

# **Columbia Basin Collaborative SDM Steelhead Pilot Project**

**December 19, 2024  
2 – 4 pm PT/3 – 5 pm MT**

# **Welcome, Agenda Review, and Updates**

# Meeting Guidelines

- Honor the agenda
- Listen to understand and ask questions to clarify
- Balance speaking time
- Don't pile on
- Be hard on the problems, soft on the people
- Seek alignment and common ground wherever possible
- Be present



# Agenda Review

Time (PT)	Topic
<b>2:00 – 2:10 p.m.</b>	<b>Welcome, Agenda Review, and Updates</b>
<b>2:10 – 3:10 p.m.</b>	<b>SDM Methodology</b>
<b>3:10 – 3:35 p.m.</b>	<b>Scenario and Actions</b>
<b>3:35 – 3:55 p.m.</b>	<b>Update the Work Plan</b>
<b>3:55 – 4:00 p.m.</b>	<b>Confirm Next Steps and Action Items</b>

# **SDM Prototype Article Highlights**

## **Steps of the SDM process:**

- 1) identify the problem and decision situation including spatial and temporal extent.
- 2) identify explicit quantifiable objectives.
- 3) generate explicit management alternatives (candidate actions) that can be taken to meet the objectives.
- 4) cooperatively produce qualitative conceptual diagrams to help predict the consequences of potential management actions on objectives and to rule out implausible alternatives.
- 5) analyze tradeoffs among competing objectives (i.e., the consequences of the management alternatives) and categorizing and ranking management alternatives.
- 6) using sensitivity analyses to examine the sensitivity of decision-making to model parameters and inputs.

Ecological models usually strive to capture the realism and complexity inherent in ecological systems and may not make ideal Decision Support Models [DSMs], as they are often more complex than they need to be at the outset. Natural resource managers and scientists should strive toward the development of requisite DSMs, which are models that contain only those elements that are required to approximate system dynamics and address a decision-making problem.

Decision analysts often use sensitivity analysis as the basis of model simplification and modification to obtain requisite DSMs. It is common for an SDM effort to initially result in an overly complex model to approximate system dynamics, but sensitivity analyses are then used to identify the elements that warrant inclusion in the final set of decision-support models.

There are several advantages of requisite DSMs. For example, simpler models often lead to improved stakeholder understanding of the model components and output, which leads to broader stakeholder acceptance of the model and a more transparent evaluation of tradeoffs.

Simpler models also allow for rapid processing times which allows the decision-making process to move forward without delay. We do not mean to imply that complex models do not serve a useful purpose, but models for conservation decision-making should chiefly aim to help stakeholders think about and communicate hypotheses concerning conservation problems

Despite multiple decades of research and monitoring in the Bay-Delta, the information collected in the system is often inconsistently linked to decision making. This is likely due to different objectives, often unstated, among the numerous stakeholders and decision makers, and it complicates attempts to evaluate the effects of management actions on multiple ecological and non-ecological objectives. Our prototyping effort facilitated communication among Bay-Delta stakeholders and allowed the evaluation of assumptions regarding the response of valued resources (e.g., fish, water) to natural and human-caused environmental change.



# Next Steps

- **Steve, Kevin, and Rene:** Work on framing a conceptual model based on Columbia Basin Partnership work and the Mid-Columbia Recovery Plans.
- **Art, Rene, and Jeremiah:** Work on framing a conceptual model around predation impacts.
- **Alex:** Prepare a presentation on bottlenecks preventing Yakima River MPG from reaching viability.
- **Jeremiah/Steve:** Prepare a presentation on bottlenecks preventing Umatilla/Walla Walla River MPG from reaching viability.
- **K&W and ODFW:** Connect to identify representatives from Warm Springs and Burns Paiute who can present on bottlenecks preventing Cascades Eastern Slope Tributaries MPG and John Day River MPG from reaching viability.
- **K&W:** Draft a summary of the CBC SDM Steelhead Pilot Project December 19 Meeting and share with the Sub-group.



# Thank you



Photo credit: Roger Tabor