# Endangered Species Act / Recovery Drives Platte River Cooperative Agreement

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## **Executive Summary**

On July 1, 1997, Nebraska, Colorado, Wyoming and the United States Department of the Interior entered into a partnership to develop a basin-wide recovery "program" for threatened and endangered species in the Central Platte River Basin. The program's primary purpose is to provide recovery oriented habitat and water for the whooping crane, piping plover and the interior least tern. The pallid sturgeon, which uses the Platte only near its mouth, is also a target species for the proposed program. For now it is uncertain what types of efforts if any will be directed specifically towards sturgeon recovery.

Each party entered into the agreement voluntarily and each could opt out at any time. The proposed program takes a phased, adaptive management approach and has three primary components; the Water Action Plan (WAP), the Depletion Plan, and a Habitat Plan. The WAP is designed to put "new water" into the river (water that would not normally be there, at that time). Water goals for the program relate to "target flows", which have been identified by the USFWS. The Depletion Plan is designed to prevent increased shortages to target flows caused by new or expanded uses of water. New uses that contribute to target flow shortages would be subject to mitigation, either with water or with dollars that could be used to produce water. The Habitat Plan has a first increment goal to develop and/or protect at least 10,000 acres of terrestrial habitat between Lexington and Chapman. This habitat would be acquired from willing participants via leasing, conservation easements, and (as a last option) through purchase. Focus would be placed on riverine and wet meadow type habitat.

Nebraska has undertaken a comprehensive study called the Cooperative Hydrology Study (COHYST), to determine to what extent ground water is hydrologically connected to surface water and how new ground water uses adversely effect the Platte and it's tributaries. Nebraska and the other states will also contract for a study to determine how improving flows to better meet target flows with "new water" or otherwise might impact sediment load and transport, and what (if any) effect that might have on the depth and width of the streambed.

A Draft Environmental Impact Statement for the proposed program is to be released in early 2002. One of the alternatives to be considered in the draft EIS is the proposed "program". Another is called the "No Action" alternative, which is basically no "program". Under the "No Action" alternative the obligation for overcoming adverse effects rests with individual citizens and water project operators instead of with the "program".

Sometime in late 2002 or early 2003, Nebraska will be presented with a "program" document and with a decision about whether to sign on. The best we can do until then is to stay informed, as this program is being drafted and revised continually.

### Introduction

Nebraska, Colorado, Wyoming and the United States Department of the Interior have entered into a partnership to develop a basin-wide recovery program for threatened and endangered species in the Central Platte River Basin. The program's primary purpose is to provide recovery oriented habitat and water for the whooping crane, piping plover and the interior least tern. The pallid sturgeon, which uses the Platte only near its mouth, is also a target species for the proposed program. For now it is uncertain what types of efforts if any will be directed specifically towards sturgeon recovery.

The "Cooperative Agreement" (CA), or the "agreement to try to reach and agreement" on a basin wide recovery program, was signed on July 1, 1997 by the Secretary of Interior Bruce Babbit and the Governors of Nebraska, Colorado, and Wyoming. Each party entered into the agreement voluntarily and each could opt out at any time

The proposed "program" takes a phased, adaptive management approach. Adaptive management means that initial actions may be modified as determined by the results of those actions. Assuming the cooperating partners agree to the terms of the program, the first phase is expected to be 10 to 13 years in length. A ten-member governing body call the Governance Committee (GC) has been responsible for the activities undertaken to date. The GC includes representatives from the U.S. Fish and Wildlife Service (USFWS), the U.S. Bureau if Reclamation, each of the three states, water users from three geographic areas in the Platte River Basin, and environmental organizations. Dale Strickland of West Inc., an environmental consulting firm out of Cheyenne, WY is the acting Executive Director. The Executive Director is responsible for assisting the parties in developing the different elements of the proposed program. The proposed recovery program has three primary components; Water Action Plan, Depletion Plan, and a Habitat Plan. Following is a brief description and the current status of each.

## Water Action Plan (WAP)

The USFWS has identified target flows for the endangered species in the Central Platte; i.e. flow levels the USFWS believes are needed to provide adequate habitat for those species. These flows would be measured at Grand Island. The USFWS believes that actual annual flows currently fall short of those target flows by an average of approximately 417,000 acre feet (af) per year. To put this into perspective, one cubic feet per second (cfs) of river flow is equal to approximately 2 af per day, so a flow of 570 cfs would result in a daily total of 1,140 af, which would result in an annual total of 416,100 af. There is some disagreement on whether the identified target flows are biologically or hydrologically necessary or even beneficial to the habitat and/or recovery of the species. The USFWS is willing to review and possibly revise the target flows, as better science becomes available.

