

1 April 21, 2016

2 **Platte River Recovery Implementation Program**

3 **First Increment Extension Proposal**

4
5 **PREAMBLE**

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

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

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

- 19 (1) providing water capable of improving the occurrence of Platte River flows in the central Platte
20 River associated habitats relative to the present occurrence of species and annual pulse target
21 flows by an average of 130,000 to 150,000 acre-feet per year at Grand Island, through
22 reregulation and water conservation/supply projects. Department of the Interior (DOI) and the
23 states agree that United States Fish and Wildlife Service (FWS) target flows will be examined
24 through the Adaptive Management Plan and peer review and may be modified by FWS
25 accordingly. DOI and the states have agreed, however, that during the First Increment, species
26 and annual pulse target flows serve as an initial reference point for determining periods of excess
27 and shortage in the operation of Program reregulation and water conservation/supply projects.
28 (2) protecting, restoring where appropriate, and maintaining at least 10,000 acres of habitat in the
29 central Platte River area between Lexington and Chapman, Nebraska.
30

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

Table 1. Platte River Recovery Implementation Program ESA Compliance Milestones

Milestone	Program Status
1. Pathfinder Project operational and capable of providing water	Achieved
2. Completion and operation of Tamarack I	Achieved
3. Environmental Account and operation	Achieved
4. Water Action Plan implementation to provide an average of 50,000 acre-feet per year	Not Achieved
5. Protection and restoration of 10,000 acres of habitat	Achieved
6. Implementation of Integrated Monitoring and Research Plan	Achieved
7. Operation of Wyoming Depletions Plan	Achieved
8. Operation of Colorado Depletions Plan	Achieved
9. Operation of Nebraska Depletions Plan ¹	Not Achieved
10. Operation of Federal Depletions Plan	Achieved

Commented [RM1]: A large portion of Nebraska's depletion offsets are currently planned to be offset via implementation of J-2.

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 has not been achieved, but all State water projects and the State 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 of the First Increment in 2019. As such, Milestone 4 will not be achieved.

The Program has also not 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) which is not a FWS target flow. The Program implemented research and monitoring to evaluate the potential effectiveness of SDHF. Examination of target flows was described within the original program document and could be undertaken under the existing adaptive management framework, would require updating of the Adaptive Management Plan to identify target flow uncertainties and implementation of management experiments to address those uncertainties. This cannot be accomplished prior to 2019.

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. 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 examine target flows 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 that some additional species-related benefits will be necessary to compensate for the delay in achieving first increment milestones and transitioning to a Second Increment. Potential additions include acquisition of a limited amount of additional habitat lands and approval to use Program water projects to release flows to benefit the pallid sturgeon. These "plus-ups" are included in the proposed Extension activities.

Commented [RM2]: The land and water milestones may require modifications (addendums or amendments) as indicated within the sections below to account for the needed environmental plus ups associated with a 10-year extension.

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

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)
 - 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
- Negotiate process and requirements 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.
 - Acquire⁵ up to an additional 60 acres⁶ of non-complex tern and plover nesting habitat.⁷
 - Acquire up to at least an additional 1,500 acres of riverine complex habitat adjacent to existing Program habitat complexes. 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 would be 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.

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

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.

Commented [RM3]: An evaluation of the habitat values of the entire Plum Creek complex is needed. Jeffery Island may require significant management in order to improve habitat to conditions to highly suitable for target species. Counting nearly 5,000 acres of habitat toward long term land targets may need to be evaluated based on current species habitat conditions and use.

Commented [RM4]: This descriptor is too specific and restrictive though riverine habitat would be the focus.

Commented [RM5]: It is anticipated that existing lands that do not have a high conservation value could be sold and used to purchase high priority land between now and the end of the first increment. There needs to be some amount of "new" habitat above and beyond that which offsets excessed land. Current land withholdings (aprx. 12,000ac) are consistent with the amount expected given the amount of pre-97 conservation lands purchased (aprx 4700 ac) and the GC approved approach of "floor, not a ceiling." The plus up of land for the extension is in addition to these lands and would also be in addition to any conservation lands added as part of the long term conservation land crediting.

Commented [RM6]: Terns, plovers, and whooping cranes are still all listed. If least tern is delisted, this could be modified at that time.

- 103 ○ Implement and evaluate mechanical creation and maintenance of on- and off-channel
- 104 habitat.
- 105 ○ Implement and evaluate full-scale sediment augmentation.

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 this milestone in approximately 2022. Extension Water Plan activities will proceed under the same principles that have guided water supply and management activities since Program initiation.

Commented [RM7]: The Service supports targeting 70,000 acre feet as the minimum target during a first increment extension.

Water Conservation and Supply

- Modify state and federal depletions plans to remain consistent with 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.
- ~~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 2022.

Commented [RM8]: Routine updates to Water Action Plan projects already occur as part of normal operating procedures. It was originally intended that it would be automatically updated as needed by the WAC. As with the AMP, a major re-write to the Plan which was formally adopted as part of the "Program Document" is not needed as part of this extension.

