

WORKING DRAFT
Platte River Recovery Implementation Program
First Increment Extension Proposal

General Comments from Colorado Team

- Costs – The actual commitments need to be informed by the available budget for the First Increment Extension. The overall costs of this proposal are of concern for Colorado. This needs further discussion by the GC.
- Priorities – Given anticipated budgetary constraints, priority should be given to achieving the Water Action Plan milestone, to maintaining the Program’s First Increment work/assets, and to acquiring a knowledge base upon which to set up the Second Increment.
- Land –Are the additional proposed acres of riverine habitat warranted in view of the existence of habitat supporting the long-term objective of 29,000 acres inclusive of conservation lands owned by others? (page 3).
- Pallid – Would like to explore commitment to conduct additional research re: pallid sturgeon biology and habitat needs, pallid use of the Platte, and the relationship between pallid use and flow, prior to implementation of Program “flow releases to benefit pallids.” (pages 5 - 6).

PREAMBLE

The Platte River Recovery Implementation Program (Program; PRRIP) became effective January 1, 2007 following signatures by the Governors of Colorado, Wyoming, and Nebraska and the U.S. Secretary of the Interior. PRRIP provides Endangered Species Act (ESA) compliance for water related activities within the three states and Federal Government while working to provide recovery benefits for four endangered and threatened species.

The First Increment of the Program began in 2007 and extends through 2019. The Program’s long-term goal is to improve and maintain the associated habitats of the target species. This includes: (1) improving and maintaining migrational habitat for whooping cranes and reproductive habitat for least terns and piping plovers; (2) reducing the likelihood of future listing of other species found in this area; and (3) testing the assumption that managing flow in the central Platte River also improves the pallid sturgeon’s lower Platte River habitat.

The Program signatories committed to achieving the following objectives by the end of the First Increment of the Program:

- (1) providing water capable of improving the occurrence of Platte River flows in the central Platte River associated habitats relative to the present occurrence of species and annual pulse target flows by an average of 130,000 to 150,000 acre-feet per year at Grand Island, through reregulation and water conservation/supply projects. Department of the Interior (DOI) and the states agree that United States Fish and Wildlife Service (FWS) target flows will be examined through the Adaptive Management Plan and peer review and may be modified by FWS accordingly. DOI and the states have agreed, however, that during the First Increment, species and annual pulse target flows serve as an initial reference point for determining periods of excess and shortage in the operation of Program reregulation and water conservation/supply projects.
- (2) protecting, restoring where appropriate, and maintaining at least 10,000 acres of habitat in the central Platte River area between Lexington and Chapman, Nebraska.

During the First Increment ESA compliance is measured through progress in achieving ten Program Milestones that are related to the First Increment Objectives. Milestones and current Program status are presented in Table 1.

Table 1. Platte River Recovery Implementation Program ESA Compliance Milestones (Final Program Document, Attachment 2, Pages 1-2)

Milestone	Program Status
1. The Pathfinder Modification Project will be operational and physically and legally capable of providing water to the Program by no later than the end of Year 4 of the First Increment.	Achieved
2. Colorado will complete construction of the Tamarack I and commence full operations by the end of Year 4 of the First Increment.	Achieved
3. CNPPID and NPPD will implement an Environmental Account for Storage Reservoirs on the Platte System in Nebraska as provided in FERC licenses 1417 and 1835.	Achieved
4. The Reconnaissance-Level Water Action Plan, as may be amended by the Governance Committee, will be implemented and capable of providing at least an average of 50,000 acre-feet per year of shortage reduction to target flows, or for other Program purposes, by no later than the end of the First Increment.	Not Achievable by end of 2019
5. The Land Plan, as may be amended by the Governance Committee, will be implemented to protect and, where appropriate, restore 10,000 acres of habitat by no later than the end of the First Increment.	Achieved
6. The Integrated Monitoring and Research Plan, as may be amended by the Governance Committee, will be implemented beginning Year 1 of the Program.	Achieved
7. The Wyoming Depletions Plan, as may be amended with the approval of the Governance Committee, will be operated during the First Increment of the Program.	Achieved
8. The Colorado Depletions Plan, as may be amended with the approval of the Governance Committee, will be operated during the First Increment of the Program.	Achieved
9. The Nebraska Depletions Plan, as may be amended with the approval of the December 7, 2005 Milestones Document 2 Governance Committee, will be operated during the First Increment of the Program. ¹	Not Achieved
10. The Federal Depletions Plan, as may be amended with the approval of the Governance Committee, will be operated during the First Increment of the Program.	Achieved

