



# CARPE DIEM WEST

*Our water – Finding solutions together*

## **Carpe Diem West - Healthy Headwaters Project**

Working Group Meeting

Friday, March 25, 2011

Denver, Colorado

Meeting Summary

**Carpe Diem West's** Healthy Headwaters Project Working Group and an invited group of leaders from the western water community met in Denver on March 25, 2011. This was the Working Group's third face-to-face meeting (following meetings last March and September in Seattle and Salt Lake City, respectively). The first two meetings focused primarily on framing the issues surrounding headwaters protection and linking a core group of leaders working in the field. Building on that foundation, the Denver meeting focused on how Carpe Diem West can support successful headwaters programs across the West, and strengthen its unusual alliance of leaders that form the core constituency for headwaters protection.

Using the example of the **Denver Water - US Forest Service Forest-to-Faucet Partnership** as a focus point for discussion, the Denver meeting participants explored specific issues central to the work of exporting successful headwaters protection programs across the American West and bringing them to scale. These included:

- ▶ What will success in headwaters protection look like two years from now?
- ▶ What lessons learned and best practices can be gleaned from existing successful headwaters programs such as the Denver Water-US Forest Service Forest-to-Faucet Partnership?
- ▶ Which western communities and watersheds are the most promising locations for new Healthy Headwaters programs, and/or for involvement in our Healthy Headwaters Network?
- ▶ What is the best way to manage watersheds for resiliency over the short and long term in a time of climate change - and how should we define "resiliency"?

### **Following is a summary of the day's discussions:**

1. Meeting Outcomes
2. Conversation With Under Secretary of Agriculture Harris Sherman
3. The Denver Water - USFS Forest-to-Faucet Partnership - the Story, and Lessons Learned
4. Developing the Partnerships

5. Defining Success for Headwaters Restoration: What Will Be the Best Indicators of Success Two Years From Now?
6. Managing Watersheds - Short-term and Long-term Paths
7. Next Steps for the Healthy Headwaters Alliance

Additional Information and background is available at Carpe Diem West's Healthy Headwaters web page, <http://carpediemwest.org/what-we-do/healthy-headwaters-project>.

## 1. Meeting Outcomes

The group identified three main themes that emerged from its discussions over the course of the day:

- ▶ A strong alliance of diverse partners (as was represented in the room on Friday) is essential to success. This alliance needs to be ready to take advantage of opportunities - which, thanks to climate change, are on their way.
- ▶ In the next two years, this alliance will develop a shared policy and science agenda.
- ▶ The stories - the new partnerships, the lessons, etc. - are rich and compelling and need to be told.

## 2. Conversation With Under Secretary of Agriculture Harris Sherman

*"Carpe Diem West and USDA need to establish a process for checking in and making sure we're being helpful to each others' work on headwaters.*

*We place a lot of value on what Carpe Diem West is doing."*

*- Harris Sherman, Under Secretary, U.S. Department of Agriculture*

Mr. Sherman gave his views on the indicators of success for the Forest Service's headwaters protection work. He emphasized five main elements that will be important to the success of this work:

- ▶ Building public awareness. We need to raise awareness of the watersheds where water comes from, of the fact that these watersheds are "green infrastructure," and of the connection between healthy forests and the water people drink every day.
- ▶ Building partnerships. We need to partner with businesses, NGOs, and communities in order to provide a broad base of support for headwaters conservation, and to ensure projects are coordinated as opposed to "random acts of conservation."
- ▶ Setting priorities. "With 40 million acres of beetle-killed trees in the West, and predictions of 20 million more, we can't do everything. So we need to be strategic."

- ▶ Focusing on projects with multiple benefits. This means projects that benefit streams, forests, wildlife, and drinking water - and that can attract the involvement of private partners.
- ▶ Documenting success. In many cases, the Forest Service finds it has done good work in the past, and needs to be able to tell that story to the public and potential partners.

Mr. Sherman stressed that all of these concepts are reflected in the proposed National Forest Planning Rule that is currently out for public comment until May 16, 2011. He also noted that the Rule contains several emphasis areas connected to Carpe Diem West's goals: drinking water, watersheds, and the need to build partnerships to protect and manage them.

Mr. Sherman said that Carpe Diem West can play a major role in helping to create and develop the partnerships that are crucial to the success of headwaters restoration. He mentioned the need to extend the existing Healthy Headwaters Network to more communities, for example Boulder, Pueblo, and Colorado Springs.

