

**Remote Sensing Workshop  
September 27-28, 2012  
San Diego, CA**

**Sponsored by  
Environmental Defense Fund  
NASA  
California Water Foundation  
Water Education Foundation**

**AGENDA**

**Thursday, September 27**

**8:30 Check-in**

**8:45 Welcome**

*Rebecca Shaw, Associate Vice President, Environmental Defense Fund  
Lester Snow, Executive Director, California Water Foundation*

**9:00 Water Management Panel – Issues at the Local, State and Federal Levels**

***A survey of water manager policy and administration challenges at the federal, state and local levels that could be addressed with remote sensing technology.***

*Dave Palumbo, Deputy Regional Director, Bureau of Reclamation, Lower Colorado Region  
Paula Landis, Chief, Division of Integrated Regional Management, California Department of Water Resources*

*David Orth, General Manager, Kings River Conservation District*

*Steve Wolff, Colorado River Coordinator, Wyoming State Engineer's Office*

*Moderator: Lester Snow, Executive Director, California Water Foundation*

**10:15 Break**

**10:30 Technology Panel – Snow Hydrology, Evapotranspiration and Groundwater Change**

***Hear from three experts on the remote sensing capabilities and examples of existing uses and recent expansion in use related to snowpack monitoring, evapotranspiration and groundwater elevation changes.***

*Snow Hydrology: Jeff Dozier, Professor, University of California, Santa Barbara*

*Evapotranspiration: Justin Huntington, Assistant Research Professor of Hydrology, Desert Research Institute*

*Groundwater Change: Jay Famiglietti, Professor, University of California, Irvine*

*Moderator: Forrest Melton, Senior Research Scientist, NASA/Ames Research Center*

**Noon Lunch**

**1:30 Emerging Technology, Remote Sensing Applications and Investments by Federal and State Agencies**

*Anne Castle, Assistant Secretary for Water and Science, Department of the Interior*

- 2:15 Case Studies**  
**Examples of Successful Applications of Remote Sensing to Address Water Management Issues**  
**Integration of Remote Sensing into the U.S. Drought Monitor**  
 Brian Wardlow, *University of Nebraska, Lincoln*  
**Implementation of a State Remote Sensing Program for Water Accounting and Drought Management**  
 Rick Allen, *Professor, University of Idaho*  
 Steve Wolff, *Colorado River Coordinator, Wyoming State Engineer's Office*  
**Blended Observations and Models of Snow Water Equivalent for Water Resources Applications**  
 Leanne Lestak, *GIS Remote Sensing Specialist, Institute of Arctic and Alpine Research, University of Colorado, Boulder*  
**Session Chair:** Jennifer Pitt, *Director, Colorado River Program, Environmental Defense Fund*
- 3:30 Break**
- 3:45 Economics of Remote Sensing**  
 Bonnie Colby, *Professor, Departments of Resource Economics, Geography, Hydrology and Water Resources, University of Arizona*  
 Richard Howitt, *Professor, Department of Agricultural and Resource Economics, University of California, Davis*  
 Tony Willardson, *Executive Director, Western States Water Council*  
 Moderator: Tony Morse, *Managing Partner, Spatial Analysis Group*
- 5:00 Emerging Needs and Potential Future Use of Remote Sensing**  
 Rebecca Shaw, *Associate Vice President, Environmental Defense Fund*
- 5:30 Adjourn**

**Friday, September 28**

- 8:30 Overview of NASA Applied Sciences Water Resources Program**  
 Bradley Doorn, *Program Manager for Water Resources, Applied Science Program, Earth Science Division, NASA*

**Breakout Session**

**9:15-10:30**  
**Room A**  
**California Groundwater Elevation**  
 Jeanine Jones, *Interstate Resources Manager, California DWR*  
 Jay Famiglietti, *Professor University of California, Irvine*  
 Zhen Liu, *Scientist, NASA-JPL*

**9:15-10:30**  
**Room B**  
**Colorado River Interstate Accounting**  
 Jim Verdin, *Physical Scientist, USGS*

**Breakout Session**

**10:45-12:00**

**Room A**

**Agricultural Water Use**

Kent Frame, *Program Manager II, Water Use & Efficiency Branch, Statewide Integrated Water Management, California DWR*

Forrest Melton, *Senior Research Scientist, NASA/Ames Research Center*

**10:45-12:00**

**Room B**

**Verification/Administration of Water Transfers**

Bruce Aylward, *Director, Ecosystem Economics*

Stephen Smith, *Partner, Regenesys Management Group*

**12:00 Lunch**

**Breakout Session**

**1:15-2:30**

**Room A**

**Snowpack Monitoring/Water Supply Forecasting**

Tom Painter, *Scientist, NASA/JPL*

Frank Gehrke, *Chief, California Cooperative Snow Surveys, California DWR*

**1:15-2:30**

**Room B**

**Vegetation Monitoring/Wetlands Mapping**

Shruti Khanna, *Post Doctoral Scholar, UC Davis*

**2:30 Break**

**2:45 Feedback from Breakout Groups and Discussion: Vision of the Future of Remote Sensing**

Lester Snow, *Executive Director, California Water Foundation*

**4:00 Adjourn**