



TO: GOVERNANCE COMMITTEE (GC)
FROM: EXECUTIVE DIRECTOR'S OFFICE (EDO)
SUBJECT: ADAPTIVE MANAGEMENT WORKING GROUP (AMWG) REFRESH
DATE: AUGUST 20, 2020
CC: TECHNICAL ADVISORY COMMITTEE (TAC)

Background

During development of the original First Increment Adaptive Management Plan (AMP), the AMWG was instrumental in drafting conceptual management models (CMMs), identifying critical uncertainties, drafting priority hypotheses, and developing monitoring and research efforts for hypothesis testing. At that time, the AMWG was purposely kept small, with the expectation that members would actively participate in the technical work of AMP development. To that end, original membership included nine individuals (and specific expertise):

- Don Anderson – USFWS (hydrology)
- Mike Besson – Wyoming
- Felipe Chavez Ramirez – Crane Trust (whooping cranes)
- Mark Czaplewski – CPNRD (pallid sturgeon)
- Mike Drain – CNPPID (hydrology)
- Lisa Fotherby – USBR (geomorphology)
- Jim Jenniges – NPPD (terns and plovers)
- Kevin Urie – Colorado
- Sharon Whitmore – USFWS

In March of 2019, the GC reinitiated the AMWG to work collaboratively with the EDO in updating the AMP for the First Increment Extension. At that time, updated AMWG membership included:

- Brock Merrill – USBR
- Matt Rabbe – USFWS
- Tom Econopouly – USFWS
- Brandi Flyr – CPNRD
- Mike Drain / Dave Zorn – CNPPID
- Jim Jenniges – NPPD
- Rich Walters / Bill Taddicken – Conservation Organizations
- Jojo La – Colorado
- Barry Lawrence – Wyoming
- Michelle Koch – Nebraska
- Colorado Water Users – TBD



Following the March GC meeting, the EDO convened two AMWG webinar workshops to initiate the AMP update process. By the first workshop, the AMWG participant list had grown to 20 individuals, with others attending as non-participating observers. Ultimately, the size of the group required the process be modified from collaborative development to comment and review on EDO-drafted work products. Ultimately, the GC requested the AMP update process be paused until Extension legislation was passed and the relationship between the AMP update and target flows was clarified.

Authorizing legislation was passed in December of 2019 and a target flow process is emerging. As such, we would like to reinstate AMWG work. However, we recommend the AMWG be refocused to be more consistent with the originally envisioned collaborative process. The remainder of this memorandum presents a refocusing approach for GC consideration.

AMWG Purpose and Participatory Expectations

The AMWG will be responsible for working collaboratively with the EDO to generate the technical content of the AMP update. Specifically, members will be expected to work with the EDO to:

- *evaluate and refine conceptual models* – ensure proper linkages between current Program understanding of river form and function and target species responses; identify areas and relationships with uncertainty needing further investigation.
- *identify important technical uncertainties and develop potential priority hypotheses* – based on areas of uncertainty in the conceptual models, brainstorm the language of hypotheses (determining *a priori* independent and dependent variables) for testing management actions, develop expected response functions (X-Y graphs for predicting response), and map out how answering hypotheses (and alternative hypotheses) will be communicated to the GC as an input to decision-making.
- *develop a new set of Big Questions for the Extension* – work collaboratively with the EDO to develop a proposed set of Big Questions for the Extension that serve as a roll-up of underlying hypotheses and that provide an organizational tool for tracking progress against AMP management objectives and communicating AM learning to the GC.
- *communicate technical information to the TAC and GC* – take ownership of content in the revised AMP and present material at TAC and GC meetings.
- *participate in writing and technical review of AMP document* – homework assignments, participation in numerous virtual and in-person (when allowable) meetings and workshops, and communication with the Independent Scientific Advisory Committee (ISAC).

The AMWG will **NOT** replace the review, recommendation, and approval authorities the Program Document delegates to the TAC and GC. Specifically, AMWG work products will be provided to the TAC for review and comment and the TAC will be responsible for recommending a final draft AMP update for final GC review and approval. The frequency of AMWG interaction with the TAC will depend on working group progress but we anticipate regular check-ins to confirm that the larger body is comfortable with work products prior to advancing to each subsequent step of AMP development (see bulleted list above).



AMWG Membership and Roles

Review of original AMWG membership indicates a mix of technical subject matter experts and technically proficient policymakers. We have developed a revised AMWG roster based on this concept.

- Interior least tern and piping plover expertise
 - Jeff Runge – USFWS
 - Jim Jenniges – NPPD
 - Dave Zorn – CNPPID
- Whooping crane expertise
 - Andy Caven – Crane Trust
 - Matt Rabbe – USFWS
- Hydrology/Hydraulics expertise
 - Tom Econopouly – USFWS
 - Mike Drain – CNPPID
 - Brandi Flyr – CPNRD
- Technically oriented policymakers
 - Brock Merrill - USBR
 - Jojo La – Colorado

Technical AMWG members will focus on the scientific and technical details of the AMP update process. Technically oriented policymakers may also provide input on technical issues but will primarily focus on ensuring the AMP update remains consistent with the Extension Document and other GC policy guidance.

Role of the EDO

Over the past year, the EDO developed several technical tools that will assist in AMWG planning and, as part of that process, identified several priority issues that the group should explore during plan development. Program staff will coordinate and facilitate AMWG meetings and serve as a technical resource for work group members. However, we do want the group to work collaboratively to develop work products as opposed to the AMWG merely functioning as a body that directs the EDO and reviews work products developed primarily by the EDO. The collaborative model will require more time and input from working group members, but we believe it will substantially improve the resulting AMP.

Next Steps

If the GC approves of this concept, we anticipate quickly moving into a series of AMWG virtual meetings focused on priority issues that have been identified by the EDO since the AMP update was placed on hold. Ultimately, we anticipate having a final draft AMP ready for GC review in June 2021. In the meantime, the EDO will work with AMWG members to ensure that 2021 research and monitoring efforts are consistent with the AMP update as it progresses.