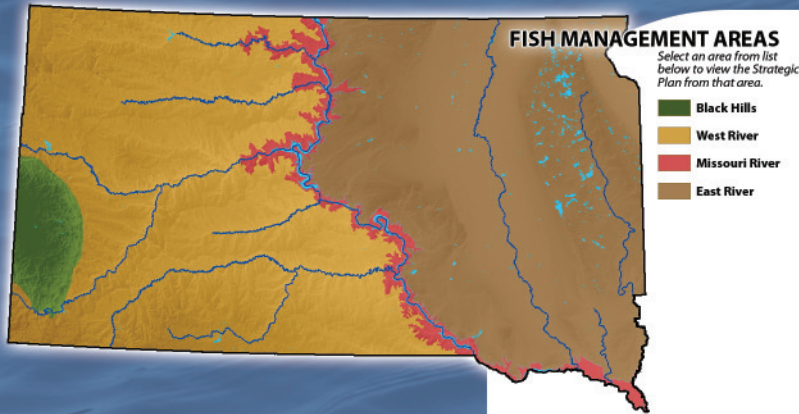


STATEWIDE FISHERIES & AQUATIC RESOURCES 2014-2018 STRATEGIC PLAN



FISHERIES MANAGEMENT AREAS

South Dakota is divided into four geographic management regions known as fisheries management areas. The Statewide Plan contains information on management goals, objectives, and strategies common to all the fisheries management areas, while individual fisheries management area plans will discuss area-specific information.

Fisheries management plans are being developed for the [Black Hills](#), [West River](#), [Missouri River](#), and [East River](#) fisheries management areas.

WHAT IS THE STATEWIDE FISHERIES STRATEGIC PLAN?

This document is a summary of a much larger document, the Statewide Fisheries Strategic Plan. As an overall statewide plan, it encompasses the management of all the fisheries and aquatic resources across the state, including maintaining recreational fisheries and native aquatic communities, enhancing habitats, and providing angler opportunities and access. The plan outlines fisheries management priorities for 2014-2018 to assist in maintaining the quality of aquatic resources for current and future users.

WHAT INFORMATION IS CONTAINED IN THE STATEWIDE FISHERIES PLAN?

The Statewide Fisheries Plan includes a brief inventory of South Dakota's aquatic resources, and descriptions of staff, infrastructure, and monetary resources available to accomplish management objectives. Nine fisheries programs are also described with associated issues, objectives and strategies.

STATEWIDE FISHERIES PROGRAMS INCLUDE:

- Fish and Angler Surveys
- Fisheries Research
- Fishing Access
- Habitat Management
- Non-Game Management
- Fish Production and Stocking
- Bait and Private Aquaculture
- Aquatic Invasive Species
- Fish Health and Contaminants

WHY IS A FISHERIES PLAN NEEDED?

Outlining management priorities with a strategic plan, is a way to optimize use of limited resources (staff, money, facilities and equipment) by prioritizing how these resources are used to best meet fisheries management needs.

MAJOR ISSUES IDENTIFIED DURING THE PLANNING PROCESS INCLUDE:

- A standardized survey data collection process and centralized storage system is lacking.
- A process for prioritizing waters for fish and angler surveys is not well established.
- Implementation of habitat improvement projects is expensive, while staff and monetary resources are limited.
- Relationships with the public, other governmental agencies and conservation organizations need to be developed and strengthened.
- The role of Game, Fish and Parks in aquatic habitat preservation and restoration is not well defined.
- Prioritization of fishing access projects is hampered by the lack of a fishing access inventory and needs assessment.
- Large data gaps in non-game species distribution, status, and habitat requirements make prioritizing research and survey needs difficult.
- Fish diseases and aquatic invasive species threaten recreational fisheries and non-game aquatic communities.

OBJECTIVES ADDRESSING SOME OF THESE ISSUES INCLUDE:

1. Standardize fish population sampling protocols.
2. Develop a centralized database for storing fisheries-related data.
3. Develop a process for selecting and prioritizing fish population and angler surveys.
4. Add to existing information on fishing access to include population demographic and angler use information to help in access project prioritization.
5. Develop partnerships with other governmental entities, non-governmental organizations and the public related to aquatic habitat projects.
6. Develop a comprehensive plan to maintain and enhance aquatic habitats in South Dakota.
7. Develop a series of standardized survey programs for non-game fish and other aquatic species.
8. Update the aquatic invasive species management plan.
9. Revise and implement the fish health management plan.