Finally, Mr. Sherman emphasized the need to establish a regular process by which Carpe Diem West and the USDA can follow up on the progress of their headwaters protection efforts, and to ensure they are being helpful to each others' work. He assigned Regional Forester Rick Cables to work with Carpe Diem West in that regard.

### **3. The Denver Water - USFS Forest-to-Faucet Partnership - the Story, and Lessons Learned**

*"The 1996 Buffalo Creek Fire was a cold wake-up call. It led to a new understanding of where water comes from - not from the streams, but from the forest."  
- Ron Lehr, President, Denver Water Board (1993-1999)*

*"We understand that we must focus on values, so that customers understand the need to care for their water sources, as well as preserving the economy and recreational values."  
- Jim Lohead, Manager and CEO, Denver Water*

*"We - the Forest Service - sit at the top of the watershed in the Rocky Mountain Region. When you realize the role we play in the watershed, it's astounding. Water originating on our lands is relied upon by over 30 million people."  
- Rick Cables, Regional Forester, US Forest Service*

*“We need to move fast. We know these fires are going to happen. We now have people in leadership positions who are more inclined to work together, both at the utility and at the Forest Service. It's time to move out of a ‘utility model’ and into a ‘resource management’ model.”*

*- Tom Gougeon, Commissioner, Denver Water Board*

In August 2010, Denver Water and the US Forest Service signed a landmark agreement known as the **Forest-to-Faucet Partnership**, which will jointly fund \$33 million of fire prevention projects over a five-year period in five key watersheds that supply municipal water to the Denver area. At its September 2010 meeting in Salt Lake City, the Healthy Headwaters Working Group recognized the value of the Forest-to-Faucet Partnership as a model for programs in other Western communities, and decided to hold the March 2011 meeting in Denver so that the group could learn details directly from the people who created the Partnership.

At the meeting, Forest-to-Faucet principals were asked to tell the story of the Partnership's creation and development from their perspective, and to share the most important lessons learned from that experience.

**Ron Lehr**, former President of the Denver Board of Water Commissioners, described the reaction to the 1996 Buffalo Creek Fire, and subsequent rainstorms, which filled Strontia Springs Reservoir with sediment. He said this led to a new understanding of the connection between forests and the city's water supply. At first, a lot of blame was directed at the Forest Service, but then people realized the Forest Service and the cities were facing the same problems. This started the conversation that led to the Forest to Faucet partnership 14 years later.

Ron stressed the need for agencies like Denver Water to tell the story to the public. He said that in his experience in the utility world, if the story has value to consumers, they are willing to spend money on that value.

**Rick Cables**, US Forest Service Region 2, described his long-standing interest in getting water to the top of the Forest Service agenda. As Regional Forester, he could see ways that water providers and the Forest Service could work together on common interests, but relationships were often hampered by past disputes over issues like state primacy and federal reserved water rights. Rick said he made a deliberate effort to form relationships with water providers, and eventually suggested to Denver Water the idea of using a small ratepayer surcharge for watershed improvement. This developed into the collaborative process that ultimately produced the Forest-to-Faucet Partnership.

**Jim Lochhead**, Denver Water, stated that shortly after he took over as CEO/Manager of Denver Water in the Spring of 2010, development of the Forest-to-Faucet Partnership was well underway. Under Secretary Sherman made it clear that the project was a priority for the Forest

Service, and the same was true for Denver Water. The Memorandum of Understanding (MOU) was signed in August 2010. Jim described its main provisions: Denver Water and the Forest Service each contribute \$16.5 million to improve forest resiliency to wildfire in five key watersheds that are critical to providing water to over 1.3 million people in the Denver area.

**Don Kennedy** of Denver Water, and **Brad Piehl** of JW Associates, presented details of the on-the-ground work planned for the five key watersheds identified in the Forest-to-Faucet Partnership, as well as the process for selecting these watersheds and projects. Their powerpoint presentations are available at the Carpe Diem West web page for the Denver meeting, [www.carpediemwest.org/Denver](http://www.carpediemwest.org/Denver).

