River) Sedimentation/Siltation Impacts from Hydrostructure Flow Regulation/modification Streambank Modifications/destablization Upper/Middle Musselshell MT40A002 070 FISH CREEK, headwaters to the 86.7 MILES C-3 P Р Nitrate/Nitrite (Nitrite + Nitrate as N) Flow Alterations from Water Diversions mouth (Musselshell River) Other flow regime alterations Rangeland Grazing Phosphorus (Total) Source Unknown Total Kjehldahl Nitrogen (TKN) Upper/Middle Musselshell MT40A002 080 PAINTED ROBE CREEK. 37.6 MILES C-3 P Alteration in stream-side or littoral Non-irrigated Crop Production headwaters to the mouth vegetative covers Rangeland Grazing (Musselshell River) Salinity Total Kjehldahl Nitrogen (TKN) Upper/Middle Musselshell MT40A002 090 HALF BREED CREEK, headwaters 16.6 MILES C-3 P Nitrate/Nitrite (Nitrite + Nitrate as N) Highway/Road/Bridge Runoff (Nonconstruction Related) to the mouth (Musselshell River) Nitrogen (Total) Livestock (Grazing or Feeding Operations) Other flow regime alterations On-site Treatment Systems (Septic Systems Total Kjehldahl Nitrogen (TKN) and Similar Decencentralized Systems)

Appendix A: Im	npaired Wate	rs													
HUC 10040201	Upper Musselsh	ell	Watershed	Mu	ısselshe	II									
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Upper/Middle Musselshell	MT40A005_010	DEADMANS BASIN RESERVO T7N R18E Sec 22-27	R 5	1903	ACRES	B-1	N	N		N	F	N	F	Copper Iron Lead	Natural Sources Source Unknown

Appendix A: In	npaired Wate	rs											
HUC 10040202	Middle Mussels	hell	Watershed	Mι	ısselshe	ell							
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CWF	WWF	AG II	nd DW	Rec	Cause Name	Source Name
Upper/Middle Musselshell	MT40C001_010	MUSSELSHELL RIVER, HUC boundary SW of Roundup to Flatwillow Creek	4C	114.9	MILES	C-3	P	Р			F	Alteration in stream-side or littoral vegetative covers Low flow alterations Physical substrate habitat alterations	Agriculture Channelization Impacts from Hydrostructure Flow Regulation/modification Streambank Modifications/destablization
Upper/Middle Musselshell	MT40C002_010	NORTH WILLOW CREEK, headwaters to the mouth (Musselshell River)	5	105	MILES	C-3	N	N			F	Iron Phosphorus (Total) Sedimentation/Siltation Solids (Suspended/Bedload) Specific Conductance Sulfates Total Kjehldahl Nitrogen (TKN)	Above Ground Storage Tank Leaks (Tank Farms) Natural Sources Source Unknown

HUC 10040203	Flatwillow	Wa	tershed	Mι	usselshe	ell									
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Flatwillow - Box Elder	MT40B001_021	FLATWILLOW CREEK, headwaters to the Highway 87 bridge	5	32.8	MILES	B-2	P	P		F	P	Х	P	Alteration in stream-side or littoral vegetative covers Low flow alterations Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Loss of Riparian Habitat Rangeland Grazing
Flatwillow - Box Elder	MT40B001_022	FLATWILLOW CREEK, Highway 87 bridge to the mouth (Musselshell River)	5	83.9	MILES	C-3	P		P				P	Alteration in stream-side or littoral vegetative covers Low flow alterations Mercury Nitrates Physical substrate habitat alterations Sedimentation/Siltation	Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Loss of Riparian Habitat Rangeland Grazing Source Unknown
Flatwillow - Box Elder	MT40B001_040	NORTH FORK FLATWILLOW CREEK, headwaters to confluence with South Fork	5	24.9	MILES	B-2	Р	Р		F	F	F	F	Sedimentation/Siltation	Agriculture Loss of Riparian Habitat Rangeland Grazing

HUC 10040204	Box Elder	Wa	atershed	Mus	selshe	II							
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CWF	WWF	AG In	d DW	Rec	Cause Name	Source Name
Flatwillow - Box Elder	MT40B002_010	McDONALD CREEK, North and South Forks to mouth (Box Elder Creek)	5	72.5	MILES	C-3	Р	Р			F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation Specific Conductance Total Dissolved Solids	Agriculture Managed Pasture Grazing Source Unknown
Flatwillow - Box Elder	MT40B002_020	CHICAGO GULCH, headwaters to the mouth (Fords Creek)	5	3.1	MILES	C-3	P	X			X	Lead Zinc pH	Acid Mine Drainage Impacts from Abandoned Mine Lands (Inactive)
latwillow - Box Elder	MT40B002_030	COLLAR GULCH, headwaters to mouth (Fords Creek)	5	6.1	MILES	C-3	P	Р			Х	Lead Zinc pH	Acid Mine Drainage Impacts from Abandoned Mine Lands (Inactive)
Flatwillow - Box Elder	MT40B002_040	CHIPPEWA CREEK, headwaters to confluence with Manitoba Gulch	5	4.1	MILES	C-3	N	N			N	Alteration in stream-side or littoral vegetative covers Antimony Arsenic Cyanide Iron Mercury Sedimentation/Siltation Zinc	Grazing in Riparian or Shoreline Zones Heap-leach Extraction Mining Mine Tailings

Appendix A: Impaired Waters HUC 10040205 Lower Musselshell Musselshell Watershed TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class MUSSELSHELL RIVER, Flatwillow Lower Musselshell MT40C003 010 74.2 MILES C-3 P Alteration in stream-side or littoral Agriculture Creek to Fort Peck Reservoir vegetative covers Flow Alterations from Water Diversions Low flow alterations Grazing in Riparian or Shoreline Zones Impacts from Hydrostructure Flow Regulation/modification Impacts from Resort Areas (Winter and

Р

MILES C-3 P

MILES C-3 P

Lower Musselshell

Lower Musselshell

MT40C004_020

MT40C004 030

LODGEPOLE CREEK, North &

to mouth (Musselshell River)

Middle Fork Lodgepole Creeks to the mouth (Musselshell River)

BLOOD CREEK, Dovetail Rd. x-ing

27

30.5

Non-winter Resorts)

Natural Sources

Natural Sources

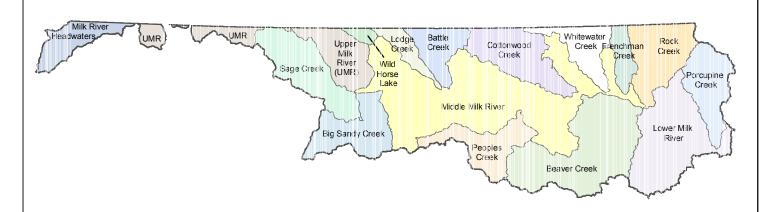
Iron

Alteration in stream-side or littoral

vegetative covers

Streambank Modifications/destablization

Grazing in Riparian or Shoreline Zones

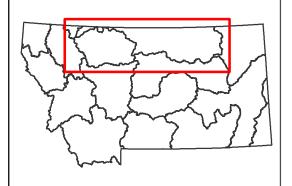


Milk **Sub-Major Basin**

Missouri River Basin

USGS HUC HUC NAME

10050001 Milk River Headwaters 10050002 Upper Milk River 10050003 Wild Horse Lake Middle Milk River 10050004 Big Sandy Creek 10050005 10050006 Sage Creek Lodge Creek 10050007 10050008 Battle Creek Peoples Creek 10050009 10050010 Cottonwood Creek 10050011 Whitewater Creek 10050012 Lower Milk River 10050013 Frenchman Creek 10050014 Beaver Creek (Milk R) 10050015 Rock Creek 10050016 Porcupine Creek



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Appendix A: Impaired Waters HUC 10050002 Upper Milk Watershed Milk TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Upper Milk MT40F003 010 MILK RIVER, Eastern U.S. border 5 31.9 MILES B-3 N Ν Ν Copper Flow Alterations from Water Diversions crossing to Fresno Reservoir High Flow Regime Natural Sources Iron Source Unknown Lead Upper Milk MT40F005_010 FRESNO RESERVOIR (Milk River 4000 ACRES B-3 P F X Other flow regime alterations Impacts from Hydrostructure Flow Regulation/modification Mainstem) Physical substrate habitat alterations

HUC 10050004	Middle Milk	W	atershed	Mill	k									
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CWI	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Middle Milk and Tributaries	MT40J001_010	MILK RIVER, Fresno Dam to Whitewater Creek	5	270.4	MILES	B-3	Х	Х	F	F	N	Х	Mercury	Agriculture Dam or Impoundment Natural Sources
Middle Milk and Tributaries	MT40J001_020	MILK RIVER, Whitewater Creek to Beaver Creek	5	38.2	MILES	B-3	P	N	F	F	F	F	Alteration in stream-side or littoral vegetative covers Iron Nitrates Other flow regime alterations	Crop Production (Crop Land or Dry Land) Flow Alterations from Water Diversions Irrigated Crop Production Natural Sources Rangeland Grazing
Middle Milk and Tributaries	MT40J002_010	BEAVER CREEK, Beaver Creek Reservoir to the mouth (Milk River)	5	22	MILES	B-1	N N		F	F	N	F	Iron Lead Mercury Other flow regime alterations Sedimentation/Siltation Temperature, water	Channelization Natural Sources Source Unknown
Middle Milk and Tributaries	MT40J002_020	BULLHOOK CREEK, headwaters to the Mouth (Milk River)	5	23.2	MILES	B-3	N	N	F	F	F	P	Alteration in stream-side or littoral vegetative covers Nitrate/Nitrite (Nitrite + Nitrate as N) Other flow regime alterations Sedimentation/Siltation Temperature, water	Habitat Modification - other than Hydromodification Natural Sources Residential Districts Source Unknown Streambank Modifications/destablization
Middle Milk and Tributaries	MT40J002_030	LITTLE BOXELDER CREEK, headwaters to the mouth (Milk River)	5	43.1	MILES	B-1	N N		F	F	F	F	Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation Temperature, water Total Kjehldahl Nitrogen (TKN)	Natural Sources Rangeland Grazing Source Unknown

Appendix A: I	mpaired Wate	ers													
HUC 10050005	Big Sandy	1	Vatershed	Mil	lk										
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL C	WF WV	VF A	AG I	Ind	DW	Rec	Cause Name	Source Name
Big Sandy - Sage	MT40H001_010	BIG SANDY CREEK, Lonesome Lake Coulee to the mouth (Milk River)	5	37.1	MILES	B-3	Р	F	F	I	F	N	X	Mercury Salinity Sulfates Total Dissolved Solids	Agriculture Atmospheric Depositon - Nitrogen Crop Production (Crop Land or Dry Land) Natural Sources Source Unknown

HUC 10050006	Sage	W	atershed	l Mi	lk										
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Big Sandy - Sage	MT40G001_011	SAGE CREEK, Laird Creek to the section line between 1 & 12 T36N R6E	4A	8.9	MILES	B-1	P		Р	Р	N	P	F	Alteration in stream-side or littoral vegetative covers Salinity Sulfates Total Dissolved Solids	Agriculture Crop Production (Crop Land or Dry Land) Grazing in Riparian or Shoreline Zones Irrigated Crop Production Natural Sources Non-irrigated Crop Production
Big Sandy - Sage	MT40G001_012	SAGE CREEK, the section line between 1 & 12 T36N R6E to the mouth	4A	100.7	MILES	B-3	P		Р	Р	N	P	F	Alteration in stream-side or littoral vegetative covers Salinity Sulfates Total Dissolved Solids	Crop Production (Crop Land or Dry Land) Grazing in Riparian or Shoreline Zones Irrigated Crop Production Natural Sources Non-irrigated Crop Production

Appendix A: Im	paired Wate	rs												
HUC 10050007	Lodge	W	atershed	Mill	k									
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CW	F WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Middle Milk and Tributaries	MT40J003_010	LODGE CREEK, Canadian border to the mouth (Milk River)	5	81.3	MILES	B-3	P	P	Р	F	N	F	Low flow alterations Mercury Nitrate/Nitrite (Nitrite + Nitrate as N) Oxygen, Dissolved Phosphorus (Total) Total Kjehldahl Nitrogen (TKN)	Agriculture Dam or Impoundment Golf Courses Residential Districts Source Unknown

Appendix A: Im	paired Wate	rs												
HUC 10050008	Battle	Wa	atershed	Mil	k									
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Middle Milk and Tributaries	MT40J004_010	BATTLE CREEK, Canadian border to the mouth (Milk River)	5	70	MILES	B-3	Р	P	F	F	F	F	Alteration in stream-side or littoral vegetative covers Cause Unknown Chlorophyll-a Physical substrate habitat alterations Sedimentation/Siltation	Agriculture Rangeland Grazing

HUC 10050009 Peoples Watershed Milk **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Middle Milk and Tributaries MT40I001 020 PEOPLES CREEK, headwaters to 5 47.7 MILES B-1 Ν F Ν Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones the Fort Belknap Reservation vegetative covers Source Unknown Boundary Chlorophyll-a Mercury Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Temperature, water BIG HORN CREEK, Zortman Mine F Aluminum Acid Mine Drainage Landusky MT40I001_030 MILES B-1 Ν Ν to Fort Belknap Reservation Arsenic Impacts from Abandoned Mine Lands (Inactive) Cadmium Mine Tailings Nickel Surface Mining Zinc MT40I001_040 Alteration in stream-side or littoral Impacts from Abandoned Mine Lands KING CREEK, headwaters to Fort 5 .7 MILES B-1 Ν N F F Х Landusky Belknap Reservation boundary vegetative covers (Inactive) Physical substrate habitat alterations Mine Tailings Selenium MT40I001_050 LODGE POLE CREEK, headwaters MILES B-1 N N F Ν Alteration in stream-side or littoral Source Unknown Landusky 4.2 to Fort Belknap Reservation vegetative covers Subsurface (Hardrock) Minining boundary Cadmium Surface Mining Cause Unknown Mercury MT40I002_010 SWIFT GULCH CREEK, MILES B-1 F Ν Aluminum Impacts from Abandoned Mine Lands Landusky 5 Ν 1.7 Headwaters to mouth (South Big (Inactive) Arsenic Horn Creek) Natural Sources Cadmium Open Pit Mining Copper Cyanide Iron Lead Nickel Selenium Thallium Zinc рΗ

Appendix A: Im	paired Wate	rs												
HUC 10050010	Cottonwood	w	atershed	Milk	<									
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL C	CWF W	VF A	G Ir	nd DV	V Rec	Cause Name	Source Name
Middle Milk and Tributaries	MT40J005_020	COTTONWOOD CREEK, Black Coulee to the mouth (Milk River)	5	54.1	MILES	B-3	P	Р	F	F	F	F	Alteration in stream-side or littoral vegetative covers Iron Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Natural Sources Source Unknown

Appendix A: In	Appendix A: Impaired Waters														
HUC 10050011	Whitewater	W	atershed	Mill	<										
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Middle Milk and Tributarie	s MT40K001_010	WHITEWATER CREEK, Canadian border to the mouth (Milk River)	5	61.7	MILES	B-3	F		F	F	F	N	F	Mercury	Source Unknown

HUC 10050012 Lower Milk Watershed Milk **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Lower Milk - Rock MT40O001 010 MILK RIVER, Beaver Creek to the 5 135.9 MILES B-3 Ρ Ν Т Fecal Coliform Agriculture mouth (Missouri River) Lead Dam or Impoundment Mercury Source Unknown CHERRY CREEK, headwaters to Natural Sources Lower Milk - Rock MT40O002_010 5 38.3 MILES B-3 P F F F Iron the mouth (Milk River) F Natural Sources Lower Milk - Rock MT40O002_020 BUGGY CREEK, headwaters to the 41.8 MILES B-3 F Iron mouth (Milk River) WILLOW CREEK, mainstem plus Alteration in stream-side or littoral F Lower Milk - Rock MT40O002_030 5 61.7 MILES B-3 P X Agriculture North Fork below Halfpint Reservoir vegetative covers Grazing in Riparian or Shoreline Zones Other flow regime alterations Impacts from Hydrostructure Flow Regulation/modification Physical substrate habitat alterations Streambank Modifications/destablization Sedimentation/Siltation Upstream Impoundments (e.g., PI-566 NRCS Structures) Lower Milk - Rock MT40O002_040 BEAVER CREEK, confluence of MILES B-3 N F Alteration in stream-side or littoral Dam or Impoundment 147 Ν Little Beaver Creek and South Fork vegetative covers Natural Sources Beaver Creek (headwaters) to Cadmium Rangeland Grazing mouth (Willow Creek) south of Copper Glasgow Iron Lead Nitrate/Nitrite (Nitrite + Nitrate as N) Solids (Suspended/Bedload) Lone Tree Creek MT40O002_050 LONE TREE CREEK, headwaters to 18.5 MILES B-3 P Χ X X X Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones mouth at Willow Creek vegetative covers Impacts from Hydrostructure Flow Nitrogen (Total) Regulation/modification Streambank Modifications/destablization

Appendix A: Im	paired Wate	ers													
HUC 10050013	Frenchman	w	atershed	Milk	(
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL C	WF W	WF	AG	Ind	DW	Rec	Cause Name	Source Name
Middle Milk and Tributaries	MT40L001_010	FRENCHMAN CREEK, Canadian border to the mouth (Milk River)	4C	74.5	MILES	B-3	P	Р	F	P	P	F	Р	Alteration in stream-side or littoral vegetative covers Chlorophyll-a Low flow alterations	Agriculture Dam or Impoundment Grazing in Riparian or Shoreline Zones Source Unknown

Beaver

HUC 10050014

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Landusky MT40M001 011 BEAVER CREEK, headwaters to the 5 4.8 MILES B-3 F F Cadmium Impacts from Abandoned Mine Lands (Inactive) Fort Belknap Reservation boundary Iron Source Unknown Lead Source Unknown Beaver MT40M001_012 BEAVER CREEK, Fort Belknap 5 148.3 MILES B-3 Р F Ν F Mercury Reservation boundary to unnamed Phosphorus (Total) tributary MT40M001 020 BEAVER CREEK, Black Coulee to MILES B-3 F Х Alteration in stream-side or littoral Agriculture Beaver 5 81.3 the mouth (Milk River) vegetative covers Source Unknown Nitrogen (Total) Phosphorus (Total) Physical substrate habitat alterations Uranium MT40M002_010 FLAT CREEK, headwaters to mouth 33.2 MILES B-3 N F Ν Arsenic Natural Sources Beaver Ν (Beaver Creek) Cadmium Source Unknown Copper Iron Lead Nitrate/Nitrite (Nitrite + Nitrate as N) Oxygen, Dissolved Phosphorus (Total) Solids (Suspended/Bedload) Total Kjehldahl Nitrogen (TKN) Zinc F Alteration in stream-side or littoral MT40M002 020 LARB CREEK, headwaters to mouth 5 73.8 MILES B-3 N F Agriculture Beaver (Beaver Creek) vegetative covers Animal Feeding Operations (NPS) Copper Natural Sources Lead Source Unknown Oxygen, Dissolved Phosphorus (Total) Total Kjehldahl Nitrogen (TKN) F F Alteration in stream-side or littoral Beaver MT40M002 030 BIG WARM CREEK, Fort Belknap 5 54 MILES B-3 P Agriculture

Watershed

Res. Boundary to mouth (Beaver

NELSON RESERVOIR T32N R32E

Creek)

LAKE BOWDOIN

MT40M003_010

MT40M003 020

Beaver

Beaver

Milk

3500

3901.7

5

ACRES B-3 P

ACRES B-3

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

vegetative covers

Phosphorus (Total)

Sedimentation/Siltation

Salinity

Salinity

Selenium

Р

N X

Other flow regime alterations

Other flow regime alterations

Phosphorus (Total)

Physical substrate habitat alterations

Dam or Impoundment

Dam or Impoundment Irrigated Crop Production

Irrigated Crop Production

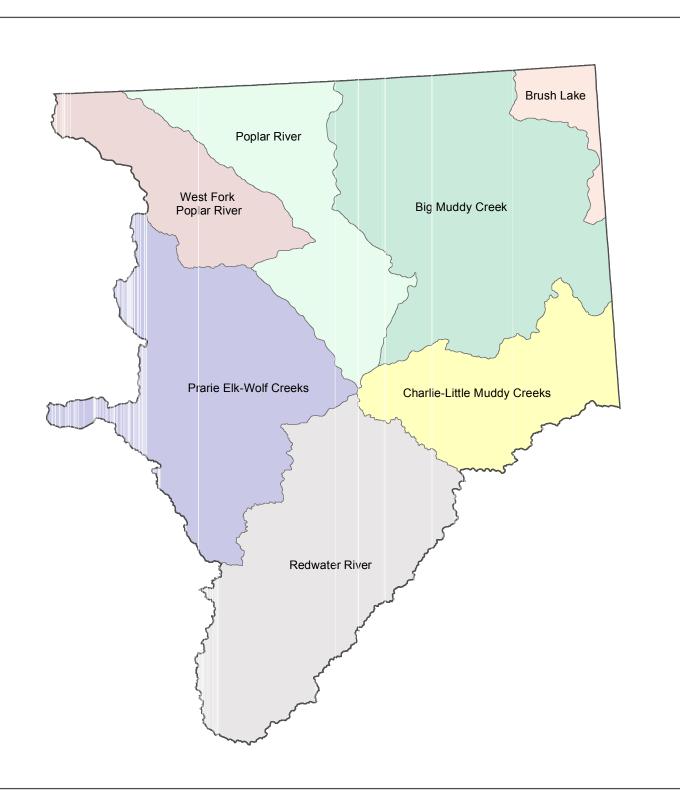
Impacts from Hydrostructure Flow Regulation/modification

Agriculture

Grazing in Riparian or Shoreline Zones

Streambank Modifications/destablization

Appendix A: Impaired Waters														
HUC 10050016	Porcupine	w	atershed	Milk	(
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CW	F WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lower Missouri	MT40O003_010	PORCUPINE CREEK, junction of West and Middle Forks to mouth (Milk River)	5	45.6	MILES	B-3	Р	Р	Р	Р	F	Х	Nitrogen (Total) Phosphorus (Total) Salinity	Non-irrigated Crop Production



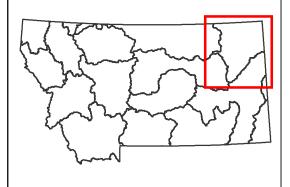
Lower Missouri Sub-Major Basin

Missouri River Basin

10060007

USGS HUC	HUC NAME
10060001 10060002	Prarie Elk-Wolf Creeks Redwater River
10060003	Poplar River
10060004 10060005	West Fork Poplar Rive Charlie-Little Muddy
10060006	Creeks Big Muddy Creek

