

Watershed Connections Strategic Planning Workshop

Meeting Notes

Date/Time: Tuesday, June 10, 2014, 9:00 am – 3:30 pm

Location: Southern California Edison Energy Education Center Sustainability Building

Workshop objectives:

- Build on previous Watershed Connections outputs to identify high priority basin-wide issues
- Identify gaps in resources and/or information needs to assess the region's water resource issues, and identify potential means to fill gaps
- Develop a preliminary list of prioritized basin-wide water resource projects
- Build consensus around an overarching goal to guide future regional collaboration, and discuss governance options and next steps

1. Welcome/Introduction/Context/Objectives:

Welcome: Bill DeLain, regional manager of Southern California Edison and host of the Watershed Connections meeting welcomed the group

Introduction by meeting facilitator: Rich Wilson, Center for Collaborative Policy/Sacramento State University

Tulare Basin context: Rob Hansen, Tulare Basin Wildlife Partners Board President/Sequoia Riverlands Trust Board Member/College of the Sequoias Biology Instructor presented a slideshow that focused on the unique history, ecology, challenges, and opportunities of the Tulare Basin. The presentation provided context for the importance of the Tulare Basin watershed and our responsibility to bring focus to its future through regional collaboration. An abbreviated version of the slideshow is [available online](#).

Meeting objectives: Rich Wilson outlined the workshop objectives of building lists of basin-wide priorities and creating consensus on the overarching goal to enhance regional collaboration for water and land conservation. The questions posed to the group for their consideration and feedback were:

- Do we feel there are merits to regional collaboration?
- If so, what would governance look like?
- And, what are the next steps?

2. Situation Assessment

Sarah Campe, Tulare Basin Wildlife Partners

Insufficient water supply, water quality, vegetative management, and need for better education on water issues were some of the issue outputs from the February Watershed Connections workshop that prompted a rapid situation assessment of the potential for regional collaboration on water resource management in the Tulare Basin.

The objectives of the assessment—completed via phone interview with over 20 people, representing a broad range of stakeholder interests—were to 1) gauge the interest in collaboration, 2) identify the barriers and methods of overcoming the barriers to collaboration, 3) identify ways in which to build upon initiatives in order to avoid duplicate efforts, and 4) to identify the priority issues that effective collaboration could address. View [presentation of assessment](#).

Overall, the results indicated widespread support for the concept and the beginning ideas for the building of regional collaboration in the Tulare Basin.

- Identified watershed issues
 - Effective data management and access
 - Groundwater management and conveyance to recharge sites
 - Education on water resource issues and challenges
 - Water supply/demand balance
 - Water quality
 - Linking ecosystems and restoring natural hydrological processes
 - Fate and transport of contaminants
- Regional collaboration
 - Broad range of stakeholder interests from federal & state agencies, rural communities, NGOs, IRWMs, water management agencies, Tulare County, energy companies, local universities, and business owners
 - Challenges and needs of putting a regional system of collaboration in place:
 - Common vision and understanding of how our water systems work
 - Science-based information used for making informed decisions
 - An open safe place to meet, discuss, and collaborate
 - Equitable governance
 - Implement successful projects that respect and benefit a wide range of stakeholder interest, start off on a positive note
 - Limit loss of independence
 - Recognize and possibly integrate the work already being done by the IRWMs or do the work that has not been caught by the IRWMs, do not reinvent the wheel
 - Identify regional leaders
 - Overcoming limited financial resources
 - Make the important connection between upper Sierra headwaters and the valley

3. Informal Prioritization of Watershed Level Issues

Workshop participants briefly revisited, refined, and prioritized a list of watershed issues originally identified at the February Watershed Connections workshop. The prioritization exercise was informal in nature and simply aimed to help focus discuss in the afternoon session to identify project concepts that may help address watershed level issues. (Numbers in parenthesis represent the number of votes received by each topic during the multi-voting prioritization exercise). The group noted that ultimately all the issues and challenges cited below are important when considering water management across the Tulare Basin.

