PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM (PRRIP or Program)
2019 ADAPTIVE MANAGEMENT PLAN (AMP) REPORTING SESSION

Tuesday, October 08, 2019 – 9:00 AM – 5:00 PM
Wednesday, October 09, 2019 – 9:00 AM – 5:00 PM
Thursday, October 10, 2019 – 8:00 AM – 12:00 PM *(ISAC & EDO only)*
Note: All times Central.

Meeting Location:
Hilton Garden Inn Omaha
1005 Dodge Street
Omaha, NE 68102
(402) 341-4400

Start Time (Duration)	TUESDAY, OCTOBER 08, 2019 Session Content	Document # - Document
9:00 AM (:15)	**Welcome and Administrative** Chad Smith, DED • Introductions • Agenda and logistics • AMP Reporting Session objectives & overview	00 – Agenda
Session #1 – PRRIP Updates *Purpose:* updates on the status of PRRIP administration; Land Plan and Water Plan implementation; and target species monitoring.		
9:15 AM (1:30)	**PRRIP Administration & Land Plan Update (:45)** Jason Farnsworth, ED • Extension legislation, timeline, priorities heading into the Extension • Current PRRIP land holdings and management activities • New 1,500 acres in Extension **Water Plan Update (:45)** Seth Turner/Kevin Werbylo/Scott Griebling, EDO • Water Plan update (Kevin/Seth) • 2018-2019 Annual Flow Summary (Scott) *Discussion Questions:* 1) Are we accurately accounting for Program land and water resources in a way that can translate into their use in the Adaptive Management Plan (AMP)?	01 – Admin & Land Plan Update Presentation 02 – Water Plan Update Presentation 03 – Annual Flow Summary Presentation
10:45 AM (:15)	**BREAK**	

11:00 AM (1:30)	**Whooping Crane Monitoring** Mallory Jaymes, EDO • 2018-2019 Whooping Crane monitoring update **Tern and Plover Monitoring** Kari Mohlman, EDO • 2019 Tern and Plover monitoring update **Band Resighting & Predator Monitoring Studies** Kaley Keldsen, EDO • 2019 Band Resighting Update • 2017-2019 Tern and Plover Predator Camera Studies updates *Discussion Questions:* 1) Are we missing any key resources or metrics from our monitoring protocols?	04 – WC Monitoring Presentation 05 – Tern/Plover Monitoring Presentation 06 – Tern/Plover Camera Study Update Presentation
12:30 PM (:30)	**Lunch (brought in)**	
Session #2 – PRRIP State of the Platte *Purpose:* review of the 2019 State of the Platte, Summary of Learning from the First Increment and Big Question assessments.		
1:00 PM (2:00)	**2019 State of the Platte** Chad Smith/Dave Baasch/Patrick Farrell/Tom Smrdel, EDO • Big Question table • Summary of Learning, 2007-2019 • Highlight – Big Question #2: channel width, vegetation, flow • Highlight – Big Question #3: sediment augmentation • Highlight – Big Question #9: pallid sturgeon next steps • Highlight – Big Question #10: system/species response *ISAC Recommendation, February 2019:* "Complete the State of the Platte Report for the First Increment (to be completed in 2019), providing a summary of what's been learned during the First Increment for each Big Question, with more detail on the still unresolved Big Questions (BQ 3, BQ9, BQ10). This will provide a large part of the scientific basis for new target flows." *Discussion Questions:* 1) Does the 2019 State of the Platte capture what the ISAC envisioned for summarizing learning from the First Increment? 2) Based on First Increment learning, what is the logical jumping off point for next steps with adaptive management in the Extension? 3) Do TAC and ISAC members have any suggestions for how to improve presentation of material in the State of the Platte in 2020 and beyond?	07 – 2019 State of the Platte & Presentation
3:00 PM (:30)	**BREAK**	

Session #3 – AM in the Extension *Purpose:* review aspects of work completed to date by the Adaptive Management Working Group (AMWG) and Executive Director's Office (EDO) setting direction for AM in the Extension.		
3:30 PM (1:30)	**Extension AM** Chad Smith, DED/Jason Farnsworth, ED • Update on process, flow related management actions, target flows • Review of CEMs • Review of current Big Questions *ISAC Recommendations, February 2019:* "Include a section of the State of Platte Report which summarizes what has been learned in the form of conceptual models of the three bird species, pallid sturgeon and their habitats. To help set the stage for an examination of target flows, these conceptual models should be organized around the life cycle of each species when present in the Central Platte, showing what flows and other actions are required to support the species, their prey and their habitats in dry, average and wet years." "Use items a through d to identify additional Big Questions and hypotheses for the revised AM Plan. The revised AM Plan should be short and modular, so it's easy to update over time. Restrict hypotheses to those that are actually testable." *Discussion Questions:* 1. Do the revised conceptual ecological models (CEMs) represent a current understanding of knowledge related to management actions, river responses, and target species responses? 2. Do the draft set of Big Questions capture the major uncertainties from the CEMs? What are we missing? 3. Are there any additional aspects of flow and flow management actions that need to be explored through adaptive management during the Extension?	08 – Draft Extension AMP & Presentation
5:00 PM **6:30 PM**	**Wrap-Up & Adjourn** **Group Dinner @ TBD**	