Program Water Management

- ~~Aggressively~~ continue channel conveyance improvements at North Platte choke point. Achieve and maintain 3,000 cfs conveyance capacity 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 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 ~~retrospective analyses of First Increment all~~ available information including natural flow events.
 - ~~Implement and evaluate flow releases associated with examination of FWS target flows.¹²~~

Commented [RM9]: Section E.2.dii(2)

Commented [RM10]: The FWS does not see this as an extension plus up as coordination of operations already occurs through the EAC/RCC. The FWS supports the current EAC/RCC process without modification.

Adaptive Management Plan

The First Increment milestone of Integrated Research and Monitoring Plan implementation has been achieved. The Program's Adaptive Management Plan is ~~currently focused solely toward~~ evaluation of two competing management strategies (flow-sediment-mechanical, and mechanical) that contemplate a single flow management action (short-duration-high-flows). 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

Commented [RM11]: A re-write or physical update to the AMP prior to extension is not needed. A new AMP can be negotiated for a second increment once water projects are online and are capable of releasing flows envisioned within the first increment. The Program document already includes language which allows for "investigation into the FWS target flows." The existing Program document anticipated a review and potential modification to target flows and this would be within the scope of actions undertaken during the extension period. The GC could independently approve of these investigations outside of the negotiation for a first increment extension.

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

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

¹² Target flow uncertainties and management experiments will be developed as part of an update to the Program's Adaptive Management Plan.

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. 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. The AMP will be updated to include evaluation of relevant target flows¹³ during the First Increment Extension. The update Until SDHF magnitude releases are capable, will also shift the AMP the initial focus will focus away from testing of two competing management strategies shift toward testing of a variety of other individual flow, sediment, and mechanical management actions. All available information related to flow and mechanical management will be used. This update 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.

Management Objectives

- The least tern, 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 crane¹⁴.
- The pallid sturgeon management objective will be revised to allow for testing of flow releases to benefit pallids.

Management Actions

- Creation and maintenance of mechanical on- and off-channel piping plover, least tern and whooping crane habitats will continue.
- 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.

A minimum of one SDHF release is envisioned to evaluate performance in relation to predictions. A variety of flow management actions are envisioned including:¹⁶

- Flow releases to influence physical process relationships are envisioned.
- Flow releases to benefit whooping cranes are envisioned.
- Flow releases to benefit least terns and piping plovers are a low priority unlikely but may be considered.
- Flow releases to benefit pallid sturgeon¹⁷ will be allowed as long as:
 - 1) Releases are credited toward water objective.

¹³ Some target flows are not related to the Program's target species or physical processes that support species habitat requirements.

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

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

Commented [RM12]: During PRRIP implementation, a number of natural SDHF magnitude flows have occurred, while full scale-sediment augmentation has just begun. Incremental improvements related to channel maintenance (unvegetated channel widths improving) have been realized as a result of these natural flows. Early indications point toward overall WC use of the central Platte River as increasing, likely related to the improved habitat conditions. This line of evidence indicates that SDHF in addition to mechanical management actions may have incremental benefits that are incapable of being realized in absence of SDHF magnitude flows.

Commented [RM13]: Is this in reference to FERC required flows such as those for fish guilds?

Commented [RM14]: There is no certainty yet on if and when ILT will get delisted-no need for this in an extension negotiation at this point. ILT is still a target species until it is formally delisted.

Commented [RM15]: Flow releases to benefit pallid are already allowed by discretion of the EA manager. This appears to be in reference to the FWS using water for pallid that would be above and beyond the target flows. Need clarification.

- 2) There is no detrimental impact to central Platte target species.
- 3) It does not set precedent for future increments.

Big Questions and Hypotheses

- First Increment Big Questions and hypotheses will continue to be modified as needed throughout will be updated as part of an AMP update prior to the Extension. The Focus will be on identifying/investigating target flow uncertainties/flow management strategies as they relate to flow releases to benefit physical processes and target species.
- Big questions. Hypotheses, and hypotheses testing, 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.

Commented [RM16]: Current AMP framework allows for ongoing adaptive management and investigating new or different alternatives. An overhaul to the AMP document within the Program Document is outside the scope of this effort, though the existing PRRIP decision making structure and AMP flexibility allows for the PRRIP to explore other flow management actions independent of this extension.

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 throughout the Extension.~~
- ~~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 tern or 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.~~
- Flow releases to benefit pallid sturgeon will be monitored to identify the quantity of Program water that reaches the lower Platte and the corresponding increase in river stage. 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.

Commented [RM17]: There is no need to detail all of this within an extension negotiation as any changes to monitoring and research can be approved by the GC at any time. All that needs to be stated here is that the IMRP will continue throughout the extension.

Adaptive Management Plan Implementation

- Retain six-member Independent Scientific Advisory Committee.
- Continue peer review of key Program science products relevant to decision making.¹⁸
- ~~Continue production of State of the Platte Report.~~
- ~~Continue annual AMP Reporting Sessions.~~

Commented [RM18]: Is this suggesting we keep the existing ISAC members or just the structure? Discuss whether the existing ISAC panel members are retained.

Commented [RM19]: These requirements are not needed as part of negotiating an extension. These weren't included in any program docs, milestones or BOs for the first increment and there is no need for them here in an extension document. The decision to continue these actions is subject to ongoing evaluation by the GC.

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 X**.

FIRST INCREMENT EXTENSION ORGANIZATIONAL STRUCTURE

¹⁸ Program peer review guidance will be revised prior to the beginning of the Extension to reflect current process.

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