**Tulare Basin Watershed Connections *Working Group***

**Subgroup Topics and Members**

**January 6, 2016**

**Goal Statement: *To advance collaborative watershed planning and resource management in the Tulare Basin based on sound science and mutually identified needs for regional economic and ecological sustainability.***

**Purpose of Subgroups:** Topic-based groups comprised of people with expertise and interest in developing strategies and implementing projects to address the challenges related to the topic; the subgroups meet and/or provide input to the broader working group as funding and partnership opportunities arise. There is substantial overlap and it is recognized that subgroup members should communicate with others as appropriate when planning a project or event.

**Funding**

Members: Dezaraye Bagalayos (TBWP)

**Previously Identified Issues –** We all recognize that overcoming limited financial resources is a hug challenge; **How can we bring funds to the region to help meet our common goals?**

**Sustainable Groundwater and Surface Water**

Members: John Austin (retired)

**Previously Identified Issues** – insufficient water supply in proportion to demand; need to increase groundwater recharge (conveyance a challenge); stormwater management; water quality (e.g. sediment management and fate and transport of contaminants); recognize and possibly integrate work already being done by the IRWMs or do work that is not being done by IRWMS; need better understanding of interaction between surface and groundwater

**Previously Identified Potential Projects:**

* Tulare Basin Hydrological Models
* Examining causes and effects of drilling wells and pumping out
* Modeling water storage and recharge on a regular basis
* Examining impacts of land use and management on groundwater

**Extreme Events and Climate Change Resilience**

Members: John Austin (retired); Jennifer Morales (DWR); Adam Livingston (SRT);

**Previously Identified Issues –** climate change impacts are already observable and will exacerbate existing pressures related to water supply and quality; anticipated future effects include increasingly frequent events such as atmospheric rivers, droughts and increased wildfire

**The Upper/Lower Watershed Connection: Education, Planning, and Project Development**

Members: Sarah Campe(SNC) (lead); Carolyn Hunsaker (USFS); Lucas Patzek (AIN); Carole Combs (TBWP); Michelle Selmon (DWR)

**Previously Identified Issues –** must increase resilience of forests to effects of large-scale change (e.g. climate change, catastrophic fires) utilize upper watershed management techniques to maintain snowpack; funding needed for management to prevent catastrophic wildfires; need for better understanding about local resource patterns, parameters, conditions, and problems; need for effective data management and access; make the important connection between upper Sierra headwaters and the valley; educate downstream users about cost/benefit ratio of upstream management to downstream user

**Previously Identified Potential Projects:**

* Develop an accessible and easy-to-use clearinghouse of information (e.g. ‘Watershed Wikipedia’)
* Study vegetation thinning and prescriptive fire in upper watershed
* Invasive species prevention and control
* Refer to Joint USFS-NPS-SRT vegetative project in Dillonwood area (North Fork Tule)
* Create water education curriculum for educators (note: see project WET – Water Education for Teachers), students, agriculture and businesses

**Regional Landscape-scale Project Prioritization and Implementation** (forest, watershed, riparian corridor, wildlife corridor, recharge, restoration)

Members: Niki Woodard (TBWP);

**Previously Identified Issues –** limited funds require strategic decisions about priorities for pursuing projects; need to integrate conservation and resource management; must find projects with multiple benefits that adds value to existing efforts

**Previously Identified Potential Projects:**

* See [Tulare Basin Conceptual Conservation Projects](http://staging.tularebasinwatershed.org/sites/default/files/TBWI-Conceptual-Project-List-updated29Oct2013.pdf) (October 2013)
* Refer to regional IRWM plans

**Wetland and Wildlife Habitat Protection and Restoration** (ecosystem services)

Members: Adam Livingston (SRT);

**Previously Identified Issues –** restore riparian habitat and floodplains (connection to surface water management); contiguous corridors allow for upslope migration under a changing climate; linking ecosystems and restoring natural hydrologic processes; integrated conservation and resource management

**Previously Identified Potential Projects:**

* ‘Sequoia to the Sloughs’ concept of establishing ‘green infrastructure’ from the Sequoias to the valley floor; link to General Plans
* Expand/adopt ‘Wadeable Streams’ projects

**Tribal Community Support for Addressing Water-Related Challenges**

Members: Michelle Selmon (DWR); Ron Goode? (North Fork Mono Tribe)

**Disadvantaged Communities**

Members: Michelle Selmon (DWR), Denise Kadara (TBWP)

**Previously Identified Issues –** there is a great need for rural community outreach; access to clean drinking water for all communities needed (link to surface water supply)

***Down the Road…***

**Governance Planning** (long term persistence will ultimately require a formalized governance structure – what might it look like?)

Members: Niki Woodard (TBWP)

**Previously Identified Issues –** equitable governance; need an open, safe place to meeting to discuss issues and collaborate;need for municipalities and planners to be a part of the conversation; encourage compatible land use (e.g. involve county planners, DWR, FEMA and Reclamation Districts); youth, the public, and land-use decision-makers all need to be targeted; limit loss of independence (e.g. institutional ‘turf’); broad range of stakeholder interests from federal and state agencies, rural communities, NGOs, IRWMs, water management agencies, Tulare Bounty, energy companies, local universities and business owners

**Possible Models for Governance Structure:**

* [Sonoma County Agricultural Preservation and Open Space District](http://www.sonomaopenspace.org/)
* HCP/NCCP
	+ [East Contra Costa County HCP/NCCP](http://www.co.contra-costa.ca.us/1910/Habitat-Wildlife)
		- [Contra Costa Watershed Forum](http://cocowaterweb.org/)
* Santa Ana Water Project Authority (SAWPA) ‘OWOW’ (One Water One Watershed) project [website link currently compromised, check back later!]
	+ ‘OWOW is an approach that advocates breaking down silos in water management and instead taking an integrated, regional view”
	+ “Our goal with OWOW is to look at the entire hydrologic system in the watershed. Our primary orientation is the hydrologic system and the way Mother Nature has that system working – following the drops.”
	+ [Celeste Cantu discusses OWOW](http://www.planningreport.com/2014/03/07/sawpa-s-celeste-cant-one-water-one-watershed) and how/why it was formed

***Other previously identified issues to keep in mind as we proceed…***

* Critical issues (such as those identified in the subgroups above) require collaboration at a regional scale (e.g. a landscape-scale perspective)
* There is a significant need for education about general water resource issues and challenges
* We need a common vision and understanding of how our water systems work
* Science-based information should be used for making informed decisions
* We need to demonstrate linkages between our individual actions and effective management of a common pool resource