The First Increment land objective and associated milestone has been achieved. The Program currently protects in excess of 12,000 acres in the Associated Habitat Reach (AHR). The First Increment water objective (Milestone #4) and the Nebraska Depletions Plan (Milestone #9) have not been achieved. All State water projects and the Colorado, Wyoming, and Federal depletions plans are operational. The Program currently provides approximately 90,000 acre-feet towards the First Increment objective of 130,000 to 150,000 acre-feet. Additional water projects in the planning and/or design phase are expected to provide an additional 40,000 acre-feet of water. However, they will not be operational prior to the end

¹ The Nebraska Depletions Plan is dependent of the completion of J2 reservoir to achieve full implementation.

of the First Increment in 2019 and may require more funding than what is currently available during the First Increment. As such, Milestone 4 will not be achieved.

Although implementation of the Integrated Monitoring and Research Plan (IMRP) has been achieved, the Program has not yet examined the FWS' target flows through the Adaptive Management Plan (AMP). The only flow action prescribed in the AMP is the short-duration high flow (SDHF) as part of the Flow Sediment Mechanical (FSM); however, SDHF flow is not a FWS target flow. The Program implemented research and monitoring to evaluate the potential effectiveness of FSM. The Program attempted to evaluate target flows but found that not to be possible due to the lack of a clear relationship of target flows to the species (i.e. summer target flows) or due to not using the best available information (i.e. whooping crane flows Farmer et. al 2005). ~~Examination of target flows would require updating of the Adaptive Management Plan to identify a systematic approach to determining flows needed in the central Platte River to support the target species and their use of the habitat (Program Flows) to address uncertainties and implementation of management experiments to address those uncertainties. These target flow related tasks cannot be accomplished prior to the end of 2019.~~ Examination of target flows was described within the original Program Document and could be undertaken under the existing adaptive management framework.

Section II.D of the 2006 Final Program Agreement makes provision for the Agreement to be extended or amended by the written agreement of all signatories. The Signatories are proposing a 10-year Extension of the First Increment, while others believe a 13-year Extension is necessary. The Extension would not change First Increment objectives, milestones, or the implementation framework. It would provide additional time to complete and operate Program water projects and to conduct the monitoring and research necessary to determine the best use of Program water to benefit the target species and their use of the habitat through the Adaptive Management Plan. Additional research and monitoring is necessary to provide a sound knowledge base upon which to structure a Second Increment.

It is anticipated the Program will provide some additional species-related benefits during the First Increment Extension period such as acquisition of a limited amount of additional habitat lands. Potential additions include acquisition of additional habitat lands through sponsorship agreements (example - Central's Jeffrey Island habitat is credited to the Program long-term habitat objectives) and determine if releases of Program water can provide measureable benefits to the pallid sturgeon. These additional enhancements to the Programs first increment objectives are included in the proposed Extension activities.

PROPOSED FIRST INCREMENT EXTENSION ACTIVITIES

Proposed Extension activities are organized according to the existing Program land, water, and adaptive management plan structure.

Land Plan

The First Increment milestone of protecting 10,000 acres has been achieved. Restoration and management of habitat lands is ongoing. Extension Land Plan activities will proceed under the same principles that have guided land acquisition and management since Program initiation. All ~~habitat~~ land acquisitions will proceed under a willing buyer/willing seller approach and all management activities will be conducted in accordance with the Program's Good Neighbor Policy.

Land Acquisition²

- Review and renew (as appropriate) existing leases and management agreements.
 - Renew Cottonwood Ranch sponsorship agreement (2,650 acres)

² The PRRIP has achieved the First Increment land milestone. Additional land acquisition is considered to be a plus-up.

