

## Colorado Basin Roundtable Integrated Water Management Planning Framework Project

### Task 4 Kickoff Meeting/ Webinar

December 20, 2017

Colorado River District, Glenwood Springs, CO

#### NOTES

##### Participants

###### In person

David Payne, Ute Water  
Peter Dodd, South Side Conservation District  
Nathan Bell, Bell Consulting LLC  
Richard VanGytenbeek, Trout Unlimited (steering comm.)  
Jim Pokrandt, Colorado River District  
Mark Fuller, Ruedi Water and Power Authority  
Heather Lewin, Roaring Fork Conservancy  
Dave Kanzer, Colorado River District  
Angie Fowler, SGM  
Lisa Tasker, Pitkin County Healthy Rivers Board  
Bill Hoblitzell, Lotic Hydrological (presenting)  
Hannah Holm, Hutchins Water Center (coord.)

###### By phone/ computer

Scott Schreiber, Wright Water Engineers  
Dennis Davidson, retired Natural Res Cons Svc  
Chris Sturm, CO Water Cons Board  
Jeffrey Bundy, Denver Water  
Gigi Richard, Hutchins Water Center (coord.)  
Lane Wyatt, NWCCOG/ QQ (steering comm.)  
David Graf, CO Parks & Wildlife (steering comm.)  
Mark Beardsley, Econometrics (project team)  
Steve Malers, Open Water Foundation (project team)  
Seth Mason (project team, presenting)

##### Introduction

Hannah Holm welcomed the participants and explained the background on the project, which started two years ago as a grant proposal to respond to the goal in the Colorado Basin Implementation Plan to have stream management plans throughout the basin. Since that was too large a task for one project, the Colorado Basin Roundtable members developing the project decided to develop a framework to facilitate doing plans throughout the basin, rather than do a plan. The group also decided to use the term “integrated water management planning” instead of “stream management planning” in recognition of the fact that plans needed to consider all water uses on shared streams in order to be accepted and effective.

She noted that the project began with the development of a bibliography of existing studies, and then Lotic Hydrological developed data visualization tools to make more accessible and understandable flow data and modeling from the Colorado Decision Support System and a wide range of water quality data. She explained that this section of the project, Task 4, is seeking to develop additional tools to rate the health of the stream and capture how well streams are providing the services that people want from them.

##### Task 4 Preview

Seth Mason, with help from Bill Hoblitzell, provided an overview of Lotic’s approach for Task 4. His slides are available here: [http://www.coloradomesa.edu/water-center/task4kickoff\\_meetingslides.pdf](http://www.coloradomesa.edu/water-center/task4kickoff_meetingslides.pdf)

Seth said the key objectives of the framework Lotic is developing are for it to:

- Be used broadly by local groups.
- Enable plans developed in different parts of the basin to be able to “talk to each other.”

Additional objectives are listed on the slide.

The project timeline is to collect and organize stakeholder feedback in December, meet in January with people involved in other related efforts to ensure alignment, further develop the organizational frameworks in February and March, and then submit the final deliverables to the Colorado Basin Roundtable and CMU in April 2018.

Seth then presented the conceptual model (in the slides) underlying the approach and explained that the intent is to bridge the way people talk about traditional water management and water management for ecological and recreational needs, and address the current disconnect between discussions about water management for ecosystem function and water management for human well-being.

Seth then presented a 'straw-man' organizational framework, with sets of two tables intended to provide a way to characterize the ecosystem condition and the capacity for delivering ecosystem services to local communities. This is an example of a high-level framework that provides a way to capture capacity to deliver various ecosystem services against the demand for those services. The value of this (or a similar) framework should be in its ability to provide an overall view as well as serve as a tool to organize both quantitative data and information on community values related to how streams are working.

## **Discussion**

*Question: How would river reaches be defined?*

Seth responded that this would not be prescribed, but that Lotic had previously, in Task 2 of this project, used the Source Water Route Framework developed by the state, chopped into 0.1 mile stream segments, in order to provide a common way to reference stream locations. Individual groups could use that framework to delineate reaches of interest.