- Watershed/Landscape Level Issues
 - Education (10)
 - Forest/wildfire management (7)
 - Integrated Conservation and Resource Management – water & land use (7)
 - Groundwater management & conveyance (6)
 - Insufficient water supply/yields/storage (5)

- Restoring natural processes (4)
 - Economic development relative to short and long term impacts on water management (3)
 - Water quality (3)
 - Sustainability – balancing supply & demand – regional self-sufficiency (3)
 - Climate change & its overarching impacts (2)
 - Effective data management and access (2)
 - Cross-regional water supply (2)
 - Demand exceeds supply (2)
 - Wildlife/riparian Corridors (2)
 - Relationships/Common Interests (1)
 - Stormwater management (1)
 - Need for additional imports (1)
 - Use of new technologies (0)
 - Conversations about getting enough supply to meet demand (0)
 - Fate & transport of contaminants (0)
- Additional Comments
 - Must have commonality of interest
 - Need for unified vision to show strength when going to the state and feds for support
 - Stress and focus on the relationship between upper watershed management and its connection to downstream watershed users. This was ultimately the idea that led to the creation of Watershed Connections.
 - Regional self-sufficiency in the context of an area that has relied on imports to grow
 - Patterns of development affects household water consumption
 - To the extent that we change our water management there are distinct realities of changing our economy; how far are we willing to test this?
 - Getting a clearer picture of overall regional water demand
 - In addition to identifying and prioritizing watershed level issues, some in the group identified different issues and challenges associated with how water should be managed in the region, including:
 - Water supply/demand balance impossible due to ongoing and increasing agriculture demands (It was pointed out the above is not so much an approach as a statement of a problem. In terms of agriculture, there is never enough water. The more water received the more water used.)
 - Cut off imports and be regionally sustainable (4)
 - Balance supply through imports and other tools (5)

4. Identification of Resource/Information Gaps and Means to Fill Gaps

Following the prioritization of watershed level issues, the group discussed resource and information needs to understand watershed level issues in the Tulare Basin. The group explored resource information needs and available resources, and subsequently identified gaps and means to fill those gaps.

- Resource Information Needs

- Interaction between surface water and groundwater
 - Total runoff
 - Effect of land management on runoff, manipulating through forest management
 - Information to educate downstream users
 - Runoff
 - Cost/benefit ratio of upstream to downstream user
 - Data for informed decision- making
 - Need to invest in getting data
 - How much water and where is it at any given time (e.g. streams, vegetation, trees etc)
 - Quantify water yield from pre-managed forest
 - Understanding how systems function differently at different elevations
 - Current groundwater usage
 - How pesticide and dust transport influencing water quantity and quality
 - What is the overall water demand for the region (There is macro-level understanding of this in alluvial basins in DWR models.)
 - A holistic, whole- system understanding
- Available Information Resources
 - [Water Sources 1998-2010](#) (DWR data presented by John Austin)
 - Modeling results (forest activity related to forest density)
 - Connections between water compartments
 - Water in atmosphere
 - Water lost through vegetation
 - Amount of surface water
 - Deep groundwater and shallow soil water
 - Demand understood in alluvial basins
 - Valley floor groundwater understood through well data; less understood at higher elevations
 - [CCST report](#)
 - [DWR water portfolio](#)
 - Effects of vegetation management on water flow
 - Historical ecology (ex: [State of Change: Forgotten Landscapes of California by Laura Cunningham](#))
 - [The Mokelumne Watershed Avoided Cost Analysis](#); the economic cost associated with forest fire management
 - [The San Joaquin Valley Greenprint](#)
 - [The New California Water Atlas](#)
 - Means to Fill Needs and Gaps
 - Understanding of water balance and identify needs to get there
 - Basin-wide studies on effects of vegetation management on water flow and effects on yield
 - Regional understanding of vegetation management on streambeds
 - Immediate resource management action
 - e.g. the removal of invasive species from riparian corridors
 - Removing sedimentation from existing reservoirs (cost/benefit analysis)
 - Create information clearinghouse