- Renew Broadfoot South lease (15 acres)
- Renew management agreements at complexes (1,140 acres)
- A comprehensive review of the amount, use, distribution and characteristics of all PRRIP and other conservation lands should be conducted to guide future land acquisition, management, and consideration for inclusion into PRRIP long-term land goals.
- Negotiate sponsorship agreement with Central Nebraska Public Power and Irrigation District for Jeffery Island (4,100 acres) and manage as part of the Plum Creek habitat complex.³
- Determine process and requirements to negotiate sponsorship agreements for conservation lands to be counted towards long-term PRRIP land goals.
- Targeted acquisition of additional habitat lands.
 - Review and consider disposal of existing habitat lands that do not possess significant habitat value for target species.⁴ Use proceeds for acquisition of high-value habitat lands.
 - Complete acquisition of⁵ up to an additional 60 acres⁶ of non-complex tern and plover nesting habitat (any of the 60 acres not acquired before the end of First Increment (2019)).⁷
 - ~~Acquire up to an additional 1,500 acres of riverine habitat adjacent to existing Program habitat complexes. Acquisition focus would be on the Odessa-Kearney bridge segment.~~
 - Acquire at least an additional 1,500 acres of ~~riverine~~ complex habitat This 1500 acres is not to be replacement of excess lands⁸ and any complex lands excessed should be replaced with additional new complex acres. Acquisition would continue focusing on the Odessa-Kearney bridge segment, with consideration given for development of a new complex in the Gibbon to Shelton bridge segment or high quality riverine land downstream of Grand Island where little to no conservation ownership or management exists.

Land Management

- Manage lands acquired by PRRIP for the benefit of the target species⁹ and species of concern when not in conflict with the target species.
- Conduct land management actions within the framework of the AMP.
 - ~~Implement and evaluate mechanical creation and maintenance of on and off channel habitat.~~
 - ~~Implement and evaluate full scale sediment augmentation.~~
- Investigate potential of improving quality of existing grasslands and any cropland restorations on PRRIP ownership to connect remnant grasslands to reduce negative impacts to other at risk species.

Water Plan

The First Increment milestone of providing an average of 50,000 – 70,000 acre-feet of water in addition to state water projects has not been achieved.¹⁰ Water conservation and supply projects are ongoing and the Program has developed an implementation path to achieve the lower end of this milestone in

³ It is not anticipated that the PRRIP will reimburse CNPPID for prior restoration and management expenditures.

⁴ ~~For example, marginal wet meadow acres could be sold and used to fund acquisition of riverine habitat.~~

⁵ Acquire can include fee-title purchase, conservation easement, lease, and management agreement.

⁶ 60 acres of bare sand habitat. Acquisition may begin prior to 2019.

⁷ 100 acres of additional habitat would achieve the FWS objective of supporting a stable to increasing plover population in the AHR through the First Increment Extension period.

⁸ Excess lands sold with “no build easement” and lands currently or previously (prior to 1997) in conservation ownership will not count toward the 1,500 acres of “new” additional habitat.

⁹ ~~Primarily the piping plover and whooping crane. It is anticipated that piping plover management actions will also benefit the interior least tern.~~

¹⁰ Approximately 10,000 acre-feet have been provided to date.

approximately 2022. By 2029, meet the goal of 150,000 acre feet of water per year at Grand Island, capable of improving the occurrence of Platte River flows in the central Platte River associated habitats relative to the present occurrence of species and annual pulse target flows. Extension Water Plan activities will proceed under the same principles that have guided water supply and management activities since Program initiation.

Water Conservation and Supply

- Modify state and federal depletions plans to remain consistent with operational or statutory requirements.
 - Modify Colorado's irrigated acre depletion plan reporting requirement in order to correspond with Colorado's current analysis schedule.
 - Modify Nebraska New Depletion Plan (NNDP) in relation to Nebraska's statutory requirements.
 - Modify Nebraska New Depletions Plan to ensure that current flows in excess to target flows are not diverted from the Platte Basin or for consumptive use.
- ~~• Update the Program Water Action Plan to evaluate the existing portfolio of Program water assets developed during the First Increment.~~
- Renew water project agreements as deemed necessary to achieve water milestone.
- Finish construction of J-2 Regulating Reservoir by and achieve at least 130,000 acre-feet by 2022.
- Complete J-2 and other WAP projects to achieve 1st Increment objectives and monitor response of target species.

Program Water Management

- Aggressively continue to implement channel conveyance improvements at North Platte choke point through the commitment of \$XX annually for efforts that are directed toward achieving and maintaining 3,000 cfs conveyance capacity while remaining below flood stage. Additionally, improvements should allow for the delivery of Program water that is likely to yield 800 cfs at the habitat reach during the irrigation season.
- ~~• Develop and implement joint operational plans for PRRIP water projects.¹¹~~
- ~~• Utilize Program water assets to implement and evaluate flow-related management actions contemplated in the Program's AMP.
 - Implement a minimum of one full-scale SDHF release once Program water projects are operational and conveyance issues are resolved. Evaluate against performance predictions based on retrospective analyses of First Increment natural flow events.
 - Implement and evaluate flow releases associated with examination of FWS target flows.~~
- Implement full-scale SDHF releases and/or other actions associated with allowing for flow releases up to flood stage in the associated habitat reach once Program water projects are operational and conveyance issues are resolved. Evaluate benefits of SDHF flow releases against other flow management actions or alternatives as well as performance predictions based on all available information including natural flow events.