STRATEGIES TO ACCOMPLISH THESE OBJECTIVES INCLUDE:

- Develop a statewide data management system.
- Establish a survey review and prioritization process.
- Participate in watershed and lake conservation projects linked to important fisheries and aquatic resources.
- Conduct a comprehensive fishing access inventory and needs assessment.
- Develop standard surveys to monitor non-game species and prioritize research needs.
- Update the state fish health plan to include bait and private aquaculture, GFP egg taking procedures, and fish trap and transfer activities.
- Investigate ways to increase reliability of egg sources and availability of catchable fish for stocking.

BLACK HILLS FISHERIES MANAGEMENT AREA STRATEGIC PLAN



WHAT IS THE BLACK HILLS FISHERIES MANAGEMENT AREA?

The Black Hills Fisheries Management Area is one of four South Dakota geographic areas for which specific fisheries management plans are being created.

Bounded roughly by the Redwater River to the North, Highways I-90 and 79 to the East, Highway 18 to the South, and Wyoming to the West, the Black Hills Fisheries Management Area boasts aquatic habitats and fisheries unique in South Dakota.

WHAT MAKES THE BLACK HILLS FISHERIES MANAGEMENT AREA SPECIAL?

Coldwater streams in the Black Hills contain the only naturally-reproducing trout populations in the state. A number of small lakes and three large reservoirs in the Black Hills provide abundant opportunities for trout fishing, but also maintain populations of a variety of cool and warm water fish species.

BLACK HILLS FISHERIES MANAGEMENT PLAN OVERVIEW

This is a summary of a much larger document, the Black Hills Fisheries Management Area Strategic Plan. As an overall plan, it encompasses all fisheries resources in the Black Hills. More detailed plans focusing on stream fisheries and small lakes and ponds will be developed within the next two years. In addition, plans specific to the three major reservoirs in the Black Hills – Pactola Reservoir, Deerfield Reservoir, and Sheridan Lake, will also be created.



LEGEND

- Game Production Areas
- Parks and Recreation Areas
- Black Hills National Forest
- Bureau of Land Management
- Custer State Park
- Wind Cave National Park

MAJOR ISSUES IDENTIFIED DURING THE PLANNING PROCESS INCLUDE:

- Current information is needed detailing the preferences, demographics, and behaviors of Black Hills anglers.
- Introduced species are likely having negative impacts on recreational fisheries and native fish populations.
- Habitat degradation, particularly sedimentation, is hurting fisheries and fishing opportunities.
- Relationships with private landowners and federal agencies need to be developed and strengthened.
- Research is needed in several areas, including: trout reproduction, genetics, non-game fish sampling procedures, and fish stocking protocols.
- Habitat restoration projects need to be prioritized and evaluated both biologically and economically.

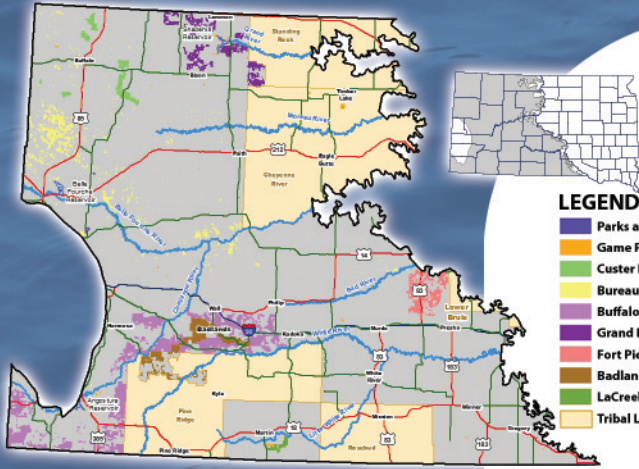
OBJECTIVES ADDRESSING SOME OF THESE ISSUES INCLUDE:

1. Determine current Black Hills angler demographics and preferences.
2. Generate specific plans for streams, small lakes, and the three large reservoirs.
3. Prevent new introductions and manage the presence of undesirable introduced fish species in Black Hills waters.
4. Complete existing and currently identified habitat improvement projects.
5. Determine factors that may be limiting the quality of Black Hills fisheries.
6. Refine existing trout stocking and evaluation criteria.
7. Develop a database and procedural manual to identify habitat degraded waters and direct the selection of habitat improvement projects.

