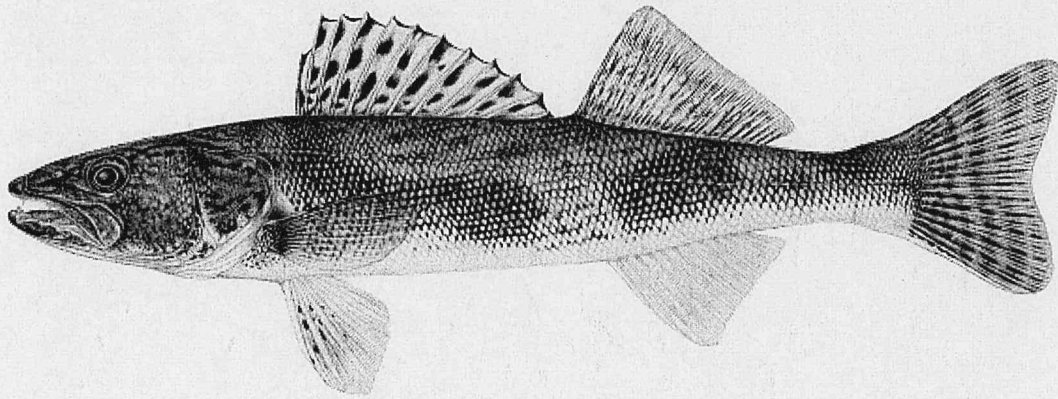


**Memorandum of  
Understanding  
and  
Conservation Agreement  
for  
Sauger  
(*Sander canadensis*)  
in  
Montana**



**Montana Department of Fish, Wildlife and Parks  
1420 East Sixth Avenue  
Helena, Montana 59620**



**February 2004**

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This Memorandum of Understanding and Conservation Agreement (hereafter called Agreement) has been developed to expedite the implementation of conservation measures for sauger (*Sander canadensis*) in Montana as a collaborative effort among resource agencies, academic institutions, conservation organizations, resource users, and private land owners. Threats that warrant listing sauger as a Species of Special Concern by the State of Montana should be reduced or eliminated through the implementation of this Agreement. Further, this Agreement should eliminate the need to list sauger as an endangered species and most importantly ensure the long-term persistence of sauger in Montana.

## **I. GOAL**

To ensure the long-term self-sustaining persistence of sauger in the Missouri River and Yellowstone River basins in Montana.

## **II. OBJECTIVES**

Technically feasible objectives have been established to attain the goal. The objectives are not regulations, but provide guidance to meet the goal. The goal and objectives are based on the best current scientific knowledge and may need to be modified over time to reflect current knowledge.

1. Develop an Montana Sauger Work Group by 2006.
2. Determine the genetic status, distribution, and abundance of sauger populations.
3. Reduce specific threats to sauger and its habitat to the greatest extent possible.
4. Protect current populations and increase the distribution of sauger within its native range.
5. Implement a Montana recovery plan that includes a standardized sampling program by 2008 to document progress toward the goal.
6. Provide technical information, administrative assistance, and financial resources to meet the above objectives and goal.

1. Develop an upper Montana Sauger Work Group by 2006.

Biologists representing Montana Fish, Wildlife and Parks regions 4, 5, 6 and 7; federal agencies, and tribes will be on the work group. In addition, one individual from the public sector within the upper Missouri River basin will be on the work group. The mission of the work group is to better understand the status of sauger in the upper Missouri River basin and assist in implementing and monitoring the progress of the Sauger Conservation Agreement. Further, the work group will assist in establishing a consortium of biologists to develop the long-term standardized sampling program for sauger in Montana. Montana Department of Fish, Wildlife and Parks is taking the lead on this Agreement, thus the leader of the Sauger Work Group will be the Montana Department of Fish, Wildlife and Parks representative.

2. Determine the genetic status, distribution, and abundance of sauger populations.

Rate of hybridization usually increases when spawning times overlap between sauger and walleye, there is a limited number of spawning sites, unequal abundance of parental species, or high turbidity occurs in the system. All of the latter conditions exist for sauger and walleye populations in Montana waters, except increased turbidity. Thus, the potential for hybridization to occur can be high. McMahon and Gardner (2001) found that hybridization rates averaged about 10%. Current results suggest that hybridization rates are highly variable (0 - 21.7 %) along the Missouri River (N. Billington, Troy State University, personal communication).