Brush Lake



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HUC 10060001	Prairie Elk-Wolf	w	atershed	l Lo	ower Mis	souri									
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lower Missouri	MT40S001_011	MISSOURI RIVER, Fort Peck Dam to the Milk River	5	3.3	MILES	B-2	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Other flow regime alterations Temperature, water	Impacts from Hydrostructure Flow Regulation/modification
Lower Missouri	MT40S001_012	MISSOURI RIVER, Milk River to the Poplar River	e 5	84.3	MILES	B-3	Р		Р	F	F	F	Х	Alteration in stream-side or littoral vegetative covers Other flow regime alterations Temperature, water	Impacts from Hydrostructure Flow Regulation/modification Loss of Riparian Habitat
Redwater	MT40S002_010	PRAIRIE ELK CREEK, the East an Middle Forks to the mouth (Missou River)		37.5	MILES	C-3	P		Р				х	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Physical substrate habitat alterations Total Kjehldahl Nitrogen (TKN)	Agriculture Grazing in Riparian or Shoreline Zones
Redwater	MT40S002_030	SAND CREEK, the forks to the mouth (Missouri River)	5	19.3	MILES	C-3	Р		Р				X	Phosphorus (Total) Physical substrate habitat alterations Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Agriculture Non-irrigated Crop Production Rangeland Grazing

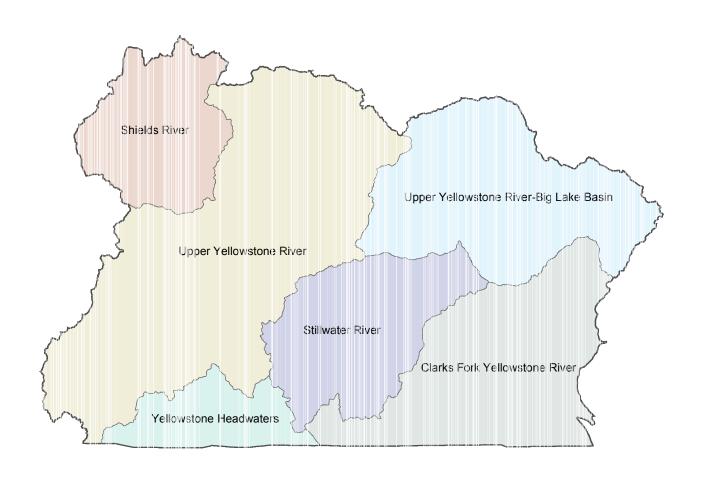
HUC 10060002	Redwater	Wa	itershed	Low	er Mis	souri							
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CWF	WWF	AG Ind	DW	Rec	Cause Name	Source Name
Redwater	MT40P001_012	REDWATER RIVER, Hell Creek to Buffalo Springs Creek	5	8	MILES	C-3	Р	F			F	Cause Unknown Nitrogen (Total) Phosphorus (Total)	Municipal Point Source Discharges Natural Sources On-site Treatment Systems (Septic Systems and Similar Decencentralized Systems)
Redwater	MT40P001_014	REDWATER RIVER, Pasture Creek to the mouth (Missouri River)	4C	57.7	MILES	C-3	Р	Р			F	Alteration in stream-side or littoral vegetative covers Physical substrate habitat alterations	Natural Sources Rangeland Grazing
Redwater	MT40P002_010	EAST REDWATER CREEK, headwaters to mouth (Redwater River)	5	48.2	MILES	C-3	P	P			P	Chlorophyll-a Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation Specific Conductance Sulfates Total Dissolved Solids Total Kjehldahl Nitrogen (TKN)	Agriculture Source Unknown
Redwater	MT40P002_020	HORSE CREEK, headwaters to mouth at Redwater River near Circle, MT	5	29	MILES	C-3	Р	P			X	Alteration in stream-side or littoral vegetative covers Physical substrate habitat alterations Salinity	Non-irrigated Crop Production Rangeland Grazing Source Unknown
Redwater	MT40P002_030	PASTURE CREEK, headwaters to mouth at Redwater River	5	38.9	MILES	C-3	Р	N			F	Total Kjehldahl Nitrogen (TKN)	Animal Feeding Operations (NPS) Source Unknown

HUC 10060003	Poplar	Wa	tershed	Lo	wer Mis	souri									
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lower Missouri	MT40Q001_010	POPLAR RIVER & MIDDLE FORK POPLAR RIVER, Canada to the Fort Peck Reservation	5	66.6	MILES	B-2	Р	I		F	F	F	N	Escherichia coli Sedimentation/Siltation Temperature, water	Natural Sources Rangeland Grazing Source Unknown
Lower Missouri	MT40Q002_010	BUTTE CREEK, headwaters to the mouth (Poplar River)	5	36.6	MILES	B-2	P	1		Р	F	F	F	Iron Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sodium Specific Conductance Total Kjehldahl Nitrogen (TKN)	Crop Production (Crop Land or Dry Land) Natural Sources Source Unknown
Lower Missouri	MT40Q002_020	EAST FORK POPLAR RIVER, international border to the mouth (Poplar River)	5	20.4	MILES	B-2	P	I		Р	Р	F	Р	Chlorophyll-a Iron Other flow regime alterations	Impacts from Hydrostructure Flow Regulation/modification Natural Sources Source Unknown

HUC 10060005 Charlie-Little Muddy Watershed Lower Missouri TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Lower Missouri MT40S003 010 MISSOURI RIVER, the Poplar River 5 94.8 MILES B-3 F F Х Other flow regime alterations Dam or Impoundment to North Dakota Impacts from Hydrostructure Flow Temperature, water Regulation/modification CHARLIE CREEK, East and Middle Crop Production (Crop Land or Dry Land) Lower Missouri MT40S004_010 31.2 MILES C-3 N Ν Fish-Passage Barrier Charlie Creek to the mouth Highways, Roads, Bridges, Infrasturcture (Missouri River) (New Construction) Specific Conductance Natural Sources **Total Dissolved Solids** Total Kjehldahl Nitrogen (TKN) Lower Missouri MT40S004_020 HARDSCRABBLE CREEK, MILES C-3 N Nitrogen (Total) Agriculture 5 32.6 headwaters to mouth (Missouri Specific Conductance Natural Sources River)

Total Dissolved Solids

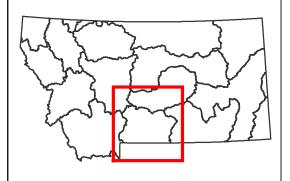
HUC 10060006	Big Muddy	Wa	itershed	Low	er Miss	souri							
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CWF	WWF	AG Ir	nd DW	Rec	Cause Name	Source Name
Lower Missouri	MT40R001_010	BIG MUDDY CREEK, northern Fort Peck Res. boundary to the mouth (Missouri River)	5	80.8	MILES	C-3	P	P			X	Alteration in stream-side or littoral vegetative covers Low flow alterations Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation	Agriculture Grazing in Riparian or Shoreline Zones Impacts from Hydrostructure Flow Regulation/modification
Lower Missouri	MT40R001_020	BIG MUDDY CREEK, Canada to northern boundary of Fort Peck Reservation	5	114	MILES	C-3	P	P			F	Alteration in stream-side or littoral vegetative covers Copper Lead Mercury Organic Enrichment (Sewage) Biological Indicators Phosphorus (Total) Total Kjehldahl Nitrogen (TKN) Zinc	Agriculture Grazing in Riparian or Shoreline Zones Non-irrigated Crop Production Source Unknown
Lower Missouri	MT40R003_010	MEDICINE LAKE (entire lake)	5	8599	ACRES	C-3	Р	Р			F	Cadmium Lead Mercury	Atmospheric Depositon - Toxics Source Unknown



Upper Yellowstone Sub-Major Basin

Yellowstone River Basin

USGS HUC	HUC NAME
10070001	Yellowstone Headwaters
10070002	Upper Yellowstone River
10070003	Shields River
10070004	Upper Yellowstone River-Big Lake Basin
10070005	Stillwater River (Yellowstone R)
10070006	Clarks Fork Yellowstone River



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HUC 10070001	Yellowstone He	eadwaters Wa	atershed	Up	per Yell	owsto	ne								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Yellowstone River	MT43B001_010	YELLOWSTONE RIVER, Yellowstone Park Boundary to Reese Creek	5	4.8	MILES	B-1	P	P		F	F	N	F	Ammonia (Total) Arsenic Copper Lead Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation	Highway/Road/Bridge Runoff (Non- construction Related) Impacts from Abandoned Mine Lands (Inactive) Natural Sources Source Unknown Subsurface (Hardrock) Minining Surface Mining
Yellowstone River	MT43B001_011	YELLOWSTONE RIVER, Montana State border to Yellowstone Park Boundary	5	8.7	MILES	A-1	Р	Р		X	X	N	X	Ammonia (Un-ionized) Arsenic Copper Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation	Highway/Road/Bridge Runoff (Non- construction Related) Impacts from Abandoned Mine Lands (Inactive) Natural Sources Source Unknown Subsurface (Hardrock) Minining Surface Mining
Paradise	MT43B002_010	REESE CREEK, the state border to the mouth (Yellowstone River)	4C	5.2	MILES	A-1	F	Р		F	F	F	F	Fish-Passage Barrier	Source Unknown
Paradise	MT43B002_021	BEAR CREEK, 1/2 mi. below Jardine Mine to mouth (Yellowstone River)	5	3.1	MILES	B-1	Р	Р		F	Р	F	Р	Low flow alterations Temperature, water	Flow Alterations from Water Diversions
Cooke City	MT43B002_031	SODA BUTTE CREEK, McLaren Tailings to the Montana Border	4A	4.2	MILES	B-1	Р	Р		X	X	X	F	Copper Iron Lead Manganese	Acid Mine Drainage Mine Tailings
Cooke City	MT43B002_040	MILLER CREEK, headwaters to mouth (Soda Butte Creek)	4A	.8	MILES	B-1	X	N		X	X	N	X	Aluminum Cadmium Copper Iron Lead Manganese Zinc	Acid Mine Drainage Mine Tailings Natural Sources

HUC 10070002 Upper Yellowstone Watershed Upper Yellowstone

THE Planting Area | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 |

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Yellowstone River	MT43B003_010	YELLOWSTONE RIVER, Reese Creek to Bridger Creek	4C	121.8	MILES	B-1	P	Р		X	X	Х	Х	Alteration in stream-side or littoral vegetative covers Physical substrate habitat alterations	Loss of Riparian Habitat Site Clearance (Land Development or Redevelopment) Streambank Modifications/destablization
Yellowstone - Sweet Grass	MT43B004_011	OTTER CREEK, 2 mi downstream o Highway 191 bridge to the mouth (Yellowstone River)	f 4C	20	MILES	B-1	Р	Р		Х	Х	Х	X	Other flow regime alterations Physical substrate habitat alterations	Impacts from Hydrostructure Flow Regulation/modification
Yellowstone - Sweet Grass	MT43B004_012	OTTER CREEK, headwaters to 2 mi downstream of Highway 191 bridge	5	21.64	MILES	B-1	Р	Р		F	F	F	I	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Agriculture
Yellowstone - Sweet Grass	MT43B004_021	BIG TIMBER CREEK, Swamp Creek to the mouth (Yellowstone River)	4C	5.1	MILES	B-1	Р	Р		Х	Х	Χ	Р	Low flow alterations	Impacts from Hydrostructure Flow Regulation/modification
Yellowstone - Sweet Grass	MT43B004_022	BIG TIMBER CREEK, headwaters downstream to Swamp Creek	5	26.1	MILES	B-1	P	P		F	F	P	I	Alteration in stream-side or littoral vegetative covers Arsenic Cadmium Copper Iron Lead Manganese Nickel Sedimentation/Siltation Selenium Solids (Suspended/Bedload)	Agriculture Grazing in Riparian or Shoreline Zones Source Unknown
'ellowstone - Sweet Grass	MT43B004_031	LOWER DEER CREEK, the mouth (Yellowstone River) 4 mi upstream	4C	4	MILES	B-1	Р	Р		Χ	Х	Х	Р	Low flow alterations	Impacts from Hydrostructure Flow Regulation/modification
ellowstone - Sweet Grass	MT43B004_041	UPPER DEER CREEK, the mouth (Yellowstone River) 6.5 miles upstream	4C	6.5	MILES	B-1	Р	Р		Х	X	Х	Р	Low flow alterations	Impacts from Hydrostructure Flow Regulation/modification
Yellowstone - Sweet Grass	MT43B004_042	UPPER DEER CREEK, headwaters downstream to Cartwright Gulch (~ 6.5 miles above the mouth)	5	17.3	MILES	B-1	Р	Р		F	F	F	I	Alteration in stream-side or littoral vegetative covers Solids (Suspended/Bedload)	Grazing in Riparian or Shoreline Zones Silviculture Activities
Paradise	MT43B004_051	BILLMAN CREEK, 1.31 miles downstream to mouth (Yellowstone River)	5	1.31	MILES	B-1	P	Р		F	F	F	Р	Excess Algal Growth Fish-Passage Barrier Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation	Agriculture Channelization Habitat Modification - other than Hydromodification Source Unknown
Paradise	MT43B004_052	BILLMAN CREEK, From headwaters to 1.3 miles from mouth (Yellowstone River)	5 5	12.08	MILES	B-1	Р	Р		F	F	F	F	Combined Biota/Habitat Bioassessments Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation	Agriculture Channelization Source Unknown
Paradise	MT43B004_061	TOM MINER CREEK, Tepee Creek to the mouth (Yellowstone River)	5	.8	MILES	B-1	Р	Р		F	F	F	Р	Low flow alterations Temperature, water	Flow Alterations from Water Diversions
Paradise	MT43B004_071	MILL CREEK, National Forest boundary to mouth (Yellowstone River)	4C	6.5	MILES	B-1	Р	Р		Х	Х	Х	Р	Low flow alterations	Agriculture Impacts from Hydrostructure Flow Regulation/modification

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

HUC10070002Upper YellowstoneWatershedUpper Yellowstone

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Paradise	MT43B004_081	PINE CREEK, from the mouth (Yellowstone River) 2.5 miles upstream	4C	2.5	MILES	B-1	Р	Р		Х	Х	Х	Р	Low flow alterations	Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production
Paradise	MT43B004_090	SUCE CREEK, Absaroka-Beartooth Wilderness boundary to mouth (Yellowstone River)	4C	3.8	MILES	B-1	Р	Р		Х	X	Х	Р	Low flow alterations	Impacts from Hydrostructure Flow Regulation/modification
Paradise	MT43B004_101	SIX MILE CREEK,National Forest boundary to mouth (Yellowstone River)	4C	5	MILES	B-1	Р	Р		Х	Х	Х	Р	Low flow alterations	Impacts from Hydrostructure Flow Regulation/modification
Paradise	MT43B004_102	SIX MILE CREEK, Absaroka- Beartooth Wilderness boundary to NF boundary	5	3.6	MILES	B-1	Р	Р		Х	X	Х	X	Other anthropogenic substrate alterations Sedimentation/Siltation	Loss of Riparian Habitat Placer Mining
Big Creek (Yellowstone)	MT43B004_111	BIG CREEK, NF boundary to the mouth (Yellowstone River)	4C	3.6	MILES	B-1	Р	Р		Х	Χ	Х	Р	Low flow alterations	Flow Alterations from Water Diversions
Paradise	MT43B004_120	MOL HERON CREEK, Yellowstone National Park boundary to mouth (Yellowstone River)	4C	8.9	MILES	B-1	Р	Р		F	F	F	F	Low flow alterations	Agriculture
Boulder - Big Timber	MT43B004_131	BOULDER RIVER, the mouth (Yellowstone River) five miles upstream	5	5	MILES	B-1	P	Р		F	F	F	Р	Copper Iron Lead Low flow alterations Silver	Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production
Boulder - Big Timber	MT43B004_132	BOULDER RIVER, North Fork boundary to 5 miles above the mouth (Yellowstone River)	5	27.8	MILES	B-1	P	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Chromium (total) Nickel Nitrate/Nitrite (Nitrite + Nitrate as N) Total Kjehldahl Nitrogen (TKN)	Agriculture Grazing in Riparian or Shoreline Zones Source Unknown
Boulder - Big Timber	MT43B004_133	BOULDER RIVER, the confluence of the East Fork boulder River (not to be confused with the East Boulder River) downstream to Natural bridge and Falls	5	23.5	MILES	B-1	P	Р		F	F	F	Р	Excess Algal Growth Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Total Kjehldahl Nitrogen (TKN)	Source Unknown
Boulder - Big Timber	MT43B004_134	BOULDER RIVER, the headwaters downstream to the East Fork Boulder River, near Box Canyon Guard Station	5	8.2	MILES	B-1	Р	Р		F	F	N	F	Copper Lead	Impacts from Abandoned Mine Lands (Inactive)
Boulder - Big Timber	MT43B004_141	EAST BOULDER RIVER, Elk Creek to the mouth (Boulder River)	5	3.1	MILES	B-1	P	P		F	F	X	Р	Chlorophyll-a Low flow alterations Other anthropogenic substrate alterations Sedimentation/Siltation	Flow Alterations from Water Diversions Source Unknown Streambank Modifications/destablization
Boulder - Big Timber	MT43B004_142	EAST BOULDER RIVER, NF boundary to Elk Creek	4C	3	MILES	B-1	Р	Р		F	F	F	Р	Chlorophyll-a Low flow alterations	Agriculture Source Unknown
Yellowstone - Sweet Grass	MT43B004_150	SWEET GRASS CREEK, headwaters to the mouth (Yellowstone River)	4C	77.3	MILES	B-1	Р	Р		F	F	F	I	Alteration in stream-side or littoral vegetative covers	Agriculture

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

Shields

MT43A002_010

MT43A002 020

MT43A002 031

MT43A002_040

MT43A002_051

HUC 10070003

Shields

Shields

Shields

Shields

Shields

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Shields MT43A001 011 SHIELDS RIVER, Cottonwood 5 20.3 MILES B-1 Р Х Х Χ Alteration in stream-side or littoral Agriculture Creek to the mouth (Yellowstone vegetative covers Impacts from Hydrostructure Flow River) Low flow alterations Regulation/modification Physical substrate habitat alterations Streambank Modifications/destablization Sedimentation/Siltation SHIELDS RIVER, headwaters to Shields MT43A001_012 5 41.6 MILES B-1 Ρ Р Х Χ Χ Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Cottonwood Creek vegetative covers Impacts from Hydrostructure Flow Regulation/modification Low flow alterations Physical substrate habitat alterations Silviculture Activities Sedimentation/Siltation Streambank Modifications/destablization

Р

Р

Р

P P

F F

F F

F F P

Χ

F F

X X

Low flow alterations

vegetative covers

Excess Algal Growth

Low flow alterations

vegetative covers

Low flow alterations

Solids (Suspended/Bedload)

Sedimentation/Siltation Solids (Suspended/Bedload)

Alteration in stream-side or littoral

Alteration in stream-side or littoral

Upper Yellowstone

MILES B-1

MILES B-1

MILES B-1

MILES B-1

B-1 P P

MILES

24.6

10

17

3.4

13.4

4C

4C

4C

Watershed

POTTER CREEK, headwaters to the

ANTELOPE CREEK, headwaters to

COTTONWOOD CREEK, from the

Confluence of Trespass Creek to the mouth (Shields River)

ELK CREEK, headwaters to the

NW1/4 SW1/4 Sec9 T2N R11E downstream to the mouth on the

ROCK CREEK, USFS boundary at

mouth (Shields River)

Shields River

mouth (Shields River)

the mouth (Shields River)

Impacts from Hydrostructure Flow

Livestock (Grazing or Feeding Operations)

Grazing in Riparian or Shoreline Zones

Flow Alterations from Water Diversions

Regulation/modification

Irrigated Crop Production

Agriculture

Source Unknown

HUC 10070004	Upper Yellowsto	ne-Lake Basin \	Watershed	Up	per Yell	lowsto	ne								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Yellowstone River	MT43F001_011	YELLOWSTONE RIVER, City of Laurel PWS to City of Billings PV	5 VS	19	MILES	B-2	N	1		F	F	I	N	Cause Unknown Chlorophyll-a Nitrate/Nitrite (Nitrite + Nitrate as N) Other anthropogenic substrate alterations Physical substrate habitat alterations	Channelization Crop Production (Crop Land or Dry Land) Municipal Point Source Discharges Streambank Modifications/destablization
Yellowstone - Sweet Grass	MT43F002_010	DUCK CREEK, headwaters to the mouth (Yellowstone River)	e 5	12.5	MILES	B-2	P	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Low flow alterations Sedimentation/Siltation	Channelization Drought-related Impacts Grazing in Riparian or Shoreline Zones
Yellowstone - Sweet Grass	MT43F002_021	CANYON CREEK, highway 532 t the mouth (Yellowstone River)	o 4C	16.1	MILES	B-1	Р	Р		Х	Х	Χ	Χ	Other flow regime alterations	Flow Alterations from Water Diversions
Yellowstone - Sweet Grass	MT43F002_022	CANYON CREEK, headwaters to highway 532	5	11.7	MILES	B-2	Р	1		F	F	F	F	Alteration in stream-side or littoral vegetative covers Low flow alterations Oxygen, Dissolved Sedimentation/Siltation	Agriculture Channelization Drought-related Impacts
Yellowstone - Sweet Grass	MT43F002_040	VALLEY CREEK, headwaters to mouth (Yellowstone River)	the 5	13.7	MILES	B-2	P	1		F	F	F	F	Alteration in stream-side or littoral vegetative covers Benthic-Macroinvertebrate Bioassessments Other flow regime alterations Oxygen, Dissolved Sedimentation/Siltation	Agriculture Channelization Drought-related Impacts Irrigated Crop Production Loss of Riparian Habitat
Lake Basin - Spidel	MT43F003_010	BIG LAKE, T2N R21E, 3081 AC	5	2806	ACRES	B-2	N	N		N	Ν	N	Χ	Salinity	Agriculture
Lake Basin - Spidel	MT43F003_020	HAILSTONE LAKE T3N R20E	5	538	ACRES	B-2	Р	N		N	N	N	Χ	Salinity	Agriculture
Lake Basin - Spidel	MT43F003_030	HALFBREED LAKE T3N R21E S 33	EC 5	278	ACRES	B-2	Р	Р		Р	Р	Р	Χ	Salinity	Agriculture

Creek)

