



U.S. FISH AND WILDLIFE SERVICE COLUMBIA FISHERY RESOURCES OFFICE ACCOMPLISHMENT REPORT

...Dedicated to Conserving Big River Ecosystems in America's Heartland.

Partnerships and Accountability

SEI Conducts an Independent Science Review of HAMP

Partners of the Habitat Assessment and Monitoring Program (HAMP) met with Sustainable Ecosystems Incorporated (SEI) in Sioux Falls, South Dakota to discuss the results of an independent science review of HAMP. Experts from various fields including sturgeon biology and large river hydrology reviewed the progress of various facets of HAMP. The intent of the Independent Science Review is to provide an unbiased opinion of this monitoring program. Reviewers on the SEI panel are from outside the program and than the Missouri River basin. This is the second time that HAMP has met with SEI and these meetings are intended to keep the program on track and ensure that sound science is being conducted. The first review was conducted in the spring of 2006 and was tasked with evaluation of the biological sampling portion of the program. This latest meeting was focused primarily on the physical mapping of the selected sampling areas. It is intended that the physical mapping and the biological sampling data be combined to provide habitat requirements for pallid sturgeon and other related species.

Both the biological and physical modeling portions of HAMP are intended to monitor shallow water habitat that is currently being constructed by the Army Corps of Engineers on the channelized portion of the Missouri River. These projects are intended to provide aquatic diversity to this portion of the Missouri River that was been lost due to modifications to the river to meet the needs of the Bank stabilization and Navigation Program. Although the intent of these projects is to recover the pallid sturgeon, it is recognized that improved aquatic habitat will be beneficial to many other species including those sought by anglers.



The results of this review were generally good and progress is what would be expected for a program of this size. Areas that need improvement will be addressed when SEI provides a report summarizing the findings of this meeting and data collected during the 2006 sampling season is analyzed. The results of this review will assist in changes to improve the quality of the program .

These results will lead to our vision in leadership in science to recover an endangered species and protect sensitive communities. This project will assist the Service’s Fishery Program with meeting its Partnership and Accountability goal of developing collaborative conservation strategies for aquatic resources.

Andrew B. Starostka

HAMP Partners Meet in Lincoln Nebraska

Representatives from the Army Corps of Engineers, US Fish and Wildlife Service and Nebraska Game and Fish Commission met in Lincoln Nebraska to discuss issues relating to the monitoring program. Andy Starostka from the Columbia FRO presented data collected during the previous field season and described sampling changes and strategies for the 2006 field season that were intended to move the program from the experimental stage and provide a sound scientific basis for the monitoring program. Schuyler Sampson of Nebraska Game and Fish Commission also presented data that Nebraska had collected. Much of the meeting consisted of discussing the data presented and sampling strategies to move the program forward.

The Habitat Assessment Project (formerly known as shallow water habitat) is intended to monitor both biological changes as well as physical changes to the constructed habitat sites and provide biological and hydrologic feed back on the physical construction of habitat by ACOE work crews on the channelized portion of the Missouri River.

These results will lead to our vision in leadership in science to recover an endangered species and protect sensitive communities. This project will assist the Service’s Fishery Program with meeting its Partnership and Accountability goal of developing collaborative conservation strategies for aquatic resources.

Andrew B. Starostka

Aquatic Species Conservation and Management

Title

Body

Author

Public Use





Improving Fisheries on Big Muddy National Fish and Wildlife Refuge

Columbia FRO worked with staff from the Big Muddy National Fish and Wildlife Refuge and the Missouri Department of Conservation (MDC) to improve and increase recreational fishing opportunities on scours at the Overton Bottoms unit of the Big Muddy National Fish and Wildlife Refuge. The flood of 1993 created three scour basins ranging from six to thirty acres in size that have since served as a home for a variety of fish species. Resource users have expressed an interest in establishing healthy recreational fisheries in these scours. Therefore the Columbia FRO has led a collaborative effort to improve this fishery by first sampling the Diana Bend, I-70, and NC4 scours at Big Muddy NFWR, then using the results of the sampling to determine what could be done for the fishery. Initial plans for improving the fishery included both the creation of habitat for recruitment and reproduction and the stocking of channel catfish.



The scour sampling targeted the entire fish community by using a variety of gear types. Mentionable catches included silver and bighead carp, walleye, smallmouth bass, and paddlefish. The sampling indicated little recruitment was occurring in the scours due to a severe lack of available habitat. In other words small fish were not growing big and replenishing the larger adult portion of the population harvested by anglers. After young fish hatch they have no place to hide, making them vulnerable to predation. In addition, the scours lack suitable spawning habitat limiting the amount of reproduction, causing recruitment to be hampered even more.

In order to improve the available habitat in the scours basins the Columbia FRO and Big Muddy Refuge staff placed reefs of cedar trees and cottonwood logs into them. This new habitat will increase areas for recruitment of crappie, sunfish and other young of the year fish and aggregate fish for anglers. Future surveys will show how well the new habitat has benefited the fish populations.

Refuge anglers have indicated a desire to catch riverine species such as buffalo and catfish. Our survey revealed both an abundance of smallmouth and bigmouth buffalo and a shortage of channel catfish. As part of a Cost Share Challenge Grant,





the MDC stocked fingerling (ten to twelve inches) catfish to boost the population. These collaborative catfish stockings will be continued annually to increase angler satisfaction at the refuge.



Future plans for the refuge scours include holding a kid's fishing clinic, creating additional access, creating more habitat for spawning and recruitment, and the additional stocking of channel catfish. Columbia FRO will sample these scours annually to monitor the condition and population of the fishery.

Our collective efforts with the Big Muddy NFWR and MDC to identify and implement ways to increase recreational



fishing supports the Partnerships and Accountability and Public Use goals of the Fisheries Programs Vision for the Future.

Cliff D. Wilson

Leadership in Science and Technology

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Columbia FRO, November 2006



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