Genetic variation needs to be mapped for all waters containing sauger. All genetically pure populations are to be provided the necessary protection to ensure long-term persistence. Protection would include stocking sterile walleye, reduce walleye stocking, replace walleye fisheries with sauger fisheries, expanded isolated populations, and improve habitat.

Protection could include replicating genetically pure populations and establishing them in another location. Genetic samples (i.e., random samples from all fish not only those used as brood stock) should be obtained (if possible) from waters targeted for stocking (see Objective 4). A genetics plan will be developed by 2007 to outline a standard sampling protocol for obtaining genetic samples.

(Population for this Agreement is defined as the aggregate of sauger residing in large rivers. Thus, populations are defined for the Bighorn, Judith, Marias, Milk, Missouri, Musselshell, Popular, Powder, Teton, Tongue, and Yellowstone.)

3. Reduce specific threats (e.g., entrainment, barriers, habitat fragmentation, loss of spawning habitat in tributaries) to sauger and its habitat to the greatest extent possible.

Threats to sauger outlined by McMahon and Gardner (2001) include: water withdraws, unnatural water-level fluctuations caused by reservoirs, decreased turbidity, hybridization with walleye (*Sander vitreus*), negative interactions with other predators, and overexploitation. Sauger populations declined during the drought in the late 1980s in several locations in the Missouri and Yellowstone river basins (McMahon and Gardner 2001). Despite the improved flows in the mid-1990s, the sauger population has not rebounded in the Missouri River (W. Gardner, Montana Fish, Wildlife and Parks, personal communication). Conversely, the sauger population in the Yellowstone River appears to be increasing in numbers (M. Jaeger, Montana Fish, Wildlife and Parks, personal communication). Despite the rebound in the Yellowstone River, fisheries biologists statewide are concerned about the current status of sauger. Many biologists believe sauger have the potential to be at higher numbers; however, entrainment, barriers, water withdraws, alteration of the natural hydrograph, and loss of spawning habitat in tributaries are the main factors continuing to plague sauger populations.

Specific threats outlined by river in Table 1 need to be eliminated through conservation actions. Thus, by 2008 a recovery plan for sauger will be implemented and 50% of the conservation actions will be in place by 2010.

4. Protect current populations and increase the distribution of sauger within its native range.

Sauger persist and are only common in only 28% of the estimated 3,376 river kilometers of their historical range in Montana (McMahon and Gardner 2001). Fragmentation by dams and water diversion canals coupled with drought increases the likelihood that sauger will be extirpated from streams within their historical range. Sauger should be reintroduced in areas where they have been extirpated or are rare. Many of the populations are interconnected by downstream and upstream movements. However, because of barriers in many of the rivers upstream movement is more limited than downstream.

Reintroduction may not be necessary if the threat is reduced or removed. For example, stocking sauger in a river with a barrier would not be necessary if the barrier were removed. Removing the threat to the sauger population is the highest priority.



Caution should be used when reintroducing sauger in waters that contain walleye and sauger. The potential of hybridization and introgression must be evaluated before sauger are reintroduced in any rivers that contain walleye. The reintroduction of sauger in waters with walleye could increase introgression in downstream populations and further reduce sauger populations. Guidelines for stocking sauger in Montana waters will be outlined in the stocking plan.

5. Implement a recovery plan that includes a standardized sampling program by 2008 to document progress toward the goal.

A recovery plan will be developed by the Montana Sauger Work Group and implemented by 2008. In addition, a standardized sampling program will be established and implemented to document temporal and spatial variation in population (e.g., catch per unit effort [C/f], density, condition, mortality, growth rate, hybridization rate) and habitat metrics (e.g., discharge, turbidity). Ideally, the sampling protocol would be used by other state and federal agencies so these data could be compared within the upper Missouri River basin. The plan will be written by a consortium of biologists from regions, federal agencies, and universities. The plan will include methods for standardizing sampling techniques for capturing sauger, habitat measurements, analysis methods, and genetic sampling in lotic and lentic ecosystems, and goals for various population metrics.

6. Provide technical information, administrative assistance, and financial resources to meet the above objectives and goal.