Each of the Forest-to-Faucet principals was asked to share some the most important lessons learned that would be of help to colleagues starting similar programs elsewhere:

- ▶ “Start early and move fast - it took 14 years from the 1996 Buffalo Creek Fire to the signing of the MOU. With climate change, we need to learn to move faster.”
- ▶ “Emphasize the value and benefits of the project to the larger public. If people see the values, they will support the investment.”
- ▶ “Move quickly and be ready to change course - conditions in some of these watersheds may change over the course of the five-year MOU, and we may need to change the projects to match the new reality.”
- ▶ “Engage partners in monitoring efforts - it’s a great way to engage the public, especially young people.”
- ▶ “Reach across silos and build relationships - and keep building new ones, because the people at the agencies often change.”

#### 4. Developing the Partnerships

Following a brief overview of headwaters investment programs across the American West by **Matt Clifford**, Carpe Diem West, the group heard from several people involved in such programs. (For an overview of these programs, see Carpe Diem West’s report *User Contribution Programs: Linking Upstream Watershed Health With the Hearts, Minds, and Wallets of Downstream Users*, at <http://carpediemwest.org/reports>).

**Rick Cables**, US Forest Service Region 2, described his recent work, under special assignment from the Chief of the Forest Service, to identify new opportunities for the Forest Service to partner with communities, NGOs, and private companies, to develop programs to invest in headwaters. Rick and Under Secretary Sherman met with a variety of potential partners, including the cities of Phoenix and Salt Lake City, utilities such as Southern California Edison, the National Ski Area Association, and others in the outdoor industry.

**Mary Mitsos**, National Forest Foundation, described NFF's work to create voluntary "opt-in" and "opt-out" programs at resorts and utilities around the country. These programs now raise over \$500,000 per year. Mary said NFF has learned there is definitely a minimum size that such programs need to have in order to be effective, and to really scale them up, NFF needs to partner with national-scale businesses.

**Laura Briefer**, Salt Lake Public Utilities, described Salt Lake's involvement in watershed protection dating back over 100 years, when it first signed an MOU with the Forest Service. SLPU now generates about \$1 million with a water bill surcharge devoted primarily to acquiring inholdings in its municipal watersheds. In terms of lessons learned, Laura stressed the importance of constantly building and renewing relationships, and re-evaluating communications and education strategies. She also mentioned the need to remind the public that protecting watersheds is an ongoing challenge, and to fight the sense of complacency that can set in among the ratepayers who think the issue "has been taken care of."

**Karl Morgenstern**, Eugene Electric & Water Board, described Eugene's watershed protection activities which began with the development of a watershed protection plan in 2000. These activities are implemented with around \$600,000 per year derived in part from a one-percent rate increase. They focus primarily on private land, including payments for farmland preservation and riparian habitat protection. These programs are designed to reward good land management rather than punish bad management.

**Mike Anderson**, The Wilderness Society, described conservationists' work with Region 6 of the Forest Service to integrate municipal water protection into the Region's Watershed Action Planning process. A possible location is the Dungeness River, which provides water for the city of Sequim, WA, and which is a priority due to anadromous fish issues.

**John Shepard**, Sonoran Institute, described the pilot-scale economic analysis Sonoran and the Theodore Roosevelt Conservation Partnership are jointly conducting of the value of watershed services supplied by a sample municipal watershed - the Cache La Poudre River, which supplies water to Fort Collins, CO. The initial estimate is between \$269 million and \$553 million. The goal of the project is to produce a standardized process that can be used to make similar estimates for municipal watersheds west-wide.

## **5. Defining Success for Headwaters Restoration: What Will Be the Best Indicators of Success Two Years From Now?**

In order to help develop a common understanding of success that will help us to measure the progress of Carpe Diem West's Healthy Headwaters work, the participants were divided up into 13 groups of 3-4 persons a week prior to the meeting, and each group was asked to formulate its best answers to the following question:

*What will be an important indicator of success for this Healthy Headwaters work over the next two years?*

At the meeting, the groups presented their top answers to this question. (Note: post-meeting, the Healthy Headwaters Working Group will be preparing a summary list of responses that will be available on the meeting web page, [www.carpediemwest.org/Denver](http://www.carpediemwest.org/Denver)).

