TNC Western US Water Fund Workshop Summary

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PARTICIPANTS

First	Last	Location	Title
Fernando	Veiga	Latin America Region	Water Funds Manager
Michael	Reuter	NA Freshwater	Director of Freshwater Program & Great Rivers Partnership
Eleanor	Morris	WO External Affairs	Senior Policy Representative
Rob	Marshall	Arizona	Director, Center for Science and Policy
Cheryl	Lombard	Arizona	Director of Government Relations
Ed	Smith	Arizona	Forest Conservation and Restoration Program Manager
Mark	Kramer	California	Director of Federal Government Relations
David	Edelson	California	Sierra Nevada Project Director
Kristen	Podolak	California	Sierra Nevada Project Associate
Kirk	Klausmeyer	California	GIS Analyst, Special Projects
Laura	McCarthy	New Mexico	Director of Conservation Programs
Anne	Bradley	New Mexico	Forest Conservation Program Director
Bassett	Steve	New Mexico	Conservation Info Manager
Borgias	Darren	Oregon	Southwest Oregon Program Director

WORKSHOP SUMMARY

Fourteen TNC staff from western states and the worldwide office met to discuss current and proposed "water fund" projects in the western U.S. While the projects have different emphases, they all seek to increase investment in watershed conservation, restoration, and other green infrastructure by quantifying the water-related benefits of such activities to downstream water users. California and New Mexico are both conducting avoided cost studies to quantify the direct and indirect costs of wildfire and calculate the potential savings from forest thinning to reduce wildfire risk. California focused on the water quality impacts, specifically post-fire sediment, in the Mokelumne watershed, while New Mexico is also addressing post-fire flooding and debris flows. Arizona is evaluating the potential to create new sources of water through various natural infrastructure approaches, and comparing these approaches to traditional grey infrastructure in terms of cost effectiveness. Oregon is pursuing the idea of a water fund in Ashland through discussion with stakeholders, but is not pursuing a quantitative or economic study. Finally, Laura McCarthy spoke for Paige Lewis (Colorado) about the issues and questions that arose from the Denver Water Fund enacted in 2010 (US Forest Service may not be delivering on their match, TNC and the Front Range Collaborative Planning Group were not involved, and the science is not transparent).



Darren Borgias enjoys the workshop (left), Rob Marshall uses the map on the wall to illustrate Arizona water issues (middle), and we move outside to enjoy the nice weather in the afternoon (right).

• Arizona is analyzing alternative water management strategies such as creating 'new water' from forest thinning, recharging storm water, treated effluent, and irrigation efficiencies in the Verde and Salt River watersheds to see whether natural infrastructure approaches are cost competitive with grey water infrastructure. Initial results from the analysis of water yield increase from forest thinning appear promising. Study phase to be completed in June 2013.

• New Mexico is focusing on a 700,000-acre area in the Middle Rio Grande watershed and working towards water security through watershed studies and an economic assessment of the cost of wildfire and savings if wildfire and flooding do not occur. The path forward for New Mexico involves pulling together a river and forest advisory board, watershed studies, economic assessments and water fund planning. Study and design phase to be completed April 2014.

• California is conducting an avoided cost study to assess investments in forest thinning and fuels reduction to reduce post-fire sediment risk in the Mokelumne watershed (~300,000 acres). The California team is assessing which watersheds, and what activities provide the greatest potential to enhance both ecological values and water resources in the Northern Sierra Nevada. Mokelumne avoided cost study to be completed June 2013; Northern Sierra assessment to be completed August 2014.

• Oregon is considering the potential value of a water fund in the Ashland watershed (15,000 acres) to complete forest thinning and reintroduction of fire begun under the Ashland Forest Resiliency Project. Ongoing discussion of water funds through 2014.

In addition to the state's project summaries, there were presentations on Latin America Water Funds, The North America Freshwater Program, and polling to support water funds. The discussions following the presentations centered on understanding Latin American Water Funds and similar examples in the western United States (Santa Fe, Denver), what is working and what is not, and how the models can be applied more broadly in the western U.S.

Fernando Veiga, the manager for water funds in Latin America, described lessons learned from water fund projects. He recommended that water funds have clearly defined biophysical and financial goals to convince stakeholders. He presented the water fund as a flexible tool following these general steps:
1. Evaluate potential aka "Outreach Phase": Identify possible areas for water funds using return on investment, opportunity, ecological importance, water supply importance, erosion abatement relevance or another approach. Evaluate the enabling conditions opportunities, barriers, and feasibility. Identify and have conversations with potential partners and stakeholders.

