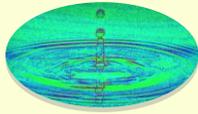


Adaptation Strategies and Information Needs in Response to Extreme Events

A series of workshops focusing on water resources, led by the National Oceanic and Atmospheric Administration (NOAA), US Environmental Protection Agency (US EPA), Water Environment Research Foundation (WERF), and Water Research Foundation (WaterRF).



NOAA ♦ EPA ♦ WERF ♦ WaterRF

Russian River Case Study

Finley Community Center
2060 West College Avenue
Santa Rosa, California 95401

March 13 - 14, 2012

Objectives:

1. **Learn what worked and didn't** in water/wastewater utilities' responses to extreme climate and weather events
2. **Help local and federal agencies and professional organizations better understand** how to address local needs for improved/relevant information, forecasts, and services for supporting resource management and other related decision making
3. **Identify emerging approaches** to adaptation planning
4. **Discuss gaps in tools and knowledge** for coping with the next extreme event (e.g., new tools, data formats, relationships, etc.)
5. **Explore the need for a regional drought early-warning information system** that directly informs the public, major water managers, agricultural interests, and conservation agencies

TUESDAY, MARCH 13, 2012

- 8:00 – 8:30 Coffee and Registration
- 8:30 – 8:45 Welcome and Purpose of Workshop
Nancy Tosta, Ross and Associates, Facilitator; Nancy Beller-Simms, NOAA; Karen Metchis, EPA; Lauren Fillmore, WERF; Kenan Ozekin, WaterRF
- 8:45 – 9:00 Importance of Workshop
Jake Mackenzie, Mayor, City of Rohnert Park and Chair of the Sonoma County Regional Climate Protection Authority
- 9:00 – 9:30 Russian River Watershed: Past, Current and Future Climatology and Hydrology
Mike Anderson, California State Climatologist and California State Department of Water Resources (CA DWR)
- 9:30 – 10:15 Challenges and Partnerships:
 - Water Management - *Jay Jasperse, Sonoma County Water Agency (SCWA)*
 - Ecosystem Services - *Lisa Micheli, Pepperwood Foundation*
- 10:15 – 10:30 Break

10:30 – 11:00 Mitigating Impacts of Extreme Events in the Russian River Watershed: Examples of Activities Aimed at Improved Resource Management (Part 1 of 2 sessions) – This session will include short presentations with a panel discussion

Robert Webb, U.S. National Oceanic and Atmospheric Administration (NOAA), Session Chair

- National Integrated Drought Information System (NIDIS) and US Geological Survey (USGS) flood study and future climate modelling – *Lorrie Flint, USGS*
- CA Department of Water Resources including Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) – *Mike Anderson, CA DWR*
- Integrated Water Resources Science and Services (IWRSS)– *Robert Hartman, NOAA National Weather Service, California Nevada River Forecast Center*
- Hydrometeorological Testbed (HMT) Project - *Allen White, NOAA*

11:00 – 11:30 Questions and Answers

11:30 – 12:00 Mitigating Impacts of Extreme Events in the Russian River Watershed: Examples of Activities Aimed at Improved Resource Management (Part 2 of 2 sessions) - This session will include short presentations with a panel discussion.

Robert Webb, NOAA, Session Chair

- Open space and agriculture preservation – *Karen Gaffney, Sonoma County Agricultural Preservation & Open Space District*
- Sonoma County Water Agency programs – *Jay Jasperse, SCWA*
- Coho Recovery Program – *Dick Butler, NMFS*

12:00 – 12:30 Questions and Answers

12:30 - 1:30 Lunch with Keynote Presentation: “Sustainable Water Management in the Face of Risk and Uncertainty” *Lester Snow, Director of Integrated Resource Management, Resources Law Group*

1:30 – 2:40 Evolution of Response to Extreme Events Panel
Jay Jasperse, SCWA, Session Chair

Panelists:

- *Mike Dillabough, U.S. Army Corps of Engineers, Manager of Operations for Lakes Sonoma and Mendocino*
- *Nick Frey, Sonoma County Winegrape Commission*
- *Pam Jeane, SCWA*
- *Sean White, Mendocino County Russian River Flood Control and Water Conservation District*
- *David Guhin, City of Santa Rosa - Laguna Sub-Regional Treatment Plant*
- *Chris Helgren, Manager, Sonoma County Emergency Services*

- 2:40 – 3:30 Questions and Answers
- 3:30 – 3:45 Cookie Break
- 3:45 – 4:45 Previous Experience: Breakout Sessions
- How similar or different have your experiences and responses been to what the panelists described?
 - What partnerships, technologies, or other tools have been most helpful to you in being able to respond?
- 5:30 – 7:30 Reception Kendall-Jackson Wine Center, 5007 Fulton Road, Fulton, CA
95439, 707.322.8185

WEDNESDAY, MARCH 14, 2012

- 8:00 – 8:30 Coffee
- 8:30 – 9:00 Welcome and Synthesis
Nancy Tosta, Ross and Associates, Facilitator; Jay Jasperse, SCWA; Kenan Ozekin, WaterRF; Lauren Fillmore, WERF; Karen Metchis, EPA; Nancy Beller-Simms, NOAA
- 9:00 – 10:30 The Future: Breakout Sessions
- What are your gaps in knowledge, institutions, and/or data systems?
 - What are public, political, other barriers/concerns/pressures to plan (or not plan) for an extreme event?
 - What could be done either institutionally or regionally to enhance the ability to respond in the future?
- 10:30 – 10:50 Break
- 10:50 – 11:25 Summary Panel: What have we learned? Where do we go from here? –
Lisa Micheli, Pepperwood Foundation; Chet Koblinsky, NOAA; Bob Wilkinson, UCSB
- 11:25 – 11:45 Summary and Closing Observations
- 11:45 – 11:50 Description of Afternoon Activities
Ann Steinemann, U Wash; Lorrie Flint, USGS
- 12:00 – 1:00 Lunch with Keynote Presentation: “Storms, Floods and Atmospheric Rivers -- Putting the Extreme into California Extreme” *Mike Dettinger, USGS and California Regional Integrated Sciences and Assessment (RISA)*
- 1:00 – 4:45 NIDIS California Pilot: Drought Early Warning Information System Scoping meeting for a North Bay Counties and Russian River Valley pilot activity
- First California Russian River/North Bay meeting of interested stakeholders, organizations, and agencies to plan activities associated with developing a local drought early warning system
 - NIDIS Overview; pilots and pilot activities: *Robert Webb, NOAA*
 - Round table discussion of drought information needs, resources, and priorities: *led by Anne Steinemann, University of Washington*

BREAK

- Round table discussion of potential applications of drought early warning information: *led by Anne Steinemann*
- Identify and discuss applications: decision-makers, partners, stakeholders, and products: *Anne Steinemann and Lorrie Flint*
- *Next Steps*

