



Join River Network, Colorado Water Conservation Board, and your fellow SMP/IWMP leads to learn more about environmental and recreational flow targets. During this workshop we'll learn how to set and evaluate targets, how to make flow target recommendations, how to set your process up for success and how to bring stakeholders together to align on setting targets. We'll also problem solve common challenges related to flow targets as a group.

During this workshop you will:

- Learn about environmental and recreational flow targets, from how to evaluate, set, and make recommendations.
- Hear from peers how they set flow targets for their SMP.
- Connect, learn, and problem-solve with your peers.
- Continue to build a community of practice among SMP leaders, develop relationships and learn to collectively enhance work on SMP/IWMPs throughout Colorado.

## **AGENDA**

### **20 minutes Welcome and Introductions – Mikhaela Mullins, River Network**

Nicole set the stage by describing the paucity of flow recommendations in SMPs even though inclusion of environmental and recreational flow targets set SMPs apart from other types of planning documents. She expressed the desire to dive into the topic and figure out what the barrier(s) are, and reminded the group to always be intentional about how flow targets are integrated into SMPs.

**60 minutes    Deep Dive: Flow Targets - Chris Sturm, Colorado Water Conservation Board, Seth Mason, Lotic Hydrological, and Mickey O’Hara, Colorado Water Trust**

Overview of how and why setting and evaluating flow targets is important, how to set your process up for success, and how to align stakeholders.

Chris talked about how SMPs were supposed to focus on flows, and that all of the other components of SMPs are items that have already been happening and continue to happen in watershed plans and other planning documents. SMPs were specifically conceived to include objectives for environment and recreation in the basin or at specific reaches. Perhaps the State thought about SMPs too simply.

A few other points Chris hit on are below:

- The assessment piece and identification of flow needs is science-based and should not be compromised as understanding flow needs is critical to SMPs. Compromise is related to defining the objective (e.g., riparian health, self-sustaining fishery, etc.).
- Outcome of flow targets should be a range of flows, not just one number.
- It’s difficult to find representative reaches and translate results into a larger area.
- We need to think farther out in SMPs; it is understandable that values of the community may change; however, the science can be an important foundation to long-term efforts which will prevent repetitions of the planning processes.
- Consider demand management: if water is leaving CO, we need to be getting the biggest benefit for environment and recreation as it leaves.
- The hydrology piece should be expanded in SMPs. 2-D modeling is a good idea for most every watershed, particularly those at risk of wildfire. If a full suite of hydrologic and hydraulic modeling is completed, then flows for specific objectives can always be extracted.
- Low flows present a large challenge, particularly dry-up points and the bare minimum flows for supporting aquatic life. SMPs need to include those.

Seth presented information about selecting assessment methodologies for identifying flow targets (e.g., hydrological risk rating-based approaches such as IHA and WFET; environmental threshold setting such as the Tennant-Montana method, R2CROSS, wetted perimeter, and effective discharge; response function development such as habitat suitability indices for different species/life stages; and recreational use opportunities such as American Whitewater’s boatable days analysis. However, Seth also stressed the importance of dealing with limitations and uncertainties of assessments, setting the context for an SMP and making sure goals and objectives are established prior to completing assessments, and keeping diverse stakeholder groups non-adversarial (particularly in over-appropriated systems) so

that headway can be made. He also discussed setting targets using percent deviation from natural conditions, comparing existing water availability with demand to compute the gap between the two (number of days you're short or volume of water needed to alleviate the gap), and predicted changes under future scenarios (useful for putting results in context with other expected changes in the watershed such as development, fire risk etc.).

Mickey discussed the Colorado Water Trust's (CWT) work using voluntary and flexible tools within the prior appropriations system to compensate water rights holders fairly and support CWCB's instream (ISF) flow program. CWT expected more projects related to flow targets to come out of SMPs. He differentiated between flow protection tools (ISF appropriations, RICDs) and flow restoration tools (temporary or permanent water rights transfers to ISF, targeted/coordinated releases of stored water to downstream decreed uses, non-ISF water transaction tools). He provided information about CWCB's ISF program and was clear that CWT tailors agreements by taking the constraints of any water user and working those into specific agreements. He used the Yampa Basin as an example of different options for flow protection and restoration.

**35 minutes    Group Problem Solving – Stacy Beagh, Strategic by Nature**

Group problem solve common challenges related to flow targets.

Round robin to hear peoples' thoughts and ideas after listening to the presentations. These will be the basis of River Network's upcoming programming related to environmental and recreational flows.

Themes included:

- Common challenges
  - Where to start - concern about how to approach this work on a large, watershed scale
  - Stakeholder involvement
    - Stakeholders aren't always ready to talk to each other; there isn't trust
    - Realizing that there is sometimes a large economic diversity among stakeholders (e.g., the large property owners aren't necessarily at the table) and that appealing to some people about the importance of these planning process is difficult
  - Drought – flow targets don't go very far when we're in a big drought
  - Language matters - putting the information out there in a way that is digestible, and “we want to understand our hydrology better,” need to satisfy the grant language; when you lead with “flow targets” aka, the solution, people leave the table, need to focus more on their interests/what is bringing them to the table and building trust at first

- Opportunities
  - The long-term investment of building relationships combined with some near-term community/economic changes (e.g., power plant decommissioning) is opening the door in some regions
  - Existing Instream Flow Program
    - Interest in understanding why some of the existing in stream flows aren't being administered – comes down to capacity at the state
    - Can the program or other mechanisms be used to preserve the entirety of the hydrograph (to keep the peak/pulse flows intact)
  - Ideas to better connect this work with fire mitigation models
  - Investing in more gauges and measurement

Next Steps - River Network will be hosting another workshop to build on this information that starts to answer the following questions:

- What can we as agencies and statewide NGOs do to better support practitioners on the ground?
- What can we be doing differently and provide differently?

**5 minutes      Closing – Mikhaela Mullins**

Migrate to a happy hour location to continue networking, location TBD