HUC 10070005 Stillwater Watershed Upper Yellowstone **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Cooke City MT43C001 010 STILLWATER RIVER, headwaters 4A 20.7 MILES B-1 Р F Ν Χ Copper Acid Mine Drainage to Flood Creek Highway/Road/Bridge Runoff (Non-Iron construction Related) Manganese Impacts from Abandoned Mine Lands Sedimentation/Siltation (Inactive) Ηα Mine Tailings Natural Sources Hardrock Mining Discharges (Permitted) Stillwater - Columbus MT43C001 020 STILLWATER RIVER, West Fork to 35.9 MILES B-1 Р F Ν Cadmium the mouth (Yellowstone River) Chromium (total) Impacts from Abandoned Mine Lands (Inactive) Copper Natural Sources Cyanide Source Unknown Mercury Watershed Runoff following Forest Fire Nickel Nitrate/Nitrite (Nitrite + Nitrate as N) Chlorophyll-a Stillwater - Columbus MT43C002_010 LODGEPOLE CREEK, headwaters 5.9 MILES B-1 Ρ Р F F Irrigated Crop Production to the mouth (Castle Creek) Nitrate/Nitrite (Nitrite + Nitrate as N) Rangeland Grazing Source Unknown Stillwater - Columbus BAD CANYON CREEK, headwaters F F Chlorophyll-a Rangeland Grazing MT43C002 020 4C MILES B-1 F 10.4 to the mouth (Stillwater River) Stillwater - Columbus MT43C002_030 CASTLE CREEK, headwaters to the MILES B-1 Р Р F Chlorophyll-a Livestock (Grazing or Feeding Operations) 5 10.5 F Ν mouth (West Fork Stillwater River) Nitrate/Nitrite (Nitrite + Nitrate as N) Source Unknown Upstream Source Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Stillwater - Columbus MT43C002 041 GROVE CREEK, the mouth (West MILES B-1 Р F F vegetative covers Fork Stillwater River) five miles Irrigated Crop Production upstream Chlorophyll-a Loss of Riparian Habitat Phosphorus (Total) Natural Sources Sedimentation/Siltation Stillwater - Columbus MT43C002 050 FISHTAIL CREEK, headwaters to MILES B-1 Р F F Source Unknown 5 139 Iron the mouth (West Rosebud Creek) Lead Stillwater - Columbus MT43C002 070 JOE HILL CREEK, headwaters to 5 MILES B-1 Р Р F F Chlorophyll-a Flow Alterations from Water Diversions 11 4 Ν the mouth (Stillwater River) Low flow alterations Irrigated Crop Production Sedimentation/Siltation Stillwater - Columbus MT43C002 081 BUTCHER CREEK, highway 78 to MILES B-1 Р Р F High Flow Regime Streambank Modifications/destablization 5 18.5 the mouth (Rosebud Creek) Transfer of Water from an Outside Physical substrate habitat alterations Watershed Solids (Suspended/Bedload) Stillwater - Columbus MT43C002_082 BUTCHER CREEK, headwaters to 5 22 MILES B-1 P F F Chlorophyll-a Hydrostructure Impacts on Fish Passage highway 78 Fish-Passage Barrier Natural Sources Phosphorus (Total) Source Unknown Sedimentation/Siltation Solids (Suspended/Bedload) Benthic-Macroinvertebrate Source Unknown Stillwater - Columbus MT43C002 090 WEST ROSEBUD CREEK. 5 33.2 MILES B-1 Р F F headwaters to the mouth (Rosebud Bioassessments

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

Appendix A: Ir	npaired Wate	rs													
HUC 10070005	Stillwater	Wa	itershed	Up	per Yell	lowsto	ne								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Stillwater - Columbus	MT43C002_100	ROSEBUD CREEK, East and West Branches to the mouth (Stillwater River)	5	3.8	MILES	B-1	Р	Р		F	F	F	F	Benthic-Macroinvertebrate Bioassessments	Source Unknown
Cooke City	MT43C002_140	DAISY CREEK, headwaters to mouth (Stillwater River)	4A	1.9	MILES	B-1	N	N		N	N	N	N	Aluminum Cadmium Copper Iron Lead Manganese Sedimentation/Siltation Zinc pH	Acid Mine Drainage Highway/Road/Bridge Runoff (Non- construction Related) Impacts from Abandoned Mine Lands (Inactive) Mine Tailings Natural Sources

HUC 10070006 Upper Yellowstone Clarks Fork Yellowstone Watershed **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Clarks Fork Yellowstone MT43D001 011 CLARKS FORK YELLOWSTONE 5 41.3 MILES B-2 Р Р Х Ammonia (Total) Habitat Modification - other than RIVER, Bridger Creek to mouth Hydromodification Chlorophyll-a (Yellowstone River) Impacts from Hydrostructure Flow Copper Regulation/modification Iron Irrigated Crop Production Lead Source Unknown Low flow alterations Streambank Modifications/destablization Mercury Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Physical substrate habitat alterations Solids (Suspended/Bedload) Temperature, water Total Kiehldahl Nitrogen (TKN) Cooke City MT43D001 020 CLARKS FORK YELLOWSTONE 4A 4.9 MILES B-1 Р F F Cadmium Acid Mine Drainage RIVER, headwaters to the Montana Copper Impacts from Abandoned Mine Lands Border (Inactive) Lead Mine Tailings Silver Zinc pН Alteration in stream-side or littoral Animal Feeding Operations (NPS) Clarks Fork Yellowstone MT43D002 010 ELBOW CREEK, headwaters to the 32 MILES B-1 Р F F mouth (Clarks Fork) vegetative covers Grazing in Riparian or Shoreline Zones Chlorophyll-a Irrigated Crop Production Nitrate/Nitrite (Nitrite + Nitrate as N) Rangeland Grazing Sedimentation/Siltation Solids (Suspended/Bedload) Total Kjehldahl Nitrogen (TKN) BEAR CREEK, headwaters to the F F Alteration in stream-side or littoral Impacts from Abandoned Mine Lands Clarks Fork Yellowstone MT43D002 020 MILES B-1 5 18.2 Ν vegetative covers (Inactive) mouth (Clarks Fork) Chlorophyll-a Irrigated Crop Production High Flow Regime Loss of Riparian Habitat Rangeland Grazing Nitrate/Nitrite (Nitrite + Nitrate as N) Transfer of Water from an Outside Watershed Phosphorus (Total) Sedimentation/Siltation Clarks Fork Yellowstone MT43D002 031 BLUEWATER CREEK, mouth to 9 MILES B-1 Ρ F F Chlorophyll-a Agriculture miles upstream (Clarks Fork Nitrate/Nitrite (Nitrite + Nitrate as N) Animal Feeding Operations (NPS) Yellowstone River) Phosphorus (Total) Aquaculture (Permitted) Sedimentation/Siltation Irrigated Crop Production Solids (Suspended/Bedload) MT43D002 050 RED LODGE CREEK, headwaters 4C Alteration in stream-side or littoral Crop Production (Crop Land or Dry Land) Rock Creek - Red Lodge 16.5 MILES B-1 F F to Cooney Reservoir vegetative covers Grazing in Riparian or Shoreline Zones

Clarks Fork Yellowstone **HUC** 10070006 Watershed Upper Yellowstone **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Rock Creek - Red Lodge MT43D002 060 RED LODGE CREEK, Cooney 5 11.4 MILES B-1 Р Χ Х Χ Organic Enrichment (Sewage) Biological Impacts from Hydrostructure Flow Reservoir to the mouth (Rock Creek) Indicators Regulation/modification Other flow regime alterations Streambank Modifications/destablization Physical substrate habitat alterations Rock Creek - Red Lodge MT43D002 070 WILLOW CREEK, headwaters to 5 31.4 MILES B-1 Р Х Χ Low flow alterations Irrigated Crop Production the mouth (Cooney Reservoir) Sedimentation/Siltation Rock Creek - Red Lodge MT43D002 080 WEST RED LODGE CREEK, 5 12 MILES B-1 Р F F Sedimentation/Siltation Natural Sources Absaroka-Beartooth Wilderness Source Unknown boundary to mouth (Red Lodge Creek) Clarks Fork Yellowstone MT43D002 100 SILVERTIP CREEK, state line to the 18 4 MILES B-1 Р Alteration in stream-side or littoral Channelization mouth (Clarks Fork) vegetative covers Dam or Impoundment Other flow regime alterations Grazing in Riparian or Shoreline Zones Oxygen, Dissolved Loss of Riparian Habitat Phosphorus (Total) Natural Sources Polycyclic Aromatic Hydrocarbons Petroleum/natural Gas Production Activities (PAHs) (Aquatic Ecosystems) (Permitted) Solids (Suspended/Bedload) Pipeline Breaks Specific Conductance Rangeland Grazing Temperature, water Upstream Source Total Dissolved Solids Total Kjehldahl Nitrogen (TKN) Turbidity MT43D002 110 FISHER CREEK, headwaters to 4A 3.6 MILES B-1 N N Р Ν Р Aluminum Acid Mine Drainage Cooke City mouth (Clarks Fork Yellowstone Cadmium Highway/Road/Bridge Runoff (Non-River) construction Related) Copper Impacts from Abandoned Mine Lands Iron (Inactive) Lead Mine Tailings Manganese Sedimentation/Siltation Silver Zinc ROCK CREEK, Red Lodge Creek to Low flow alterations Flow Alterations from Water Diversions Rock Creek - Red Lodge MT43D002 120 15.6 MILES B-1 Р Х Х the mouth (Clarks Fork) Irrigated Crop Production Rock Creek - Red Lodge MT43D002 131 ROCK CREEK, West Fork Rock 4C 26.9 MILES B-1 Ρ Р Х Р Low flow alterations Flow Alterations from Water Diversions Х Creek to Red Lodge Creek Irrigated Crop Production Clarks Fork Yellowstone MT43D002 140 COTTONWOOD CREEK. 16.8 MILES B-1 Ρ F F Alteration in stream-side or littoral Agriculture headwaters to the mouth (Clarks vegetative covers Drought-related Impacts Fork of Yellowstone) Oxygen, Dissolved Grazing in Riparian or Shoreline Zones Solids (Suspended/Bedload) Clarks Fork Yellowstone MT43D002 180 SOUTH FORK BRIDGER CREEK. 7.8 MILES B-1 Ν F Ν Arsenic Grazing in Riparian or Shoreline Zones tributary to Bridger Creek Natural Sources Iron Sedimentation/Siltation Source Unknown

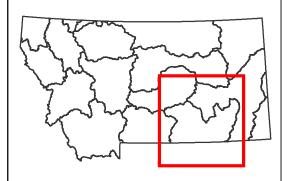
F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

Upper Yellowstone River-Pornpeys Pillar Lower Tongue River Pryor Creek Bighom River Bighom River Bighom River Upper Tongue River Upper Tongue River

Middle Yellowstone Sub-Major Basin

Yellowstone River Basin

USGS HUC	HUC NAME
10070007	Upper Yellowstone River-Pompeys Pillar
10070008	Pryor Creek
10080010	Big Horn Lake
10080014	Shoshone River
10080015	Lower Bighorn River
10080016	Little Bighorn River
10090101	Upper Tongue River
10090102	Lower Tongue River
10100003	Rosebud Creek



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HUC 10070007	Upper Yellowst	one-Pompeys Pillar V	Vatershed	I Mi	ddle Ye	llowsto	ne							
MDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CV	/F WW	AG	Ind	DW	Rec	Cause Name	Source Name
ellowstone River	MT43F001_010	YELLOWSTONE RIVER, City of Billings PWS to Huntley Diversion Dam	5	11.5	MILES	B-3	N	N	F	F	N	N	Arsenic Benthic-Macroinvertebrate Bioassessments Dissolved oxygen saturation Excess Algal Growth Nutrient/Eutrophication Biological Indicators Periphyton (Aufwuchs) Indicator Bioassessments	Agriculture Municipal Point Source Discharges Natural Sources
ellowstone River	MT43Q001_011	YELLOWSTONE RIVER, Huntley Diversion Dam to the mouth (Big Horn River)	5	62	MILES	B-3	Р	Р	I	1	I	I	Solids (Suspended/Bedload) Ammonia (Un-ionized) Sedimentation/Siltation Total Dissolved Solids	Agriculture Industrial Point Source Discharge Irrigated Crop Production Municipal Point Source Discharges Natural Sources
ellowstone - Lower ighorn	MT43Q002_010	FLY CREEK, Crow Indian Reservation boundary to the mou (Yellowstone River)	5 th	53.9	MILES	C-3	N	Р				N	Alteration in stream-side or littoral vegetative covers Alterations in wetland habitats Chlorophyll-a Nitrate/Nitrite (Nitrite + Nitrate as N) Oxygen, Dissolved Total Kjehldahl Nitrogen (TKN)	Agriculture Dam or Impoundment Drought-related Impacts Loss of Riparian Habitat
ake Basin - Spidel	MT43Q003_010	SPIDEL WATERFOWL PRODUCTION AREA T5N R23E SEC 33	5	675	ACRES	B-1	P X		Р	Х	Р	X	Other anthropogenic substrate alterations Salinity Selenium	Highways, Roads, Bridges, Infrastur (New Construction) Non-irrigated Crop Production

Appendix A: Impaired Waters Watershed Middle Yellowstone **HUC** 10070008 Pryor TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Yellowstone - Lower MT43E001 010 PRYOR CREEK, from Interstate 90 5 13.82 MILES C-3 Benthic-Macroinvertebrate Flow Alterations from Water Diversions Bighorn bridge to the mouth (Yellowstone Bioassessments Irrigated Crop Production Low flow alterations Source Unknown Yellowstone - Lower MT43E001_011 PRYOR CREEK, From Crow MILES B-1 P P Р F Ρ Excess Algal Growth Agriculture 2.75 Bighorn Reservation Boundary to the Low flow alterations Flow Alterations from Water Diversions Interstate 90 bridge Sedimentation/Siltation Natural Sources Sources Outside State Juristiction or Borders Upstream Source

Appendix A: In	npaired Wate	rs													
HUC 10080010	Bighorn Lake	v	/atershed	Mi	ddle Yel	lowsto	one								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Bighorn Lake - Shoshone	MT43P002_010	CROOKED CREEK, headwaters t the Wyoming Border	o 4C	14.6	MILES	B-1	Р	Р		Х	Х	Х	Х	Physical substrate habitat alterations	Agriculture

Appendix A: Impaired Waters Lower Bighorn **HUC** 10080015 Watershed Middle Yellowstone **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Yellowstone - Lower MT43R001 010 BIGHORN RIVER, Crow Indian Res. 5 38.4 MILES B-2 Χ F Ν Х Lead Source Unknown Bighorn Boundary to the mouth (Yellowstone Mercury BIGHORN RIVER, Yellowtail Dam to 5 F Nitrogen (Total) Source Unknown Bighorn Lake - Shoshone MT43R001_020 6.9 MILES B-1 Ρ Р Χ Χ Crow Indian Res. Boundary MT43R002_010 TULLOCK CREEK, Crow Indian 5 Ρ Alteration in stream-side or littoral Dam or Impoundment Yellowstone - Lower 58.2 MILES C-3 P Bighorn Reservation Boundary to the mouth vegetative covers Flow Alterations from Water Diversions (Bighorn River) Iron Irrigated Crop Production Low flow alterations Loss of Riparian Habitat

Phosphorus (Total)

Sedimentation/Siltation

Total Kjehldahl Nitrogen (TKN)

Natural Sources

Rangeland Grazing

Appendix A: Impaired Waters HUC 10090101 **Upper Tongue** Watershed Middle Yellowstone **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Tongue MT42B001 010 TONGUE RIVER, Wyoming border 5 4.7 MILES B-2 Ν F F Iron Impacts from Hydrostructure Flow Regulation/modification to Tongue River Reservoir Low flow alterations Irrigated Crop Production Natural Sources Streambank Modifications/destablization Impacts from Hydrostructure Flow Tongue MT42B001_020 TONGUE RIVER, Tongue River 4C 22.5 MILES B-2 N N F F Low flow alterations Dam to Prairie Dog Creek Regulation/modification Irrigated Crop Production Streambank Modifications/destablization Impacts from Hydrostructure Flow Tongue MT42B001 021 TONGUE RIVER, Prairie Dog Creek 4C 12.4 MILES B-3 N Low flow alterations Regulation/modification to Hanging Woman Creek Irrigated Crop Production Streambank Modifications/destablization Tongue MT42B002 031 HANGING WOMAN CREEK, Stroud 18.5 MILES C-3 N Ν Iron Grazing in Riparian or Shoreline Zones Creek to the mouth (Tongue River) Low flow alterations Irrigated Crop Production Salinity Natural Sources Sedimentation/Siltation Rangeland Grazing Streambank Modifications/destablization Irrigated Crop Production Tongue MT42B002_032 HANGING WOMAN CREEK, the 5 28.7 MILES C-3 N Ν Low flow alterations

N

Ν

Salinity

-1

- 1

Chlorophyll-a

Oxygen, Dissolved

Solids (Suspended/Bedload)

Wyoming border to Stroud Creek

5

3500

ACRES B-2

TONGUE RIVER RESERVOIR

MT42B003_010

Tongue

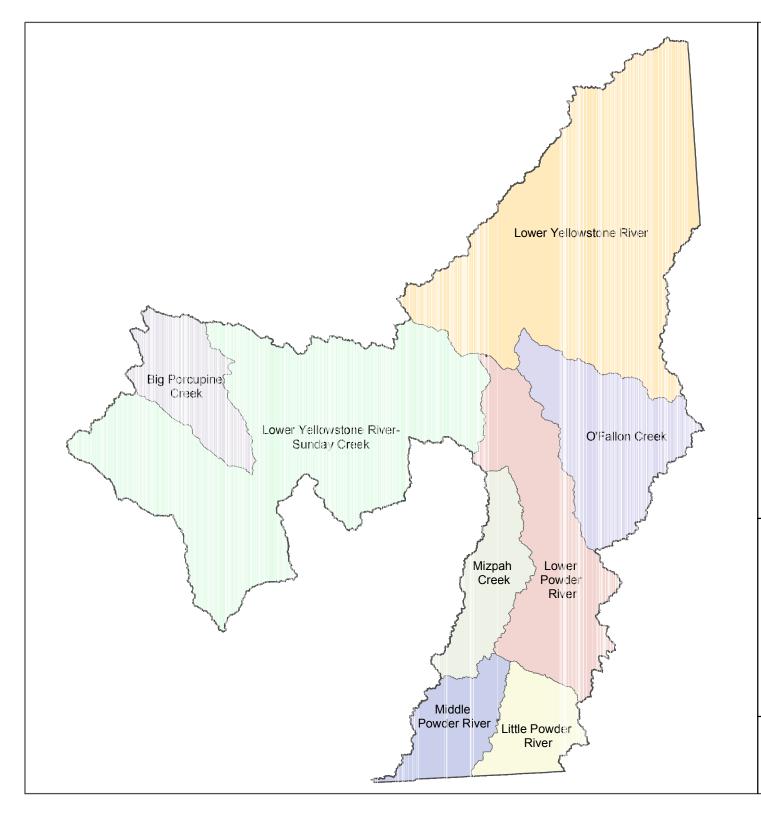
Natural Sources

Irrigated Crop Production

Municipal Point Source Discharges

HUC 10090102 Lower Tongue Watershed Middle Yellowstone **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Tongue MT42C001 011 TONGUE RIVER, diversion dam just 5 20.4 MILES B-3 Ρ Ν Cadmium Dam Construction (Other than Upstream Flood Control Projects) above Pumpkin Creek to the mouth Copper (Yellowstone River) Impacts from Hydrostructure Flow Iron Regulation/modification Lead Irrigated Crop Production Low flow alterations Natural Sources Nickel Streambank Modifications/destablization Salinity Solids (Suspended/Bedload) Sulfates Zinc F Impacts from Hydrostructure Flow Tongue MT42C001_012 TONGUE RIVER, From the 147.9 MILES B-3 P F F Iron confluence with Hanging Woman Regulation/modification Low flow alterations Creek downstream to the Tongue-Irrigated Crop Production Solids (Suspended/Bedload) Yellowstone Diversion Dam. Natural Sources Streambank Modifications/destablization OTTER CREEK, headwaters to the Alteration in stream-side or littoral MT42C002_020 103.6 MILES C-3 N Ν Ν Agriculture Tongue mouth (Tongue River) vegetative covers Grazing in Riparian or Shoreline Zones Iron Highways, Roads, Bridges, Infrasturcture Salinity (New Construction) Solids (Suspended/Bedload) Natural Sources Site Clearance (Land Development or Redevelopment) MT42C002 060 PUMPKIN CREEK, headwaters to 171.9 MILES C-3 N Low flow alterations Irrigated Crop Production Tongue the mouth (Tongue River) Salinity Natural Sources Temperature, water

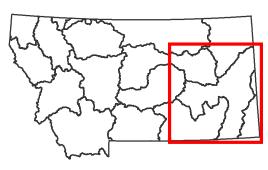
Appendix A: Impaired Waters HUC 10100003 Rosebud Watershed Middle Yellowstone TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Rosebud MT42A001 011 ROSEBUD CREEK, From the mouth 3.8 MILES C-3 P Х Physical substrate habitat alterations Loss of Riparian Habitat 3.8 mi upstream to an irrigation dam ROSEBUD CREEK, Northern Other Dam Construction (Other than Upstream Rosebud MT42A001_012 105.8 MILES C-3 X Х Cheyenne Res. Boundary to an Flood Control Projects) irrigation dam 3.8 mi above the mouth



Lower Yellowstone Sub-Major Basin

Yellowstone River Basin

USGS HUC	HUC NAME
10090207	Middle Powder River
10090208	Little Powder River
10090209	Lower Powder River
10090210	Mizpah Creek
10100001	Lower Yellowstone River-Sunday Creek
10100002	Big Porcupine Creek
10100004	Lower Yellowstone River
10100005	O'Fallon Creek



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Appendix A: Ir	npaired Water	'S											
HUC 10090207	Middle Powder	Wa	itershed	Low	er Yell	owsto	ne						
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL CWF	WWF	AG	Ind DW	Rec	Cause Name	Source Name

Appendix A: II	mpaired Wate	rs											
HUC 10090208	Little Powder	w	atershed	Lo	wer Yell	lowsto	ne						
TMDL Planning Area	ID305B	Waterbody	Category	Sizo	Unito	Haa	A1 C\A/I		۸.	Ind DW	Pag	Cause Name	Source Name
-		Name/Location	Category	3126	Ullits	Class	AL CWI	VVVV	AG	ina DW	Rec	Oudot Name	Source Name

Appendix A: Impaired Waters HUC 10090209 Lower Powder Watershed Lower Yellowstone TMDL Planning Area ID305B Waterbody Name/Location Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Class Powder MT42J003 010 POWDER RIVER, mainstem 5 144.3 MILES C-3 X Χ Ν Х Salinity Natural Sources between the Little Powder River and Source Unknown the Yellowstone River STUMP CREEK, tributary to Powder 5 Natural Sources MT42J004_010 Salinity Powder 27.5 MILES C-3 X Χ Ν Χ River below Powderville

Appendix A: Impaired Waters															
HUC 10090210	Mizpah	Wa	itershed	Lov	wer Yell	owsto	ne								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL (CWF	WWF	AG	Ind D	W R	lec	Cause Name	Source Name
Powder	MT42J005_010	MIZPAH CREEK, headwaters to the mouth (Powder River)	5	149.8	MILES	C-3	Х		Х	N		Х		Salinity	Natural Sources