STRATEGIES TO ACCOMPLISH THESE OBJECTIVES INCLUDE:

- Conduct a comprehensive angler survey to determine what anglers want from their fishing experiences and their current level of satisfaction.
- Write specific plans for Black Hills streams, small lakes and ponds, and individual plans for Deerfield Reservoir, Pactola Reservoir, and Sheridan Lake using the information from the comprehensive angler survey and fish population surveys.
- Use social media, traditional outreach methods, and law enforcement to prevent unplanned and undesirable fish introductions.
- Conduct research on trout reproduction, growth, and the effects of introduced non-trout fish species on Black Hills lakes and streams.
- Complete habitat projects in the Pactola Basin, Grace Coolidge and Gimlet Creeks, and Bismarck, Horsethief, and Lakota Lakes.
- Modify routine fish population surveys to collect needed data.
- Review historic stocking and regulation information, the scientific literature, angler preference data, and hatchery rearing capabilities.
- Identify areas for long and short term habitat monitoring.
- Train staff in habitat evaluation and sampling.
- Identify essential habitat features, and available data to be included in a habitat database and procedural manual.

WEST RIVER FISHERIES MANAGEMENT AREA STRATEGIC PLAN



WEST RIVER FISHERIES MANAGEMENT PLAN OVERVIEW

This is a summary of a much larger document, the West River Fisheries Management Area Strategic Plan. As an overall plan, it encompasses all fisheries resources in the West River Fisheries Management Area. In addition, the plan inventories West River fisheries resources and management activities.



WHAT IS THE WEST RIVER FISHERIES MANAGEMENT AREA?

The West River Fisheries Management Area is one of four South Dakota geographic areas for which specific fisheries management plans are being created.

The West River Fisheries Management Area includes all of South Dakota west of the Missouri River except for the Black Hills, which is in its own fisheries management area.

The fisheries of the West River Fisheries Management Area are influenced by low annual precipitation and erodible soils.

WHAT MAKES THE WEST RIVER FISHERIES MANAGEMENT AREA SPECIAL?

The West River Fisheries Management Area offers anglers a wide range of fishing opportunities including large reservoirs, small ponds, and river fishing.

Major fisheries in the West River Fisheries Management area include Shadehill, Belle Fourche and Angostura, the three irrigation reservoirs on the Grand, Belle Fourche and Cheyenne River drainages, respectively. Western tributaries of the Missouri River contribute to the sport fishery and add to the diversity of the area for native fish species.

The most distinguishing feature of the West River Fisheries Management Area is the large number of small, man-made dams and ponds constructed for municipal water supply, livestock watering, and recreation.

Privately owned lands dominate this area, but state, county, municipal, federal, and tribal lands contain some of the most used fisheries.

Fisheries management in the area focuses on walleyes in the three large reservoirs, bass and panfish in the small dams, and catfish in the rivers.

MAJOR ISSUES IDENTIFIED DURING THE PLANNING PROCESS INCLUDE:

- Aging, sedimentation and structural problems of impoundments.
- Lack of information on angler demographics and preferences.
- Lack of partnerships in the management of west river fisheries with governments and groups.
- Impacts of water levels on large reservoirs fisheries.
- Limited shoreline angling due to aquatic vegetation in the summer months.
- Unauthorized fish stockings.

OBJECTIVES ADDRESSING SOME OF THESE ISSUES INCLUDE:

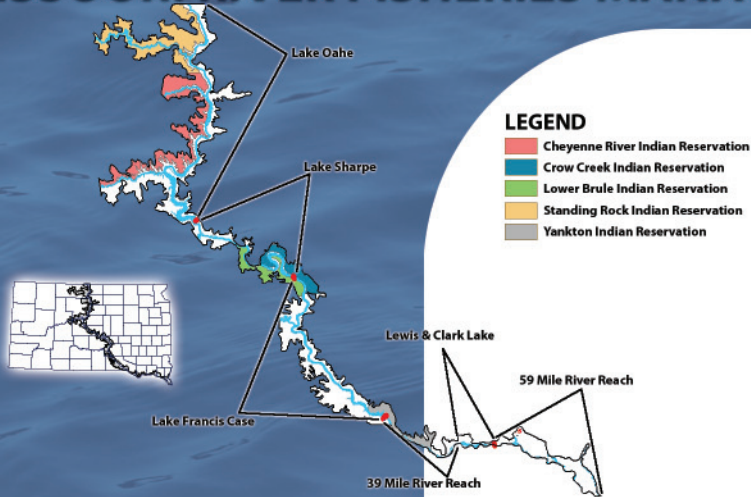
1. Improve angling opportunities by rehabilitating aging small dams and ponds.
2. Improve fisheries by improving water quality and reducing sedimentation.
3. Determine the demographics and desires of anglers fishing in the West River Fisheries Management Area.
4. Reduce the impacts of unauthorized fish introductions.
5. Increase angler access to all types of fisheries.

STRATEGIES TO ACCOMPLISH THESE OBJECTIVES INCLUDE:

- Determine angler needs and preference using surveys to gather public input
- Rehabilitate small impoundments.
- Participate in watershed enhancement projects.
- Foster partnerships with groups, agencies, and private landowners.
- Complete projects to provide access to waters by vehicle and boat.
- Reduce unauthorized fish stockings using marketing and educational techniques.



MISSOURI RIVER FISHERIES MANAGEMENT AREA STRATEGIC PLAN



WHAT IS THE MISSOURI RIVER FISHERIES MANAGEMENT AREA?

The Missouri River Fisheries Management Area is one of four South Dakota geographic areas for which specific fisheries management plans are being created.

Consisting of four mainstem Missouri River reservoirs, Lakes Oahe, Sharpe, Francis Case, and Lewis & Clark and two sections of un-impounded river below Ft. Randall Dam and Gavins Point Dam, the Missouri River Fisheries Management Area contains some of South Dakota's most popular sport fisheries as well as big river native fish communities that include the federally endangered Pallid Sturgeon.

WHAT MAKES THE MISSOURI RIVER FISHERIES MANAGEMENT AREA SPECIAL?

Sport fisheries exist on all stretches of the Missouri River and its reservoirs within South Dakota. Over 350,000 angler days are spent annually equating to a direct economic input that can exceed \$50 million. The Missouri River is a major contributor to South Dakota's walleye spawning operations, helping to sustain walleye fisheries throughout the state. The waters of the Missouri River Fisheries Management Area also provide unique fisheries, including paddlefish snagging seasons and Chinook Salmon fisheries.



MISSOURI RIVER FISHERIES MANAGEMENT PLAN OVERVIEW

This is a summary of a much larger document, the Missouri River Fisheries Management Area Strategic Plan. As an overall plan, it encompasses all fisheries resources in the Missouri River. In addition, the plan inventories Missouri River resources and management activities.



MAJOR ISSUES IDENTIFIED DURING THE PLANNING PROCESS INCLUDE:

- Changing nature of fish populations complicates management.
- Information obtained from fish population surveys may be inadequate to document population status for some species.
- Changes in productivity, sedimentation and erosion can impact fish populations and angler access.
- The Missouri River system is highly susceptible to aquatic invasive species infestation.
- Factors influencing angler satisfaction are not well understood.
- Balancing biological and social needs to develop regulations is challenging.
- Many large river species native to the Missouri River are declining in numbers.

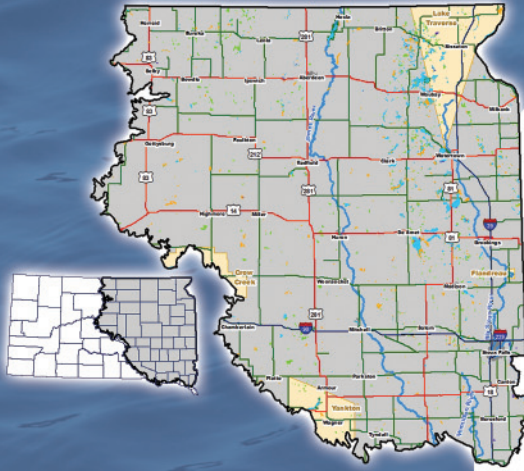
OBJECTIVES ADDRESSING SOME OF THESE ISSUES INCLUDE:

1. Annually identify factors limiting sportfish populations and angler satisfaction.
2. Assess current fish population surveys to determine how well they describe trends in fish populations.
3. Improve public involvement in fisheries management.
4. Annually pursue opportunities to cooperate with outside entities on the management of fisheries and aquatic resources within the Missouri River.
5. Incorporate efforts to determine status of aquatic non-game species into survey designs and management strategies.
6. Assist with the development of the Missouri River Fisheries Management Area section of the state angler access plan.
7. Complete reservoir and river reach specific plans.