The goal and objectives will be obtained through implementation of specific Conservation Actions (see section VIII). Upon signing, the signatories agree to commit resources in terms of personnel and operational funding to meeting the goals, objectives, and conservation actions. The signatories also agree to ensure the implementation of those conservation actions detailed in section VIII. The status of sauger will be evaluated annually to assess progress toward conservation actions and amendments will be added to the Agreement as appropriate to identify new conservation actions and ensure the effectiveness of this Agreement. The goals and objectives in this Agreement shall not interfere with the recovery of any species presently listed under the Endangered Species Act.

Sauger populations reside almost exclusively in waters on private lands and many waters are considered navigable. Thus, these systems can be highly modified with respect to water diversion; therefore, having private landowner support for this Agreement is critical. Technical assistance

should be provided to private landowners that cooperate in the conservation of sauger in Montana.

These objectives are not mutually exclusive and will likely require equal commitment if successful conservation of sauger is to be achieved. Interaction among federal, state, and provincial government agencies and private landowners will be critical for the success conservation of sauger in the upper Missouri River basin.

### III. OTHER SPECIES INVOLVED

This Agreement is for the conservation and enhancement of sauger. However, many other species such as blue sucker (*Cycleptus elongatus*), smallmouth buffalo (*Ictiobus bubalus*), shovelnose sturgeon (*Scaphirhynchus platyrhynchus*), pallid sturgeon (*Scaphirhynchus albus*), river carpsucker (*Carpiodes carpio*), channel catfish (*Ictalurus punctatus*), sturgeon chub (*Macrhybopsis gelida*), sicklefin chub (*Macrhybopsis meeki*) will benefit from this Agreement. The benefits to other species are accomplished through a holistic landscape and watershed approach to enhancing sauger populations.

### IV. PARTICIPANTS

This Agreement primarily addresses conservation and enhancement of sauger in Montana. However, surrounding states and provinces (i.e., Wyoming, North Dakota, South Dakota, Alberta, and Saskatchewan) will be included because some rivers containing sauger in Montana originate from or flow into surrounding states and provinces.

Montana Department of Fish, Wildlife and Parks  
Montana Department of Environmental Quality  
Montana Chapter of the American Fisheries Society  
U.S. Fish and Wildlife Service  
U.S. Geological Survey  
U.S. Forest Service  
National Park Service  
Bureau of Reclamation  
Bureau of Land Management  
North Dakota Game and Fish Department  
Wyoming Game and Fish Department  
Alberta  
Saskatchewan  
PPL Montana  
Tongue River Water Users' Association



## V. AUTHORITY

The signatory parties hereto enter into this Agreement under federal and state law, as applicable, including, but not limited to Section (c)(2) of the Endangered Species Act (ESA), which states that “the policy of Congress is that Federal agencies shall cooperate with State and local agencies to resolve water issues in concert with conservation of endangered species.”

All parties to this Agreement recognize that they each have specific statutory responsibilities that cannot be abdicated, particularly with respect to the management and conservation of fish species, their habitat, and the management, development and allocation of water resources. Nothing in this Agreement is intended to abrogate any of the parties’ respective responsibilities. Each signatory has final approval authority for any activities undertaken as a result of this Agreement on the lands owned and administered by the signatory party.

The Agreement is subject to, and intended to be consistent with, all applicable Federal and State laws and interstate compacts.

The Agreement in no way restricts the parties involved from participating in similar activities with other public or private agencies, organizations, or individuals.

Modifications to the Agreement shall be made by the Sauger Work Group (see Section IX).

This Agreement is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement or contribution of funds between the parties to this Agreement will be handled in accordance with applicable laws, regulations, and procedures including those for Government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This Agreement does not provide such authority. Specifically, this Agreement does not establish authority for noncompetitive award to the cooperator of any contract or other agreement. Any contract or agreement for training or other services must fully comply with all applicable requirements for competition.

## VI. STATUS OF SAUGER

Sauger have declined in abundance and distribution throughout Montana (see McMahon and Gardner [2001] for a thorough review of the status of sauger in Montana). Thus, sauger have been listed by the Montana Natural Heritage Program, Montana Fish, Wildlife, and Parks, and the Montana Chapter of the American Fisheries Society as a Species of Special Concern (Carlson 2003). McMahon and Gardner (2001) suggest that the decline in sauger is related to water withdraw for irrigation, reservoirs, hybridization with walleye, negative interactions with other predators, and overexploitation. Several other authors have documented declines in sauger populations throughout the U.S. (Rawson and Scholl 1978; Hesse 1994; Pegg et al. 1997). Conversely, Fryda (2002) documented an increase in catch per unit effort (C/f) of sauger from 1962 to 2000 in Lake Sakakawea, North Dakota. Although he documented an increase in C/f over the 38 years, sauger C/f has declined during the last 15 years. Fryda (2002) concluded that the decline in sauger during the mid-1980s was related to the drought and the reduced density of rainbow smelt (*Osmerus mordax*) during this time period.