Adaptive Management Plan

The First Increment milestone of Integrated Research and Monitoring Plan implementation has been achieved. The Program's Adaptive Management Plan focuses on evaluation of two competing management strategies (flow-sediment-mechanical, and mechanical) that contemplate a single flow

¹¹ Operation of PRRIP water projects requires joint coordination between water project sponsors, Nebraska Department of Natural Resources, USFWS Environmental Account Manager, and PRRIP.

management action (short-duration-high-flows). The Program has evaluated the ability of SDHF to create suitable tern and plover nesting habitat and is nearing completion of an analysis of the ability of SDHF to maintain suitably-wide unvegetated widths for whooping cranes. Due to their absence from the AMP, the Program has not examined target flows. In preparation for the First Increment Extension or by the second year of the Extension, the AMP will be updated to include evaluation of flows needed by the species and species habitat¹² during the First Increment Extension¹³. This will shift the AMP focus away from testing of two competing management strategies toward testing of individual flow, sediment, and mechanical management actions. Planning for implementation of the AMP during the Extension will occur prior to the beginning of the Extension in the year 2020 and will include the use of tools such as Structured Decision Making (SDM) to evaluate potential management alternatives, predict outcomes, and provide structure for the implementation and evaluation of Program management actions and related decision during the Extension.

ALTERNATIVE TEXT FROM USFWS (delete everything after first sentence and add this):

While some hypotheses related to FSM have been answered, an evaluation of the potential benefits of the FSM strategy and its ability to provide incremental benefits to the target species both independently and in combination with mechanical actions may still be warranted. The current inability to release a SDHF has delayed some aspects of testing the benefits of this management strategy. In absence of the ability to implement a flow release in the SDHF magnitude, flexibility provided within the existing AMP and its framework will allow the PRRIP to investigate a variety of alternative combinations of flow, sediment, and mechanical management actions that independently or combined improve habitat, thereby providing defined benefits to the target species. The outcome of these investigations will be combined with other available science to facilitate development of future flow, sediment, and mechanical management actions or strategies considered beyond the First Increment Extension period. Until SDHF magnitude releases are capable, the initial focus will shift toward testing of a variety of other flow, sediment, and mechanical management actions. All available information related to flow and mechanical management will be used to evaluate potential management alternatives, predict outcomes, and provide structure for the implementation and evaluation of Program management actions and related decisions during the Extension.

Management Objectives

- The piping plover, whooping crane, and non-listed species management objectives will be retained in the Extension ~~with most of the emphasis placed on the piping plover and whooping crane~~¹⁴. It will be assumed that management objectives for the piping plover will provide benefits for the least tern.
- The Environmental Account objectives will focus primarily on benefits for whooping cranes and also for central Platte targets species habitats. Flows for pallid sturgeon management are described below. Expected outcomes for flows to benefit pallid sturgeon will be identified and changes in flow levels determined to evaluate benefits to pallids.
- Commit \$ XX for additional research on pallid sturgeon biology and habitat needs, pallid use of the Platte, and the relationship between pallid use and flow.

Management Actions

¹² Some target flows are not related to the Program's target species or physical processes that support species habitat requirements.

¹³ This is already anticipated in the Final Program Document (Page 4) —“DOI and the states agree that FWS' target flows will be examined through the Adaptive Management Plan and peer review and may be modified by FWS accordingly.”

¹⁴ The USFWS has recommended delisting of the least tern. This will almost certainly occur before 2019.

