



**CARPE DIEM WEST**  
*Our water – Finding solutions together*

## **Water is Life: Climate Change, Western Water and Health**

*Developing a Common Action Agenda for Water Managers, Community Activists & Health Leadership*

Program Overview: February 2016

### **Summary**

Carpe Diem West is engaging western water managers, local and state agencies, social justice activists, climate scientists, and western health sector leadership in developing a common policy and research agenda to address the impacts of a changing climate and water quantity and quality on health in the American West.

### **The Rapids Ahead**

Observed changes in the Earth's climate are having profound impacts on water in the American West. Climate-related changes to water supply and quality are having significant effects on human health. From outbreaks of vector-borne and infectious diseases, to impacts on nutrition and agriculture, to increased incidences of cardiovascular and respiratory diseases linked to forest fires, the effects of climate change on water and regional health are raising significant public policy, infrastructure, social justice and financing issues for decision makers now and in the coming decades.

The “separate” issues of health, water, and climate can no longer be disaggregated and addressed in silos. The professionals and activists working in their respective fields need to be aware of the powerful ways in which these issues intersect — to be on the lookout for impacts, to communicate what they see to their colleagues, and to plan collaboratively for the future.

A lack of collaborative discussion is of particular concern in the American West, where climate scientists agree that climate change is significantly altering every aspect of water—its quality, quantity, timing, phase (rain or snow), and temperature. In the American West, as in the rest of the nation, the longstanding divisions between water managers, social justice advocates, regulatory agencies and health officials have frustrated most attempts at collaboration even before the considerations of climate change.

### **The Opportunity**

In 2011, Carpe Diem West and the Public Health Institute's Center for Public Health & Climate Change interviewed some of the nation's leading experts from the fields of health, water, and

climate about what they see as some of the most significant areas of concern, with a focus on the American West. The [resulting brief](#) highlighted some of the common themes and issues that emerged from discussions with these experts, and identified questions for decision makers to consider as they address the potential impacts of climate change on water and health.

The experts interviewed for the 2011 report, in addition to interviews with field experts conducted in Fall 2015 and further research conducted by Carpe Diem West, cite three critical needs:

1. *Effective coordination of efforts among professional sectors, community leaders and regulatory agencies that work within various aspects of water, climate, and health.*

We have heard repeatedly that the “separate” issues of health, water, and climate can no longer be disaggregated and addressed in silos. Field experts went on to note that the professionals and activists working in all three fields need to be aware of the powerful ways in which these issues intersect — to be on the lookout for impacts, to communicate what they see to their colleagues, and to plan collaboratively for the future. The diverse perspectives, community observations, and experience of those that work with and observe the effects of climate, water, and health must be connected in order to obtain an accurate picture of their combined effects.

2. *More extensive information and monitoring of the existing and emerging connections between water, climate, and health.*

This monitoring should be focused on answering the basic questions that diverse communities of professionals and policymakers agree are most important. For example:

- What effect will the changing precipitation, runoff, and infiltration patterns have on public health?
- What are the long-term health consequences of the increasing prevalence of catastrophic wildfires including air quality, sediment run-off, and use of fire fighting chemicals?
- In what ways are communities of color and low-income residents being disproportionately affected by water quality and availability?
- How are instream flow levels and air temperatures affecting water quality and quantity, and how are these changes altering the ecosystems that humans live in and rely upon for food and water?
- What information is needed to foresee impacts on water quality or stresses on current water treatment infrastructure?
- What research is needed to monitor for public health impacts and inform managers and decision makers about adverse outcomes and cost?

### 3. *Development of a policy agenda on the local, regional and national level.*

There is no coordinated discussion of the policies needed to address these issues and no collaborative group to advocate for these changes.

Developing the strategies necessary to successfully address these, and other questions, requires coordinated action among the professionals and community activists working on health, water, social justice and climate. The first step in any such effort is to establish a dialogue among these disparate groups.

### **Moving Forward - The Carpe Diem West Approach**

Carpe Diem West leads an innovation network of diverse western water leaders. Together, we develop sustainable responses to the impacts of climate change on water resources. Through this broad-based network, leaders access a collaborative framework, identify new approaches for addressing climate change impacts, share information quickly, advocate for policy changes, and integrate communication strategies and tools to promote success.