McMahon and Gardner (2001) suggest that hybridization and displacement of sauger by nonnative walleye or smallmouth bass was lacking, but that these factors could influence the recovery of sauger in Montana. Overharvest of sauger is likely not a factor contributing to their decline in the Yellowstone River; for example, the estimated exploitation rate of sauger in the Yellowstone River varied from 12% to 27% (M. E. Jaeger, Montana State University, personal communication). Sauger are common in only 28% of their historic range in Montana waters (McMahon and Gardner 2001). Much is known about threats to sauger in Montana, but reducing the threats has proven difficult.

## VII. PROBLEMS FACING THE SPECIES

The success of any Agreement or recovery effort depends on reducing the impacts that threaten sauger. Threats to sauger are numerous and vary by location (Table 1). The following are identified as key threats to the continued existence of sauger:

1. Water withdraws resulting in low river flows
2. Entrainment
3. Reservoir operation that alters the natural hydrograph, temperature, and sediment
4. Barriers that negatively influence spawning movement patterns and larval drift
5. Channelization and loss of side channel habitat for larval and juvenile sauger
6. Hybridization with walleye
7. Negative interactions with other species such as walleye and smallmouth bass
8. Overexploitation

Table 1. Current condition of threats to sauger populations (see Section VII) by river in Montana.

River	Threats							
	Water withdrawal	Entrainment	Reservoir operation	Barriers	Channelization	Hybridization and introgression	Negative interactions with other species	Exploitation
Bighorn	Low	High, Manning Dam, Kemp Dam, Two Leggins Dam	Yes; impacted by Bighorn Lake	Yes; Leggins Diversion, Yellowtail Dam	High	Low to moderate	Minimal	Low
Judith	Moderate	None	None	None	None	Moderate	Moderate	Low
Little Missouri*	Unknown	None	None	Unknown	Unknown	Unknown	Unknown	Unknown
Marias	Moderate	None	Yes; lower Marias highly impacted by flows from Tiber	Yes; Tiber Reservoir	Minimal	Moderate	Moderate	Unknown
Milk below Fresno Reservoir*	High	None	Yes; impacted by flows from Fresno Reservoir	Yes; Fresno Dam and several low-head dams	Unknown	Moderate to high	Moderate	Low
Milk above Fresno Reservoir	Low	None	None	None	Minimal	Low to Moderate	Low	Low
Missouri above Ft. Peck	Low to Moderate	None	Yes; moderately impacted by flow modifications from several upstream reservoirs (Canyon Ferry)	Yes; Morony Dam	Minimal; some bank stabilization on outside bends and near bridges	Moderate to high in upper portion	Moderate to high	Moderate



Table 1. Continued.

River	Threats							
	Water withdrawal	Entrainment	Reservoir operation	Barriers	Channelization	Hybridization and introgression	Negative interactions with other species	Exploitation
Missouri below Ft. Peck <sup>a</sup>	Low	None	Yes; highly impacted by flows from Ft. Peck Reservoir	Yes; Ft. Peck Dam	Minimal; some bank stabilization on outside bends and near bridges	High	Moderate to high	Moderate
Musselshell <sup>a</sup>	High	High, Kovenko Dam, Musselshell Dam, Davis Dam	None	Yes, several low-head dams	High, a function of straightening by railroad	Unknown	Moderate	Low
Powder <sup>a</sup>	Low	Minimal	None	None	None	Low to moderate	Low	Low
Teton	High	None	None	Unknown	None	Unknown	Low	Low
Tongue <sup>b</sup>	High	Moderate, T&Y Diversion; Unknown, Mobley Dam	Yes; impacted by Tongue River Reservoir	Yes; T and Y Diversion Dam and Tongue River Reservoir; SH Diversion; Mobley Diversion	None	Low to moderate	Low	Low to moderate
Yellowstone <sup>b</sup>	High	High, Intake Diversion and other low-head diversions	None	Yes; several low-head dams	Moderate; mostly on outside bends and near cities such as Billings and Miles City	Low to moderate	Low to moderate	Moderate

<sup>a</sup>Also includes associated tributaries.