2. Design aka "Feasibility Studies Phase": Identify the goals of the water fund: terrestrial and freshwater conservation goals, hydrological services goals, water user's goals, socioeconomic goals. Identify and design the institutional, legal, and financial structures according to the legislation and partners.

3. Negotiate and Formalize: Negotiate the terms of the agreement among different water users, including the decision-making process for the water fund, contributions from different water users, and the general policy for the water fund. All water users sign contracts and policies are in place.

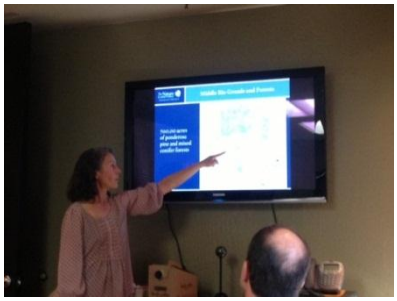
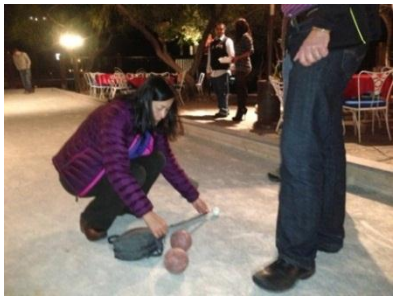
4. Developing and Operating: Set-up the staff to manage, implement, and monitor the water fund. Work plans, roles, strategic and financial plan, monitoring plan for socioeconomic and environmental impacts are developed. Water users provide funding and conservation activities start.

5. Mature and Strengthened: Stable and secure funding provided to support interventions in the watershed, monitoring taking place to establish baseline conditions and evaluate impacts of the interventions, and an adaptive management approach is adopted.

Michael Reuter presented how Water Funds would fit within the 'Securing Water' objective of the Global Freshwater Program and went through the organizational structure and potential TNC contacts for water fund work. ***Eleanor Morris*** presented polling as a way to promote Water Funds where local officials have to make decisions to allow funds to go forward. She summarized the poll done for the Santa Fe Water Fund to determine ratepayer support and willingness to pay. Voters focus on human health as it relates to water policy, and safe and reliable water supplies are a top priority. We need to avoid using technical words like watershed, as people do not understand them. The point that only 25% of people know where their water comes from was brought up, and ***Kirk Klausmeyer*** presented the TNC 'Where does your water come from' interactive online map to raise awareness of water supply sources and levels of protection. ***Laura McCarthy*** presented the impacts of the Las Conchas fire in New Mexico and striking photos of post-fire flooding and sediment. Finally, ***Rob Marshall*** presented Arizona's calculation of water yield benefits from forest thinning, including the idea that forest thinning can create new water by decreasing the evapotranspiration and increasing runoff. At the end of the workshop, we discussed strategies going forward and created small teams to work on the strategies. The main goal is to move a few of the Water Fund projects in the US forward, monitor them, and replicate if successful.

Strategy	**Leads**	**Team**
Community of Practice: share workshop presentations and strategies on Connect site and coordinate with Mississippi Water Funds effort and eastern US. Use the 'Restoring America's Forest' conference, the 'North America Leadership' meeting (March 27) in New Mexico and the TNC Science Conference as platforms.	Michael Reuter & Laura McCarthy	Kristen Podolak, Eleanor Morris, (Kristen Blann, Adam Freed)
Coordinate D.C. approach: work together to plan a joint D.C. visit to key agencies (Army Corps, Bureau of Rec, FEMA, US Forest Service etc.) and legislative staff.	Mark Kramer and Cheryl Lombard	David Edelson, Laura McCarthy, Michael Reuter
Coordinate outreach to foundations, individual donors and corporations: jointly seek funds to support ongoing and future TNC water fund efforts.	Michael Reuter	David Edelson, Laura McCarthy, (Diane Rudin, Susan Weber, Rich Walters, Tauni Sauvage)
Bring in the Science Leadership: Contact Heather Tallis (Invest for water funds in Latin America, how can we apply models to US), also Peter Kareiva to ask about methods to calculate costs of fire.	David Edelson	Laura McCarthy
Planning & Science Coordination: share results of avoided cost studies and other studies using webcast and Connect.	Ed Smith	Ann Bradley, Darren Borgias, Kristen Podolak, (Marcos Robles, Ryan Haugo, Mark Stern)

() Person not at the workshop

Fernando Veiga listens intently (left), Laura McCarthy makes the case with photos of fire and sediment (center), and Anne Bradley shows how TNC plays bocce using the scientific purse-string measurement method (right).