

RECLAMATION

Managing Water in the West

BACKGROUND

Final Environmental Impact Statement for the Platte River Recovery Implementation Program

What is the proposed Federal action that the FEIS analyzes?

The proposed Federal Action is to help fund and implement a Platte River basin-wide, cooperative recovery implementation program (Program) for the four target species (the endangered whooping crane, interior least tern, and pallid sturgeon, and the threatened piping plover) which use riverine and nearby habitat along the Central and Lower Platte River in Nebraska.

Why is a Program required?

Federal water projects, and State and private water activities which require Federal permits or funding, must ensure that they do not increase the risk of extinction of threatened or endangered species, or adversely affect designated critical habitat for those species. Over the past 20 years, the U.S. Fish and Wildlife Service has determined that many water projects in the Platte River Basin have jeopardized the existence of these four species by altering river and nearby habitat along the Central and Lower Platte in Nebraska.

Before the 1880s the Platte River in Nebraska was a broad and braided river subject to high spring floods, great loads of sediment, and occasional summer droughts. These conditions caused continuous movement of the braided river channels and sandbars resulting in a channel that was very broad, shallow, sandy, and generally without vegetation. These are the conditions which supported the four target species. However, over the last 150 years as much as 90 percent of the habitat used by the three bird species along the Central Platte River has been lost, primarily due to the effects of the many water storage and diversion projects throughout the basin and land development along the river in the habitat area.

Leaders from the States of Wyoming, Colorado, and Nebraska, and the Department of the Interior, along with water managers and environmental group representatives, believe that the best way to address these impacts is through a basin-wide, cooperative effort to improve river flows and land habitat for the target species. This was the basis for the Cooperative Agreement signed by the States and Interior signed in 1997.



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Such a Program, they believe, will be the most efficient, effective, and equitable way to create improvements in the habitat for the target species. In doing so, such a Program will allow hundreds of water projects and activities in the Platte River Basin to continue current operations and meet the requirements of the ESA for these species.

What happens if a basin-wide, cooperative Program is not implemented?

All Platte River Basin water projects or activities that are operated by, funded by, or authorized by the Federal Government (which includes a large number of private projects), must operate in compliance with the Endangered Species Act (ESA). They must avoid causing impacts that threaten the continued existence of the listed species or adversely modify designated critical habitat. Where operations of projects have historically caused such effects, offsetting measures must be implemented to restore habitat.

Without a basinwide, cooperative Program to accomplish habitat restoration, each water project or activity will be responsible for its own offsetting measures. For many reasons, the costs to individual projects in money and water resources are likely to be much greater if a cooperative Program is not implemented. Details are found in the FEIS and attachments.

Does the FEIS identify the preferred alternative for the Program?

Yes. The Department of the Interior has identified the Governance Committee Alternative as its preferred alternative, based upon the analysis in the Draft and Final EIS and the public comment on the Draft EIS.

How much will the Governance Committee Alternative cost?

The projected costs of the Program First Increment are addressed in the Governance Committee's Platte River Recovery Implementation Program document, Attachment 1, Finance Document (December, 2005), which can be found on the Program website: <http://www.platteriver.org>. (The following is taken from that document).

“The following table depicts the Cash Contributions and Cash Equivalent Contributions that will be provided by the Department of the Interior (DOI) and the Signatory States during the First Increment of the Program:

Program Contributions
(values in millions of dollars)

| Contributions | Total | DOI | States | Description |
|----------------------|---------------|---------------|---------------|--|
| Cash | 187.14 | 157.14 | 30.0 | Colorado – 24.0; Wyoming 6.0 |
| Cash Equivalents | | | | |
| Land | 10.0 | | 10.0 | Cottonwood Ranch/Deer Creek Lands |
| Water | 120.19 | | 120.19 | Water from the three initial State projects: Pathfinder Modification, Tamarack Project, Lake McConaughy Environmental Account. |
| Total | 317.33 | 157.14 | 160.19 | |

How does the Preferred Alternative benefit the target species?

The Preferred Alternative improves habitat conditions in the Central Platte Habitat Area (lands along the Platte River from Lexington to Chapman, Nebraska) for the three target bird species (whooping crane, interior least tern, piping plover) by:

- Increasing the achievement of Fish and Wildlife Service target flows for the species by roughly 130,000-150,000 acre-feet on an average annual basis, primarily by increasing river flows in the spring, summer, and early fall (see following question for more details).
- Leasing or acquiring land habitat in the Central Platte Habitat Area from willing sellers and restoring habitat. Habitat restoration focuses primarily on restoration of wet meadow areas and areas of wide unvegetated river channel.
- Habitat restoration methods to be tested and employed include:
 - improving channel habitat by clearing wooded river islands and lowering island elevations to broaden the flow of water within existing river banks;
 - moving river sand perched on wooded islands back into the active channel to begin offsetting the ongoing erosion and narrowing of the river channel and to support formation of sandbars;
 - creating a 2- to 3-day pulse flow each year, within existing channel capacity, to build higher sandbars and scour annual vegetation from the river channel.
- Taking measures on Program lands to reduce disturbance of roosting, nesting, or foraging birds.
- Implementing an extensive program of research and monitoring of the target species and their habitat, and the response of the species and the river system to Program actions. This includes a focused program of research related to the habitat use and needs of the pallid sturgeon.