- A one stop “shop”/portal
- Water Bond fund demonstration projects, key research, and efforts
- Historical ecology studies done and presented well to inform the general public

5. Southern California Edison Upper Watershed Management Strategies

Russell Johnson, Southern California Edison Manager of Hydraulic Services

SCE staff briefly presented information on the company’s hydraulic services programs. The group received information on pump testing, use rates and SCE outreach associated with the program. Key discussion points of the presentation included the following:

- The Pump Test
 - Irrigation pump testing began in the valley in 1911
 - 11.5 million acre feet per year on average pumped
 - Testing to identify inefficiencies, track pumps and water usage. Budgeting, operational planning (priority pumping), identification of lowest-cost pumps, etc.
 - Test ran for agriculture, municipal water users, private domestic users (not including households), etc.
- Time of Use Rates
 - Paying different prices based on time of day/season
 - Price signals steer water usage
- Outreach
 - SCE.com
 - Tools: My Account offers budget assistance (!!!), rate analyzer
 - Express incentives and customized incentives: pump retrofits
 - Demand response: when there is higher than normal water usage, there is an account device that signals reaching the limit and shuts the system down

6. Summary of Issue Prioritization Exercise and Subsequent Basin Wide Project List

Rich Wilson and Sarah Campe

The facilitator and TBWP workshop coordinator briefly summarized to the group the outputs of the multi-voting exercise on watershed level management issues. The group subsequently identified four key topics areas that could guide discussion of a preliminary basin-wide project list, including:

- Groundwater management
- Forest & wildfire management
- Education
- Integrated conservation and resource management

Breakout groups were subsequently formed based on the above topics. Workshop participants were encouraged to join the topic of most interest to them, and consider projects associated with that topic that might cross-pollinate with other initiatives or projects in the region, and thus foster basin-wide collaboration on water management. Upon completion of the breakout session, each group reported back outputs—a list of potential projects, people/institutions, and resources for the respective categories—to the rest of the group.

- Groundwater Management & Conveyance Group

- Projects
 - Tulare Basin Hydrological Models
 - Examining causes and effects of drilling wells and pumping out
 - Modeling water storage & recharge on a regional basis
 - Examining impacts of land use and management on groundwater
 - People/Institutions
 - Groundwater management groups
 - Compiling existing data
 - Existing water agencies
 - Maps (Greenprint)
 - CASGEM
 - Resources
 - Three Rivers Hydro Capacity study
 - A potential pilot project funded by DWR
 - KRCD public-friendly Kings River Basin hydrological system informational video (take this format & regionalize it)
 - Forest and Wildfire Management (Vegetation Management) Group
 - Projects
 - Increase resilience of forests to effects of large-scale change (e.g. climate change, catastrophic fires, etc.)
 - Prescriptive Fire
 - Vegetation thinning prior to burning
 - Invasive species prevention and control
 - People/Institutions
 - Joint USFS-NPS-SRT vegetative project in Dillonwood area (North Fork Tule)
 - Funding from groups like CA LCC and from downstream lower watershed users
 - Resources
 - Public support
 - Tort reform
 - Marijuana legalization
 - Education Group
 - Projects
 - Rural community outreach
 - Creation of water education curriculum for educators and students
 - Water education for agriculture and businesses
 - People/Institutions
 - Local conservation groups
 - County officials
 - Residents
 - Resource managers
 - School systems (K-12 & higher ed)
 - Board and staff members
 - Silicon Valley
 - CART (Center for Advanced Research and Technology)
 - Greenprint