## **6. Managing Watersheds - Short-term and Long-term Paths**

*“We can build resilience not just into watersheds, but into our social systems as well, by creating new networks and new constituencies. People that didn’t think of themselves having common interests are coming together around watershed health.”*

*- Polly Hays, Regional Hydrologist, US Forest Service*

*“We need to break out of the old institutions based on old themes - they’re like the water in the fishbowl we are swimming in. We don’t know what the water is like outside of the fishbowl, but we need to be asking the questions that will help us find out.”*

*- Dr. Tony Cheng, Associate Professor, Colorado State University*

**Dr. Holly Hartmann**, University of Arizona, led a discussion of how managers can develop watershed management plans in the face of the uncertainty inherent in climate forecasts. She stressed that the “new normal” managers must contend with “VUCA”: Volatility, Uncertainty, Complexity, and Ambiguity. This requires managers to plan in terms of different scenarios, to try to focus in the short term on actions that will be beneficial under a wide range of scenarios, and, as the effects of climate change manifest themselves over the coming years, to strike a balance between committing too soon and acting too late.

**Jim Verdin**, National Integrated Drought Information System, spoke about how recent experience with drought has helped understand the range of drought scenarios we are likely to see over the mid-term. He emphasized the need to include the wealth of local knowledge from across the west in making such forecasts.

**Kevin Werner**, Colorado Basin River Forecast Center, NOAA, spoke about his river forecasting work. The Center places a high priority on ensuring that forecasts are done and presented in a way that is useful to river managers in the real world. This means getting out and talking to a lot of people, finding out how they actually use the forecasts, and what could make them more useful. Kevin made the point that working with river forecasts gives water managers hands-on experience with uncertainty and projections in the context of their operations, which can help them better incorporate these concepts into their planning for the effects of climate change.

**Polly Hays**, US Forest Service Region 2, pointed out that most watersheds have many stressors, and sometimes the best way to build resiliency is to address these other stressors so the system is better able to adapt to the effects of climate change. There is one set of priorities in the Denver Water - USFS Forest-to-Faucet Partnership, built primarily around fire, but once you factor climate change into the model, you might emerge with a different set of priorities.

**Dr. Tony Cheng**, Colorado State University, suggested that creating resilient headwaters in the face of climate change may require us to back up and question whether our institutions and practices are designed to the task at hand, or whether we need to re-think them. He said there is a great deal of information gathered at universities, but much of it is not useful because there is no advance agreement on the questions to be answered before research is conducted. He discussed the idea of “co-management” of resources, where a group of stakeholders reaches basic agreement on management principles in advance, and jointly manages them in accordance with these shared principles.

## 7. Next Steps for the Healthy Headwaters Alliance

At the end of the meeting, the group identified the three broad areas on which action is needed over the next six months and beyond: one, building a strong and diverse alliance, two, developing a shared policy agenda, and three, telling the stories. Following the meeting, Carpe Diem West staff organized the list of action items that participants suggested throughout the day, and organized them according to these three themes:

1. A strong alliance of diverse partners is essential to success. This alliance needs to be ready to take advantage of opportunities - which, thanks to climate change, are on their way.
  - ▶ Create a strategy for engaging additional communities and leaders in the Healthy Headwaters network
  - ▶ Get more Western mayors involved, perhaps through the creation of a “Mayors for Healthy Headwaters” group
  - ▶ Create a Healthy Headwaters discussion among Front Range water interests
  - ▶ Start a pilot project to test the co-management idea
  - ▶ Assess the membership of the Healthy Headwaters Working Group and consider new additions
  - ▶ Consider new venues for Jim Lochhead and Rick Cables to speak to about new partnerships



1. In the next two years, this alliance will develop a shared policy and science agenda.
  - ▶ Establish a Congressional presence for Healthy Headwaters
  - ▶ Create a list of impediments to headwaters restoration
2. The stories - the new partnerships, the lessons, etc. - are rich and compelling and need to be told.
  - ▶ Develop a communications strategy based on consistent messages, and use consistent language to tell the stories of successful partnerships
  - ▶ Meet with Secretary of Agriculture Tom Vilsack, with stories about successful headwaters partnerships
  - ▶ Engage the Western Governors Association, and get Healthy Headwaters on its agenda

This list will be presented to the Healthy Headwaters Working Group as a basis for developing a workplan for carrying the Healthy Headwaters agenda forward over the next two years.

## **About Carpe Diem West**

Carpe Diem West is a broad-based network of experts, advocates, decision makers and scientists addressing the unprecedented impacts the growing climate crisis is having on water in the American West. Facing this challenge requires us to move beyond historic conflicts and develop sustainable practices and policies to better manage water in a time of increasing uncertainty. Because no one interest group or constituency can, by itself, make the necessary changes, Carpe Diem West connects leaders across previously un-bridged boundaries to create solutions that provide water security for people, the economy, the environment, and food production in the American West.