STRATEGIES TO ACCOMPLISH THESE OBJECTIVES INCLUDE:

- Investigate factors influencing sportfish populations and angler satisfaction such as aquatic invasive species.
- Investigate how well current gear types monitor fish populations and whether the American Fisheries Society standard fish sampling methods are potential alternatives.
- Increase information transfer to anglers by evaluating communication efforts, identifying target audiences and removing communication barriers.
- Increase information exchange, communication and coordination with government, non-governmental organizations, private entities and anglers.
- Identify non-game species on which to focus monitoring efforts.
- Examine trends in species status and incorporate non-game species data into a statewide database.
- Work to compile an inventory of angler access issues and opportunities and incorporate information on fishing access into an access development and improvement plan for the Missouri River.

EAST RIVER FISHERIES MANAGEMENT AREA STRATEGIC PLAN



LEGEND

- Game Production Areas
- Parks and Recreation Areas
- USFWS Wildlife Refuge
- Waterfowl Production Area
- Tribal Lands

EAST RIVER FISHERIES MANAGEMENT PLAN OVERVIEW

The East River Fisheries Management Area Strategic Plan will guide the management of East River Fisheries. The South Dakota Game, Fish and Parks (GFP) vision is to maintain abundant aquatic habitat with plentiful fish and wildlife while preserving our fishing heritage, and providing fisheries programs that are efficient, friendly and science-based.



WHAT IS THE EAST RIVER FISHERIES MANAGEMENT AREA?

The East River Fisheries Management Area is one of four South Dakota geographic areas for which specific fisheries management plans are being created.

The East River Fish Management Area covers all waters and land east of the Missouri River. There are 210,000 acres of natural and manmade lakes and thousands of miles of rivers and streams within this area.

What makes the East River Fisheries Management Area unique?

Nearly 70% of South Dakotans live within the East River Fisheries Management Area. Fortunately, the area contains abundant and diverse fisheries that support close to a million days of fishing with an economic value of over \$50 million each year. The East River Fisheries Management Area is also home to many of South Dakota's threatened, endangered, or rare aquatic species.

MAJOR ISSUES IDENTIFIED DURING THE PLANNING PROCESS INCLUDE:

- Deteriorating quality of natural lakes, reservoirs, rivers and streams.
- Watershed degradation.
- Decline in use of outdoor aquatic resources due to cultural changes.
- Invasion of exotic plants and animals.
- Fishing access problems during high water conditions.
- Poor panfish size on some small lakes and reservoirs.
- Insufficient knowledge about river and stream fish communities and sport fisheries.
- Balancing the time used for routine monitoring surveys with the time needed to implement management actions.

OBJECTIVES ADDRESSING THESE ISSUES INCLUDE:

1. Participate in watershed maintenance and restoration efforts.
2. Identify critical shoreline habitat to protect with restoration projects.
3. Assess the condition of stream and riverine fish communities.
4. Improve angling opportunities in small reservoirs.
5. Evaluate the stocking of hatchery-reared yellow perch.
6. Investigate the cause of short-lived panfish in lakes with poor panfish size.
7. Improve angler access to all waters.
8. Create additional urban and community fishing opportunities.

STRATEGIES TO ACCOMPLISH THESE OBJECTIVES INCLUDE:

- Participate in at least two watershed projects within the East River Fisheries Management Area.
- Implement projects to protect and enhance critical shoreline habitats.
- Develop a standardized survey to assess stream and riverine fish communities.
- Conduct at least one demonstration project designed to improve small impoundment fish populations.



- Stock yellow perch eggs, fry and fingerlings and evaluate success.
- Identify yellow perch populations with high mortality and research potential causes.
- Work with counties, townships and private landowners to create fishing access along public road right-of-ways.
- Gather urban and community angler input on preferred methods for receiving information.
- Establish five new urban and community fisheries.