HUC 10100001	Lower Yellowstone-Sunday		atershed	Lo	wer Yel	lowsto	ne								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Yellowstone River	MT42K001_010	YELLOWSTONE RIVER, the Cartersville Diversion Dam to the Powder River	5	87.9	MILES	B-3	P		P	1	I	I	I	Alteration in stream-side or littoral vegetative covers Copper Lead Nitrate/Nitrite (Nitrite + Nitrate as N) Solids (Suspended/Bedload) Total Dissolved Solids Zinc pH	Agriculture Irrigated Crop Production Municipal Point Source Discharges Natural Sources Post-development Erosion and Sedimentation Rangeland Grazing Source Unknown Streambank Modifications/destablization
Yellowstone River	MT42K001_020	YELLOWSTONE RIVER, the Big Horn to the Cartersville Diversion Dam	4C	58.2	MILES	B-3	Х		Р	F	F	Х	X	Fish-Passage Barrier	Dam Construction (Other than Upstream Flood Control Projects)
Middle Yellowstone Tributaries	MT42K002_020	HARRIS CREEK, headwaters to the mouth (Yellowstone River)	5	26.1	MILES	C-3	P		P				Р	Chlorophyll-a Other flow regime alterations Phosphorus (Total) Solids (Suspended/Bedload)	Grazing in Riparian or Shoreline Zones Livestock (Grazing or Feeding Operations) Natural Sources Transfer of Water from an Outside Watershed
Middle Yellowstone Tributaries	MT42K002_030	SUNDAY CREEK, the North and South Forks to the mouth (Yellowstone River)	5	15.2	MILES	C-3	P		P				P	Chlorophyll-a Copper Iron Lead Nitrate/Nitrite (Nitrite + Nitrate as N) Nitrogen (Total) Phosphorus (Total) Physical substrate habitat alterations Total Kjehldahl Nitrogen (TKN)	Irrigated Crop Production Natural Sources Non-irrigated Crop Production Rangeland Grazing Source Unknown
Middle Yellowstone Tributaries	MT42K002_040	MUSTER CREEK, headwaters to the mouth (Yellowstone River)	5	30.6	MILES	C-3	P		P				N	Chlorophyll-a Nitrate/Nitrite (Nitrite + Nitrate as N) Other flow regime alterations Phosphorus (Total) Solids (Suspended/Bedload)	Irrigated Crop Production Transfer of Water from an Outside Watershed
Middle Yellowstone Tributaries	MT42K002_060	DEADMAN CREEK, headwaters to mouth (North Fork Sunday Creek)	5	16.7	MILES	C-3	Р		Р				F	Phosphorus (Total) Total Kjehldahl Nitrogen (TKN)	Source Unknown
Middle Yellowstone Tributaries	MT42K002_070	STELLAR CREEK, headwaters to mouth (Little Porcupine Creek)	5	38.1	MILES	C-3	N		N				N	Cadmium Chlorophyll-a Phosphorus (Total) pH	Rangeland Grazing Source Unknown
Middle Yellowstone Tributaries	MT42K002_090	SARPY CREEK, Crow Indian Reservation Boundary to the mouth (Yellowstone River)	5	87	MILES	C-3	P		Р				F	Nitrate/Nitrite (Nitrite + Nitrate as N) Nitrogen (Total) Phosphorus (Total) Total Kjehldahl Nitrogen (TKN)	Grazing in Riparian or Shoreline Zones Non-irrigated Crop Production

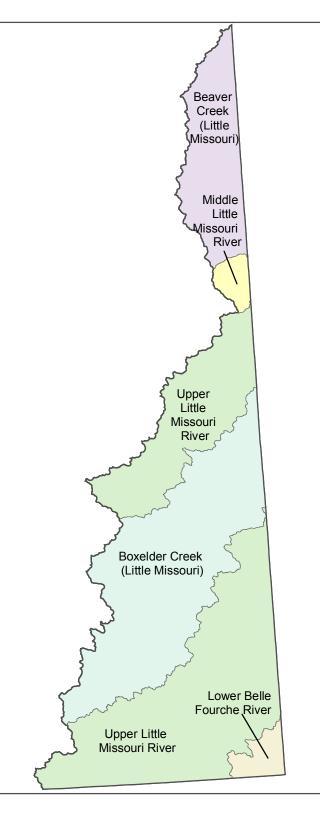
HUC 10100001	Lower Yellowsto	one-Sunday	Watershed	l Lo	ower Yell	owsto	ne								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF W	/WF	AG	Ind I	ow	Rec	Cause Name	Source Name
Middle Yellowstone Tributaries	MT42K002_110	EAST FORK ARMELLS CREEK Colstrip to the mouth (Armells Creek)	ζ, 5	30.8	MILES	C-3	Р	F	o ·				F	Nitrate/Nitrite (Nitrite + Nitrate as N) Specific Conductance Total Dissolved Solids Total Kjehldahl Nitrogen (TKN)	Agriculture Coal Mining Transfer of Water from an Outside Watershed
Middle Yellowstone Tributaries	MT42K002_160	LITTLE PORCUPINE CREEK, headwaters to the mouth (Yellowstone River)	5	108.4	MILES	C-3	P	F	Þ				P	Chlorophyll-a Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Total Dissolved Solids Total Kjehldahl Nitrogen (TKN)	Rangeland Grazing Source Unknown
Middle Yellowstone Tributaries	MT42K002_170	EAST FORK ARMELLS CREEN headwaters to Colstrip	ζ, 4C	21.5	MILES	C-3	Р	I					F	Alteration in stream-side or littoral vegetative covers	Surface Mining

HUC 10100004 Lower Yellowstone Watershed Lower Yellowstone **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Yellowstone River MT42M001 011 YELLOWSTONE RIVER, Lower 5 71.1 MILES B-3 F F Alteration in stream-side or littoral Impacts from Hydrostructure Flow Regulation/modification Yellowstone Diversion Dam to North vegetative covers Dakota border Chromium (total) Irrigated Crop Production Copper Natural Sources Fish-Passage Barrier Rangeland Grazing Lead Source Unknown Streambank Modifications/destablization Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation Total Dissolved Solids Yellowstone River MT42M001 012 YELLOWSTONE RIVER, Powder 4C 78.4 MILES B-3 X F X X Fish-Passage Barrier Dam Construction (Other than Upstream Flood Control Projects) River to the Lower Yellowstone Diversion Dam Lower Yellowstone BENNIE PEER CREEK, North 4C 9.3 MILES C-3 P Р Alteration in stream-side or littoral Channelization MT42M002 010 Dakota border to the mouth vegetative covers Highways, Roads, Bridges, Infrasturcture (Yellowstone River) Low flow alterations (New Construction) Physical substrate habitat alterations Irrigated Crop Production Lower Yellowstone MT42M002 020 FOURMILE CREEK, headwaters to 23.5 MILES C-3 P Chlorophyll-a Dam or Impoundment the North Dakota border Nitrate/Nitrite (Nitrite + Nitrate as N) Source Unknown Other flow regime alterations Total Dissolved Solids Total Kjehldahl Nitrogen (TKN) Lower Yellowstone MT42M002_030 FIRST HAY CREEK, headwaters to 29 4 MILES C-3 P Copper Hydrostructure Impacts on Fish Passage the mouth (Yellowstone River) Fish-Passage Barrier Irrigated Crop Production Iron Source Unknown Lead Transfer of Water from an Outside Watershed Nitrate/Nitrite (Nitrite + Nitrate as N) Other flow regime alterations Phosphorus (Total) Solids (Suspended/Bedload) Total Dissolved Solids Total Kjehldahl Nitrogen (TKN) LONE TREE CREEK, North Fork Channelization Lower Yellowstone MT42M002 040 16.5 MILES C-3 P Alteration in stream-side or littoral confluence to the mouth vegetative covers Habitat Modification - other than (Yellowstone River) Chlorophyll-a Hydromodification Irrigated Crop Production Nitrate/Nitrite (Nitrite + Nitrate as N) Other flow regime alterations Solids (Suspended/Bedload)

HUC 10100004 Lower Yellowstone Watershed Lower Yellowstone **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Lower Yellowstone MT42M002 050 FOX CREEK and NORTH FORK 5 69.1 MILES B-2 Р Ρ Ν Arsenic Channelization FOX CREEK, headwaters to mouth Excess Algal Growth Irrigated Crop Production (Yellowstone River) Iron Natural Sources Source Unknown Lead Low flow alterations Mercury Phosphorus (Total) Physical substrate habitat alterations Solids (Suspended/Bedload) Sulfates Total Dissolved Solids Total Kjehldahl Nitrogen (TKN) Excess Algal Growth Animal Feeding Operations (NPS) Lower Yellowstone MT42M002 060 O'BRIEN CREEK, state line to the 13.1 MILES C-3 N mouth (Yellowstone River) Nitrate/Nitrite (Nitrite + Nitrate as N) Irrigated Crop Production Selenium Lower Yellowstone MT42M002_070 CRANE CREEK, headwaters to the 21.5 MILES C-3 P Р Alteration in stream-side or littoral Channelization mouth (Yellowstone River) vegetative covers Irrigated Crop Production Other flow regime alterations Sedimentation/Siltation Lower Yellowstone MT42M002 080 SMITH CREEK, headwaters to the 4C 41.5 MILES C-3 F Fish-Passage Barrier Low Water Crossing mouth (Yellowstone River) Lower Yellowstone MT42M002_100 COTTONWOOD CREEK, 5 MILES C-3 N Ν Cadmium Channelization 20.9 headwaters to the mouth Fish-Passage Barrier Flow Alterations from Water Diversions (Yellowstone River) Hydrostructure Impacts on Fish Passage Physical substrate habitat alterations Natural Sources Source Unknown Lower Yellowstone MT42M002_110 BURNS CREEK, headwaters to the 48.9 MILES C-3 P Chlorophyll-a Crop Production (Crop Land or Dry Land) mouth (Yellowstone River) Fish-Passage Barrier Hydrostructure Impacts on Fish Passage Iron Irrigated Crop Production Other flow regime alterations Natural Sources Phosphorus (Total) Solids (Suspended/Bedload) Total Kjehldahl Nitrogen (TKN) Lower Yellowstone MT42M002 120 MORGAN CREEK, headwaters to 4C 18.6 MILES C-3 P Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones the mouth (Yellowstone River) vegetative covers

Appendix A: Impaired Waters HUC 10100005 O` Fallon Watershed Lower Yellowstone TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class O` Fallon MT42L001 010 PENNEL CREEK, headwaters to the 62.1 MILES C-3 P F **Total Dissolved Solids** Source Unknown mouth (O'Fallon Creek) SANDSTONE CREEK, headwaters 5 Nitrate/Nitrite (Nitrite + Nitrate as N) Agriculture O` Fallon MT42L001_020 72.1 MILES C-3 P to the mouth (O'Fallon Creek) Total Kjehldahl Nitrogen (TKN) Municipal Point Source Discharges

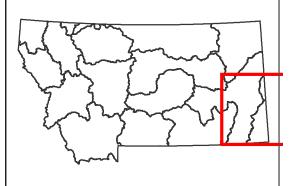
Lower Yellowstone **HUC** 10100004 Lower Yellowstone Watershed **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Lower Yellowstone MT42M002 130 GLENDIVE CREEK, headwaters to 52.3 MILES C-3 Ν Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones the mouth (Yellowstone River) vegetative covers Natural Sources Cadmium Source Unknown Chromium (total) Copper Iron Lead Nickel Selenium Solids (Suspended/Bedload) Lower Yellowstone MT42M002 141 CEDAR CREEK, the mouth 26 MILES C-3 P Р Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones vegetative covers (Yellowstone River) 26 miles Natural Sources upstream (approx. the Arsenic Spills from Trucks or Trains Prairie/Wibaux Co. line) Copper Iron Lead CEDAR CREEK, 26 to 45 miles Natural Sources Lower Yellowstone MT42M002_142 19 MILES C-3 P Copper above the mouth Iron Lead Selenium Oxygen, Dissolved Dam or Impoundment Lower Yellowstone MT42M002_150 CABIN CREEK, headwaters to the 96.8 MILES C-3 N Ν mouth (Yellowstone River) Sedimentation/Siltation Natural Sources Total Kjehldahl Nitrogen (TKN) Rangeland Grazing Lower Yellowstone MT42M002 180 SEARS CREEK, headwaters to the 12.3 MILES C-3 N Ν Alteration in stream-side or littoral Channelization mouth (Yellowstone River) vegetative covers Hydrostructure Impacts on Fish Passage Copper Irrigated Crop Production Excess Algal Growth Rangeland Grazing Fish-Passage Barrier Source Unknown High Flow Regime Transfer of Water from an Outside Watershed Iron Lead Solids (Suspended/Bedload)



Little Missouri Sub-Major Basin

Yellowstone River Basin

USGS HUC	HUC NAME
10110201	Upper Little Missouri River
10110201	Upper Little Missouri River
10110202	Boxelder Creek (Little Missouri R)
10110203	Middle Little Missour River
10110204	Beaver Creek (Little Missouri R)
10120202	Lower Belle Fourche River



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Upper Little Missouri

HUC 10110201

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class MT39F001 010 THOMPSON CREEK, State line to 35.9 MILES C-3 Х Cadmium Natural Sources mouth Copper Iron

Little Missouri

Watershed

Little Missouri Zinc Little Missouri MT39F001_021 LITTLE MISSOURI RIVER, Highway 5 63 MILES C-3 P Cadmium Natural Sources 323 bridge to the South Dakota Source Unknown Copper Border Iron Lead Zinc MT39F001_022 LITTLE MISSOURI RIVER, MILES C-3 P Ρ Cadmium Agriculture Little Missouri 40 Wyoming border to the Highway 323 Natural Sources Copper bridge Source Unknown Lead Phosphorus (Total) Total Kjehldahl Nitrogen (TKN) Zinc

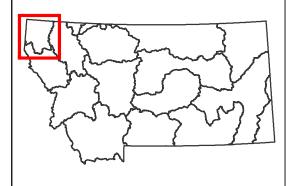
Appendix A: I	mpaired Wate	rs											
HUC 10110204	Beaver	Wa	atershed	Litt	le Misso	ouri							
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		WF WWF	AG	Ind DW	Rec	Cause Name	Source Name
Little Missouri	MT39G002_010	LAMESTEER NATIONAL WILDLIF	E 5	80	ACRES	C-3	Р	Р			Х	Other	Agriculture



Kootenai Sub-Major Basin

Columbia River Basin

USGS HUC	HUC NAME
17010101	Upper Kootenai River
17010102	Fisher River
17010103	Yaak River
17010104	Lower Kootenai River
17010105	Movie River



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HUC 17010101

Upper Kootenai **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Kootenai MT76A001 010 KOOTENAI RIVER between the 5 6.2 MILES B-1 Р F F Other flow regime alterations Impacts from Hydrostructure Flow Yaak River Confluence and the Regulation/modification Temperature, water Idaho border Upstream Impoundments (e.g., PI-566 NRCS Structures) MT76D001 010 KOOTENAI RIVER, the Libby Dam Р Other flow regime alterations Impacts from Hydrostructure Flow Kootenai 5 44.6 MILES B-1 F F Regulation/modification to Yaak River confluence Temperature, water Upstream Impoundments (e.g., PI-566 NRCS Structures) MT76D002 010 STANLEY CREEK to confluence 5 3.5 MILES B-1 Р F F Cause Unknown Mine Tailings Kootenai with Fairway Creek T29N R34W Copper Streambank Modifications/destablization SEC 13&24 Nutrient/Eutrophication Biological Indicators Highways, Roads, Bridges, Infrasturcture MT76D002 020 DRY CREEK (Trib. of Lake Creek) 1 4C MILES B-1 Χ Х Other flow regime alterations Kootenai mile upstream from State Highway (New Construction) Physical substrate habitat alterations Kootenai MT76D002_030 KEELER CREEK, the headwaters to 4C 8.3 MILES B-1 Р F Χ Low flow alterations Forest Roads (Road Construction and Use) Lake Creek Physical substrate habitat alterations Silviculture Activities Impacts from Abandoned Mine Lands SNOWSHOE CREEK, Cabinet Alteration in stream-side or littoral Kootenai MT76D002 040 5 3.6 MILES B-1 Р Р Ν Ν Ν Х Wilderness boundary to the mouth vegetative covers (Inactive) (Big Cherry Creek) Cadmium Zinc Kootenai MT76D002_050 BIG CHERRY CREEK, Snowshoe 12.9 MILES B-1 Р Р F Х Alteration in stream-side or littoral Forest Roads (Road Construction and Use) Creek to Mouth (Libby Creek) vegetative covers Habitat Modification - other than Physical substrate habitat alterations Hydromodification Zinc Impacts from Abandoned Mine Lands (Inactive) Mine Tailings LIBBY CREEK, from 1 mi above 12 MILES B-1 Ρ Р F Alteration in stream-side or littoral Impacts from Abandoned Mine Lands Kootenai MT76D002 061 Ν vegetative covers Howard Creek to the highway 2 (Inactive) bridge Mercury Placer Mining Physical substrate habitat alterations LIBBY CREEK, from the highway 2 Physical substrate habitat alterations Site Clearance (Land Development or MT76D002 062 15.2 MILES B-1 F Х Х Kootena 5 bridge to the mouth (Kootenai River) Redevelopment) Sedimentation/Siltation Source Unknown Streambank Modifications/destablization Forest Roads (Road Construction and Use) MT76D002 070 LAKE CREEK, Bull Lake outlet to 18.2 MILES Р F Ν Cadmium Kootena 5 B-1 mouth (Kootenai River) Copper Mine Tailings Natural Sources Lead Mercury in Water Column Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation Zinc MT76D002 080 BOBTAIL CREEK, headwaters to Ρ Other flow regime alterations Forest Roads (Road Construction and Use) **Bobtail Creek** 4A 10 MILES B-1 F Х mouth (Kootenai River) Sedimentation/Siltation Source Unknown Turbidity

Watershed

Kootenai

HUC 17010101 Upper Kootenai Watershed Kootenai **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Kootenai MT76D002 090 QUARTZ CREEK, headwaters to 5 11.1 MILES B-1 Р F Х Χ Physical substrate habitat alterations Forest Roads (Road Construction and Use) confluence with the Kootenai River Sedimentation/Siltation Highway/Road/Bridge Runoff (Nonconstruction Related) Silviculture Activities Kootenai MT76D002 100 CRIPPLE HORSE CREEK, 4C 12.6 MILES B-1 F Χ Χ Low flow alterations Silviculture Activities headwaters to mouth (Lake Physical substrate habitat alterations Koocanusa) BRISTOW CREEK, the headwaters 5 Р Р F Χ F Sedimentation/Siltation Forest Roads (Road Construction and Use) Kootenai MT76D002 110 6.3 MILES B-1 to the mouth at Lake Koocanusa Total Kjehldahl Nitrogen (TKN) Silviculture Activities Source Unknown LAKE KOOCANUSA Р F Dam or Impoundment Kootenai MT76D003 010 4C 28850 ACRES B-1 F Other flow regime alterations MILES B-1 Р F Tobacco MT76D004_010 TOBACCO RIVER, confluence of 5 13.5 Р F F Physical substrate habitat alterations Grazing in Riparian or Shoreline Zones Grave Creek & Fortine Creek to Sedimentation/Siltation Streambank Modifications/destablization mouth (Lake Koocanusa) FORTINE CREEK, headwaters to Р Tobacco MT76D004 020 5 30.7 MILES B-1 F F Alteration in stream-side or littoral Agriculture confluence with Graves Creek vegetative covers Channelization (mouth), which is the headwaters of **Excess Algal Growth** Flow Alterations from Water Diversions the Tobacco River Low flow alterations Forest Roads (Road Construction and Use) Sedimentation/Siltation Grazing in Riparian or Shoreline Zones Temperature, water Highways, Roads, Bridges, Infrasturcture (New Construction) Silviculture Activities Source Unknown MT76D004 030 EDNA CREEK, headwaters to mouth 10.2 MILES B-1 Р F F F Sedimentation/Siltation Forest Roads (Road Construction and Use) Tobacco (Fortine Creek) Silviculture Harvesting Tobacco MT76D004 040 SWAMP CREEK, headwaters to the 11.1 MILES B-1 Р F F Alteration in stream-side or littoral Forest Roads (Road Construction and Use) mouth (Fortine Creek) vegetative covers Grazing in Riparian or Shoreline Zones Low flow alterations Irrigated Crop Production Sedimentation/Siltation Silviculture Harvesting MT76D004 050 LIME CREEK, headwaters to mouth MILES B-1 F Alteration in stream-side or littoral Forest Roads (Road Construction and Use) Tobacco 43 N N (Fortine Creek) vegetative covers Grazing in Riparian or Shoreline Zones Arsenic Silviculture Harvesting Chlorophyll-a Source Unknown Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN) GRAVE CREEK, Foundation Creek Alteration in stream-side or littoral Flow Alterations from Water Diversions Grave Creek MT76D004 060 4A 15.9 MILES B-1 F Х to the mouth (Fortine Creek) vegetative covers Forest Roads (Road Construction and Use) Other flow regime alterations Silviculture Harvesting Sedimentation/Siltation MT76D004 070 THERRIAULT CREEK, headwaters MILES B-1 Ρ F F Sedimentation/Siltation Grazing in Riparian or Shoreline Zones Tobacco 5 9 to the Tobacco River Irrigated Crop Production

Appendix A: II	npaired Water	'S														
HUC 17010101	Upper Kootenai		Watersl	ned	Koote	enai										
TMDL Planning Area	ID305B	Waterbody Name/Location	Cate	gory S	Size L	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Tobacco	MT76D004_080	DEEP CREEK, headwaters to n (Fortine Creek)	nouth 5	1	15.4 N	MILES	A-1	Р	P		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Excess Algal Growth Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones

HUC 17010102	Fisher	W	atershed	Ko	otenai										
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Fisher	MT76C001_010	FISHER RIVER, the Silver Butte/Pleasant Valley junction to th mouth (Kootenai River)	5 e	33	MILES	B-1	P	P		F	F	F	F	High Flow Regime Lead	Channelization Grazing in Riparian or Shoreline Zones Highway/Road/Bridge Runoff (Non- construction Related) Highways, Roads, Bridges, Infrasturcture (New Construction) Silviculture Activities Source Unknown Streambank Modifications/destablization
Fisher	MT76C001_020	WOLF CREEK, headwaters to mouth (Fisher River)	5	36.9	MILES	B-1	Р	Р		F	F	X	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation Temperature, water	Channelization Highways, Roads, Bridges, Infrasturcture (New Construction) Streambank Modifications/destablization
Fisher	MT76C001_030	RAVEN CREEK, headwaters to mouth (Pleasant Vally Fisher River T26-27N, R29W	5	3.1	MILES	B-1	P	Р		F	F	F	P	Alteration in stream-side or littoral vegetative covers Chlorophyll-a Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Forest Roads (Road Construction and Use) Loss of Riparian Habitat Silviculture Activities Source Unknown

Yaak

MT76B002_100

Yaak

EAST FORK YAAK RIVER,

headwaters to mouth (Yaak River)

5

13.9

Kootenai **HUC** 17010103 Watershed **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Yaak MT76B002 010 SEVENTEEN MILE CREEK, 5 15.1 MILES B-1 F F Nitrate/Nitrite (Nitrite + Nitrate as N) Forest Roads (Road Construction and Use) headwaters to mouth (Yaak River) Sedimentation/Siltation Silviculture Harvesting Source Unknown Nitrate/Nitrite (Nitrite + Nitrate as N) Forest Roads (Road Construction and Use) Yaak MT76B002_020 LAP CREEK, headwaters to mouth 5 4.8 MILES B-1 N N F F F (Yaak River) Sedimentation/Siltation Silviculture Harvesting Source Unknown Yaak MT76B002 070 PETE CREEK, headwaters to mouth 5 10.1 MILES B-1 Ρ F Nitrate/Nitrite (Nitrite + Nitrate as N) Silviculture Harvesting (Yaak River) Source Unknown Forest Roads (Road Construction and Use) Yaak MT76B002 080 SOUTH FORK YAAK RIVER, 5 11 MILES B-1 Ν F Sedimentation/Siltation headwaters to mouth (Yaak River) Silviculture Harvesting Nitrate/Nitrite (Nitrite + Nitrate as N) Silviculture Harvesting Yaak MT76B002 090 WEST FORK YAAK RIVER 5 19.8 MILES B-1 Р F [excluding Canadian portion], Source Unknown headwaters to mouth (Yaak River)