In the meantime, incremental improvements in flows would be sought. The goal during the first increment of the proposed program would be to reduce shortages to the current target flows at Grand Island by an average of 130,000 to 150,000 af per year. Three projects already being implemented by the three States will produce an estimated 80,000 af per year. The first project is an "environmental account" (EA) in Lake McConaughy, where 10% of the storable inflows between October and April are available to be stored, managed and released in a manner to reduce shortages to target flows. There is a cap of 100,000 af that can be stored annually and a carryover limit of 100,000 af, leaving a 200,000 af total storage cap. The year 2000 was the first year of operation for the EA and favorable weather resulted in a 137,000 af balance to start the water year. In June of 2000 the USFWS released the first EA water out of Lake McConaughy and because of very dry conditions, releases continued throughout most of the summer, usually at a rate of 400 to 550 cfs. The EA release total for water year 2000 (Oct 1, 1999 to Sept. 30, 2000) was 82,810 af. After seepage and evaporation losses were factored in the EA balance at the end of September, 2000, was 44,026 af.

The second project is an enlargement of Pathfinder Reservoir in Wyoming. Water from that project will be managed with a similar objective. The third project is the Tamarack Project in Colorado. The Tamarack Project would take water out of the river during times of excess flows (most often during the winter months) and temporarily store it in shallow alluvial aquifers where it would naturally return to the river at times when flow shortages are most likely (in the summer months). Tamarack is under construction and currently is partially operational, while Pathfinder is still in the planning stages.

The additional 50,000 to 70,000 af necessary to realize the 130,000 to 150,000 af goal for the first increment will be obtained through other projects. These projects will be selected throughout the basin, implemented through out the remainder of the program, and must be acceptable to the representative states.

These projects are most likely to be storage and retiming and/or conservation oriented.

A Draft Water Action Plan which lists the projects now proposed was completed in September, 2000, and will be revised as necessary. Inclusion of projects in the WAP simply means that they will be advanced to the feasibility level of study to undergo further analysis (i.e. economic and social impacts etc.). Changes are likely before final decisions are made. Finally, participation in these projects by entities or individuals is intended to be voluntary and incentive based, so similar to state participation in the program in general, a participant could participate in and/or opt out of projects at their discretion.

Projects proposed for Nebraska at the present time include: (1) small storage and retiming reservoir(s) located on or near the supply canal for Central Nebraska Public Power and Irrigation District (CNPPID) somewhere between Brady and Lexington, (2) water rights leasing, (3) agriculture related water management incentives, (4) management of the Gosper, Phelps and Kearney County ground water mound, (5) drainage cutoffs located in the Tri Basin NRD, (6) Dawson and Gothenburg Canal groundwater recharge in Dawson County, (7) power interference (retaining water instream that would otherwise be released for off season hydropower production, and (8) additional environmental account water from CNPPID's system (attained from conservation measures already being implemented).

## Sediment

Flowing water by nature needs to carry sediment. In many storage and retiming type projects the sediment has settled out and the water released is sediment "hungry". This sediment hungry water will then get the required sediment from wherever it can, many times from the streambed and/or bank. There is some concern as to how improving flows to better meet target flows with "new water" or otherwise might impact sediment load and transport, and what (if any) effect that might have on the depth and width of the streambed. Nebraska and the other states will contract for a study to determine what impacts might be associated with augmenting current flows.

# **Depletion Plan**

While the WAP is designed to put "new water" into the river (water that would not normally be there, at that time), the Depletion Plan is designed to prevent increased shortages to target flows caused by new or expanded uses of water. New uses that contribute to target flow shortages would be subject to mitigation, either with water or with dollars that could be used to produce water. A new depletion is defined as – new or expanded water related activities begun on or after July 1, 1997, including new or expanded uses of surface water or hydrologically connected ground water which adversely affect Platte River target flows in the Lexington to Chapman reach or which adversely effect at least some water right holders above Chapman. Remember, the overall goal of the program

is to reduce shortages to target flows. Each state is responsible for developing it's own depletion plan and Nebraska is still working on it's plan.

Nebraska has undertaken a comprehensive study called the Cooperative Hydrology Study (COHYST), to determine to what extent ground water is hydrologically connected to surface water and how new ground water uses adversely effect the Platte and it's tributaries. The first results of this study are expected to become available sometime towards the end of 2001.

A brief overview of Nebraska's current New Depletion proposal follows:

- uses prior to 7-1-1997 would be grandfathered (this is written into the July, 1997 CA document)
- the "State" would assume mitigation responsibility for new uses begun from 7-1-1997 to 12-31-2003
- the user would assume at least part of the mitigation responsibility for new uses begun after 12-31-2003, with the state potentially picking up the remainder
- mitigation would be required on qualifying uses that reduce flows during times of target flow shortages
- mitigation would be in water or in dollars which would be used to produce water
- the need to mitigate would be based on "consumptive use" so, replacement wells for similar acres and similar crops would not be "new" uses
- would apply to all new uses: agriculture, industrial, and municipal

# Where will mitigation water or dollars come from?

Projections show that some of the WAP projects located in Nebraska should produce more water than Nebraska is proposing to contribute to the "program" water account. To what extent the extra water produced by these projects would be used to offset new depletions for which the state would assume full responsibility (those begun between 7-1-1997 and 12-31-2003) and to what extent this water would be used to offset new depletions begun after 12-31-2003 has not been determined.