*Question: This is a sophisticated matrix, assuming a level of information about various reaches that may or may not exist for every reach. How can that be accounted for?*

Seth responded that the framework is trying to find a balance between how prescriptive to be while providing sufficient consistency and flexibility, and said that local groups could pick and choose the items that were most relevant to them. He also noted that it is a way to organize the information available, identify gaps, and prioritize further work. Lastly, he noted that the presented framework is only a straw man meant to inspire creative ideas and convey the basic intentions of the effort moving forward. The final framework may or may not look like the one presented.

*Question: How many years back in data do you go?*

Seth responded that local knowledge would inform that decision, looking at factors like what has happened on the surrounding landscape over what period of time, the availability of historical data, and other factors. He further explained that the data dashboards developed in Task 2 aggregated and made explorable CDSS information as well as water quality data with a mapping interface. The water quality data in that tool go back five years and the hydrological modeling information represents the previous 30-40 years of climate and patterns of water use. These are 'typical' windows used when examining these types of data.

*Question: If you build this out comprehensively, is there an opportunity to synthesize and display results?*

The response was that the Roundtable could think about what to do with a basin-scale dataset.

*Question: who holds the data if different people are working on the same parts of a stream?*

Seth responded that if two different groups were developing information for the same reach, those would have to be independent data sets. He does not anticipate developing a framework that would preclude two groups from examining the same reach of stream. Rather, the intent is to allow that to happen and encourage comparative assessment of planning results based on reporting by individual groups on how information was analyzed and conclusions developed.

*Comments:*

- *There's a technical side to this, and a need to look at nuts and bolts. With open data portals, you need to think about who is the steward, and who gets their fingers on it.*
- *There's a need to check in with local groups, the "troops on the ground" about how they can use this.*

Response: Hannah noted that she will be checking in with stakeholders throughout the basin to get their input on this framework. She also noted that CMU was committed, at least in the medium term, to hosting the information developed for and from this project and related integrated water management plans in the Colorado Basin on a new website that is under development.

*Question: How can you access and score qualitative information?*

Seth responded that there is not a scientific method for getting at the qualitative information, but there are approaches that people have used and the framework will likely contain references to and/or recommendations for various approaches.

*Question: Could you provide an example of how this applied to the Crystal River Plan?*

Seth responded that a framework like the straw-man presented would allow people to reflect together on different community and individual values related to the river. He noted that it was only about halfway through the Crystal River process that they got good data on water supply and shortages for agriculture. Incorporating information about agricultural needs/perspectives/values on water sooner during discussions of ecological water needs (rather than saving that information for a cost-benefit analysis conducted toward the end of the assessment) would have smoothed those stakeholder discussions.

*Reference to the Literature Review element of Task 4*

Hannah asked Seth to comment on the literature review portions of the project, and Seth responded that this would involve reviewing work that had already been done related to ecosystem management planning. One relatively well-known example is the FACStream Framework, which provides guidance on how to collect and present information on ecosystem function using a common vocabulary and organizational structure.

*Question: Can this be a tool to integrate past, current and future studies across the state?*

Response: Seth commented that the planned meeting in January with others involved in related efforts will address the potential to standardize that kind of large-scale effort. However, the contract for work on Task 4 only includes the Colorado River basin. Hannah noted that statewide relevance may be a great impact, but we need to keep focus of this project more local and make sure it is useful on the ground in the CO basin. If we create something useful to the statewide audience that is great, but we need to respond to our stakeholders' needs first.

*Concern: Keeping track of data quality in a large database may be resource intensive and difficult. It is also important to make sure poorly conducted studies don't get in, or at least can be filtered out.*

Response: Seth indicated that this effort won't be able to ensure that any planning effort conducted in the future will be high quality. However, the one goal of developing the framework is to provide a relatively straightforward means for assessing the reliability or utility of any given planning effort outcome.

*Question: will these plans be limited just to the narrow green line along the river, or address influences of the upper reaches of watersheds?*

Response: Seth responded that this would depend on what local concerns were driving the process. It will be important that any planning framework not be so restrictive that it cannot accommodate a wide range of local needs.

### **Final Comments**

Hannah thanked everyone for their participation and noted that she expected this project to make an important contribution into building a bigger picture of how streams are working for communities across the basin and to figuring out how to collect and manage data related to integrated water management planning in a way that is transparent and useful. She also emphasized, though, that the primary purpose of the project was to help communities identify tangible ways to improve how their shared streams work for multiple stakeholders.