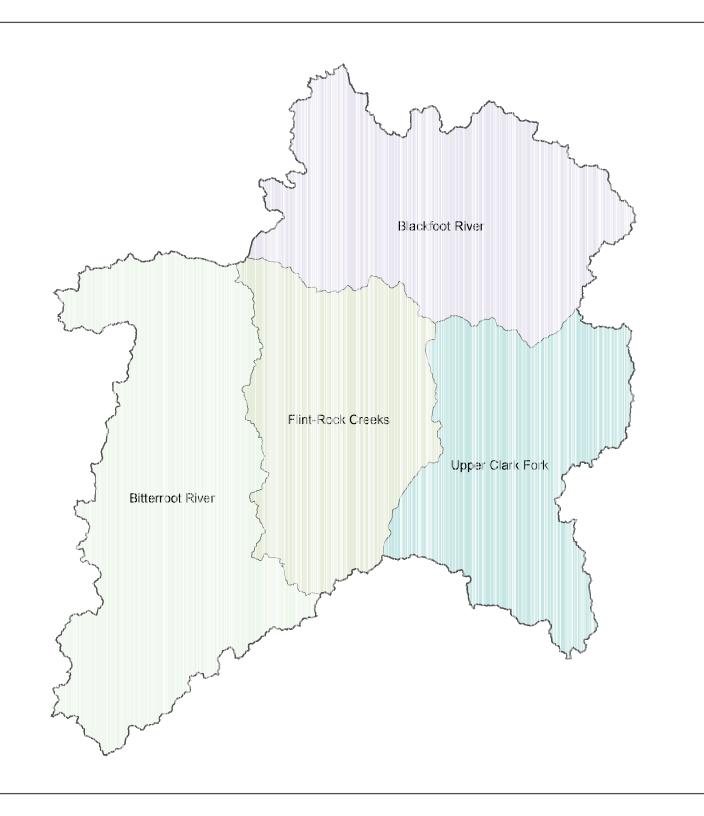
Ρ

MILES B-1

F F Nitrate/Nitrite (Nitrite + Nitrate as N)

Silviculture Harvesting

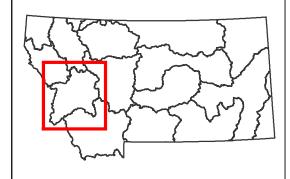
Source Unknown



Upper Clark Fork Sub-Major Basin

Columbia River Basin

USGS HUCHUC NAME17010201Upper Clark Fork17010202Flint-Rock Creeks17010203Blackfoot River17010205Bitterroot River



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Upper Clark Fork

MT76G001 040

MT76G002 011

MT76G002 012

Creek

CLARK FORK RIVER, Cottonwood

Creek to Warm Springs Creek

WARM SPRINGS CREEK (Near

WARM SPRINGS CREEK (near

R12W, SEC 25) to mouth (Clark

Fork)

Meyers Dam (T5N, R12W, SEC 25)

Warm Springs), Meyers Dam (T5N,

Warm Springs), headwaters to

4C

5

17.7

14.5

MILES

MILES B-1

HUC 17010201

Clark Fork River

Upper Clark Fork

Upper Clark Fork

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Clark Fork River MT76G001 010 CLARK FORK RIVER, Flint Creek to 25.2 MILES B-1 Р F Ν Alteration in stream-side or littoral Agriculture the Little Blackfoot River vegetative covers Mill Tailings Arsenic Copper Lead Low flow alterations Nitrogen (Total) Phosphorus (Total) Physical substrate habitat alterations Sedimentation/Siltation Zinc Clark Fork River MT76G001 030 CLARK FORK RIVER, the Little 13.6 MILES C-1 N N F Alteration in stream-side or littoral Agriculture vegetative covers Blackfoot River to Cottonwood

Upper Clark Fork

MILES C-2 P

Watershed

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

Ρ

N N

A-1

Channelization

Municipal Point Source Discharges

Municipal Point Source Discharges

Highway/Road/Bridge Runoff (Non-

Grazing in Riparian or Shoreline Zones

Mill Tailings

Agriculture

Mill Tailings

Channelization

Mill Tailings

construction Related)

Irrigated Crop Production

Copper

Low flow alterations Nitrogen (Total) Phosphorus (Total)

Sedimentation/Siltation

vegetative covers

Low flow alterations Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation

vegetative covers

Low flow alterations

Arsenic

Copper Lead

Physical substrate habitat alterations

Alteration in stream-side or littoral

Physical substrate habitat alterations

Alteration in stream-side or littoral

Physical substrate habitat alterations

Lead

Zinc

Arsenic

Cadmium Copper Lead

F F

F Х

Ν

Upper Clark Fork **HUC** 17010201 Watershed Upper Clark Fork **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Upper Clark Fork MT76G002 030 CABLE CREEK, the headwaters to 5 3.2 MILES B-1 Р F F Chlorophyll-a Grazing in Riparian or Shoreline Zones the mouth (Warm Springs Creek) (Inactive) Physical substrate habitat alterations Sedimentation/Siltation STORM LAKE CREEK, headwaters MILES B-1 Р F F Alteration in stream-side or littoral Channelization Upper Clark Fork MT76G002 040 5 11 vegetative covers to mouth (Warm Springs Creek) Flow Alterations from Water Diversions Chlorophyll-a Forest Roads (Road Construction and Use) Low flow alterations Silviculture Harvesting Sedimentation/Siltation Source Unknown Contaminated Sediments Upper Clark Fork MT76G002_051 MILL CREEK, headwaters to the 11.02 MILES B-1 Ρ Р F F Arsenic section line between Sec 27 & 28, Cadmium Mill Tailings T4N, R11W Chromium (total) Mine Tailings Copper Lead Zinc Upper Clark Fork MT76G002 052 MILL CREEK, section line between 5 8.7 MILES B-1 Ν F Ν Alteration in stream-side or littoral Contaminated Sediments Sec 27 & 28, T4N, R11W to the vegetative covers Irrigated Crop Production mouth (Silver Bow Creek) Aluminum Mill Tailings Arsenic Cadmium Copper Iron Lead Low flow alterations Zinc Grazing in Riparian or Shoreline Zones MT76G002_061 WILLOW CREEK, headwaters to 5.5 Alteration in stream-side or littoral Upper Clark Fork MILES B-1 Ν F Ν T4N, R10W, Sec30 (DABC) vegetative covers Mill Tailings Arsenic Natural Sources Cadmium Copper Lead Phosphorus (Total) Sedimentation/Siltation Upper Clark Fork MT76G002 062 WILLOW CREEK, T4N, R10W. 7.4 MILES B-1 Ν F Ν Alteration in stream-side or littoral Agriculture Sec30 (DABC) to mouth (Silver Bow vegetative covers Atmospheric Depositon - Toxics Creek) Arsenic Grazing in Riparian or Shoreline Zones Cadmium Mill Tailings Copper Lead Low flow alterations

HUC 17010201 Upper Clark Fork Watershed Upper Clark Fork

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Upper Clark Fork	MT76G002_072	LOST CREEK, the south State Park boundary to the mouth (Clark Fork River)	: 5	15.9	MILES	B-1	N	N		F	F	N	P	Alteration in stream-side or littoral vegetative covers Arsenic Iron Low flow alterations Manganese Nitrate/Nitrite (Nitrite + Nitrate as N) Physical substrate habitat alterations Sulfates	Agriculture Contaminated Sediments Grazing in Riparian or Shoreline Zones Irrigated Crop Production
Upper Clark Fork	MT76G002_080	MODESTY CREEK, headwaters to the mouth (Clark Fork River)	5	14.1	MILES	B-1	Х	Χ		F	F	N	Р	Arsenic Low flow alterations	Agriculture
Upper Clark Fork	MT76G002_090	RACETRACK CREEK, the national forest boundary to the mouth (Clark Fork River)	4C	10.4	MILES	B-1	Р	Р		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Low flow alterations	Agriculture Irrigated Crop Production
Upper Clark Fork	MT76G002_100	DEMPSEY CREEK, the national forest boundary to the mouth (Clark Fork River)	5	9.2	MILES	B-1	Р	Р		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Low flow alterations Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation	Agriculture Grazing in Riparian or Shoreline Zones Irrigated Crop Production
Upper Clark Fork	MT76G002_110	TIN CUP JOE CREEK, Tin Cup Lake to mouth (Clark Fork River)	4C	6.6	MILES	B-1	N	N		F	F	F	N	Low flow alterations	Agriculture
Upper Clark Fork	MT76G002_120	MILL-WILLOW BYPASS from Silver Bow Creek to the Clark Fork River	5	4.2	MILES	B-1	Р	Р		F	F	N	F	Arsenic Copper Lead	Mill Tailings
Upper Clark Fork	MT76G002_131	PETERSON CREEK, headwaters to Jack Creek	5	6.4	MILES	B-1	N	N		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Copper Low flow alterations Nitrogen (Total) Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Forest Roads (Road Construction and Use Grazing in Riparian or Shoreline Zones Irrigated Crop Production Silviculture Activities Source Unknown
Upper Clark Fork	MT76G002_132	PETERSON CREEK, Jack Creek to the mouth (Clark Fork River)	5	6.9	MILES	B-1	N	N		Х	X	Х	N	Alteration in stream-side or littoral vegetative covers Low flow alterations Physical substrate habitat alterations Temperature, water	Agriculture Grazing in Riparian or Shoreline Zones Irrigated Crop Production
Upper Clark Fork	MT76G002_140	ANTELOPE CREEK, headwaters to the mouth (Gardner Ditch)	4C	6	MILES	B-1	Х	Χ		F	F	F	Р	Low flow alterations	Agriculture

Watershed

Upper Clark Fork

Upper Clark Fork

HUC 17010201

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Upper Clark Fork MT76G003 020 SILVER BOW CREEK, the Warm 5 26.8 MILES Ν Ν Ν Ν Ν Ν Ν Aluminum Impacts from Abandoned Mine Lands Springs Pond 2 outlet to headwaters (Inactive) Arsenic Loss of Riparian Habitat Copper Site Clearance (Land Development or Iron Redevelopment) Lead Manganese Nitrates Physical substrate habitat alterations Sedimentation/Siltation Silver Zinc Upper Clark Fork MT76G003 030 GERMAN GULCH headwaters to 5 8.4 MILES B-1 Ν N F F Selenium Impacts from Abandoned Mine Lands mouth (Silver Bow Creek) (Inactive) Placer Mining Upper Clark Fork MT76G003_031 BEEFSTRAIGHT CREEK Minnesota 5.1 MILES B-1 Ν Ν Χ Х Χ Cyanide Mine Tailings Gulch to mouth (German Gulch) LITTLE BLACKFOOT RIVER, Dog Alteration in stream-side or littoral Little Blackfoot MT76G004 010 26.2 MILES B-1 Р Р Agriculture Creek to the mouth (Clark Fork vegetative covers Channelization River) Copper Grazing in Riparian or Shoreline Zones Lead Impacts from Abandoned Mine Lands Low flow alterations (Inactive) Nitrate/Nitrite (Nitrite + Nitrate as N) Rangeland Grazing Sedimentation/Siltation Little Blackfoot MT76G004 020 LITTLE BLACKFOOT RIVER, the 21.6 MILES B-1 P P F F Alteration in stream-side or littoral Highway/Road/Bridge Runoff (Nonconstruction Related) headwaters to Dog Creek vegetative covers Arsenic Impacts from Abandoned Mine Lands (Inactive) Cvanide Sedimentation/Siltation Little Blackfoot SPOTTED DOG CREEK, forest MILES F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones MT76G004 032 5 10 B-1 boundary to the mouth (Little vegetative covers Blackfoot River) Phosphorus (Total) Sedimentation/Siltation ELLISTON CREEK, headwaters to 4C Р Alteration in stream-side or littoral Channelization Little Blackfoot MT76G004 040 5.4 MILES B-1 F F the mouth (Little Blackfoot River) vegetative covers Site Clearance (Land Development or Redevelopment) Little Blackfoot MT76G004 051 TELEGRAPH CREEK, headwaters MILES B-1 F Ν Alteration in stream-side or littoral Forest Roads (Road Construction and Use) to Hahn Creek vegetative covers Impacts from Abandoned Mine Lands Arsenic (Inactive) Beryllium Cadmium Copper Iron Sedimentation/Siltation Zinc

Upper Clark Fork

MT76G004 100

MT76G004_112

WOODSON GULCH, Trib to

THREEMILE CREEK, Quigley

Ranch Res. to mouth (Little

Blackfoot River)

Carpenter Creek T11N, R7W, Sec

4C

4C

.8

7

MILES B-1

MILES B-1

Watershed

Upper Clark Fork

HUC 17010201

Little Blackfoot

Little Blackfoot

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Little Blackfoot MT76G004 052 TELEGRAPH CREEK, Hahn Creek 5 2.4 MILES B-1 F F Ν Lead Impacts from Abandoned Mine Lands to the mouth (Little Blackfoot River) (Inactive) Mercury Little Blackfoot MT76G004 060 MONARCH CREEK, headwaters to MILES B-1 Р Р F F Arsenic Mill Tailings 4.5 the mouth (Ontario Creek) Copper Mine Tailings Lead Source Unknown Mercury Subsurface (Hardrock) Minining Selenium Little Blackfoot MT76G004 071 DOG CREEK, headwaters to 5 4.2 MILES B-1 N N F F Alteration in stream-side or littoral Impacts from Abandoned Mine Lands Meadow Creek vegetative covers (Inactive) Arsenic Rangeland Grazing Lead Sedimentation/Siltation Zinc DOG CREEK, Meadow Creek to the F F Alteration in stream-side or littoral Agriculture Little Blackfoot MT76G004_072 5 12.4 MILES B-1 Р mouth (Little Blackfoot River) vegetative covers Channelization Nitrate/Nitrite (Nitrite + Nitrate as N) Rangeland Grazing Sedimentation/Siltation Little Blackfoot MT76G004_080 SNOWSHOE CREEK, headwaters 5 MILES B-1 Р F F Alteration in stream-side or littoral Dredge Mining 10.7 to the mouth (Little Blackfoot River) vegetative covers Flow Alterations from Water Diversions Low flow alterations Forest Roads (Road Construction and Use) Nitrate/Nitrite (Nitrite + Nitrate as N) Grazing in Riparian or Shoreline Zones Sedimentation/Siltation Impacts from Abandoned Mine Lands (Inactive) Irrigated Crop Production Source Unknown Little Blackfoot MT76G004 091 CARPENTER CREEK, headwaters Х Alteration in stream-side or littoral Impacts from Abandoned Mine Lands 3.2 MILES B-1 Х to Basin Creek vegetative covers (Inactive) Other anthropogenic substrate alterations Physical substrate habitat alterations Little Blackfoot MT76G004 092 CARPENTER CREEK, Basin Creek 4C Alteration in stream-side or littoral Impacts from Abandoned Mine Lands 4.8 MILES B-1 N N Х Х (Inactive) to the mouth (Little Blackfoot River) vegetative covers Other anthropogenic substrate alterations Physical substrate habitat alterations

N N

F

X X

Physical substrate habitat alterations

Alteration in stream-side or littoral

vegetative covers

Low flow alterations

Impacts from Abandoned Mine Lands

Grazing in Riparian or Shoreline Zones

Impacts from Abandoned Mine Lands

(Inactive) Placer Mining

Agriculture

(Inactive)

HUC 17010201 Upper Clark Fork Watershed Upper Clark Fork

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Jpper Clark Fork	MT76G005_071	DUNKLEBERG CREEK, headwaters SW corner Sec 2, T9N, R12W	5	3.6	MILES	B-1	N	N		F	F	N	Р	Alteration in stream-side or littoral vegetative covers Cadmium Lead Zinc	Grazing in Riparian or Shoreline Zones Mine Tailings
Jpper Clark Fork	MT76G005_072	DUNKLEBERG CREEK, SW corner Sec 2, T9N, R12W to mouth (Clark Fork River)	5	4.7	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Lead Nitrogen (Total)	Impacts from Abandoned Mine Lands (Inactive) Rangeland Grazing
Jpper Clark Fork	MT76G005_081	HOOVER CREEK, headwaters to Miller Lake	5	5.6	MILES	B-1	Х	Х		X	Х	Х	Р	Sedimentation/Siltation Turbidity	Highway/Road/Bridge Runoff (Non- construction Related) Rangeland Grazing
lpper Clark Fork	MT76G005_082	HOOVER CREEK, Miller Lake to the mouth (Clark Fork River)	5	6	MILES	B-1	N	N		Х	Х	X	N	Low flow alterations Nitrogen (Total) Physical substrate habitat alterations	Agriculture Dam Construction (Other than Upstream Flood Control Projects) Streambank Modifications/destablization
pper Clark Fork	MT76G005_091	GOLD CREEK, headwaters to the Natl. Forest boundary	5	8	MILES	B-1	N	N		F	F	N	F	Alteration in stream-side or littoral vegetative covers	Impacts from Abandoned Mine Lands (Inactive)
														Lead	Mine Tailings
pper Clark Fork	MT76G005_092	GOLD CREEK, the forest boundary to the mouth (Clark Fork River)	5	7.2	MILES	B-1	Р	Р		F	F	F	Р	Low flow alterations Nitrogen (Total)	Agriculture Irrigated Crop Production
pper Clark Fork	MT76G005_100	BROCK CREEK, headwaters to mouth (Clark Fork River)	5	12	MILES	B-1	Х	Х		F	F	F	Р	Sedimentation/Siltation	Streambank Modifications/destablization
pper Clark Fork	MT76G005_111	WARM SPRINGS CREEK (Near Phosphate), headwaters to the line between R9W and R10W	5	8.8	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Highway/Road/Bridge Runoff (Non- construction Related) Silviculture Activities
lpper Clark Fork	MT76G005_112	WARM SPRINGS CREEK (Near Phosphate) from line between R9W and R10W to mouth (Clark Fork River)	5	5.2	MILES	B-1	P	Р		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Low flow alterations Physical substrate habitat alterations Sedimentation/Siltation	Agriculture Grazing in Riparian or Shoreline Zones
ittle Blackfoot	MT76G006_010	ONTARIO MINE WETLAND T8N R6W SEC 21	5	20	ACRES	B-1	N	N		P	F	N	P	Arsenic Cadmium Copper Lead Mercury Zinc pH	Impacts from Abandoned Mine Lands (Inactive)

Appendix A: Impaired Waters Flint-Rock

HUC 17010202

Rock

Rock

Rock

Rock

Rock

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Clark Fork River MT76E001 010 CLARK FORK RIVER, the Blackfoot 5 53 MILES B-1 Ν F Ν Alteration in stream-side or littoral Agriculture River to Flint Creek vegetative covers Channelization Arsenic Mill Tailings Cadmium Mine Tailings Chlorophyll-a Municipal Point Source Discharges Copper Iron Lead Nitrogen (Total) Phosphorus (Total) Rock MT76E002 020 EAST FORK ROCK CREEK, East 8.7 MILES B-1 N N F F Alteration in stream-side or littoral Forest Roads (Road Construction and Use) Fork Reservoir to mouth (Middle vegetative covers Grazing in Riparian or Shoreline Zones Fork Rock Creek) Chlorophyll-a Impacts from Hydrostructure Flow Low flow alterations Regulation/modification Nitrogen, Nitrate Irrigated Crop Production Source Unknown Sedimentation/Siltation Temperature, water Rock MT76E002 030 WEST FORK ROCK CREEK. 5 23.9 MILES B-1 X X F Ν F Mercury Source Unknown headwaters to mouth (Rock Creek) Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones MT76E002 040 UPPER WILLOW CREEK, 4C 19.4 MILES B-1 Р Р F Χ

vegetative covers

F

F

F F

F

Х X Х

Ν

Low flow alterations

Fish-Passage Barrier

Low flow alterations

Phosphorus (Total) Sedimentation/Siltation

vegetative covers

Phosphorus (Total)

vegetative covers

vegetative covers

Mercury

Sedimentation/Siltation Temperature, water

Sedimentation/Siltation

Physical substrate habitat alterations

Alteration in stream-side or littoral

Nitrate/Nitrite (Nitrite + Nitrate as N)

Alteration in stream-side or littoral

Alteration in stream-side or littoral

Upper Clark Fork

Watershed

5

5

4C

4.5

2.8

3

1.5

MILES B-1 Р

MILES B-1

MILES B-1

MILES B-1

Ν

Ν

N N

headwaters to the mouth (Rock

BREWSTER CREEK, East Fork to

SOUTH FORK ANTELOPE CREEK,

headwaters to mouth (Antelope

QUARTZ GULCH, headwaters to

BASIN GULCH, headwaters to

the mouth (Basin Gulch)

mouth (Quartz Gulch)

mouth (Rock Creek)

Creek) T6N R15W

Creek)

MT76E002 050

MT76E002_060

MT76E002_070

MT76E002 080

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

Irrigated Crop Production

Irrigated Crop Production

Forest Roads (Road Construction and Use)

Grazing in Riparian or Shoreline Zones

Impacts from Abandoned Mine Lands

Source Unknown

Silviculture Activities

Source Unknown

Natural Sources

Placer Mining

(Inactive) Placer Mining

HUC 17010202 Flint-Rock Watershed Upper Clark Fork **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Rock MT76E002 090 EUREKA GULCH, confluence of 5 .6 MILES B-1 Ν F Ν Ν Alteration in stream-side or littoral Natural Sources Quartz Gulch and Basin Gulch to vegetative covers Open Pit Mining mouth (Rock Creek) Arsenic Placer Mining Mercury Sedimentation/Siltation Solids (Suspended/Bedload) Phosphorus (Total) Forest Roads (Road Construction and Use) Rock MT76E002_100 SCOTCHMAN GULCH, headwaters 5 7.1 MILES B-1 Р F F to mouth (Upper Willow Creek-Rock Sedimentation/Siltation Placer Mining Creek) Rangeland Grazing Silviculture Harvesting Source Unknown Rock MT76E002_110 SLUICE GULCH, headwaters to 6.1 MILES B-1 N N F Ν Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones vegetative covers mouth (Rock Creek) Impacts from Abandoned Mine Lands (Inactive) Arsenic Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation MT76E002 120 FLAT GULCH, headwaters to the MILES B-1 P P F F Phosphorus (Total) Forest Roads (Road Construction and Use) Rock 2.9 mouth (Rock Creek) Sedimentation/Siltation Rangeland Grazing Total Kjehldahl Nitrogen (TKN) Silviculture Activities Source Unknown Sedimentation/Siltation MINERS GULCH, headwaters to Р F Grazing in Riparian or Shoreline Zones Rock MT76E002_160 5 5.4 MILES B-1 mouth (Upper Willow Creek) T8N Impacts from Abandoned Mine Lands R15W (Inactive) Silviculture Activities Source Unknown Alteration in stream-side or littoral Agriculture Flint MT76E003_011 FLINT CREEK, Georgetown Lake to 28 MILES B-1 N N F Ν Boulder Creek confluence vegetative covers Grazing in Riparian or Shoreline Zones Antimony Impacts from Abandoned Mine Lands (Inactive) Arsenic Cadmium Copper Lead Low flow alterations Mercury Sedimentation/Siltation