## Water rights leasing and water banking

Water rights leasing and water banking are a couple of other potential ways to secure water for offset purposes. Legislation does not exist in Nebraska right now for either, but was proposed and probably will again be proposed in a future session. Water leasing is simply what it would imply. One could obtain or transfer the use of or the right to use X amount of water at X price. A water bank would simply be an entity that would serve the same function as the bank you write your checks on – except it would hold (on paper) and do the accounting of water – sort of a water broker. If a party needed offset water for a new depletion, they could go to the water bank and buy water from the bank to offset the new depletion. Deposits into the bank could result from retiring an existing use or reducing a consumptive use. Again, willing participant, in this case willing buyer,

willing seller would be the rule. The water bank could potentially be managed by an NRD, an irrigation district, the state or a newly created institution.

## **Land Component**

Terrestrial habitat is also necessary to meet the needs of the species. The proposed program would over time result in the development and protection of 29,000 acres of terrestrial riverine habitat between Lexington and Chapman. This, however could change as a result of adaptive management. The goal for the first increment of the proposed program would be to develop and/or protect at least 10,000 acres. NPPD's Cottonwood Ranch property located between Overton and Elm Creek (2,650 acres) has been dedicated to the program. This leaves an unmet first increment need of 7,350 acres. This habitat would be acquired from willing participants via leasing, conservation easements, and (as a last option) through purchase. Focus would be placed on riverine and wet meadow type habitat.

The Platte River Whooping Crane Maintenance Trust, the Nebraska Game and Parks Commission, the Nature Conservancy, and the Audubon Society currently own 9,000 to 10,000 acres of potentially eligible habitat. Eventually, those holdings are expected to contribute to meeting the 29,000 acre goal, but they will not count toward the 10,000 acre first increment goal.

### **NEPA Review**

The National Environmental Policy Act (NEPA) requires that any federal agency prepare an Environmental Impact Statement (EIS) when proposing a major action which could cause significant environmental impact. A Draft Environmental Impact Statement for the proposed program is to be released in early 2002. It will evaluate a number of alternatives and identify a Preferred Alternative. A comment period will follow (usually around sixty days), and the Final EIS, which must address all written comments, will then be released. The goal for release of the official Record of Decision by the Department of Interior is late 2002 or early 2003, it will then be presented to the Secretary of Interior for his or her signature. Each of the three States will also be assessing the proposed program and making a decision whether it should be approved. With this timeline, the States would have a proposed program document to serve as an impetus for related/required 2003 legislative activity. A Cooperative Agreement to implement a program would be signed by June 30, 2003. If required, the Governance Committee could extend the Cooperative Agreement (deadline) an additional six months.

One of the alternatives to be considered in the draft EIS is the proposed "program". Another is called the "No Action" alternative. The No Action alternative is not the "status quo". The USFWS has issued the opinion that the species are "in jeopardy". Consequently, some type of recovery oriented action will be required. The *No Action* alternative is basically no "program" or no basin-wide cooperative recovery effort. Instead of the obligation for overcoming

adverse effects resting with the "program", individual citizens and water project operators would have to assume that responsibility under the "no action" alternative. With this comes individual Section 7 consultations on any activities with a federal "nexus". Nexus means connection or relationship. A Section 7 consultation is an evaluation to determine if the action has or potentially could have a negative impact on the endangered species. This would include any projects which utilize federal permits, dollars, expertise or any other type of assistance. Ag programs and irrigation projects could be affected, though the full extent of what may later be determined to have a federal nexus is not now known.

#### **Bottom Line**

The states (including Nebraska) have considerable work to do prior to deciding whether to implement a program. Funding availability as well as budget timetables are a common concern and Nebraska needs to finalize it's depletion plan. Affected NRD's will also play a major role in implementation, especially the new depletions plan and the boards of those districts will have difficult decisions to make.

As stated earlier "status quo" is not an option. Recovery efforts will be required by the USFWS. However, until a state officially signs the agreement it is not bound in any sense of the word to the actions outlined in the agreement. Even if a state signs the agreement it may opt out at any time if it concludes that continued participation is no longer in it's best interest. Some important questions to consider include: Are Nebraskans better off participating in a cooperative basin-wide recovery effort? Or would we be better off leaving the decisions to the US Fish and Wildlife Service? What actually will need individual Section 7 consultations if there is no program and how burdensome will the results be? To what extent will groundwater be involved? What impacts will meeting target flows have on sediment loads and ultimately the streambed and/or bank? There are many unanswered questions. The COHYST and sediment studies mentioned earlier will provide some very valuable information but it won't answer all the questions.

Sometime in late 2002 or early 2003, Nebraska will be presented with a "program" document and with a decision about whether to sign on. The best we can do until then is to stay informed, as this program is being drafted and revised continually. For more information on the CA including meeting schedules and locations try the internet at www.platteriver.org or for information and updates on COHYST try www.cohyst.org.

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