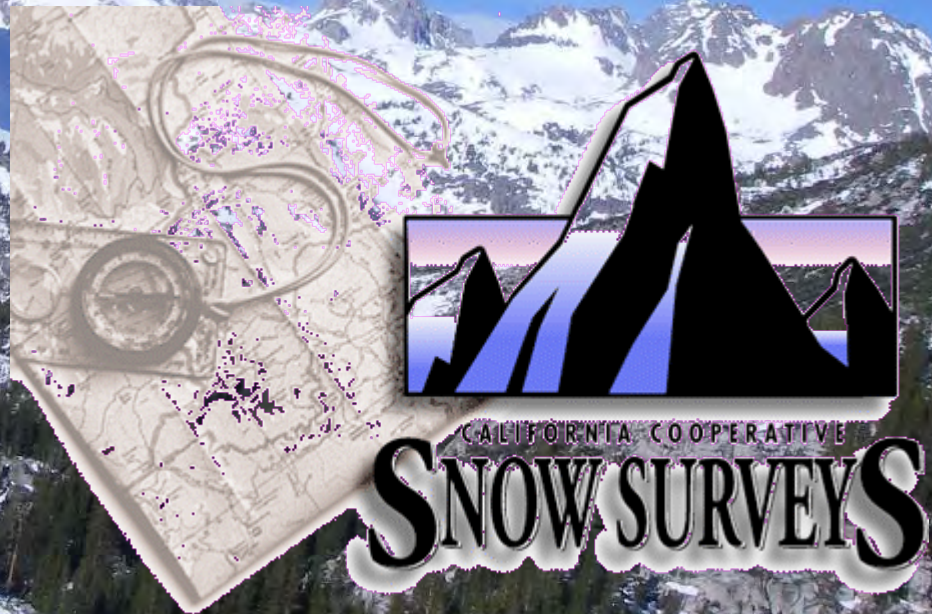


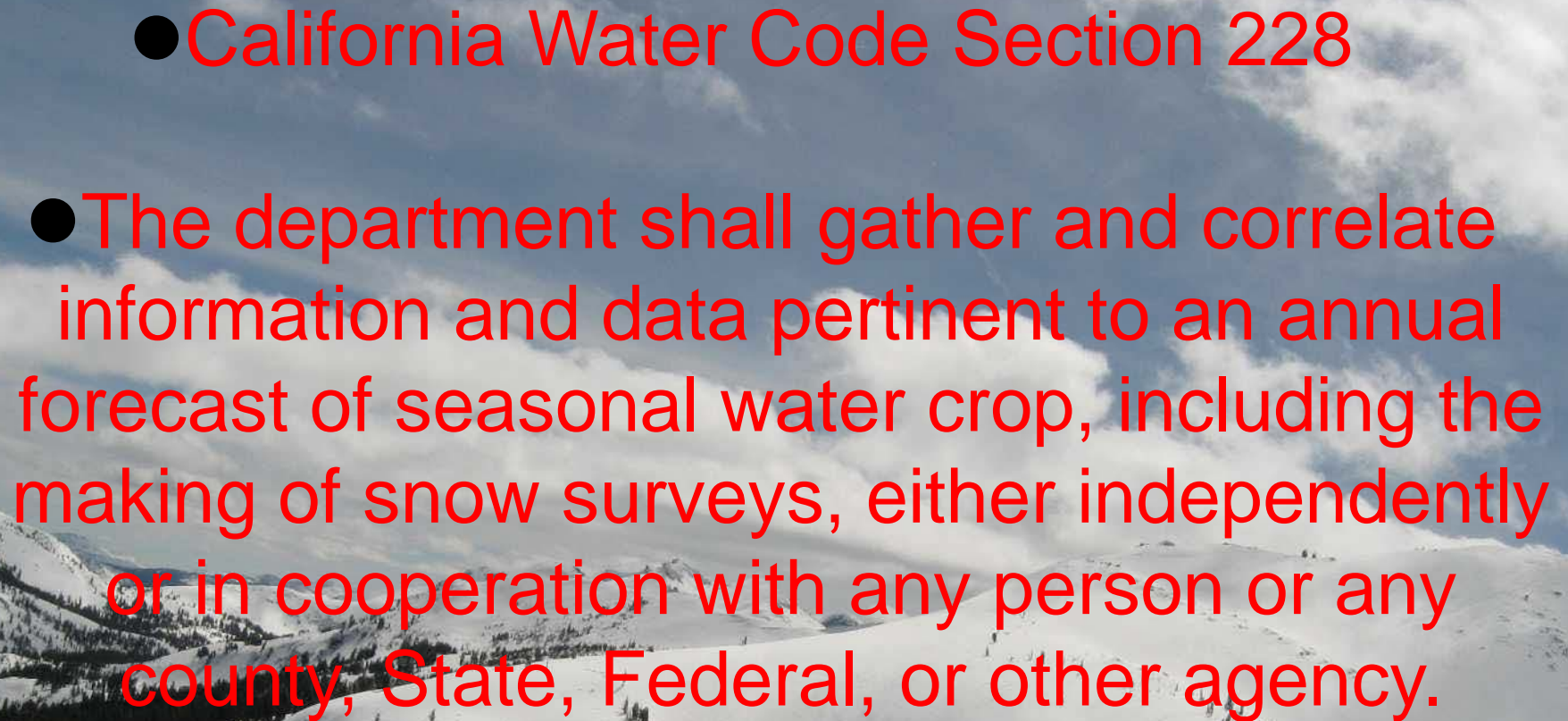
- Remote Sensing Applications Workshop
  - September 27-28, 2012
- Investing in Observations to Adapt to Change and Variability