HUC 17010202 Flint-Rock Upper Clark Fork Watershed

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Flint	MT76E003_012	FLINT CREEK, Boulder Creek to	5	15.7	MILES	B-1	N	N		F	Р	N	Р	Alteration in stream-side or littoral	Agriculture
		mouth (Clark Fork River)												vegetative covers	Grazing in Riparian or Shoreline Zones
														Arsenic Cadmium	Impacts from Abandoned Mine Lands (Inactive)
														Copper	Streambank Modifications/destablization
														Iron	
														Lead	
														Nitrogen (Total)	
														Phosphorus (Total)	
														Turbidity	
Flint	MT76E003_020	DOUGLAS CREEK, Confluence of Middle and South Forks to mouth	5	6.4	MILES	B-1	Р	Р		F	F	Х	F	Nitrogen, Nitrate	Channelization
		(Flint Creek) T9N, R13W												Physical substrate habitat alterations	Impacts from Abandoned Mine Lands (Inactive)
		,													Silviculture Activities
Flint	MT76E003 030	NORTH FORK DOUGLAS CREEK,	5	3.1	MILES	B-1	N	N		P	F	N	Х	Alteration in stream-side or littoral	Grazing in Riparian or Shoreline Zones
·	WIT 7 02 000_000	headwaters to mouth (Douglas	J	0.1	WILLO	٥.				•	•	.,	,	vegetative covers	Impacts from Abandoned Mine Lands
		Creek-Flint Creek)												Arsenic	(Inactive)
														Cadmium	
														Copper	
														Sulfates Zinc	
Eli-4	MT705000 040	EDED DUDD ODEEN Ford Door	-	40.4	NII 50	D.4				_	F		F	Alteration in stream-side or littoral	Aminultura
Flint	MT76E003_040	FRED BURR CREEK, Fred Burr Lake to mouth (Flint Creek)	5	10.1	MILES	B-1	N	N		Г	г	N	Г	vegetative covers	Agriculture Grazing in Riparian or Shoreline Zones
		,												Arsenic	Mill Tailings
														Lead	3.
														Mercury	
Flint	MT76E003_050	SOUTH FORK LOWER WILLOW	5	12.5	MILES	B-1	Ν	Ν		F	F	Ν	X	Copper	Mill Tailings
		CREEK, headwaters to mouth (Lower Willow Creek)												Lead	
		,												Mercury	
Flint	MT76E003_060	BOULDER CREEK, headwaters to mouth (Flint Creek)	5	13.8	MILES	B-1	Р	Р		F	F	N	X	Arsenic	Impacts from Abandoned Mine Lands (Inactive)
		mount (Fint Creek)												Lead	Silviculture Harvesting
														Mercury Physical substrate habitat alterations	Cirvibultato Harvooting
														Zinc	
Flint	MT76E003_070	BARNES CREEK, headwaters to	5	8.3	MILES	B-1	Р	Р		Þ	P	Р	Р	Chlorophyll-a	Irrigated Crop Production
ı iiit	WIT70E003_070	mouth (Flint Creek)	3	0.5	WILLO	D-1	•			'	•	'	•	Iron	Managed Pasture Grazing
														Nitrate/Nitrite (Nitrite + Nitrate as N)	Source Unknown
														Phosphorus (Total)	
														Sedimentation/Siltation	
														Total Kjehldahl Nitrogen (TKN)	
Flint	MT76E003_090	PRINCETON GULCH, headwaters	5	3.9	MILES	B-1	Р	Р		F	F	X	Χ	Nitrates	Placer Mining
		to mouth (Boulder Creek)												Physical substrate habitat alterations	

Clark Fork - Drummond

MT76E004 050

MULKEY CREEK, headwaters to the

mouth (Clark Fork River)

5.7

MILES

B-1

HUC 17010202 Flint-Rock Watershed Upper Clark Fork **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Flint MT76E003 100 DOUGLAS CREEK (Above 5 5.1 MILES B-1 Ν F Ν Arsenic Impacts from Abandoned Mine Lands Philipsburg), headwaters to mouth (Inactive) Cadmium (Flint Creek) Silviculture Activities Cause Unknown Source Unknown Copper Streambank Modifications/destablization Iron Lead Mercury Physical substrate habitat alterations Sedimentation/Siltation Zinc Flint MT76E003_110 SMART CREEK, headwaters to 11.2 MILES B-1 Р Р F F Alteration in stream-side or littoral Freshettes or Major Flooding mouth (Flint Creek) T9N R13W vegetative covers Grazing in Riparian or Shoreline Zones Phosphorus (Total) Silviculture Harvesting Sedimentation/Siltation Watershed Runoff following Forest Fire Alteration in stream-side or littoral Channelization Flint MT76E003 130 CAMP CREEK, headwaters to 1.8 MILES B-1 Ν F F vegetative covers terminus, near the town of Habitat Modification - other than Philipsburg Arsenic Hydromodification Copper Impacts from Abandoned Mine Lands (Inactive) Fish-Passage Barrier Lead Zinc WALLACE CREEK, headwaters to Impacts from Abandoned Mine Lands Clark Fork - Drummond MT76E004_010 3.8 MILES B-1 Р F F Copper mouth (Clark Fork River) (Inactive) Zinc Highway/Road/Bridge Runoff (Non-CRAMER CREEK, headwaters to F Clark Fork - Drummond MT76E004_020 5 11 MILES B-1 Р Р F Arsenic the mouth (Clark Fork River) construction Related) Barium Impacts from Abandoned Mine Lands Cause Unknown (Inactive) Cobalt Source Unknown Copper Lead Mercury Physical substrate habitat alterations Sedimentation/Siltation F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Clark Fork - Drummond TENMILE CREEK, headwaters to Р F MT76E004_030 4.9 MILES B-1 mouth (Bear Creek-Clark Fork vegetative covers Silviculture Activities River) Phosphorus (Total) Sedimentation/Siltation Physical substrate habitat alterations HARVEY CREEK, headwaters to Streambank Modifications/destablization Clark Fork - Drummond MT76E004_041 4C 11.6 MILES B-1 Ρ Х Х Grouse Gulch Clark Fork - Drummond MT76E004 042 HARVEY CREEK, Grouse Gulch to 4C 3.9 MILES B-1 F Low flow alterations Agriculture mouth (Clark Fork River) Physical substrate habitat alterations Streambank Modifications/destablization

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

X X

Sedimentation/Siltation

Low Water Crossing

HUC 17010202	Flint-Rock	Wa	itershed	Up	per Cla	rk Forl	k								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Clark Fork - Drummond	MT76E004_060	RATTLER GULCH, headwaters to mouth (Clark Fork River), West of Drummond, T11N R13W	5	7.8	MILES	B-1	Р	Р		F	P	F	P	Alteration in stream-side or littoral vegetative covers Chlorophyll-a Low flow alterations Phosphorus (Total) Sedimentation/Siltation	Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Natural Sources Silviculture Harvesting Source Unknown
Clark Fork - Drummond	MT76E004_070	DEEP CREEK, headwaters to mouth (Bear Creek, which is a tributary to the Clark Fork River near Bearmouth)	n 5	5	MILES	B-1	P	Р		F	P	F	Р	Chlorophyll-a Low flow alterations Nitrate/Nitrite (Nitrite + Nitrate as N) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Placer Mining Silviculture Harvesting Subsurface (Hardrock) Minining
Clark Fork - Drummond	MT76E004_080	ANTELOPE CREEK, headwaters to mouth (Clark Fork River)	4C	8	MILES	B-1	Р	Р		X	Х	Х	Х	Alteration in stream-side or littoral vegetative covers Physical substrate habitat alterations	Grazing in Riparian or Shoreline Zones Loss of Riparian Habitat Streambank Modifications/destablization

Blackfoot

MT76F002_020

MT76F002 030

MT76F002 040

HUC 17010203

Blackfoot Headwaters

Blackfoot Headwaters

Blackfoot Headwaters

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Blackfoot Headwaters MT76F001 010 BLACKFOOT RIVER, headwaters to 16.4 MILES B-1 Ν F Ν Cadmium Subsurface (Hardrock) Minining Landers Fork Copper Surface Mining Iron Lead Manganese MT76F001 020 BLACKFOOT RIVER, Landers Fork MILES Alteration in stream-side or littoral Agriculture Blackfoot Headwaters 48.3 R-1 to Nevada Creek vegetative covers Silviculture Harvesting Aluminum Subsurface (Hardrock) Minining Cadmium Surface Mining Iron Sedimentation/Siltation Zinc Middle Blackfoot MT76F001 031 BLACKFOOT RIVER. Nevada Creek MILES Ρ F F Nitrogen (Total) Irrigated Crop Production 21.9 B-1 to Monture Creek Phosphorus (Total) Temperature, water F Nitrogen (Total) Flow Alterations from Water Diversions BLACKFOOT RIVER, Monture Р F Middle Blackfoot MT76F001_032 5 23.9 MILES B-1 Creek to Belmont Creek Phosphorus (Total) Streambank Modifications/destablization Temperature, water Ammonia (Un-ionized) Lower Blackfoot MT76F001 033 BLACKFOOT RIVER, Belmont 21.9 MILES B-1 Ρ F F Contaminated Sediments Creek to mouth (Clark Fork) Grazing in Riparian or Shoreline Zones Silviculture Activities

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F F

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F

Other flow regime alterations

Alteration in stream-side or littoral

Sedimentation/Siltation

vegetative covers

Low flow alterations

Sedimentation/Siltation

Cadmium

Cadmium

Manganese Zinc

Copper

Iron

Lead

Copper

Lead

Watershed

2.8

14

4A

4A .5

MILES

MILES B-1

MILES B-1

B-1

WILLOW CREEK, Sandbar Creek to

mouth, T15N R7W (Blackfoot River)

POORMAN CREEK, headwaters to

BEARTRAP CREEK. Mike Horse

Creek to the mouth (Blackfoot River)

the mouth (Blackfoot River)

Upper Clark Fork

Highway/Road/Bridge Runoff (Non-

Construction Stormwater Discharge

Flow Alterations from Water Diversions

Forest Roads (Road Construction and Use)
Impacts from Abandoned Mine Lands

Streambank Modifications/destablization

construction Related)

Silviculture Activities

Acid Mine Drainage

Subsurface (Hardrock) Minining

Mine Tailings

Surface Mining

(Permitted)

(Inactive)

App	endix A: Ir	mpaired Waters		
HUC	17010203	Blackfoot	Watershed	Upper Clark Fork

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Blackfoot Headwaters	MT76F002_060	SANDBAR CREEK, forks to mouth (Willow Creek)	5	1.6	MILES	B-1	P	P		F	F	P	F	Aluminum Copper Iron Manganese Sedimentation/Siltation	Acid Mine Drainage Highway/Road/Bridge Runoff (Non- construction Related) Impacts from Abandoned Mine Lands (Inactive) Mine Tailings Subsurface (Hardrock) Minining
Blackfoot Headwaters	MT76F002_070	ARRASTRA CREEK, headwaters to mouth (Blackfoot River)	4A	12.6	MILES	B-1	Р	Р		F	F	F	F	Sedimentation/Siltation	Surface Mining Agriculture Highway/Road/Bridge Runoff (Non- construction Related) Streambank Modifications/destablization
Blackfoot Headwaters	MT76F003_010	MIKE HORSE CREEK, headwaters to mouth (Beartrap Creek)	4A	.64	MILES	B-1	N	N		X	×	N	X	Aluminum Cadmium Copper Iron Lead Manganese Zinc	Acid Mine Drainage Impacts from Abandoned Mine Lands (Inactive) Mine Tailings
Nevada Creek	MT76F003_011	NEVADA CREEK, headwaters to Nevada Lake	5	18.3	MILES	B-1	P	P		F	F	N	P	Alteration in stream-side or littoral vegetative covers Cadmium Lead Mercury Physical substrate habitat alterations Solids (Suspended/Bedload) Total Kjehldahl Nitrogen (TKN)	Agriculture Grazing in Riparian or Shoreline Zones Placer Mining
Nevada Creek	MT76F003_012	NEVADA CREEK, Nevada Lake to the mouth (Blackfoot River)	5	24.9	MILES	B-1	N	N		F	F	F	Р	Low flow alterations Phosphorus (Total) Physical substrate habitat alterations Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Agriculture Streambank Modifications/destablization
Nevada Creek	MT76F003_021	JEFFERSON CREEK, headwaters to 1 mile above Madison Gulch, segment lies entirely within coniferous forest	5	3.6	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Channelization Placer Mining Rangeland Grazing Streambank Modifications/destablization
Nevada Creek	MT76F003_022	JEFFERSON CREEK, 1 mi above Madison Gulch to mouth (Nevada Creek)	5	3	MILES	B-1	P	P		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Aluminum Iron Low flow alterations Phosphorus (Total) Sedimentation/Siltation Solids (Suspended/Bedload)	Channelization Dredge Mining Grazing in Riparian or Shoreline Zones Irrigated Crop Production Source Unknown Streambank Modifications/destablization

Appendix A: Impaired Waters Huc 17010203 Blackfoot Watershed Un

HUC 17010203	Blackfoot	Wa	atershed	Up	per Cla	rk For	k								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Nevada Creek	MT76F003_030	GALLAGHER CREEK, headwaters to mouth (Nevada Creek)	5	3.1	MILES	B-1	Р	P		F	F	F	P	Alteration in stream-side or littoral vegetative covers Low flow alterations Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Agriculture Rangeland Grazing
Nevada Creek	MT76F003_040	BRAZIEL CREEK, 2.8 miles upstream from mouth (Nevada Creek) T12N R10W Sec 22	5	2.8	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation	Highway/Road/Bridge Runoff (Non- construction Related) Rangeland Grazing Silviculture Activities
Nevada Creek	MT76F003_050	MCELWAIN CREEK, 2 miles upstream from mouth (Nevada Creek) T13N R12W Sec 27-28	5	2	MILES	B-1	Р	P		F	F	F	P	Alteration in stream-side or littoral vegetative covers Low flow alterations Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation	Flow Alterations from Water Diversions Grazing in Riparian or Shoreline Zones Irrigated Crop Production
Nevada Creek	MT76F003_060	BLACK BEAR CREEK, headwaters to mouth (Bear Creek), T12N R12W SEC 22SE	5	7.5	MILES	B-1	N	N		F	F	F	N	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation Solids (Suspended/Bedload) Total Kjehldahl Nitrogen (TKN)	Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Managed Pasture Grazing Silviculture Harvesting
Nevada Creek	MT76F003_071	WASHINGTON CREEK, headwaters to Cow Gulch	4C	5.8	MILES	B-1	Х	Х		F	F	Х	Р	Low flow alterations Physical substrate habitat alterations	Dredge Mining Impacts from Abandoned Mine Lands (Inactive)
Nevada Creek	MT76F003_072	WASHINGTON CREEK, Cow Guich to the mouth (Nevada Creek)	n 5	4.3	MILES	B-1	Р	P		F	F	X	P	Low flow alterations Sedimentation/Siltation	Agriculture Highway/Road/Bridge Runoff (Non- construction Related) Impacts from Abandoned Mine Lands (Inactive) Streambank Modifications/destablization
Nevada Creek	MT76F003_081	DOUGLAS CREEK, headwaters to Murray Creek	5	12.6	MILES	B-1	P	P		F	F	N	N	Alteration in stream-side or littoral vegetative covers Arsenic Chlorophyll-a Low flow alterations Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation Temperature, water Total Kjehldahl Nitrogen (TKN)	Flow Alterations from Water Diversions Grazing in Riparian or Shoreline Zones Irrigated Crop Production Rangeland Grazing Source Unknown

Middle Blackfoot

MT76F004 060

WARD CREEK, the headwaters to

Browns Lake

9.8

MILES B-1

HUC 17010203 Blackfoot Watershed Upper Clark Fork **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Nevada Creek MT76F003 082 DOUGLAS CREEK, Murray Creek to 5 9.3 MILES B-1 Ν F Ν Alteration in stream-side or littoral Flow Alterations from Water Diversions mouth (Nevada-Cottonwood Creeks) vegetative covers Grazing in Riparian or Shoreline Zones Arsenic Irrigated Crop Production Low flow alterations Loss of Riparian Habitat Phosphorus (Total) Rangeland Grazing Sedimentation/Siltation Source Unknown Temperature, water Total Kjehldahl Nitrogen (TKN) COTTONWOOD CREEK, South Low flow alterations Agriculture Nevada Creek MT76F003 090 4C 6.2 MILES B-1 Χ Х Fork Cottonwood Creek to mouth (Douglas Creek) NEVADA SPRING CREEK, Nevada Creek MT76F003 100 MILES B-1 Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones 2.9 headwaters to mouth (Nevada vegetative covers Impacts from Hydrostructure Flow Creek) Sedimentation/Siltation Regulation/modification Nevada Creek MT76F003 120 MURRAY CREEK, headwaters to Р F Alteration in stream-side or littoral Flow Alterations from Water Diversions 5 8.6 MILES B-1 Ν mouth (Douglas Creek) T12N R12W vegetative covers Grazing in Riparian or Shoreline Zones Sec 6 Arsenic Irrigated Crop Production Chlorophyll-a Rangeland Grazing Low flow alterations Silviculture Activities Nitrate/Nitrite (Nitrite + Nitrate as N) Source Unknown Phosphorus (Total) Streambank Modifications/destablization Sedimentation/Siltation Temperature, water Total Kjehldahl Nitrogen (TKN) BUFFALO GULCH, headwaters to Physical substrate habitat alterations Forest Roads (Road Construction and Use) Nevada Creek MT76F003 130 6.3 MILES B-1 Х Χ mouth (Nevada Creek) Sedimentation/Siltation Livestock (Grazing or Feeding Operations) Silviculture Activities Alteration in stream-side or littoral Middle Blackfoot MT76F004_010 FRAZIER CREEK, headwaters to 5 4.4 MILES B-1 N N F F Flow Alterations from Water Diversions mouth (Blackfoot River) T14N R12W vegetative covers Grazing in Riparian or Shoreline Zones Sec 28 (mouth) Low flow alterations Hydrostructure Impacts on Fish Passage Phosphorus (Total) Irrigated Crop Production Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN) Middle Blackfoot MT76F004 050 WALES CREEK, reservoir outlet to 2 MILES B-1 Р F F Alteration in stream-side or littoral Agriculture the mouth (Blackfoot River) vegetative covers Irrigated Crop Production Chlorophyll-a Rangeland Grazing Low flow alterations Upstream Impoundments (e.g., PI-566 Nitrate/Nitrite (Nitrite + Nitrate as N) NRCS Structures) Phosphorus (Total) Sedimentation/Siltation

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

F F

Physical substrate habitat alterations

Sedimentation/Siltation

Р

Agriculture

Silviculture Activities

Unspecified Unpaved Road or Trail

Watershed

Upper Clark Fork

Blackfoot

HUC 17010203

Lower Blackfoot

MT76F006_020

WEST FORK ASHBY CREEK,

Ashby Creek)

headwaters to the mouth (East Fork

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Middle Blackfoot MT76F004 070 WARREN CREEK, headwaters to 4C 11 MILES B-1 Р F F Fish-Passage Barrier Agriculture the mouth (Blackfoot River) Channelization Low flow alterations Irrigated Crop Production Middle Blackfoot MT76F004_080 YOURNAME CREEK, headwaters to 9.5 MILES B-1 Р Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones the mouth (Blackfoot River) vegetative covers Irrigated Crop Production Fish-Passage Barrier Rangeland Grazing Low flow alterations Phosphorus (Total) Sedimentation/Siltation ROCK CREEK, headwaters to the Ρ F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Middle Blackfoot MT76F004 090 9 MILES B-1 Х mouth (North Fork Blackfoot River) vegetative covers Irrigated Crop Production Low flow alterations Rangeland Grazing Sedimentation/Siltation Silviculture Harvesting Middle Blackfoot MT76F004_100 MONTURE CREEK, headwaters to 4C 29.4 MILES B-1 Р Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones mouth (Blackfoot River) vegetative covers Middle Blackfoot MT76F004 110 KLEINSCHMIDT CREEK, mouth 1.5 1.5 MILES B-1 Р Ν Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones miles upstream to mouth (North Fork vegetative covers Impacts from Hydrostructure Flow Blackfoot River) Arsenic Regulation/modification Copper Managed Pasture Grazing Sedimentation/Siltation Source Unknown Temperature, water Middle Blackfoot MT76F005 020 RICHMOND CREEK, headwaters to 3.7 MILES B-1 Р F F Sedimentation/Siltation Forest Roads (Road Construction and Use) mouth (Lake Alva) Middle Blackfoot MT76F005 030 DEER CREEK, headwaters to mouth 5 10.3 MILES B-1 Sedimentation/Siltation Forest Roads (Road Construction and Use) (Seeley Lake) Silviculture Harvesting Middle Blackfoot MT76F005 060 BLANCHARD CREEK, the North MILES Р F F Ν Alteration in stream-side or littoral Agriculture 5 2.3 B-1 Fork to the mouth (Clearwater River) vegetative covers Flow Alterations from Water Diversions Low flow alterations Grazing in Riparian or Shoreline Zones Sedimentation/Siltation Highway/Road/Bridge Runoff (Nonconstruction Related) Lower Blackfoot MT76F006 010 UNION CREEK, headwaters to 5 19.4 MILES B-1 Ν F F Arsenic Animal Feeding Operations (NPS) mouth (Blackfoot River) Cause Unknown Flow Alterations from Water Diversions Impacts from Abandoned Mine Lands Copper (Inactive) Phosphorus (Total) Rangeland Grazing Physical substrate habitat alterations Source Unknown Solids (Suspended/Bedload)

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

F F

MILES

B-1 P

Streambank Modifications/destablization

Silviculture Activities

Source Unknown

Forest Roads (Road Construction and Use)

Temperature, water

vegetative covers

Phosphorus (Total)