<sup>b</sup>The Powder, Tongue, and Yellowstone rivers may exhibit declining water quality from coalbed methane development.

## VIII. CONSERVATION ACTIONS

Generic conservation actions are ordered by five categories: habitat management, fisheries management, genetics, research, and administration and information management. All of the categories may not apply to each objective. Some conservation actions are specific to particular water bodies and are identified in the action statement. Some or all conservation actions may apply in a watershed within the upper Missouri River basin. The conservation action or actions should be identified by watershed and related to the decline of sauger within the watershed. Many of the conservation actions are long-term and will subsequently need long-term evaluation. Further, several of the conservation actions are referred to in the Montana Warmwater Fisheries Management Plan 1997-2006 (Montana Department of Fish, Wildlife and Parks 1997). More specific conservation actions have been outlined for high priority rivers (Table 2).

### Habitat Management

1. Reduce water withdraw through irrigation diversion canals and pumping stations within the Missouri and Yellowstone river basins.
2. Reduce entrainment in irrigation diversion canals, particularly at Intake in the Yellowstone River.
3. Develop fish passage around instream barriers (eliminate barriers if no longer functional), particularly in the lower Yellowstone River.
4. Restore flows that reflect the natural (historic) hydrograph, particularly in the Bighorn, Marias, Milk, Missouri, Musselshell, Teton, Tongue, and Powder rivers.
5. Reduce and minimize use of bank stabilization (e.g., riprap) and flow deflector (e.g., barbs, wing dikes) structures.
6. Maintain and enhance large woody debris recruitment by establishment of healthy riparian corridors.
7. Maintain and enhance connectivity to backwater and side channel habitats (i.e., a low-velocity habitat that provides a nursery area for juvenile sauger) in Milk, Missouri, and Yellowstone rivers.

Table 2. Plan for implementing conservation actions for the rivers identified as high priority (the Administration and Information Management action was not included). Bolded items are the highest priority within a river.

Rivers	Conservation Action Categories			
	Habitat Management	Fisheries Management	Genetics	Research
Bighorn	Increase turbidity  Restore natural hydrograph from Yellowtail Dam  Improve fish passage	Reduce stocking or stock sterile walleye in Bighorn Lake  Cease smallmouth bass stocking within the watershed  Stock OTC marked sauger if the probability of introgression with walleye is low	Obtain samples below Yellowtail Dam  Continue sampling	Determine use of Bighorn by sauger and overlap with walleye and smallmouth bass  Evaluate the impact of Two Leggins Diversion  Evaluate contribution of stocked sauger
Judith	<ul style="list-style-type: none"> <li>● Improve summer flow conditions</li> </ul>	<ul style="list-style-type: none"> <li>● Increase sampling effort</li> </ul>	<ul style="list-style-type: none"> <li>● Continue sampling</li> </ul>	<ul style="list-style-type: none"> <li>● Determine use of Judith by sauger and walleye</li> <li>● Evaluate Judith as a spawning site for sauger</li> </ul>
Marias	<ul style="list-style-type: none"> <li>● Increase turbidity</li> <li>● Restore natural hydrograph from Tiber Dam</li> </ul>	<ul style="list-style-type: none"> <li>● Remove walleye from Tiber Reservoir</li> <li>● Stock OTC marked sauger in Tiber Reservoir</li> </ul>	<ul style="list-style-type: none"> <li>● Continue sampling</li> <li>● Obtain samples above Tiber Reservoir</li> </ul>	<ul style="list-style-type: none"> <li>● Evaluate the response of sauger to flow modifications</li> <li>● Evaluate early life history of sauger</li> <li>● Evaluate contribution of stocked sauger</li> </ul>
Powder	<ul style="list-style-type: none"> <li>● Improve summer flow conditions</li> <li>● Minimize potential water quality problems associated with coalbed methane development</li> </ul>	Con	<ul style="list-style-type: none"> <li>● Continue sampling</li> </ul>	<ul style="list-style-type: none"> <li>● Determine use and movement of sauger within the Powder River and the tributaries</li> <li>● Evaluate early life history of sauger</li> </ul>



Table 2. Continued.