● Dr. James E.  
Church



- 
- An aerial photograph of a vast, snow-covered mountain range. The terrain is rugged and covered in a thick layer of white snow. Numerous evergreen trees are scattered across the slopes, some in small clusters and others in more isolated spots. The sky is filled with soft, white clouds, creating a bright and somewhat hazy atmosphere. The overall scene depicts a high-altitude winter landscape.
- California Water Code Section 228
  - The department shall gather and correlate information and data pertinent to an annual forecast of seasonal water crop, including the making of snow surveys, either independently or in cooperation with any person or any county, State, Federal, or other agency.



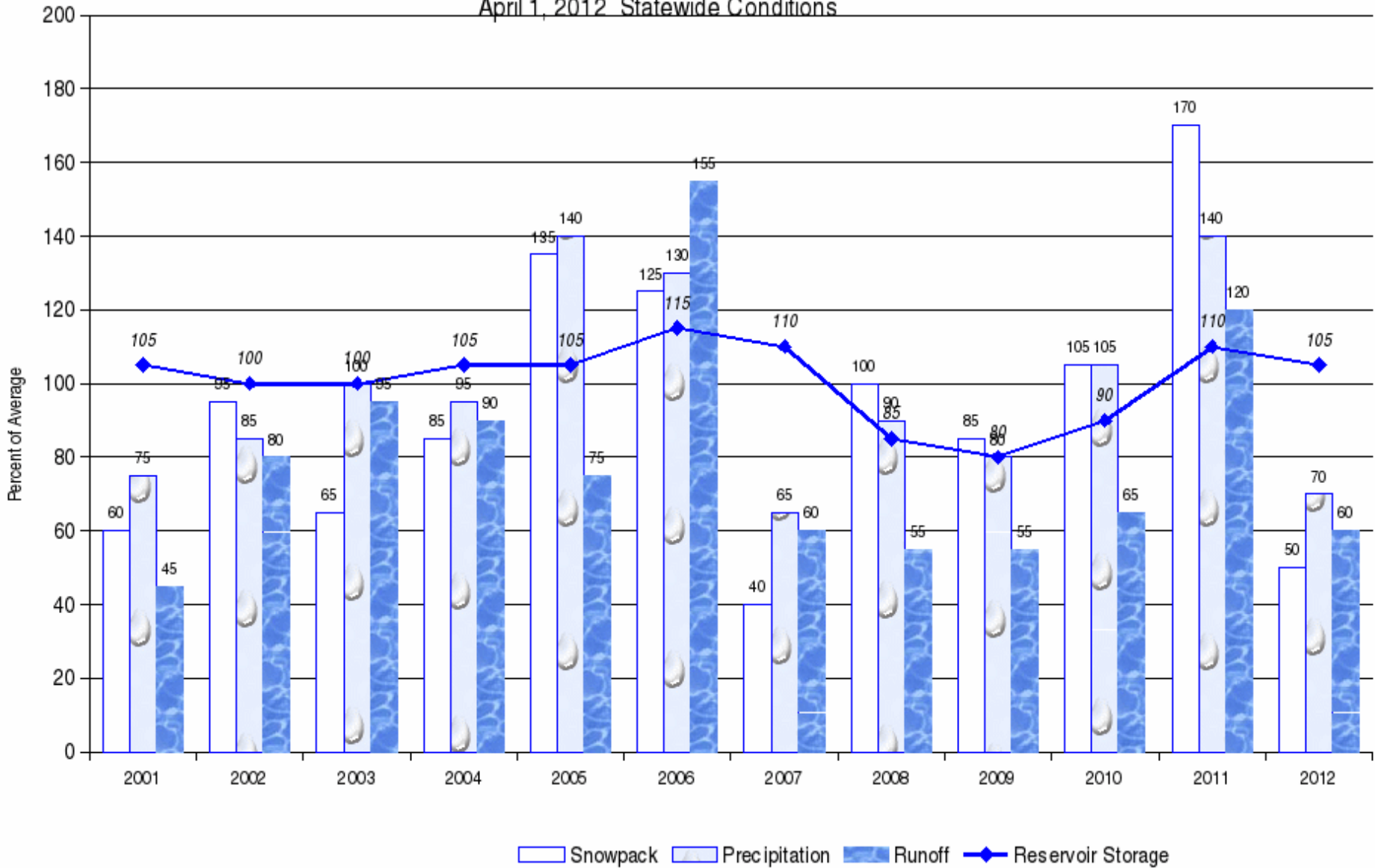






DEPARTMENT OF WATER RESOURCES  
CALIFORNIA COOPERATIVE SNOW SURVEYS

April 1, 2012 Statewide Conditions



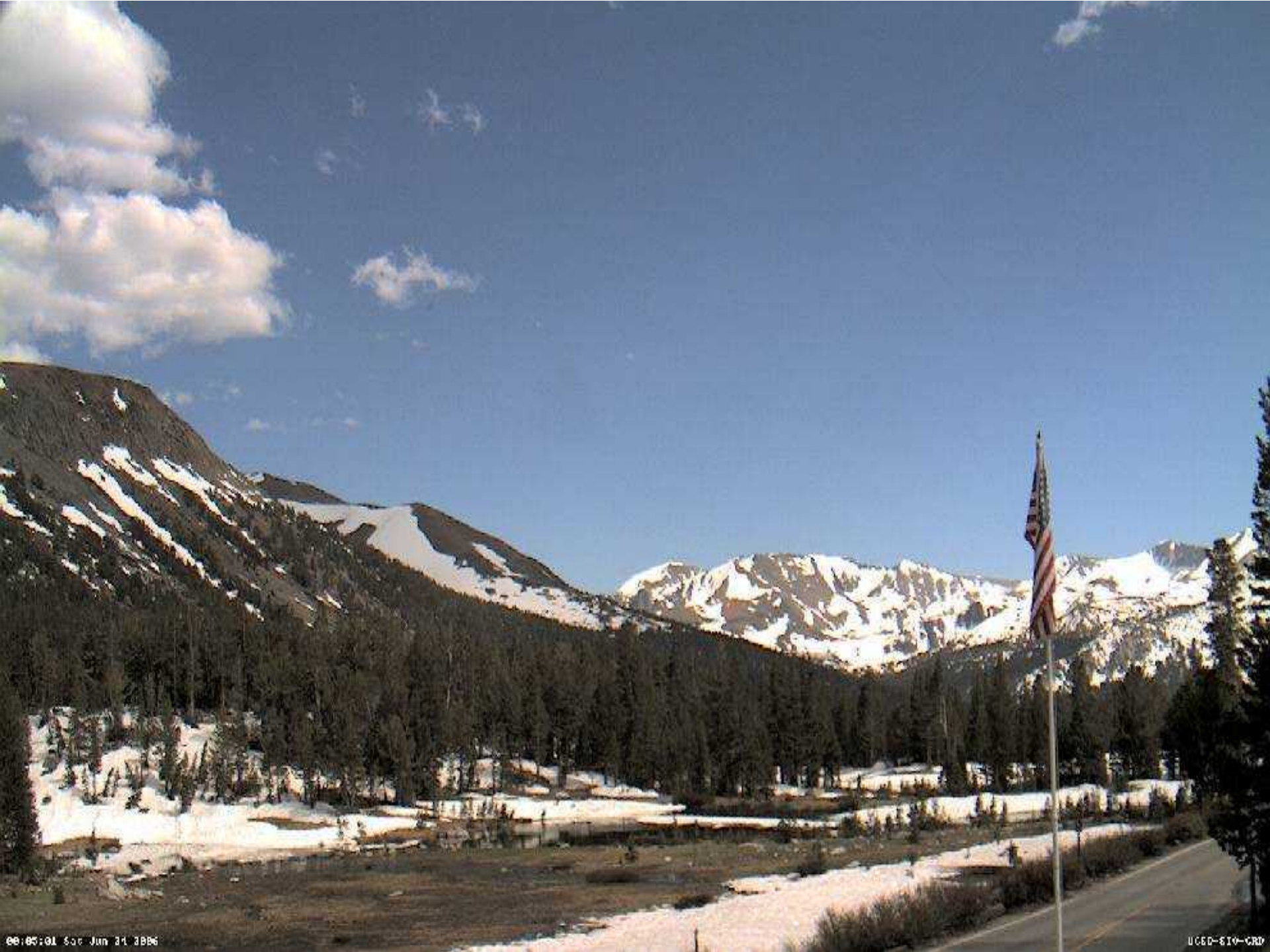


27 11:54 AM









# DANA MEADOWS ( DAN )

Date from 04/27/2011 20:56 through 07/01/2011 20:56 Duration : 65 days

Max of period : (04/29/2011 00:00, 40.0) Min of period : (06/30/2011 00:00, 1.0)