Sedimentation/Siltation

Alteration in stream-side or littoral

HUC 17010203	Blackfoot	Wa	tershed	Up	per Cla	rk Forl	<								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lower Blackfoot	MT76F006_031	ELK CREEK, headwaters to Stinkwater Creek	5	8.4	MILES	B-1	Р	Р		F	F	F	F	Cadmium Nitrogen, Nitrate Physical substrate habitat alterations Sedimentation/Siltation	Forest Roads (Road Construction and Use) Placer Mining Streambank Modifications/destablization
Lower Blackfoot	MT76F006_032	ELK CREEK, Stinkwater Creek to the mouth (Blackfoot River)	5	5.6	MILES	B-1	Р	Р		F	F	X	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation Temperature, water	Grazing in Riparian or Shoreline Zones Streambank Modifications/destablization
Lower Blackfoot	MT76F006_050	EAST FORK ASHBY CREEK T13N R16W	5	3.9	MILES	B-1	P	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation	Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Silviculture Activities Source Unknown
Lower Blackfoot	MT76F006_060	CAMAS CREEK, 1 mile above mouth to mouth (Union Creek)	5	1	MILES	B-1	Р	Р		F	F	F	F	Low flow alterations Phosphorus (Total) Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Irrigated Crop Production Upstream Source
Lower Blackfoot	MT76F006_070	BELMONT CREEK, headwaters to mouth (Blackfoot River)	5	10.5	MILES	B-1	Р	Р		F	F	F	F	Sedimentation/Siltation	Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones
Lower Blackfoot	MT76F006_090	WASHOE CREEK Headwater to mouth (Union Creek)	5	6.1	MILES	B-1	Р	P		F	F	F	Р	Chlorophyll-a Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Open Pit Mining Silviculture Harvesting Source Unknown
Nevada Creek	MT76F007_020	NEVADA LAKE, reservoir of Nevada Creek, T12N, R9W, Section 13, and 10W, Sections 18 &19	5	352.6	ACRES	B-1	Р	Р		F	F	F	Р	Oxygen, Dissolved Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Source Unknown Upstream/Dowstream Source

Appendix A: Impaired Waters HUC 17010205 Bitterroot Watershed Upper Clark Fork

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Bitterroot	MT76H001_010	BITTERROOT RIVER, the east and west forks to Skalkaho Creek	5	24.3	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Copper	Grazing in Riparian or Shoreline Zones Rangeland Grazing Source Unknown Streambank Modifications/destablization
Bitterroot	MT76H001_020	BITTERROOT RIVER, Skalkaho Creek to Eightmile Creek	5	36.5	MILES	B-1	P	P		F	F	X	Р	Low flow alterations Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation Temperature, water	Agriculture Habitat Modification - other than Hydromodification Irrigated Crop Production Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)
Bitterroot	MT76H001_030	BITTERROOT RIVER, Eightmile Creek to the mouth (Clark Fork River)	5	23.4	MILES	B-1	P	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Copper Lead Nitrogen, Nitrate Sedimentation/Siltation	On-site Treatment Systems (Septic Systems and Similar Decencentralized Systems) Rangeland Grazing Sediment Resuspension (Contaminated Sediment) Streambank Modifications/destablization Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)
Bitterroot Headwaters	MT76H002_010	EAST FORK BITTERROOT RIVER, Anaconda-Pintlar Wilderness boundary to the mouth (Bitterroot River)	5	29.9	MILES	B-1	P	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Copper Lead Sedimentation/Siltation Temperature, water	Channelization Grazing in Riparian or Shoreline Zones Highways, Roads, Bridges, Infrasturcture (New Construction) Source Unknown Streambank Modifications/destablization Watershed Runoff following Forest Fire
Bitterroot Headwaters	MT76H002_020	REIMEL CREEK, headwaters to the mouth (East Fork Bitterroot River)	4A	7.4	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Agriculture Natural Sources
Bitterroot Headwaters	MT76H002_030	MEADOW CREEK, headwaters to mouth (East Fork Bitteroot River)	5	9.7	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones
Bitterroot Headwaters	MT76H002_070	LAIRD CREEK, headwaters to mouth (East Fork Bitterroot River) T1N R20	4A	5.7	MILES	B-1	Р	Р		Х	Х	Х	X	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Forest Roads (Road Construction and Use) Silviculture Activities
Bitterroot Headwaters	MT76H002_080	GILBERT CREEK, headwaters to mouth (Laird Creek) T1N R20W	4A	2.3	MILES	B-1	Р	Р		Х	Х	Х	X	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Forest Roads (Road Construction and Use) Silviculture Activities
Bitterroot Headwaters	MT76H003_010	WEST FORK BITTERROOT RIVER, headwaters to the mouth (Bitterroot River)	, 4A	39.4	MILES	B-1	P	P		F	F	X	F	Physical substrate habitat alterations Sedimentation/Siltation Temperature, water	Highway/Road/Bridge Runoff (Non- construction Related) Highways, Roads, Bridges, Infrasturcture (New Construction) Streambank Modifications/destablization
Bitterroot Headwaters	MT76H003_020	NEZ PERCE FORK Bitterroot River, headwaters to mouth (West Fork Bitterroot River)	4A	14.7	MILES	B-1	F	Р		F	F	F	F	Temperature, water	Forest Roads (Road Construction and Use) Loss of Riparian Habitat

HUC 17010205 Bitterroot Watershed Upper Clark Fork **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Bitterroot Headwaters MT76H003 040 HUGHES CREEK, headwaters to 4A 17.6 MILES B-1 Ν F F Alteration in stream-side or littoral Channelization the mouth (West Fork Bitterroot vegetative covers Impacts from Abandoned Mine Lands River) Physical substrate habitat alterations (Inactive) Sedimentation/Siltation Placer Mining Temperature, water Source Unknown OVERWHICH CREEK, headwaters MILES B-1 Bitterroot Headwaters MT76H003_050 5 19.1 Ρ Р F F F Sedimentation/Siltation Highway/Road/Bridge Runoff (Nonconstruction Related) to the mouth (West Fork Bitterroot Temperature, water River) Natural Sources Site Clearance (Land Development or Redevelopment) MT76H003 060 DITCH CREEK, headwaters to MILES B-1 Р F F Sedimentation/Siltation Forest Roads (Road Construction and Use) Bitterroot Headwaters 4A 2.7 F mouth (West Fork Bitterroot River) Silviculture Harvesting Bitterroot MT76H004 010 BASS CREEK, Selway-Bitterroot 5 5.3 MILES B-1 Р Р F F F Low flow alterations Dam or Impoundment Wilderness boundary to mouth Total Kjehldahl Nitrogen (TKN) Flow Alterations from Water Diversions (cofluence with the Bitterroot River) Irrigated Crop Production Natural Sources Source Unknown Bitterroot MT76H004 020 KOOTENAI CREEK, Selway-4C 5.8 MILES B-1 Р F Х Alteration in stream-side or littoral Agriculture vegetative covers Bitterroot Wilderness boundary to mouth (Bitterroot River) Low flow alterations Low flow alterations Bitterroot MT76H004 030 BEAR CREEK, Selway-Bitterroot 4C 8.7 MILES B-1 Χ X F Х Agriculture Wilderness boundary to the mouth (Bitterroot River) Bitterroot MT76H004 040 MILL CREEK, Selway-Bitterroot 5 8 MILES B-1 Χ Х Χ Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Wilderness boundary to the mouth vegetative covers Highways, Roads, Bridges, Infrasturcture (Bitterroot River) Low flow alterations (New Construction) Impacts from Hydrostructure Flow Temperature, water Regulation/modification Loss of Riparian Habitat Site Clearance (Land Development or Redevelopment) MT76H004_050 BLODGETT CREEK, Selway-4C 12.6 MILES B-1 P F Ρ Low flow alterations Agriculture Bitterroot X Bitterroot Wilderness boundary to the mouth (Bitterroot River) MT76H004_070 LOST HORSE CREEK, headwaters 4C 20.1 MILES B-1 F F Χ Р Low flow alterations Agriculture Bitterroot to the mouth (Bitterroot River) TIN CUP CREEK, Selway-Bitterroot F Alteration in stream-side or littoral Irrigated Crop Production Bitterroot MT76H004 080 5 MILES B-1 Р F Wilderness boundary to the mouth vegetative covers Loss of Riparian Habitat (Bitteroot River) Total Kjehldahl Nitrogen (TKN) Natural Sources Silviculture Activities Source Unknown Bitterroot MT76H004 090 SLEEPING CHILD CREEK, 23.9 MILES B-1 Ρ F Nitrogen (Total) Agriculture 5 headwaters to the mouth (Bitterroot Phosphorus (Total) Highway/Road/Bridge Runoff (Nonconstruction Related) Sedimentation/Siltation Silviculture Activities Temperature, water

Watershed

Upper Clark Fork

Bitterroot

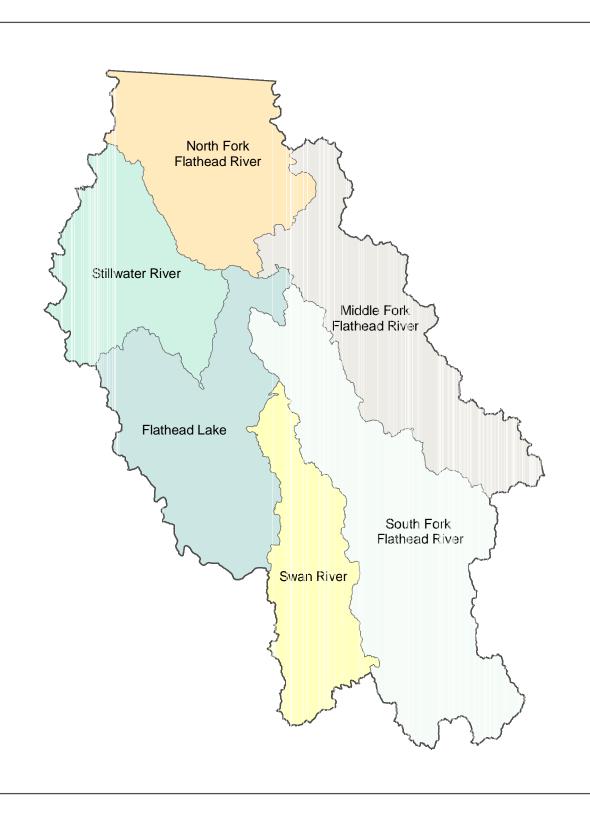
HUC 17010205

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Bitterroot MT76H004 100 SKALKAHO CREEK, headwaters to 5 25.1 MILES B-1 F F Ν Low flow alterations Agriculture the mouth (Bitterroot River) Mercury Irrigated Crop Production Source Unknown Bitterroot MT76H004_110 WILLOW CREEK, headwaters to 5 16.3 MILES B-1 Р Р F F Alteration in stream-side or littoral Flow Alterations from Water Diversions the mouth (Bitterroot River) vegetative covers Irrigated Crop Production Chlorophyll-a Loss of Riparian Habitat Sedimentation/Siltation Natural Sources Temperature, water Silviculture Activities Total Kjehldahl Nitrogen (TKN) Source Unknown Bitterroot MT76H004_120 AMBROSE CREEK, headwaters to 11.4 MILES B-1 Ν F X Nitrogen (Total) Agriculture the mouth (Threemile Creek) Grazing in Riparian or Shoreline Zones Phosphorus (Total) Physical substrate habitat alterations Р F F Alteration in stream-side or littoral Crop Production (Crop Land or Dry Land) MT76H004_130 MILLER CREEK, headwaters to the MILES Bitterroot 5 16.8 B-1 mouth (Bitterroot River) vegetative covers Grazing in Riparian or Shoreline Zones Chlorophyll-a Loss of Riparian Habitat Nitrate/Nitrite (Nitrite + Nitrate as N) Silviculture Activities Phosphorus (Total) Silviculture Harvesting Sedimentation/Siltation Source Unknown Temperature, water Bitterroot MT76H004 140 THREEMILE CREEK, headwaters to 17.3 MILES B-1 Ν F Х Х Low flow alterations Agriculture mouth (Bitterroot River) Nitrate/Nitrite (Nitrite + Nitrate as N) Irrigated Crop Production Phosphorus (Total) Rangeland Grazing Sedimentation/Siltation Bitterroot MT76H004 150 McCLAIN CREEK, headwaters to 5 5.3 MILES B-1 F Х Х Sedimentation/Siltation Forest Roads (Road Construction and Use) mouth (Bitterroot River) Bitterroot MT76H004 160 NORTH FORK RYE CREEK, 5 7 MILES B-1 Р Χ Alteration in stream-side or littoral Forest Roads (Road Construction and Use) headwaters to mouth (Rye Creekvegetative covers Grazing in Riparian or Shoreline Zones Bitterroot River, South of Darby) Nitrogen (Total) Streambank Modifications/destablization Phosphorus (Total) LICK CREEK, headwaters to mouth MILES B-1 F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones Bitterroot MT76H004_170 5 6.2 Р (Bitterroot River) vegetative covers Livestock (Grazing or Feeding Operations) Chlorophyll-a Natural Sources Phosphorus (Total) Silviculture Activities Sedimentation/Siltation Source Unknown Total Kjehldahl Nitrogen (TKN) MUDDY SPRING CREEK. F F Nitrate/Nitrite (Nitrite + Nitrate as N) Rangeland Grazing Bitterroot MT76H004 180 5 2 MILES B-1 Р Р F headwaters to mouth (Gold Creek) Sedimentation/Siltation Source Unknown T7N, R19W, S2 Bitterroot MT76H004 190 RYE CREEK. North Fork to mouth 5.6 MILES B-1 Ρ F Х Х Alteration in stream-side or littoral Animal Feeding Operations (NPS) (Bitterroot River) vegetative covers Forest Roads (Road Construction and Use) Nitrogen (Total) Grazing in Riparian or Shoreline Zones Phosphorus (Total) Silviculture Activities Sedimentation/Siltation

Bitterroot

HUC 17010205

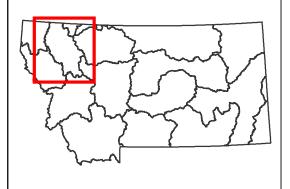
Watershed Upper Clark Fork **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Bitterroot MT76H004 200 NORTH BURNT FORK CREEK, 5 10.4 MILES B-1 Р F F **Bottom Deposits** Grazing in Riparian or Shoreline Zones confluence with South Burnt Fork Phosphorus (Total) Irrigated Crop Production Creek to Mouth (Bitterroot River) Total Kiehldahl Nitrogen (TKN) Bitterroot MT76H004_210 SWEATHOUSE CREEK, 5 11.3 MILES B-1 Р Р Х Х Alteration in stream-side or littoral Loss of Riparian Habitat headwaters to mouth (Bitterroot vegetative covers Site Clearance (Land Development or River) Low flow alterations Redevelopment) Phosphorus (Total) Bitterroot MT76H005_011 LOLO CREEK, Mormon Creek to the 2.8 MILES B-1 Р F X Р Low flow alterations Agriculture mouth (Bitterroot River) Habitat Modification - other than Physical substrate habitat alterations Hydromodification Sedimentation/Siltation Site Clearance (Land Development or Redevelopment) MT76H005 012 LOLO CREEK, Sheldon Creek to MILES B-1 Р Р F Х F Physical substrate habitat alterations Agriculture Bitterroot 5 143 Mormon Creek Sedimentation/Siltation Silviculture Activities Streambank Modifications/destablization Bitterroot MT76H005 013 LOLO CREEK, headwaters to 13 MILES B-1 Р F Χ F Physical substrate habitat alterations Habitat Modification - other than Hydromodification Sheldon Creek Sedimentation/Siltation Highways, Roads, Bridges, Infrasturcture (New Construction) Silviculture Activities F F Forest Roads (Road Construction and Use) MT76H005_020 SOUTH FORK LOLO CREEK, 4C 6.2 MILES B-1 Р Р I ow flow alterations Bitterroot Selway-Bitterroot Wilderness Physical substrate habitat alterations Impacts from Hydrostructure Flow boundary to mouth (Lolo Creek) Regulation/modification Silviculture Activities MT76H005_030 GRANITE CREEK, headwaters to MILES Р F Alteration in stream-side or littoral Forest Roads (Road Construction and Use) Upper Lolo 4A 8.5 B-1 Х Х the mouth (Lolo Creek) vegetative covers Silviculture Activities Fish-Passage Barrier Sedimentation/Siltation Upper Lolo MT76H005_040 EAST FORK LOLO CREEK, 4A 7.4 MILES B-1 Р Р Χ Χ Х Alteration in stream-side or littoral Forest Roads (Road Construction and Use) headwaters to mouth (Confluence vegetative covers Highway/Road/Bridge Runoff (Nonwith Lolo Creek) Fish-Passage Barrier construction Related) Sedimentation/Siltation Silviculture Activities WEST FORK LOLO CREEK, Alteration in stream-side or littoral Forest Roads (Road Construction and Use) Upper Lolo MT76H005_050 4A 6.8 MILES B-1 P F Х Χ vegetative covers headwaters to mouth (Lolo Creek) Highway/Road/Bridge Runoff (Non-Sedimentation/Siltation construction Related) Streambank Modifications/destablization MT76H005 060 LOST PARK CREEK, headwaters to MILES Р Alteration in stream-side or littoral Forest Roads (Road Construction and Use) Upper Lolo 5 B-1 Х Х mouth (Confluence with East Fork vegetative covers Silviculture Harvesting Lolo Creek) Fish-Passage Barrier Sedimentation/Siltation MT76H005 070 LEE CREEK, headwaters to mouth MILES Р Alteration in stream-side or littoral Forest Roads (Road Construction and Use) Upper Lolo 3.8 B-1 Х vegetative covers (West Fork Lolo Creek) Silviculture Activities Sedimentation/Siltation Streambank Modifications/destablization



Flathead Sub-Major Basin

Columbia River Basin

HUC NAME
North Fork Flathead River
Middle Fork Flathead River
Flathead Lake
South Fork Flathead River
Stillwater River (Flathead R)
Swan River



Montana Department of Environmental Quality

Appendix A: Impaired Waters Flathead **HUC** 17010206 North Fork Flathead Watershed **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Big Creek (Columbia) MT76Q002 050 BIG CREEK, tributary to the North 4A 15.7 MILES B-1 Р F Χ Alteration in stream-side or littoral Forest Roads (Road Construction and Use) Fork of the Flathead River vegetative covers Streambank Modifications/destablization Sedimentation/Siltation COAL CREEK, headwaters to South Flathead Headwaters MT76Q002_070 4C 9 MILES B-1 P P Χ X X Alteration in stream-side or littoral vegetative covers MILES B-1 P P F Sedimentation/Siltation Forest Roads (Road Construction and Use) Flathead Headwaters COAL CREEK, South Fork to mouth X MT76Q002_080 4A 10 (North Fork Flathead)

Silviculture Harvesting

Appendix A: In	mpaired Wate	rs												
HUC 17010207	Middle Fork Flat	thead	Watershed	Flathe	ad									
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size Ur		Jse Class	AL C	WF W	VF A	G In	d DV	W R	ec Cause Name	Source Name
Flathead Headwaters	MT76I002_040	CHALLENGE CREEK, headwate to mouth (Granite Creek)	ers 5	4.3 MI	LES E	B-1	P F)	F	F	F	F	Phosphorus (Total)	Silviculture Activities

App	endix A: lı	mpaired Waters		
HUC	17010208	Flathead Lake	Watershed	Flathead

HUC 17010208	Flathead Lake	W	atershed	Fla	athead										
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Flathead - Stillwater	MT76O002_010	ASHLEY CREEK, Ashley Lake to Smith Lake	5	14.8	MILES	B-1	P	P		F	F	X	P	Alteration in stream-side or littoral vegetative covers Chlorophyll-a Oxygen, Dissolved Phosphorus (Total) Sedimentation/Siltation Temperature, water Total Kjehldahl Nitrogen (TKN)	Channelization Crop Production (Crop Land or Dry Land) Grazing in Riparian or Shoreline Zones Loss of Riparian Habitat Source Unknown
Flathead - Stillwater	MT76O002_020	ASHLEY CREEK, Smith Lake to Bridge Crossing on the Kalispell Airport Road	4C	13.4	MILES	B-2	Х	Х		F	F	Х	Р	Low flow alterations	Agriculture
Flathead - Stillwater	MT76O002_030	ASHLEY CREEK, bridge crossing on Kalispell airport road to the Flathead River	5	11.8	MILES	C-2	P	P		F	F		P	Alteration in stream-side or littoral vegetative covers Chlorophyll-a Excess Algal Growth Nitrate/Nitrite (Nitrite + Nitrate as N) Oxygen, Dissolved Phosphorus (Total) Temperature, water Total Kjehldahl Nitrogen (TKN)	Discharges from Municipal Separate Storm Sewer Systems (MS4) Irrigated Crop Production Municipal Point Source Discharges Upstream Source
Flathead - Stillwater	MT76O002_040	SPRING CREEK, headwaters to mouth (Ashley Creek)	5	4.5	MILES	B-1	N	N		F	F	N	N	Alteration in stream-side or littoral vegetative covers Arsenic Nitrate/Nitrite (Nitrite + Nitrate as N) Other flow regime alterations Oxygen, Dissolved Phosphorus (Total) Physical substrate habitat alterations Total Kjehldahl Nitrogen (TKN)	Agriculture Baseflow Depletion from Groundwater Withdrawals Channelization Flow Alterations from Water Diversions Loss of Riparian Habitat Source Unknown
Flathead - Stillwater	MT76O002_050	FISH CREEK, headwaters to mouth (Ashley Lake)	n 5	2.4	MILES	B-1	Р	Р		F	Х	F	х	Phosphorus (Total) Sedimentation/Siltation Solids (Suspended/Bedload)	Silviculture Activities Source Unknown
Flathead Lake	MT76O003_010	FLATHEAD LAKE	5	126007	ACRES	S A-1	P	F		F	F	F	F	Mercury Nitrogen (Total) Phosphorus (Total) Polychlorinated biphenyls Sedimentation/Siltation	Atmospheric Depositon - Nitrogen Impacts from Hydrostructure Flow Regulation/modification Municipal Point Source Discharges Silviculture Harvesting Source Unknown Unspecified Urban Stormwater Upstream Impoundments (e.g., PI-566 NRCS Structures)
Flathead - Stillwater	MT76O004_020	LAKE MARY RONAN	4C	1520	ACRES	S A-1	N	N		F	F	Х	F	Chlorophyll-a	Agriculture Grazing in Riparian or Shoreline Zones Silviculture Activities

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

Appendix A: II	mpaired Water	rs												
HUC 17010209	South Fork Flath	nead	Watershed	Flathead										
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Flathead Headwaters	MT76J001_010	SOUTH FORK FLATHEAD RIVI	ER, 4C	5.1 MILE	S B-1	Х	Х		F	F	Х	Р	Other flow regime alterations	

HUC 17010210	Stillwater	Wa	atershed	Fla	thead										
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Flathead - Stillwater	MT76P001_010	STILLWATER RIVER, Logan Creel to mouth	5	44.1	MILES	B-2	Р	Р		F	F	N	F	Alteration in stream-side or littoral vegetative covers Cause Unknown Nitrates Phosphorus (Total) Sedimentation/Siltation	Loss of Riparian Habitat Site Clearance (Land Development or Redevelopment) Source Unknown
Flathead - Stillwater	MT76P001_030	LOGAN CREEK, above Tally Lake	5	19.2	MILES	B-1	Р	Р		F	F	Х	F	Other flow regime alterations Physical substrate habitat alterations Sedimentation/Siltation	Forest Roads (Road Construction and Use) Silviculture Activities Streambank Modifications/destablization
Flathead - Stillwater	MT76P001_040	SINCLAIR CREEK, headwaters to mouth (Sheppard Creek)	4C	2.3	MILES	B-1	Х	Х		Х	Х	Х	Р	Low flow alterations	Agriculture Streambank Modifications/destablization
Flathead - Stillwater	MT76P001_050	SHEPPARD CREEK, headwaters to mouth (Griffin Creek-Logan Creek- Talley Lake)	5	14.4	MILES	B-1	N	N		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation	Crop Production (Crop Land or Dry Land) Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Silviculture Harvesting
Flathead - Stillwater	MT76P003_010	WHITEFISH RIVER, Whitefish Lake to the mouth, confluence with the Stillwater River	e 5	23.7	MILES	B-2	Р	P		F	F	F	X	Copper Lead Nitrogen (Total) Oil and Grease PCB in Water Column Temperature, water	Industrial Point Source Discharge Silviculture Activities Site Clearance (Land Development or Redevelopment) Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)
Flathead - Stillwater	MT76P003_020	SWIFT CREEK, headwaters (East and West Forks) to mouth (Whitefish Lake)	5	16.5	MILES	A-1	Р	Р		F	F	I	I	Phosphorus (Total)	Silviculture Activities
Flathead - Stillwater	MT76P004_010	WHITEFISH LAKE	5	3349.9	ACRES	A-1	Т	Т		F	F	X	F	Mercury Polychlorinated biphenyls Sedimentation/Siltation	Forest Roads (Road Construction and Use) Silviculture Activities Source Unknown

