

Western Division -American Fisheries Society Critical Evaluation of the Upper Basin Pallid Sturgeon Recovery Program

1.0 Introduction

Pallid sturgeon in the upper portion of the Missouri River Basin were listed as endangered under the federal Endangered Species Act in 1990. To facilitate their recovery, an Upper Basin Pallid Sturgeon Recovery Workgroup, which consists of a number of federal and state resource management agencies (including Montana Fish, Wildlife, and Parks, North Dakota Fish and Game, South Dakota Game, Fish, and Parks, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Bureau of Reclamation, Western Area Power Administration, and PPL-Montana), was formed to develop and implement an Upper Basin Pallid Sturgeon Recovery Plan. Although the Workgroup has implemented various elements of the recovery plan, it is not clear that the pallid sturgeon are responding to these recovery efforts. Therefore, the recovery efforts may need to be refined to facilitate pallid sturgeon recovery in the upper basin.

This project is being undertaken to assist the Upper Basin Pallid Sturgeon Recovery Workgroup by conducting an independent peer-review of the Upper Basin Pallid Sturgeon Recovery Program. More specifically, the Upper Basin Pallid Sturgeon Recovery Workgroup has requested that the Western Division of the American Fisheries Society (WDAFS) review the existing pallid sturgeon recovery plan and make recommendations regarding the implementation of the plan to enable the Workgroup to function for effectively and efficiently.

2.0 Project Work Plan

Successful completion of an independent peer-review of the Upper Basin Pallid Sturgeon Recovery Program will require a number of steps. The work

plan tasks that will need to be completed by the WDAFS's *Pallid Sturgeon Committee* include:

- Acquisition of background information on pallid sturgeon ecology and population dynamics, on hatchery propagation programs for this species, on the physiology and health of this species, and on the rationale for the current Upper Basin Pallid Sturgeon Recovery Program.;
- Interview key practitioners in the field to access unpublished information on each of these topic areas;
- Review and evaluation of the background information and the rationale for the Upper Basin Pallid Sturgeon Recovery Program;
- Develop recommendations regarding the management and recovery of upper basin pallid sturgeon and regarding the implementation of upper basin pallid sturgeon recovery efforts;
- Prepare a technical report that summaries essential information on the population ecology, hatchery propagation, and health of pallid sturgeon, describes the results of the critical review of the Upper Basin Pallid Sturgeon Recovery Program, and presents the recommendations that were developed during the course of the investigation;
- Conduct a review of the technical report that is prepared by the Pallid Sturgeon Committee. This review will be conducted by the WDAFS Resource Policy Committee and the WDAFS Executive Committee; and,
- Finalize the technical report and disseminate it to the Upper Basin Pallid Sturgeon Recovery Workgroup.

Each of these work plan tasks is briefly described in the following sections of this prospectus.

2.1 Acquisition of Published Information

Acquisition of background information (both historical and current information) on pallid sturgeon ecology and population dynamics, on hatchery propagation programs for this species, on the physiology and health of this species represents a key element of the overall evaluation of the current pallid sturgeon recovery program. This information will provide committee members with a common understanding of the

biology, ecology, and physiology of pallid sturgeon, of the measures that have been or could be used in recovery efforts, and fo the current recovery program. It is anticipated that the Upper Basin Pallid Sturgeon Recovery Workgroup will provide hard copies and/or electronic copies of any documentation that they have that is relevant to the peer-review. It is possible that the pallid Sturgeon Committee will also need to conduct literature searches to obtain any supplementation information that is required to complete the peer-review.

2.2 Acquisition of Unpublished Information

Although a substantial quantity of published information will be available to the Pallid Sturgeon Committee to facilitate its peer-review, it is likely that data and information gaps will be identified following the review of the published information. Accordingly, the members of the Committee will conduct a series of interviews with key practitioners in the field to access unpublished information on each of the topic areas, including pallid sturgeon biologists, fish health experts, hatchery personnel, and fisheries administrators. It is anticipated that the Upper Basin Pallid Sturgeon Recovery Workgroup will provide the committee with a comprehensive list of key contacts, including the members of the Recovery Workgroup and any investigators that have worked on this species. A field trip will also be conducted in conjunction with the interviews to view the best remaining pallid sturgeon habitat.

2.3 Review and Evaluation of the Background Information

Upon completion of the data acquisition phase of the project, the Pallid Sturgeon Committee will conduct a through review of the background information that was acquired. In addition, a critical review of the existing recovery plan and recovery program will be conducted. This review will focus on what is known about this species, what is not known about this species (i.e., GAP analysis), and the underlying rationale for the existing recovery program. The critical evaluation of the existing recovery program will assess its probability of success, based on the available scientific information and its associated uncertainties.

2.4 Develop Recommendations

The critical review and evaluation of background information on pallid sturgeon and on the existing recovery program will provide the Pallid Sturgeon Committee with important insights regarding the most effective means of recovering pallid sturgeon in the upper basin. Therefore, committee members will utilize these insights to develop a series of recommendations regarding the management and recovery of upper basin pallid sturgeon. In addition, recommendations regarding the implementation of upper basin pallid sturgeon recovery efforts will be developed.

2.5 Prepare Technical Report

The Pallid Sturgeon Committee will compile the information that was generated during the review into a brief technical report. The technical report will summarize essential information on the population ecology, hatchery propagation, and health of pallid sturgeon, describe the results of the critical review of the Upper Basin Pallid Sturgeon Recovery Program, and present the recommendations that were developed during the course of the investigation.

2.6 WDAFS Internal Review

The WDAFS has established standard operating procedures for assuring that its work plan products are of the highest quality. These procedures involve a review of the documentation by the Policy Review Committee and the Executive Committee. Upon completion, the comments generated during both of these reviews will be provided to the Pallid Sturgeon Committee for consideration.

2.7 Finalize Technical Report

The final step in the peer-review process will involve finalization of the technical report that was prepared by the Pallid Sturgeon Committee. To facilitate this step in the process, the committee members will review the comments provided by the Policy Review Committee and the Executive Committee. Valid comments will be used to refine the text of the technical report, while rationale will be provided for any reviewers comments that are not addressed. Upon completion of the revisions, the Executive Committee will conduct a final review of the document, authorize it for release, prepare a cover letter, and the President will disseminate the final technical

report to the Recovery Group. The finalized report will be published as a WDAFS report and may be translated into a short article for *Fisheries*.

3.0 Project Budget and Schedule

This project is scheduled to be largely implemented over a six-month period between August 1, 2003 and January 31, 2004. Another six weeks will be required to facilitate the WDAFS Internal Review. The budget for the project is as follows:

<u>Budget Category</u>	<u>Amount</u>
WDAFS Administration Fee	\$ 3,000.00
Labor - Committee Members	N/C
Labor - Contractors	\$15,000.00
Travel Costs	\$10,000.00
Conference Calls (8@ \$300)	\$ 2,400.00
Photocopying	\$ 700.00
<u>Couriers and Mailing</u>	<u>\$ 200.00</u>
Total Budget	\$31,300.00

4.0 Committee Membership

The members of the WDAFS Pallid Sturgeon Committee are as follows:

Committee Co-Chairs

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