This approach of bringing together historically siloed parties has resulted in new initiatives, policies, and solutions that are now being carried out by communities and water agencies across the American West.

Carpe Diem West currently seeks funds to further develop this health, water and climate change program to:

- Conduct a field survey of the leading research, social justice and health advocacy work
- Based on the field surveys, identify and engage leadership in these fields
- Host a convening of field leadership
- Summarize the findings and outcomes of the convening
- Provide three months of post-convening staffing to ensure that the meeting outcomes are developed to the next step

### **Projected Outcomes**

The following outcomes for the first phase of the program have been identified:

- The field is assessed for cross-sector policy and action steps
- A core leadership group is established
- The convening of field leadership identifies opportunities for cross-sector work, policies, action steps, and priority research needs
- Outcomes from the convening are developed to the next steps
- One to two years of funding is secured, and the work is housed at an appropriate institution



## **2015 *Water is Life* Program Interviewees**

The following experts in the field of philanthropy provided their knowledge and insights that helped inform our developing program, *Water is Life: Climate Change, Western Water, and Health*.

**Paige Brown** *Climate and Energy Program Director, Consultative Group on Biological Diversity*

**Gary Cohen** *Health Care Without Harm*

**Lois DeBacker** *Senior Program Officer, Kresge Foundation*

**Jon Jensen** *Executive Director, Park Foundation*

**Sophia Kolehmainen** *Executive Director, Cedar Tree Foundation*

**Bill Mitchell** *President, Flatcoat Consulting*

**Faith Mitchell** *President & CEO, Grantmakers in Health*

**Shorey Myers** *Program Manager, Jenifer Altman Foundation*

**Rachel Pohl** *Consultant, RLP Consulting*

**Diane Schrauth** *Consultant, Stormwater Funders Working Groups*

**Kathy Sessions** *Executive Director, Health & Environmental Funders Network*

**Ben Starett** *Executive Director and Founder, Funders Network*

**Amy Swiatek** *TFN Intermountain West Program Consultant, Intermountain West Funder Network*

**Kay Treacle** *Executive Director, Harder Foundation*

**Tracy Zhu** *Environment Fellow, The San Francisco Foundation*

## **2011 Concept Paper Interviewees**

The following experts in the field of water, public health and climate change provided their knowledge and insights for our 2011 publication, *Charting the Rapids Ahead: Western Water, Climate Change, & Public Health*.

**John Andrew** *Assistant Deputy Director, California Department of Water Resources*

**Dr. John Balbus** *Senior Advisor for Public Health, National Institutes of Health*

**Dr. Tim Brown** *Director, Western Regional Climate Center*

**Dr. Joan Brunkard** *Waterborne Disease Prevention Branch, National Center for Emerging & Zoonotic Infectious Diseases, Centers for Disease Control & Prevention*

**Dr. Andrew Comrie** *Professor, School of Geography & Development / Associate Vice President for Research / Dean of Graduate College, University of Arizona*

**Heather Cooley** *Co-Director, Water Program, Pacific Institute*

**Debbie Davis** Policy Director, Environmental Justice Coalition for Water  
**Dr. Kristie L. Ebi** Lecturer, Department of Medicine, Stanford University  
**Dr. Howard Frumkin** Dean, School of Public Health, University of Washington  
**Dr. Fernando Guerra, M.D.** Director of Public Health (retired), now Consultant in Public Health, San Antonio Metro Health  
**Dr. Michael Hanemann** Wrigley Professor of Sustainability, Arizona State University and Chancellor's Professor Emeritus, University of California, Berkeley  
**Earl Lui** Program Director, California Wellness Foundation  
**Dr. Sharon Megdal** Director, Water Resources Research Center, University of Arizona  
**Elise Miller** Executive Director, Collaborative on Health and the Environment  
**Miriam Rotkin-Ellman, MPH** Scientist, Natural Resources Defense Council  
**Kathy Sessions** Executive Director, Health and Environmental Funders Network  
**Dr. Cristina Tirado** Director, Center for Public Health & Climate Change, Public Health Institute