- California Water Atlas
 - Resources
 - Both government & nonprofit funding
 - Internet access/mobile apps
 - Interactive games
 - Localized curriculum
 - Newsletters
 - Websites
- Integrated Conservation and Resource Management Group
 - Projects
 - Sequoia to the Sloughs: Establishing green infrastructure from the Sequoias and to the valley floor (link to general plans)
 - Watershed assessment
 - Expand CVP CP- like funding for water impacts on habitat
 - Expand/adopt “Wade-able Streams” projects
 - People
 - Landowners
 - Existing partnerships
 - County planners
 - Resources
 - Funding streams
 - ID streams in need of restoration
 - Willing landowners

7. Goal Setting, Regional Collaboration and Next Steps

As a final session of the day, the group considered the cumulative results of its work together and initiated development of an overarching goal to guide regional (basin-wide) collaboration on water resources management issues. The group identified and came to consensus on a range of attributes that, in time, could be formulated into a well thought-out goal. Finally,

- Attributes of the Watershed Connections overarching goal:
 - Informed, science-based decision-making
 - Build climate resilience
 - Being at least moderately prepared for any kind of water future
 - Ecological and economical sustainability
 - Creating resilience for both
 - Maintaining biodiversity
 - Strengthen self-reliance/self-sufficiency
 - Achieve long-term water balance
 - Avoiding overdrafts
 - Add value to existing efforts
 - Enhance awareness and improve communication
 - Promote multiple benefits
 - Increase local buy-in
 - Integrate the interests of upper and lower watershed
 - Maintain mutual respect for everyone’s vital interests concerning water and quality of life issues

- Take on a landscape scale perspective
- Promote general awareness of the hydrological cycle
- The overarching goal: a work in progress
 - To build a sustainable and resilient water future to support all beneficial uses for the Tulare Basin based on informed decision making, integration of ecological and economical balance, and broad-based consensus.
- Next Steps
 - Continue to wordsmith the overarching goal of the Watershed Connections group
 - Start with project ideas and break into groups, identifying who wants to work on what, that will focus on specific projects and then move to advance those projects
 - Formation of an informal working group to take responsibility for advancing the next steps
 - Michelle Selmon DWR (interim coordinator of the group)
 - Hilary Dustin SRT
 - Adam Livingston SRT
 - Sarah Campe SNC (effective June 16)
 - John Shelton DFW
 - David Hoffman DCTRA
 - Dave Clendenen, VNLC
 - Dezaraye Bagalayos TBWP
 - Denise Kadara (support) TBWP
 - Carole Combs (support) TBWP
 - Informal working group to identify key next steps

8. Participants

Name	Organization
Adam Livingston	Sequoia Riverlands Trust/Southern Sierra Partnership
Bill DeLain	Southern California Edison, Host
Bobby Kamansky	Kamansky's Ecological Consulting
Carole Combs	Tulare Basin Wildlife Partners
Carolyn Hunsaker	U.S. Forest Service – Pacific Southwest Rsrch. Stn.
Dave Clendenen	Vollmar Natural Lands Consulting
David Hoffman	Deer Creek - Tule River Authority
Denise Akins	Tulare County Resources Management Agency
Denise Kadara	Tulare Basin Wildlife Partners
Dezaraye Bagalayos	Tulare Basin Wildlife Partners
Dick Moss	Provost and Pritchard Engineering
Eric Osterling	Kings Basin Water Authority
Erin Stacy	UC Merced-Sierra Nevada Research Institute
Hilary Dustin	Sequoia Riverlands Trust
John Austin	Private citizen
John Shelton	Dept. of Fish and Wildlife

John Vollmar	Vollmar Natural Lands Consulting
Julie Allen	
Kayode Kadara	Tulare Basin Wildlife Partners
Matt Hurley	Angiola Water District
Michelle Selmon	Dept. of Water Resources
Rick Stevens	U.S. Forest Service
Rob Hansen	Tulare Basin Wildlife Partners/Sequoia Riverlands Trust/COS
Russ Johnson	Southern California Edison
Sarah Campe	Tulare Basin Wildlife Partners
Shane Smith	Kaweah Delta Water Conservation District
Soapy Mulholland	Sequoia Riverlands Trust
Stephen Byrd	Southern California Edison