- Creation and maintenance of mechanical on- and off-channel least tern, piping plover and whooping crane habitats will continue consistent with SDM considerations.
- ~~Full-scale sediment augmentation will continue. Actions may also be taken to restore south channel sediment continuity.~~¹⁵
- Contributions to reach-scale phragmites and invasive species control efforts will continue.
- More than one SDHF release is envisioned to evaluate performance in relation to predictions.¹⁶
- Utilize Program water assets to implement and evaluate flow-related management actions contemplated in the Program's AMP.
 - Implement a minimum of one full-scale SDHF release once Program water projects are operational and conveyance issues are resolved. Evaluate against expected outcomes and performance predictions based on retrospective analyses of First Increment natural flow events.
 - Implement and evaluate benefits of flow releases associated with target species or Program Flows.¹⁷
- Flow releases to influence physical process relationships will be investigated.
- Flow releases to benefit whooping crane habitat, including maintenance of habitat, will be investigated.
- Flow releases to benefit piping plovers are unlikely but may be considered.
- ~~Flow releases to benefit pallid sturgeon¹⁸ will be allowed as long as:~~
 - ~~Releases are credited toward water objective.~~
 - ~~There is no detrimental impact to central Platte target species.~~
 - ~~It does not set precedent for future increments.~~
 - ~~They are consistent with hypothesis testing in the AMP.~~

Big Questions and Hypotheses

- First Increment Big Questions, hypotheses, and decision criteria will continue to be modified as needed throughout the Extension. ~~be updated as part of an AMP update prior to the Extension.~~ The focus will be on identifying beneficial water use related to flow releases to benefit physical processes and target species.
- Big questions, hypotheses, and hypothesis testing (including decision criteria), will be structured to provide information useful for examination of the relative benefits and trade-offs of various management actions as part of Second Increment negotiations.

Integrated Monitoring and Research

- System- and reach-scale geomorphology and vegetation monitoring will continue throughout the Extension. This monitoring is necessary to evaluate physical response to mechanical, sediment, and flow actions and natural events. It is also anticipated that physical process research may be necessary to test hypotheses associated with flow releases to influence channel morphology.
- ~~Full-scale sediment augmentation monitoring will continue to be evaluated throughout the Extension.~~

¹⁵ A permanent sand dam on the CNPPID Jeffery Island property prevents sediment inflows to the south channel. Modifications to allow sediment to bypass the dam during peak flow events could reduce the need for sediment augmentation.

¹⁶ Observational studies of natural peak flow events during the First Increment strongly suggest that SDHF will not produce suitable least tern, piping plover, or whooping crane habitat. However, the Program does not currently have the capacity to implement and evaluate a full SDHF release.

¹⁷ Target flow uncertainties and management experiments will be developed as part of an update to the Program's Adaptive Management Plan.

¹⁸ Flow releases to benefit pallid sturgeon are considered to be a plus-up.

- Least tern and piping plover research and monitoring efforts will be scaled back prior to the Extension. Trend monitoring will consist of bi-monthly river and off-channel habitat surveys and systematic season-long outside monitoring at use locations. Targeted plover research projects are not anticipated to be necessary during the Extension.
- Whooping crane monitoring will continue throughout the Extension. Targeted whooping crane research may be necessary to address uncertainties in the relationship between river flow, channel morphology, and crane use.
- Additional research will be conducted on pallid sturgeon biology and habitat needs, pallid use of the Platte, and the relationship between pallid use and flow.
- *ALTERNATIVE FROM USFWS: delete all bullet points above and replace with:*
- The Integrated Scientific Monitoring and Research Program will continue providing the framework for the scientific monitoring and research necessary to facilitate decision making. Subject to GC approval, some existing monitoring and research is anticipated to be scaled back while others (such as pallid sturgeon research) may increase.

Adaptive Management Plan Implementation

- Retain six-member Independent Scientific Advisory Committee.
- Continue peer review of key Program science products relevant to decision making.¹⁹
- ~~Continue production of State of the Platte Report.~~
- ~~Continue annual or appropriate AMP Reporting Sessions.~~

FIRST INCREMENT EXTENSION FUNDING

Federal and State contributions will continue throughout the Extension using the existing 50/50 cost share with credits for in-kind contributions from the States. ~~Program implementation budget during the Extension will be similar to current with the exception of a large reduction in land acquisition budget and a reduction in the budget for water studies and infrastructure once major water projects are completed.~~ Key budget items and projected costs for a First Increment Extension are contained in **Attachment A**.

FIRST INCREMENT EXTENSION ORGANIZATIONAL STRUCTURE

First Increment governance and organizational structure will be retained throughout the Extension.

¹⁹ Program peer review guidance will be revised prior to the beginning of the Extension to reflect current process.

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ATTACHMENT A
Proposed First Increment Extension Timeline and Budget