How is water provided to the Program?

Each State contributes a project for the Program that provides a means to improve river flows in the Central Platte Habitat Area in Nebraska:

The State of Wyoming provides the Pathfinder Modification Project that restores some of the space in Pathfinder Reservoir that has been lost to sedimentation. This project provides roughly 34,000 acre-feet of storage space which can store water for use by the Program.

The State of Colorado provides the Tamarack Project, which re-times roughly 10,000 acre-feet of flows in the South Platte to help improve the timing of flows to the Habitat Area in Nebraska.

The State of Nebraska provides an Environmental Account in Lake McConaughy which can store up to a maximum of 100,000 acre-feet of water for the Program. Together these three State projects improve flows in the Central Platte Habitat Area by roughly 80,000 acre feet per year on average.

The Program also includes thirteen smaller water supply or conservation projects to provide roughly an additional 60,000 acre-feet of flow improvement in the Habitat Area in Nebraska.

How does the Program use Adaptive Management, Research and Peer Review?

An adaptive management approach to habitat restoration is a key part of the Program. The Program will extensively monitor Program actions and the resulting changes in habitat and species response. This information will be used to identify the best, most cost-effective methods, and to adjust Program actions and management objectives.

The Program will conduct research on key aspects of target species biology and habitat use, with the aim of filling information gaps important to the Program.

The Program's plans for adaptive management, monitoring, and research, and the findings from those activities, will be subject to independent peer review and will be made available to the public.

In 2003, at the request of the Governance Committee, the Department of the Interior funded a \$700,000 National Research Council review of the science associated with the target species, the Service's flow and habitat recommendations, and the Department's analysis of the river processes related to the loss of habitat. After reviewing the available data and literature, the Council gave a strong endorsement of the Department's science and the underlying need for the recovery program. The final Council report, *Endangered and Threatened Species of the Platte River*, was released in 2005.

How does the Preferred Alternative affect farmers and water users?

Farmers and other water users in the basin could choose to temporarily lease water to the Program. Farmers and other land owners in the Central Platte Habitat Area could offer to sell or lease land to the Program, or sell easements, for habitat restoration. This and other effects of Program water management could produce a reduction in farmed acres of 6,000 to 17,000 acres total in the three Basin States (out of roughly 11 million irrigated acres), depending upon assumptions. This would produce up to a \$4-5M reduction in annual gross crop revenues in the Basin.

How does the Preferred Alternative affect recreation?

The FEIS analysis projects reductions in recreation use of the North Platte Reservoirs in Wyoming and at Lake McConaughy in Nebraska due to somewhat lower water levels. On average, annual visitation and fishing at the Wyoming North Platte Reservoirs are likely to be reduced 1 to 2 percent and 6 percent at Lake McConaughy in Nebraska.

The Preferred Alternative increases the probability that lake levels in Seminoe and Pathfinder Reservoirs could reach critical levels for the fishery during a period of extreme drought.

How does the Preferred Alternative affect local economies?

Overall, in all of the Platte River Basin economic regions, the positive and negative economic impacts of the Preferred Alternative are less than one tenth of one percent of the existing level of activity (sales, income, taxes, and employment.)

It is expected that individuals will choose to lease or sell water or land to the Program only if it is economically advantageous to do so. Thus, at an individual level, water or land owners could benefit financially from the Program. In addition, many elements of the Program bring money into the local economies through expenditures for construction and land management. The primary negative effect of the Program on local economies is through reductions in crop production (mostly due to voluntary water leasing) and hence a reduction in expenditures for local agricultural services and supplies. Reduced recreation visits also negatively affect the local expenditures. Taken together, all aspects of the Preferred Alternative result in very small increases or very small decreases in local economic activity, depending upon the location in the Platte Basin.

Does the Preferred Alternative affect public health and safety?

Some individuals have expressed concern that the Program would increase the populations of mosquitoes and non-migratory, resident waterfowl in the Central Platte area, possibly leading to increases in mosquito-borne disease and problems of water contamination from waterfowl dropping and other nuisance problems. The FEIS analysis of proposed land and water elements in the Central Platte area indicates that,

(1) the Program would not increase areas of standing water in the summertime (the type of wet meadow habitat that the Program seeks to restore is not wet during the summer mosquito breeding season), (2) the Program alternatives do not increase habitat suitable for waterfowl nesting and hence would not increase the overall population of geese and other waterfowl, and (3) the Program alternatives do not increase the type of protected, irrigated, urban habitat preferred by non-migratory, resident geese populations (e.g., ponds and parks).

Who will decide whether to move ahead with Program implementation?

To initiate the Program, the Secretary of the Interior and the Governors of Nebraska, Wyoming, and Colorado will enter into an implementing agreement for the Program.