Rivers	Conservation Action Categories			
	Habitat Management	Fisheries Management	Genetics	Research
Teton	<ul style="list-style-type: none"> <li>• Improve summer flow conditions</li> <li>• Reduce de-watering</li> </ul>	<ul style="list-style-type: none"> <li>• Increasing sampling effort</li> </ul>	<ul style="list-style-type: none"> <li>• Continue sampling</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate use of Teton by sauger</li> </ul>
Tongue	<ul style="list-style-type: none"> <li>• Improve summer and summer flows</li> <li>• Improve fish passage</li> <li>• Restore natural hydrograph from Tongue River Dam</li> </ul>	<ul style="list-style-type: none"> <li>• Cease stocking walleye</li> <li>• Remove walleye to reduce introgression with sauger</li> <li>• Stock OTC marked sauger</li> </ul>	<ul style="list-style-type: none"> <li>• Continue sampling</li> <li>• Obtain samples above Tongue River Reservoir</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate early life history of sauger in the Tongue</li> <li>• Evaluate contribution of stocked sauger</li> </ul>
Yellowstone above Intake Diversion Dam	<ul style="list-style-type: none"> <li>• Reduce de-watering</li> <li>• Improve fish passage, especially at Cartersville Diversion Dam</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce stocking walleye in all waters within the watershed</li> <li>• Stock OTC marked sauger</li> <li>• Continue to monitor harvest of sauger</li> </ul>	<ul style="list-style-type: none"> <li>• Continue sampling</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate early life history of sauger in the Yellowstone</li> <li>• Evaluate the contribution of stocked sauger</li> <li>• Determine the effects of flow on year-class strength of sauger</li> <li>• Determine the contribution of sauger to Lake Sakakawea from the Yellowstone</li> </ul>
Yellowstone below Intake Diversion Dam				

### Fisheries Management

1. Maintain current status of sauger (i.e., species of special concern) until scientific knowledge justifies reducing or elevating the status.
  - ☐ Suppress or reduce introduction of species that compete with, hybridize with, or prey on sauger.
  - ☐ Where logistically, technically, and sociologically feasible, remove species that compete with, hybridize with, or prey on sauger in tributaries to the Missouri and Yellowstone rivers.
  - ☐ Develop and implement fish stocking policies that are not detrimental to sauger (Sauger Work Group will develop these policies in a Stocking Plan).
  - ☐ Stock sauger (introductory, supplemental, or maintenance) in areas that currently or historically supported sauger.
  - ☐ Implement angling regulations where necessary.
  - ☐ Continue to screen sauger for genetic purity during sauger spawning.
  - ☐ Prevent illegal introductions of nonnative aquatic species.
  - ☐ Work with private landowners to enhance or maintain quality instream and riparian habitat.
  - ☐ Develop long-term standardized sampling program that will be used by all agencies sampling sauger in the upper Missouri River basin.

### Genetics

- ☐ Identify genetic variation of sauger throughout Montana.
- ☐ Evaluate hybridization rate of sauger from a random sample of sauger in the Missouri and Yellowstone rivers.
- ☐ Reduce or prevent hybridization with walleye.
- ☐ Maintain connectivity between pure populations of sauger (i.e., reduce population fragmentation).
- ☐ Establish a genetically pure and diverse population of sauger for stocking and recovery in the Missouri and Yellowstone rivers.

### Research

- ☐ Determine sufficient population size within major watersheds for long-term viability of sauger.
- ☐ Evaluate exploitation of sauger in the Missouri River above and below Ft. Peck Reservoir.
- ☐ Evaluate location of origin for sauger populations in the Missouri River below Ft. Peck Reservoir and in Lake Sakakawea.
- ☐ Determine the number of sauger removed by irrigation canals in the lower Yellowstone River.
- ☐ Evaluate the contribution of stocked sauger to the upper Missouri River and lower Yellowstone River.
  - ☐ Evaluate contribution of sauger from stocking in the Missouri River above Morony Dam.
  - ☐ Determine the effects of high discharge in the Marias River on sauger movement, spawning, and year-class strength.
  - ☐ Identify the factors that influence mortality of larval and juvenile sauger.

### Administration and Information Management

- ☐ Coordinate the establishment of the upper Missouri River Sauger Work Group.

- ☐ Assist in securing funding for conservation efforts.
- ☐ Evaluate effectiveness of the Agreement and the upper Missouri River Sauger Work Group.
- ☐ Educate the general public on the effects of water withdraw on sauger.
- ☐ Educate anglers and general public about proper identification of sauger.
- ☐ Educate anglers and general public about the status of sauger in Montana waters.

