

Date/Time: Tuesday, February 25, 2014, 1:00 pm – 4:00 pm

Location: Pacific Southwest Research Station, USDA Forest Service

Objective: To initiate watershed-level planning and problem solving through a process based on sound science and social need.

1. Participants

Name	Organization
Bea Olsen	SFC
Bob Dean	SNA/ACWA/CLWP
Bobby Kamansky	Kamansky Ecological; Sierra Nevada Conservancy
Carole Combs	TBWP
Carolyn Hunsaker	USFS PSW Research Stn.
Cristel Tufenkjian	KRCD
David Hoffman	DCTRA
Erin Stacy	UC Merced, SNRI
Hilary Dustin	SRT
John Austin	-
John Shelton	DFW
Julie Allen	SRT; SSRWMG
Julie Bear	SNC
Kathy Wood McLaughlin	TB Watershed Coordinator
Koren Nydick	NPS
Matt Hurley	Angiola WD
Michelle Dooley	DWR
Michelle Selmon	DWR
Rick Stevens	SQNF
Rob Hansen	TBWP
Sarah Campe	TBWP
Soapy Mulholland	Sequoia Riverlands Trust

2. Identification of watershed/landscape-level issues

- Insufficient water supply
 - Increase surface storage – including existing reservoir capacity improvement and development of new surface storage basins
 - Increase groundwater recharge
 - Utilize upper watershed management techniques to maintain snowpack
 - Reclamation (increased salts and/or desalination)
- Water demands exceed supplies
 - Imbalance varies according to location

- Agricultural water conservation measures usually result in cropland expansion = no net change in water availability
- Need for municipalities, planners to be part of the conversation
- Stormwater management
 - Improve flood control structures
 - Improve reservoir condition
 - Better information needed re: reservoir capacity and sedimentation control (Insufficient funding to study sedimentation levels)
 - Restore riparian habitat and floodplains (restoration efforts sometimes hampered by ACE levee vegetation policy)
 - Capture/store floodwater for later use in multi-beneficial way
 - Encourage compatible land use (county planners, DWR, FEMA and Reclamation District representatives should be included in this discussion); HCPs & NCPPs are helpful tools
 - Consider regulatory and statutory issues, rider to Clean Water Act; agency “alignment” between DWR and USFS needed.
- Forest/Wildfire Management
 - Funding for management (manual clearing; prescribed fire) to prevent catastrophic wildfires
- Wildlife/Riparian corridors
 - Contiguous corridors allow for upslope migration under a changing climate
- Water Quality
 - Access to clean drinking water for all communities needed
 - Nitrates, salinity, selenium, arsenic can be issues, depending on location
 - Linked to water supply
- Education
 - There’s a need for better understanding about local resource patterns, parameters, conditions, and problems
 - Youth, the public, land-use decision-makers all need to be targeted

2. Overview of applicable, current watershed and conservation science

A. UC Merced/Critical Zone Observatory – Erin Stacy, UC Merced

- *References/handouts:*
 - <http://www.criticalzone.org/sierra>
 - *National CZO Program: Advances in Measurement Design, Southern Sierra Critical Zone Observatory*
 - *National CZO Program: Vegetation-Water-Regolith Interactions, Southern Sierra Critical Zone Observatory*
 - *National CZO Program: Outreach to California Water Providers, Southern Sierra Critical Zone Observatory*
 - *National CZO Program: Structure and Formation of Regolith, Southern Sierra Critical Zone Observatory*
 - *Forests and Water in the Sierra Nevada: Sierra Nevada Watershed Ecosystem Enhancement Project, by Roger Bales, et al.*

- B. Kings River Experimental Watershed – Dr. Carolyn Hunsaker, USDA Forest Service, PSW Research Station
 - *Reference/handouts*
 - www.fs.fed.us/psw/programs/snrc/water/kingsriver
 - *Kings River Experimental Watersheds: Project Overview*
 - *Kings River Experimental Watersheds: New Findings about Headwater Streams of the Southern Sierra Nevada*

- C. Mokelumne Watershed Study/Mokelumne Avoided Cost Analysis – Bobby Kamansky, Kamansky’s Ecological Consulting
 - Report to be released this April
 - This was a multi-partner, multi-disciplinary approach to examining environmental benefits on a watershed level.
 - *Mokelumne Avoided Cost Analysis, Sierra Nevada Conservancy* (information provided to SNC Board in 2012)

- D. Southern Sierra Partnership’s “Framework for Cooperative Conservation and Climate Adaptation for the Southern Sierra Nevada and Tehachapi Mountains” – Soapy Mulholland & Hilary Dustin, Sequoia Riverlands Trust
 - SSP is a partnership between SRT, The Nature Conservancy, Tejon Ranch Conservancy, Sierra Business Council, and CA Audubon
 - The *Framework* was a rigorous assessment of conservation opportunities and threats using the TNC conservation and mapping approach; it covered approximately 7 million acres from Sierra Crest to Valley floor, San Joaquin River to Tejon Ranch and highlighted the importance of riparian corridors and watershed focus to climate change adaptation.
 - Is used by SRT, partners, to guide & prioritize conservation actions.
 - References/handouts
 - <http://www.southernsierrapartnership.org/ssp-framework.html> (Includes links to download framework)

3. Information sharing about current resource management, conservation and stakeholder groups and if/how they are addressing key watershed issues

- See *TBWP Watershed Connections: Table of local organizations and collaboratives*

4. Next steps/additional comments

- Comments
 - SNC is compiling a list of projects that need funding in the next 5 years
 - This effort has a clear overlap with the IRWMs – make sure they’re involved
 - This group can help decide *where* we should be doing projects
 - This group can help identify information gaps
 - This group can identify and support regional projects
 - More water users and valley water managers need to be represented in this group
 - The CA Water Action Plan provides the incentive upper and lower watershed managers to engage productively.
 - We shouldn’t forget to include the “conjunctive use” angle in information-sharing re: inter-regional projects
 - The Sustainable Forestry Community Collaboration is a source of cross-funding; find out how to leverage this funding

- The TB IRWM collaboration group includes Valley floor and upper watershed managers – but this is primarily an information-sharing group.
 - How can USFS/CZO research inform water management decisions in other local watersheds?
 - A “Watershed Wikipedia” is needed for true, comprehensive understanding and integration. A project database, coupled with an interactive map showing project locations would be very helpful. The TBWP is working on funding for this.
 - The DOC is considering an extension of funding to current grantees as a drought response solution – if this happens, inter-regional projects can be a priority.
 - NPS is interested in creative funding sources for forest management
- Action Items/Next steps
 - DWR still has funding for CCP facilitation – Sarah will work with Michelle Dooley (DWR) on a facilitation grant
 - Participants will review the table of organizations and issues and add/edit for a more complete picture of who is doing what. (Please send both table and general comments to Sarah – sgcampe@gmail.com)
 - Participants will share table/notes with their respective networks for feedback, ideas, and interest.
 - Sarah will work with Koren about possibly contacting Mark Schwartz (UC Davis) about ways to indicate interconnectedness and collaboration.
 - Sarah will pursue additional funding for meeting coordination as part of the Tulare Basin Watershed Initiative
 - Sarah will plan a follow-up meeting to further flesh out next steps (possibly a workshop in June, depending on CCP facilitation). Possible discussion topics include:
 - Where is research needed? What are the information gaps?
 - Where are there missing partnerships/collaborations?
 - Would it be best to focus on a single watershed as a pilot?
 - Where in the watershed should management efforts be focused?
 - What additional stakeholders should be involved? How do we engage them?
 - Can lower watershed interests fund specific upper watershed management activities?