## **About Carpe Diem's Healthy Headwaters Project**

Carpe Diem West's Healthy Headwaters Project was started in Fall 2009, with the formation of the project's Working Group. The purpose of this project is to re-think western watershed management priorities and policies, and to link protection and restoration of headwater systems with downstream water security. The working group includes key leadership from various sectors across the West. Its role is to assess current and projected impacts, identify potential policy and management responses, and to help foster joint, collaborative actions.

## Healthy Headwaters Meeting Participants

March 25, 2011 - Denver, CO

**Mike Anderson**, Senior Resources Analyst, The Wilderness Society\*\*  
**Laura Briefer**, Special Projects Manager, Salt Lake City Public Utilities\*\*  
**Rick Cables**, Regional Forester, Rocky Mountain Region, USFS  
**Don Carlson**, Assistant General Manager, Northern Colorado Water Conservancy District  
**Kim Carr**, Sustainable Initiatives Coordinator, Sierra Nevada Conservancy\*\*  
**Tony Cheng**, Associate Professor, Colorado State University  
**Matt Clifford**, Policy Director, Carpe Diem West\*\*  
**Gary Collins**, Chairman, Water Working Group, Ruckelshaus Institute of Environmental Resources  
**Jeff Crane**, Executive Director, Colorado Watershed Assembly  
**Alexandra Davis**, Assistant Director for Water, Colorado Department of Natural Resources  
**Peter Dykstra**, Northwest Regional Director, The Wilderness Society  
**Beth Ganz**, Public Affairs Director, Vail Resorts  
**Kara Gillon**, Senior Staff Attorney, Defenders of Wildlife  
**Bruce Goines**, Ecosystem Services Program Manager, USFS Region 5  
**Tom Gougeon**, Executive Director, Gates Family Foundation  
**Claire Harper**, Landowner Assistance Program Manager, USFS Rocky Mountain Region  
**Holly Hartmann**, Director, Arid Lands Information Center, University of Arizona/CLIMAS\*\*  
**Taylor Hawes**, Colorado Rivers Program Director, Nature Conservancy  
**Polly Hays**, Water Program Manager, USFS Rocky Mountain Region\*\*  
**Tom Iseman**, Program Director, Western Governors Association  
**Don Kennedy**, Environmental Scientist, Denver Water  
**Doug Kenney**, Director, Western Water Policy Program, University of Colorado  
**Karen Knudsen**, Executive Director, Clark Fork Coalition\*\*  
**John Lamson**, Vice President, Resource Media  
**Ron Lehr**, Attorney, American Wind Energy Association  
**Jim Lochhead**, CEO, Denver Water  
**Mike McHugh**, Environmental Permitting Coordinator, Aurora Water  
**Mary Mitsos**, Vice President, National Forest Foundation  
**Karl Morgenstern**, Drinking Water & Source Protection Coordinator, Eugene Water & Electric Board\*\*  
**Fred Noack**, Project Manager, USFS Region Four  
**Drew Peternell**, Director, Trout Unlimited Colorado Water Project  
**Brad Piehl**, Partner/Hydrologist, JW Associates  
**Mark Pifher**, Director of Aurora Water, City of Aurora  
**John Shepard**, Senior Advisor, Sonoran Institute\*\*

**Harris Sherman**, Under Secretary, USDA

**Tim Skarupa**, Hydrologist, Water Resource Operations, Salt River Project

**Randi Spivak**, Vice President of Government Affairs, Geos Institute\*\*

**Peter Stangel**, Senior Vice President, US Endowment for Forestry & Communities

**Claire Thorp**, Assistant Director, National Fish & Wildlife Foundation

**Jim Verdin**, Deputy Director, National Integrated Drought Information System, USGS

**Kevin Werner**, Service Coordination Hydrologist, Colorado Basin River Forecast Center, NOAA

**Steve Whitney**, Program Officer, Bullitt Foundation\*\*

**Kimery Wiltshire**, CEO & Director, Carpe Diem West\*\*

**Rebecca Wolfe**, National Forest Committee, Washington State Chapter, Sierra Club\*\*

\*\* indicates Carpe Diem West Healthy Headwaters Working Group members