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Start Time (Duration)	WEDNESDAY, OCTOBER 09, 2019 Session Content	Document # - Document
9:00 AM (:15)	**Welcome and Administrative** Chad Smith, DED • Introductions • Agenda and logistics	00 – Agenda
Session #4 – Tools & Modeling for AM *Purpose:* to introduce tools developed thus far by the EDO when considering potential Program flow management actions, predictive capabilities, use in comparing predictions versus reality, and in operation of Program water projects.		
9:15 AM (3:15)	**Models & Tools** Patrick Farrell/Scott Griebling/Tom Smrdel, EDO • Overview of approach (Patrick) • 2-D modeling applications and limitations (Tom) • Flow scenarios and operations model (Scott) • Decision Tree Model (Patrick) • Application of tools for possible flow management scenario	09 – Combined Read-Aheads for Tools & Modeling Session 10 – Overview Presentation 11 – 2-D Modeling Presentation 12 – Flow Scenarios & Operations Model Presentation
	BREAK **10:45 AM (:15)**	

	ISAC Recommendations, February 2019: "Use the above items (if supported by the GC's decisions) to develop an approach for target flows for all four PRRIP species, incorporating geomorphology, differentiating based on water year, and performing comparisons with both the historical and potential future hydrographs expected in dry, average and wet water years. Organizing species' flow needs by month (or finer time scales) is a critical step prior to examining flow tradeoffs among species." "Rethink both the target flows themselves, and the method of accounting, so as to maintain flow variability (e.g., average flow over a certain period needs to be ≥ X cfs, but should be variable, rather than constantly at X; or using a preferred distribution of flows within each water year to inform water management decisions)." "Use above items to develop alternative actions for the extension of the First Increment that builds on items a through g, and recognizes the use of money, water and land for each species (example shown in Table 1)." *Discussion Questions:* 1) Are the assumptions and level of complexity underlying these tools accurate and do they provide a robust means of developing and assessing flow scenarios? 2) These tools are fairly coarse in terms of their use for decision-making. Do we need to go deeper (for example, river sub-reaches)? 3) What flow scenarios and potential flow management actions should we consider for evaluation purposes?	13 – Decision Tree Model Presentation
12:30 PM (:30)	**Lunch (brought in)**	
Session #5 – Deeper-Dive Questions for the ISAC *Purpose:* to provoke deeper thinking from the ISAC on critical issues, and to stimulate discussion between the ISAC, TAC, and EDO.		

1:00 PM (3:00)	**Deeper-Dive Questions** Chad Smith, DED *Discussion Questions:* 1) The GC directed the Program to use adaptive management in the Extension to explore issues related to flow, river form and function, and target species. Are we building a rigorous AM approach to the right questions, and to questions that would benefit from reducing uncertainty for the purposes of decision-making? 2) As we develop a revised AMP for the Extension, how should we set priorities among outstanding uncertainties and key testable hypotheses? 3) Are the current management objectives in the Program's AMP an adequate means of assessing progress and communicating with the GC about Program success or failure? 4) How do your experiences in other systems (e.g. Missouri River) inform what we should be thinking about in designing flow management actions to learn and reduce uncertainty (i.e. "experimental design")?	14 – Read-Ahead for Deep-Dive Question #8
	BREAK **2:30 PM (:30)**	
	5) How do we address the issue of whether the GC needs to invest in acquiring and managing an additional 10,000 acre-feet (go from 120,000 acre-feet to 130,000 acre-feet) of water? 6) How does the ISAC suggest we revise/re-organize the stage change study relative to an expert elicitation and the potential habitat/use questions we might address if we can detect Program flow management actions in the lower Platte? 7) How do aspects of morphology, flow detection, etc. influence the Program's ability to have an effect on pallid sturgeon habitat and use in the lower Platte River? 8) Should the Program consider undertaking predator trapping/strobe light experiments beginning in 2020 to increase productivity or are their other measures that should be considered first? If so, is the experimental design robust enough to capture differences in productivity or should another design be considered?	
4:00 PM (1:00)	**Session Synthesis** Chad Smith, DED • Key lessons learned from our two days in Omaha • Important directions for AM in the Extension • Focus for ISAC in reporting to Governance Committee (GC)	
5:00 PM **6:30 PM**	**Wrap-Up & Adjourn** **ISAC Dinner @ TBD**	

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Start Time (Duration)	THURSDAY, OCTOBER 10, 2019 Session Content	Document # - Document
8:00 AM (:15)	**Welcome and Administrative** Chad Smith, DED/Dave Marmorek & David Galat, ISAC Co-Chairs • Introductions • Agenda and logistics	00 – Agenda
8:15 AM (3:45)	**ISAC/EDO Discussion** • 2019 State of the Platte • AM in the Extension • Deeper-dive discussion questions • ISAC 2020 workplan and budget	
12:00 PM	**Wrap-Up & Adjourn**	