Summary of TMDL Approvals in South Dakota

303(d)(1) Approved TMDLs 46 PS, 27 NPS

APPROVED POINT SOURCE TMDLs					
Waterbody Name	**TMDL Parameter/ Pollutant**	**Section 303(d)(1) TMDL**	**Section 303(d)(3) TMDL**	**Point Source**	**Approval Date**
Big Sioux River* SD0023370 SD0026786	Ammonia DO BOD_5	X X X		Watertown Williams Pipeline	November 12,1996
White River SD0023376	Ammonia		X	USNPS-Badlands NP	December 11,1996
James River* SD0024376	Ammonia	X		Town of Ashton	December 11,1996
Whitewood Creek* SD0020796	Ammonia DO Fecal Coliform	X X X		Lead-Deadwood San.District #1	December 17,1996
Skunk Creek* SD0021750	Ammonia	X		City of Hartford	January 31, 1997
Turkey Ridge Creek* SD0020541	Ammonia	X		City of Viborg	"
Big Sioux River* SD0021831	Ammonia	X		City of Flandreau	August 27, 1997
East Brule Creek* SD0021695	Ammonia	X		City of Alcester	August 27, 1997
Big Sioux River* SD0022284	Ammonia	X		City of Baltic	November 13, 1997
Sand Creek* SD0025887	Ammonia	X		Town of Alpena	November 28, 1997
Spring Creek* SD0020788	Ammonia	X		City of Elkton	November 28,1997
South Fork Grand River* SD0023400	Ammonia	X		City of Buffalo	November 28, 1997
Bad River* SD0020303	Ammonia	X		City of Philip	September 25, 1998
Battle Creek* SD0024007	Ammonia	X		Keystone	September 25, 1998
Beaver Creek* SD0020923	Ammonia	X		City of Valley Springs	September 25, 1998
Big Sioux River* SD0020265	Ammonia	X		Town of Trent	September 25, 1998
Box Elder Creek* SD0020834	Ammonia	X		USFS	September 25, 1998
French Creek* SD0024228	Ammonia	X		SD Game, Fish & Parks-Blue Bell	September 25, 1998

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Missouri River* SD0025798	TDS		X	St. Joseph's Indian School	September 25, 1998
Thunder Butte Creek* SD0022411	Ammonia	X		Town of Bison	September 25, 1998
Vermillion River* SD0022527	Ammonia	X		Centerville	September 25, 1998
Wolf Creek* SD0021512	Ammonia	X		City of Bridgewater	September 25, 1998
Bad River* SD0020630	Ammonia	X		City of Midland	November 9, 1998
South Fork Whetstone Creek* SD0020371	Ammonia	X		City of Milbank	November 9, 1998
South Fork Whetstone Creek* SD0020371	DO	X		City of Milbank	December 1, 1998
West Fork of the Vermillion River* SD0020940	Ammonia	X		City of Parker	January 7, 1999
Hidewood Creek* SD0020699	Ammonia	X		City of Clear Lake	March 10, 1999
James River* SD0020869	Ammonia	X		City of Frankfort	"
Platte Creek* SD0020354	Ammonia	X		City of Platte	"
Missouri River* SD0026596	TDS		X	Dakota Dunes Development	"
Big Sioux River* SD0021920	Ammonia	X		City of Volga	"
Split Rock Creek* SD0000299	Cadmium Chromium Zinc WAD Cyanide	X X X X		USGS Eros Data Center	"
Vermillion River* SD0023639	Ammonia	X		City of Chancellor	"
Big Sioux River* SD0022489	Ammonia	X		City of Canton	August 19, 1999
James River* SD0023361	Ammonia	X		City of Mitchell	January 11, 2000
Dawson Creek* SD0022853	Ammonia	X		City of Scotland WWTF	January 26, 2000
Wolf Creek* SD0021741	Ammonia	X		City of Emery	February 29, 2000

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Big Sioux River* SD0023388 SD0022535 SD0000078	Ammonia CBOD5	X X		City of Sioux Falls City of Brandon John Morrell & Co.	March 03, 2000
James River* SD0022926	Ammonia	X		City of Columbia WWTF	May 25, 2000
Missouri River* SD0027766	TDS		X	City of Springfield WTP	"
Unnamed tributary of Missouri River*	Ammonia		X	City of Elk Point WWTF SD0022080	June 30, 2000
Medicine Creek	Ammonia	X		Town pf Kennebec WWTF SD0022861	July 30, 2000
Big Sioux River	Ammonia	X		City of Estelline WWTF SD0022144	"

APPROVED NON-POINT SOURCE TMDLs

Waterbody Name	TMDL Parameter/ Pollutant	Water Quality Goal/Endpoint	TMDL	Reference Document(s)	Approval Date
Big Stone Lake	Total nitrogen Total phosphorus	39μg/l area-weighted annual mean chlorophyll-*a* 105μg/l area-weighted mean total phosphorous	40% reduction on total phosphorous & total nitrogen	"Restoration of Big Stone Lake ; Evaluation of the Effectiveness of Lake Mgmt. Measures; EPA Ckean Lakes Phase II Final Report"	December 26, 1996
Lake Kampeska*	Total nutrients Sediment	Return Lake Kampeska from hypereutrophic to eutrophic condition	35% reduction in nutrient loadings 25% reduction in sediment loadings	Upper Big Sioux River Watershed Project Project Implementation Plan (SDDENR, 6/96) and Lake KampeskaWatershed Project (SDDENR, '94)	December 26, 1996
Pelican Lake	Total nutrients Sediment	70 μg/l total phosphorus trophic state index (TSI) 65	55% reduction om nutrient loadings 65% reduction in sediment loadings	Big Sioux River Watershed Project Project Implementation Plan (SDDENR; 6/96) and Lake Assessment Project; Pelican Lake; Codington County (SDDENR, 1995)	December 26, 1996