HUC 17010211	Swan	v	Vatershed	Fla	athead										
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Swan	MT76K002_010	SWAN LAKE	4A	2680	ACRES	6 A-1	Т	Т		F	F	F	F	BOD, sediment load (Sediment Oxygen Demand) Sedimentation/Siltation	Forest Roads (Road Construction and Use) Highways, Roads, Bridges, Infrasturcture (New Construction)
Swan	MT76K003_010	JIM CREEK, West Fork to mouth (Swan River)	4A	3.8	MILES	B-1	Р	Р		F	F	Χ	F	Sedimentation/Siltation	Silviculture Harvesting
Swan	MT76K003_031	GOAT CREEK, headwaters to Squeezer Creek	4A	9	MILES	B-1	Р	Р		F	F	Х	F	Total Suspended Solids (TSS)	Highways, Roads, Bridges, Infrasturcture (New Construction) Silviculture Harvesting

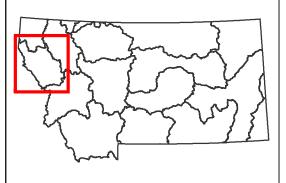
Lower Clark Fork Lower Flathead River Middle Clark Fork

Lower Clark Fork Sub-Major Basin

Columbia River Basin

USGS HUC HUC NAME

17010204 17010212 17010213 Middle Clark Fork Lower Flathead River Lower Clark Fork



Montana Department of Environmental Quality

HUC 17010204 Middle Clark Fork Lower Clark Fork Watershed

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Clark Fork River	MT76M001_010	CLARK FORK RIVER, the Flathead River to Fish Creek	5	60	MILES	B-1	Р	Р		F	F	F	Х	Copper Lead Nitrogen (Total) Phosphorus (Total)	Mill Tailings Municipal Point Source Discharges
Clark Fork River	MT76M001_020	CLARK FORK RIVER, Fish Creek to Rattlesnake Creek	5	52.6	MILES	B-1	P	P		F	F	N	P	Arsenic Cadmium Chlorophyll-a Copper Nitrogen (Total) Organic Enrichment (Sewage) Biological Indicators Phosphorus (Total)	Industrial Point Source Discharge Mill Tailings Municipal Point Source Discharges
Clark Fork River	MT76M001_030	CLARK FORK RIVER, Rattlesnake Creek to the Blackfoot River	5	6.3	MILES	B-1	N	N		F	F	F	X	Copper Lead Nutrient/Eutrophication Biological Indicators	Industrial Point Source Discharge Mill Tailings Upstream Impoundments (e.g., PI-566 NRCS Structures)
Middle Clark Fork Tributaries	MT76M002_010	TAMARACK CREEK, headwaters to the mouth (Clark Fork River)	4C	8.7	MILES	B-1	Х	Р		Х	Х	Χ	Х	Fish-Passage Barrier	Dam or Impoundment
Middle Clark Fork Tributaries	MT76M002_020	CEDAR CREEK, headwaters to the mouth (Clark Fork River)	5	16.9	MILES	B-1	Р	Р		F	Р	F	Р	Low flow alterations Nitrate/Nitrite (Nitrite + Nitrate as N) Total Kjehldahl Nitrogen (TKN)	Flow Alterations from Water Diversions Source Unknown
Middle Clark Fork Tributaries	MT76M002_050	TROUT CREEK, headwaters to the mouth (Clark Fork River)	5	14.7	MILES	B-1	Р	P		F	F	Х	X	Alteration in stream-side or littoral vegetative covers Physical substrate habitat alterations Turbidity	Highways, Roads, Bridges, Infrasturcture (New Construction) Silviculture Activities Wet Weather Discharges (Non-Point Source)
Middle Clark Fork Tributaries	MT76M002_060	FISH CREEK, West and South Forks to the mouth (Clark Fork River)	4C	9.1	MILES	B-1	F	Р		F	F	х	F	Physical substrate habitat alterations	Highways, Roads, Bridges, Infrasturcture (New Construction)
Middle Clark Fork Tributaries	MT76M002_090	PETTY CREEK, headwaters to the mouth (Clark Fork River)	5	11.6	MILES	B-1	Р	P		X	X	Х	Р	Alterations in wetland habitats Excess Algal Growth Low flow alterations Sedimentation/Siltation Temperature, water	Agriculture Highways, Roads, Bridges, Infrasturcture (New Construction)
Middle Clark Fork Tributaries	MT76M002_100	WEST FORK PETTY CREEK, headwaters to the mouth (Petty Creek)	5	7.4	MILES	B-1	Р	P		F	F	F	Р	Chlorophyll-a Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Forest Roads (Road Construction and Use) Silviculture Harvesting
Middle Clark Fork Tributaries	MT76M002_120	RATTLESNAKE CREEK, headwaters to the mouth (Clark Fork River)	4C	23.3	MILES	A- CLOS ED	×	Р		Х	Х	Х	Х	Other flow regime alterations	Dam Construction (Other than Upstream Flood Control Projects) Flow Alterations from Water Diversions

HUC 17010204 Middle Clark Fork Watershed Lower Clark Fork **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Cause Name Source Name Name/Location Class Middle Clark Fork MT76M002 130 GRANT CREEK, headwaters to the 5 18.3 MILES B-1 Р Р F Alteration in stream-side or littoral Flow Alterations from Water Diversions vegetative covers Tributaries mouth (Clark Fork River) Irrigated Crop Production Excess Algal Growth Loss of Riparian Habitat Low flow alterations Site Clearance (Land Development or Nitrate/Nitrite (Nitrite + Nitrate as N) Redevelopment) Sedimentation/Siltation Streambank Modifications/destablization Temperature, water MILL CREEK, headwaters to the Alteration in stream-side or littoral Agriculture Middle Clark Fork MT76M002_140 4C 13.4 MILES B-1 Ρ Р F F mouth (Clark Fork River near vegetative covers Tributaries Golf Courses Frenchtown) Grazing in Riparian or Shoreline Zones Middle Clark Fork SIXMILE CREEK, headwaters to the Alteration in stream-side or littoral Rangeland Grazing MT76M002 150 4C MILES B-1 Р 8.9 Х Х Tributaries mouth (Clark Fork River) vegetative covers Silviculture Activities Middle Clark Fork MT76M002 160 NEMOTE CREEK, headwaters to 5 9.8 MILES R-1 Chlorophyll-a Dredge Mining Tributaries the mouth (confluence Clark Fork Flow Alterations from Water Diversions Low flow alterations River) Nitrate/Nitrite (Nitrite + Nitrate as N) Source Unknown Phosphorus (Total) Temperature, water Total Kjehldahl Nitrogen (TKN) Middle Clark Fork MT76M002 170 DRY CREEK, headwaters to the MILES B-1 Р Alteration in stream-side or littoral Flow Alterations from Water Diversions 5 15.3 Tributaries mouth (Clark Fork River) vegetative covers Grazing in Riparian or Shoreline Zones Low flow alterations Natural Sources Nitrate/Nitrite (Nitrite + Nitrate as N) Source Unknown Total Kjehldahl Nitrogen (TKN) Middle Clark Fork MT76M002 180 FLAT CREEK, headwaters to mouth 5.6 MILES B-1 Ν Р Ν Ν Antimony Impacts from Abandoned Mine Lands Tributaries (Clark Fork) (Inactive) Arsenic Unspecified Unpaved Road or Trail Cadmium Copper Lead Mercury Physical substrate habitat alterations Sedimentation/Siltation MT76M003_010 ST. REGIS RIVER, headwaters to MILES B-1 F F Alteration in stream-side or littoral Channelization St. Regis 38.6 Р the mouth (Clark Fork River) vegetative covers Highway/Road/Bridge Runoff (Non-Other flow regime alterations construction Related) Sedimentation/Siltation Highways, Roads, Bridges, Infrasturcture (New Construction) Temperature, water Loss of Riparian Habitat Streambank Modifications/destablization

HUC 17010204 Middle Clark Fork Lower Clark Fork Watershed

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
St. Regis	MT76M003_020	TWELVEMILE CREEK, headwaters to the mouth (St. Regis River)	5	13.4	MILES	B-1	Р	Р		F	F	F	F	Physical substrate habitat alterations Sedimentation/Siltation	Channelization Forest Roads (Road Construction and Use)
														Temperature, water	Highway/Road/Bridge Runoff (Non- construction Related)
															Highways, Roads, Bridges, Infrasturcture (New Construction)
															Loss of Riparian Habitat
															Silviculture Activities
St. Regis	MT76M003_030	SILVER CREEK, headwaters to the mouth (St. Regis River)	4C	4.9	MILES	A-1	F	Р		F	F	F	F	Other flow regime alterations	Highways, Roads, Bridges, Infrasturcture (New Construction)
															Impacts from Hydrostructure Flow Regulation/modification
St. Regis	MT76M003_040	BIG CREEK, the East and Middle	5	3.4	MILES	B-1	Р	Р		F	F	F	F	Sedimentation/Siltation	Channelization
•		Forks to the mouth (St. Regis River)												Temperature, water	Loss of Riparian Habitat
															Streambank Modifications/destablization
St. Regis	MT76M003_070	LITTLE JOE CREEK, North Fork to the mouth (St. Regis River)	5	3.1	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers	Highways, Roads, Bridges, Infrasturcture (New Construction)
														Physical substrate habitat alterations	Natural Sources
														Sedimentation/Siltation	Streambank Modifications/destablization
St. Regis	MT76M003_080	NORTH FORK LITTLE JOE CREEK, headwaters to the mouth	5	10.7	MILES	B-1	Р	Р		F	F	F	F	Sedimentation/Siltation	Highways, Roads, Bridges, Infrasturcture (New Construction)
		(Little Joe Creek)													Streambank Modifications/destablization
Ninemile	MT76M004 010	NINEMILE CREEK, headwaters to	4A	25.5	MILES	B-1	Р	Р		F	F	Х	F	Low flow alterations	Flow Alterations from Water Diversions
		the mouth (Clark Fork River)												Sedimentation/Siltation	Impacts from Abandoned Mine Lands (Inactive)
															Streambank Modifications/destablization
Ninemile	MT76M004 020	STONY CREEK, headwaters to the	5	7.1	MILES	B-1	Р	Р		F	F	F	F	Phosphorus (Total)	Agriculture
		mouth (Ninemile Creek)												Sedimentation/Siltation	Irrigated Crop Production
Ninemile	MT76M004_031	McCORMICK CREEK, Little McCormick Creek to the mouth (Ninemile Creek)	4C	1.9	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers	Placer Mining
Ninemile	MT76M004_040	JOSEPHINE CREEK, headwaters to the mouth (Ninemile Creek)	4A	6	MILES	B-1	N	N		F	F	F	F	Alteration in stream-side or littoral vegetative covers	Forest Roads (Road Construction and Use)
		are modul (Millettille Cleek)												Low flow alterations	Impacts from Hydrostructure Flow Regulation/modification
														Sedimentation/Siltation	Placer Mining
Ninemile	MT7CMOO4 CCC	CEDAR CREEK, headwaters to the	4A	4.6	MILES	B-1	Р	P		_	P	F	Р	Alteration in stream-side or littoral	•
Ninemile	MT76M004_060	mouth (Ninemile Creek)	4A	4.0	WILES	D-1	٢	۲		г	Р	г	۲	vegetative covers	Agriculture Flow Alterations from Water Diversions
														Low flow alterations	
														Sedimentation/Siltation	Forest Roads (Road Construction and Use) Natural Sources

Appendix A: Impaired Waters HUC 17010204 Middle Clark Fork Lower Clark Fork Watershed **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Ninemile MT76M004 070 KENNEDY CREEK, headwaters to 6.2 MILES B-1 Р Ρ Ρ Alteration in stream-side or littoral Irrigated Crop Production the mouth (Ninemile Creek) vegetative covers Mine Tailings Copper Placer Mining Lead Subsurface (Hardrock) Minining Low flow alterations Surface Mining Mercury Sedimentation/Siltation

- 1

F I

Fish-Passage Barrier

Low flow alterations

Sedimentation/Siltation

Physical substrate habitat alterations

Placer Mining

MILES B-1 N N

3.6

MT76M004_080

Ninemile

LITTLE MCCORMICK CREEK,

Creek)

headwaters to mouth (McCormick

HUC 17010212	Lower Flathead	W	atershed	Lov	wer Cla	rk Forl	k								
TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class		CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
ower Flathead	MT76L001_010	FLATHEAD RIVER, Flathead Reservation boundary to the mouth (Clark Fork River)	5 1	4.6	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Other flow regime alterations Sedimentation/Siltation Temperature, water	Dam or Impoundment Impacts from Hydrostructure Flow Regulation/modification Irrigated Crop Production Natural Sources
ower Flathead	MT76L002_060	LITTLE BITTERROOT RIVER, Hubbart Reservoir to the Flathead Reservation Boundary	5	4.9	MILES	B-2	Р	Р		F	F	F	P	Chlorophyll-a Nitrate/Nitrite (Nitrite + Nitrate as N) Other flow regime alterations Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Upstream Impoundments (e.g., PI-566 NRCS Structures) Upstream Source
ower Flathead	MT76L002_070	SULLIVAN CREEK, headwaters to the Flathead Indian Reservation	5	3.8	MILES	B-1	N	N		P	F	N	N	Alteration in stream-side or littoral vegetative covers Aluminum Cadmium Escherichia coli Phosphorus (Total) Sedimentation/Siltation Zinc	Grazing in Riparian or Shoreline Zone: Impacts from Abandoned Mine Lands (Inactive) Mine Tailings Subsurface (Hardrock) Minining Surface Mining

HUC 17010213 Lower Clark Fork Watershed Lower Clark Fork

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Clark Fork River	MT76N001_010	CLARK FORK RIVER, the Flathead River to Noxon Reservoir	5	58.9	MILES	B-1	F	Р		F	F	N	F	Cadmium Fish-Passage Barrier	Dam Construction (Other than Upstream Flood Control Projects) Impacts from Abandoned Mine Lands (Inactive)
Clark Fork River	MT76N001_020	CLARK FORK RIVER, between Cabinet Gorge Reservoir and Noxon Dam	5	2.8	MILES	B-1	P	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Dissolved Gas Supersaturation Other flow regime alterations Temperature, water	Dam Construction (Other than Upstream Flood Control Projects) Dam or Impoundment
Middle Clark Fork Tributaries	MT76N003_010	LYNCH CREEK, headwaters to the mouth (Clark Fork River)	5	13.7	MILES	B-1	N	N		F	F	F	N	Alteration in stream-side or littoral vegetative covers Low flow alterations Phosphorus (Total) Sedimentation/Siltation Temperature, water Total Kjehldahl Nitrogen (TKN)	Channelization Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Irrigated Crop Production
Prospect Creek	MT76N003_020	PROSPECT CREEK, headwaters to the mouth (Clark Fork River)	4A	18.9	MILES	B-1	N	N		F	F	N	F	Alteration in stream-side or littoral vegetative covers Antimony Lead Zinc	Grazing in Riparian or Shoreline Zones Mine Tailings Silviculture Activities
Prospect Creek	MT76N003_021	ANTIMONY CREEK DRAINAGE headwaters to mouth (Prospect Creek)	4A	2	MILES	B-1	N	N		Х	Х	N	Х	Antimony Arsenic Lead	Mill Tailings Natural Sources
Prospect Creek	MT76N003_022	COX GULCH headwaters to mouth (Prospect Creek)	5	3	MILES	B-1	N	N		N	Х	N	Х	Lead Zinc	Mill Tailings
Lower Clark Fork Tributaries	MT76N003_030	BEAVER CREEK, headwaters to the mouth (Confluence with Clark Fork River)	4C	23.9	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers	Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Natural Sources
Lower Clark Fork Tributaries	MT76N003_040	BULL RIVER, the North Fork to the mouth (Cabinet Gorge Reservoir)	5	24.7	MILES	B-1	Р	Р		F	F	Х	F	Physical substrate habitat alterations Sedimentation/Siltation	Silviculture Activities Streambank Modifications/destablization
Prospect Creek	MT76N003_050	CLEAR CREEK, headwaters to the mouth (Prospect Creek)	5	13.7	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation	Forest Roads (Road Construction and Use) Streambank Modifications/destablization
Elk Creek	MT76N003_060	ELK CREEK, headwaters to the mouth (Cabinet Gorge Reservoir)	4A	8.1	MILES	B-1	F	N		F	F	F	F	Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones Habitat Modification - other than Hydromodification
Prospect Creek	MT76N003_070	DRY CREEK, headwaters (confluence of East andWest Forks) to the mouth (Prospect Creek)	4C	4.2	MILES	B-1	Р	Р		F	F	F	Р	Alteration in stream-side or littoral vegetative covers Chlorophyll-a	Highways, Roads, Bridges, Infrasturcture (New Construction) Rangeland Grazing
Lower Clark Fork Tributaries	MT76N003_080	GRAVES CREEK, headwaters to the mouth (Clark Fork River)	4C	10.6	MILES	B-1	Р	Р		F	F	Х	х	Alteration in stream-side or littoral vegetative covers	Grazing in Riparian or Shoreline Zones Highway/Road/Bridge Runoff (Non- construction Related)

F=Full Support P=Partial Support T=Threatened N=Not Supporting I=Insufficient Information X=Not Assessed

HUC 17010213 Lower Clark Fork Watershed Lower Clark Fork

TMDL Planning Area ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name

TMDL Planning Area	ID305B	Waterbody Name/Location	Category	Size	Units	Use Class	AL	CWF	WWF	AG	Ind	DW	Rec	Cause Name	Source Name
Lower Clark Fork Tributaries	MT76N003_090	MARTEN CREEK, headwaters to the mouth (Noxon Reservoir)	5	6.7	MILES	B-1	Р	Р		F	F	Х	Х	Physical substrate habitat alterations Sedimentation/Siltation	Forest Roads (Road Construction and Use) Silviculture Activities Streambank Modifications/destablization
Lower Clark Fork Tributaries	MT76N003_100	PILGRIM CREEK, headwaters to the mouth (Cabinet Gorge Reservoir)	4C	7	MILES	A-1	Р	Р		F	F	Х	F	Physical substrate habitat alterations	Channelization Grazing in Riparian or Shoreline Zones Streambank Modifications/destablization
Lower Clark Fork Tributaries	MT76N003_120	WHITE PINE CREEK, headwaters to the mouth (Beaver Creek)	5	11.9	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Sedimentation/Siltation Temperature, water	Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Natural Sources Silviculture Harvesting Streambank Modifications/destablization Watershed Runoff following Forest Fire
Lower Clark Fork Tributaries	MT76N003_130	VERMILION RIVER, headwaters to the mouth (Noxon Reservoir)	4C	22.5	MILES	B-1	Р	Р		F	F	Χ	Х	Alteration in stream-side or littoral vegetative covers	Silviculture Activities Streambank Modifications/destablization
Middle Clark Fork Tributaries	MT76N003_160	SWAMP CREEK, below West Fork Swamp Creek to mouth (Clark Fork River), T20N R27W	5	5	MILES	B-1	N	N		F	F	F	P	Alteration in stream-side or littoral vegetative covers Nitrate/Nitrite (Nitrite + Nitrate as N) Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Channelization Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Silviculture Harvesting Source Unknown
Middle Clark Fork Tributaries	MT76N003_170	HENRY CREEK, headwaters to mouth (Clark Fork River), T20N R25W	5	6.7	MILES	B-1	Р	Р		F	F	F	P	Alteration in stream-side or littoral vegetative covers Low flow alterations Phosphorus (Total) Sedimentation/Siltation Total Kjehldahl Nitrogen (TKN)	Channelization Flow Alterations from Water Diversions Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Source Unknown
Lower Clark Fork Tributaries	MT76N003_180	DRY CREEK, headwaters to the mouth (Bull River) T28N, R33W	5	3.5	MILES	B-1	Р	Р		F	F	F	F	Sedimentation/Siltation	Forest Roads (Road Construction and Use)
Lower Clark Fork Tributaries	MT76N003_190	ROCK CREEK, headwaters to mouth below the Noxon Dam	4C	10.9	MILES	B-1	Р	Р		F	F	F	F	Other anthropogenic substrate alterations	Silviculture Activities
Thompson	MT76N005_030	McGREGOR CREEK, McGregor Lale to the mouth (Thompson River)	5	6.7	MILES	B-1	N	N		F	F	F	Р	Other flow regime alterations Phosphorus (Total) Sedimentation/Siltation Temperature, water	Channelization Highway/Road/Bridge Runoff (Non- construction Related) Hydrostructure Impacts on Fish Passage Impacts from Hydrostructure Flow
															Regulation/modification Irrigated Crop Production
Thompson	MT76N005_040	LITTLE THOMPSON RIVER, headwaters to mouth (Thompson River)	5	20.3	MILES	B-1	Р	Р		F	F	F	F	Alteration in stream-side or littoral vegetative covers Phosphorus (Total) Sedimentation/Siltation	Forest Roads (Road Construction and Use) Grazing in Riparian or Shoreline Zones Silviculture Harvesting

Appendix A: Impaired Waters Lower Clark Fork **HUC** 17010213 Watershed Lower Clark Fork **TMDL Planning Area** ID305B Waterbody Category Size Units Use AL CWF WWF AG Ind DW Rec Cause Name Source Name Name/Location Class Thompson MT76N005 060 LAZIER CREEK, headwaters to 5 7.4 MILES B-1 Р F F Alteration in stream-side or littoral Grazing in Riparian or Shoreline Zones mouth (Thompson River) vegetative covers Silviculture Activities Nitrate/Nitrite (Nitrite + Nitrate as N) Source Unknown Phosphorus (Total) Sedimentation/Siltation

F F

MILES B-1 P

5.1

MT76N005_070

Thompson

MC GINNIS CREEK, headwaters to

mouth (Little Thompson River)

Total Kjehldahl Nitrogen (TKN)

Fish-Passage Barrier

Phosphorus (Total)
Sedimentation/Siltation

Forest Roads (Road Construction and Use)

Grazing in Riparian or Shoreline Zones

Habitat Modification - other than

Hydromodification Silviculture Harvesting Source Unknown