## **IX. COORDINATION AND ADMINISTRATION**

Administration of this Agreement will be conducted by the Sauger Work Group. The work group shall be limited to making recommendations for the conservation of sauger and any specific items related to this Agreement to the Director of Montana Fish, Wildlife and Parks. Recommendations from the work group will be forwarded to other Agreement signatories by the Montana Fish, Wildlife and Parks Director. The Director will provide any information to other signatories as requested.

The Sauger Work Group will meet annually to develop yearly conservation schedules and review the Agreement for any modifications.

Sauger Work Group meetings will be open to all interested parties. Meeting minutes and progress reports will be distributed to the Sauger Work Group and other interested parties as requested.

### **Amendment Modifications and Disputes**

The Agreement will likely require amendments as the management and conservation of sauger evolve. Minor amendments may be made by a majority vote by the Sauger Work Group. However, major modifications must have consensus of the Sauger Work Group. No amendments will be allowed that have the potential to further adversely affect any threatened or endangered species. Any major disputes regarding interpretation of amendments or implementation of the Agreement will be handled by the work group chair. Unresolved disputes will be deemed unresolved and a facilitator will be assigned to resolve the dispute. The facilitator will be agreed upon by the signatory parties by a majority vote. The facilitator has 60 days to resolve the dispute by working with both parties. The decision made by the facilitator will be the final rule on the dispute.

### **Conservation Agreement Schedule**

It is likely that the plan will not be fully functional until 2008 (Table 3). Completion of objective one will not occur until 2006 and the standardized sampling plan will not be completed until 2008. All signatory parties agree to work toward implementing the schedule in Table 3.

To effectively implement this Agreement it is recommended that the Sauger Work Group chair be housed within Montana Fish, Wildlife and Parks. Further it is recommended that the position be jointly funded by all signatories to this Agreement (see Section V). The Sauger Work Group chair will be responsible for administering this Agreement, coordination of projects, ensuring that schedules are being met, and conserving sauger in Montana.

## **X. NATIONAL AND MONTANA ENVIRONMENTAL POLICY ACT (MEPA AND NEPA) COMPLIANCE**

It is anticipated that any actions conducted through this Agreement will not entail significant state or federal actions under MEPA or NEPA. However, each signatory agency holds the



responsibility to review planned actions for their area of concern to ensure the proper environmental analyses are conducted under the MEPA and NEPA.

## **XI. FEDERAL AGENCY COMPLIANCE**

During the this Agreement the participants agree to the terms of Executive Order 11246 on non-discrimination and will not discriminate against any person because of race, color, religion, sex, or national origin.

No member or delegate to Congress or resident Commissioner, shall be admitted to any share or part of this Agreement, or to any benefit that may arise therefrom, but this provision shall not be constructed to extend to this Agreement if made with a corporation for its general benefit.

Table 3. Schedule for implementation and execution of objectives 2 and 5 of the Sauger Conservation Agreement.

Task	Year				
	2004	2005	2006	2007	2008
Review Agreement	start and complete				
All parties sign Agreement	start and complete				
Develop Sauger Work Group	begin	continue	complete		
Identify and hire chair of the Sauger Work Group	begin	continue	complete		
Sauger Recovery Plan			begin	continue	complete
Standardized sampling program			begin	continue	complete and implement

## **XII. AGREEMENT DURATION**

This Agreement shall be four years (termination date December 31, 2008). By the end of the Agreement period an analysis of the actions implementation and status of the species is warranted. If all parties agree that sufficient progress has been made toward conservation of sauger then this Agreement can be extended. If it is deemed that this Agreement is not useful regarding the conservation of sauger then this Agreement may not be extended.

Any party, in writing, may terminate the Agreement in whole, or in part, at any time before the date of expiration. However, the termination of the Agreement will require a consensus by the Sauger Work Group (Section IX). Any party may withdraw their signatory status from the Agreement without a vote by the Sauger Work Group.

## **XIII. REFERENCES**

- Carlson, J. 2003. Montana animal species of special concern. Montana Natural Heritage Program and Montana Fish, Wildlife and Parks, Helena.
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- Hesse, L. W. 1994. The status of Nebraska fishes in the Missouri River 6. Sauger (Percidae: *Stizostedion canadense*). Transactions of the Nebraska Academy of Sciences 21:109-121.
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#### **XIV. SIGNATORIES**