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Waterbody Name	TMDL Parameter/ Pollutant	Water Quality Goal/Endpoint	TMDL	Reference Document(s)	Approval Date
Lake Poinsett	Total nutrients Sediment	158 tons total lake algal biomass	40% reduction in total phosphorus	Phase I Diagnostic Feasibilty Study; Final Report; Lake Poinsett; Hamlin County (SDDENR, 1996)	December 26, 1996
Lake Mitchell/ Firesteel Creek	Total phosphorus	Trophic state index (TSI) 52	50% reduction in total phosphorous	"Phase I Diagnostic Feasibility Study; Final Report; Lake Mitchell/Firesteel Creek; Davison County (SDDENR, 1997)	April 22, 1997
Lake Byron*	phosphorus	TSI < 70	50 % reduction in phosphorus loads	Lake Assessment Project Report (SDDENR, 8/96) Lake Assessment Project Report, Lake Byron, Beadle County, SD (SDDENR, 12/92) Section 319 Nonpoint Source Control Program Watershed Project Final Report, Lake Byron Watershed Project (Beadle CD, 12/31/97), Lake Byron Watershed Project Section 319 PIP (SDDENR 7/93)	April 12, 1999
	sediment	Decrease annual inlake sediment accumulation by 1200 tons/year	50% reduction in sediment loads		
Elm Lake*	phosphorus	N:TDP ratio > 7.5 averaged over growing season	60% reduction in phosphorus loads	Phase I Watershed Assessment Final Report, Elm Lake, Brown Count, South Dakota (SDDENR, 09/98)	April 12, 1999
Lake Faulkton*	phosphorus	TSI < 90	35% reduction in phosphorus loads	Lake Assessment Project, Lake Faulkton, Faulk County, South Dakota (SDDENR 1996)	April 12, 1999
	sediment	Increased average lake depth by 6 feet over 15.5 acres	Remove 150,000 cubic yards of lake sediment		
Lake Hendricks*	phosphorus	TSI < 65	50% reduction in phosphorus loads	Diagnostic/Feasibility Study Report, Lake Hendricks/Deer Creek Watershed, Brookings County, South Dakota; Lincoln County, Minnesota (SDDENR, 1996)	April 12, 1999
	sediment	Increased average lake depth by 6 feet over 100 acres	Remove 1 million cubic yards of lake sediment		

APPROVED NON-POINT SOURCE TMDLs

Waterbody Name	TMDL Parameter/ Pollutant	Water Quality Goal/Endpoint	TMDL	Reference Document(s)	Approval Date
Lake Hiddenwood*	phosphorus	Decreased winter fish kills and increased visitor days	Maintenance of increased depth regime plus 2% decrease in phosphorus loads	Lake Hiddenwood Restoration and Protection Project Preproposal (North Central RC&D; 8/93), Lake Hiddenwood Restoration and Protection PIP for FY 94 (1994), Preliminary Report; Hiddenwood Recreation Damsite and Reservoir, North Central RC&D (RC-050-WA), Walworth County, SD (USDA, SCS; 8/78)	April 12, 1999
	sediment	Increased depth corresponding to increasing volume by 53 acre-feet	Maintenance of increased depth regime plus 5% decrease in sediment loads		
Lake Madison*	phosphorus	TSI < 50	50% reduction in phosphorus loads	Phase I Watershed Assessment Final Report - Madison Lake/Brant Lake, Lake County, South Dakota (SDDENR, 10/98)	April 12, 1999
Lake Brant*	phosphorus	TSI < 50	50% reduction in phosphorus loads		
McCook Lake*	sediment	Increased average lake depth by 4.5 feet over 183 acres	Remove 1.7 million cubic yards of lake sediment	Diagnostic/Feasibility Study Report McCook Lake, Union County, South Dakota (SDDENR, 3/90)	April 12, 1999
Ravine Lake*	phosphorus	TSI < 84	70% reduction in phosphorus loads	Diagnostic/Feasibility Study Report, Ravine Lake, Beadle County, SD (SDDENR 7/90) AGNPS Modeling of the Ravine Lake Watershed, Huron, SD (SDDENR, 7/88)	April 12, 1999
	fecal coliform	<400/100 ml fecal coliform counts	<400/100 ml fecal coliform counts		
Redfield Lake*	phosphorus	TSI < 90	45% reduction in total phosphorus load	Lake Assessment Project Report, Lake Redfield, Spink County, SD SDDENR, 5/93)	April 12, 1999
	sediment	Increased average lake depth by 5 feet over 31 acres	Remove 250,000 cubic yard of lake sediment		
Swan Lake*	phosphorus	TSI < 65	60% reduction in phosphorus loads	Diagnostic/ Feasibility Study Swan LAke; Turner County, South Dakota, (SDDENR, 1/93)	April 12, 1999
	sediment	TSI (secchi depth) < 65			