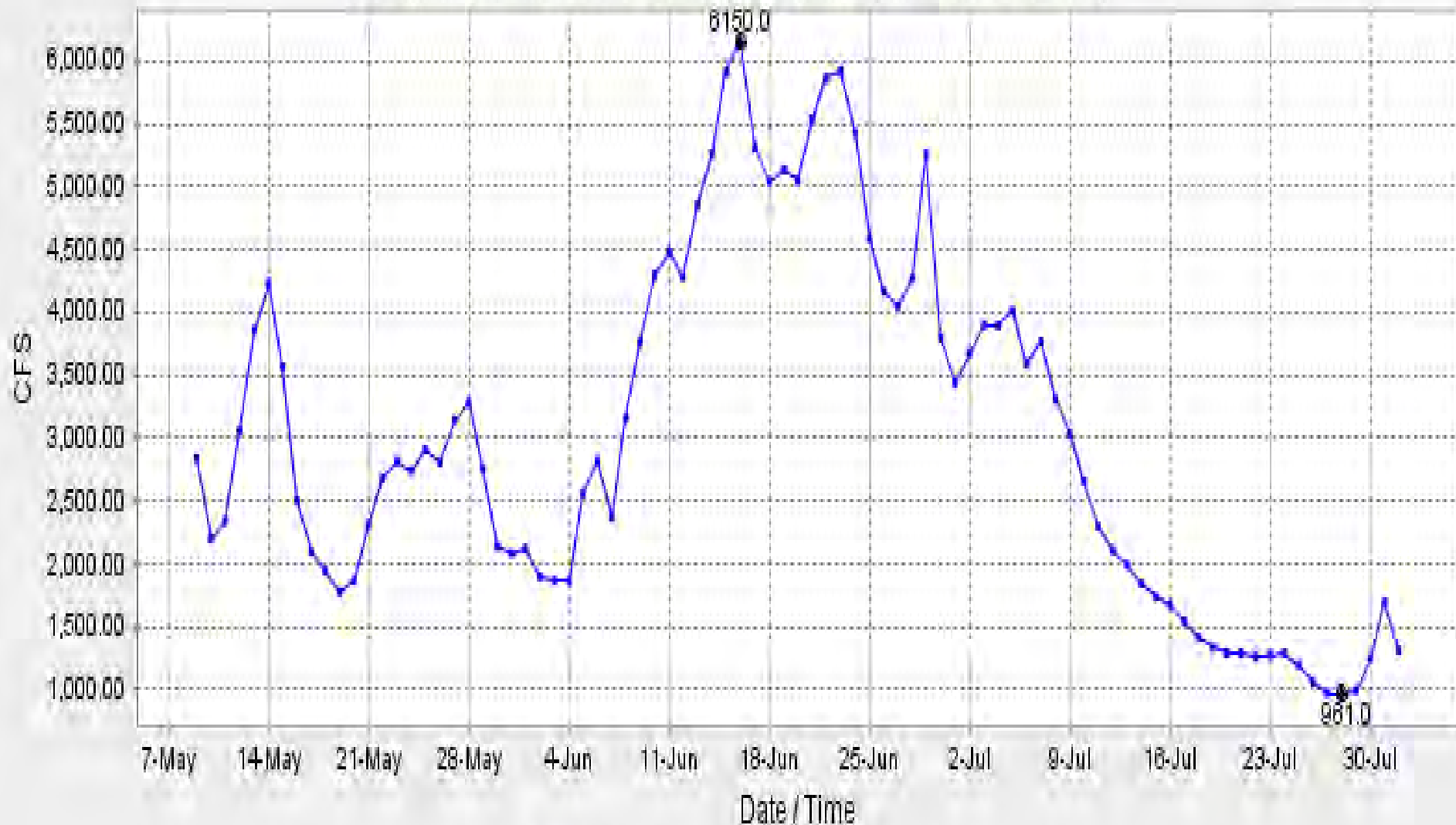
—◆— SNOW, WATER CONTENT - INCHES (2573)



# MERCED R AT POHONO BR NR YOSEMITE ( POH )

Date from 05/08/2011 21:05 through 08/01/2011 21:05 Duration : 85 days

Max of period : (06/16/2011 00:00, 6150.0) Min of period : (07/28/2011 00:00, 961.0)



—+— FLOW, MEAN DAILY - CFS (10380)

# USGS PRMS Model - Tuolumne



# The belly blow

Moderate years – 2009

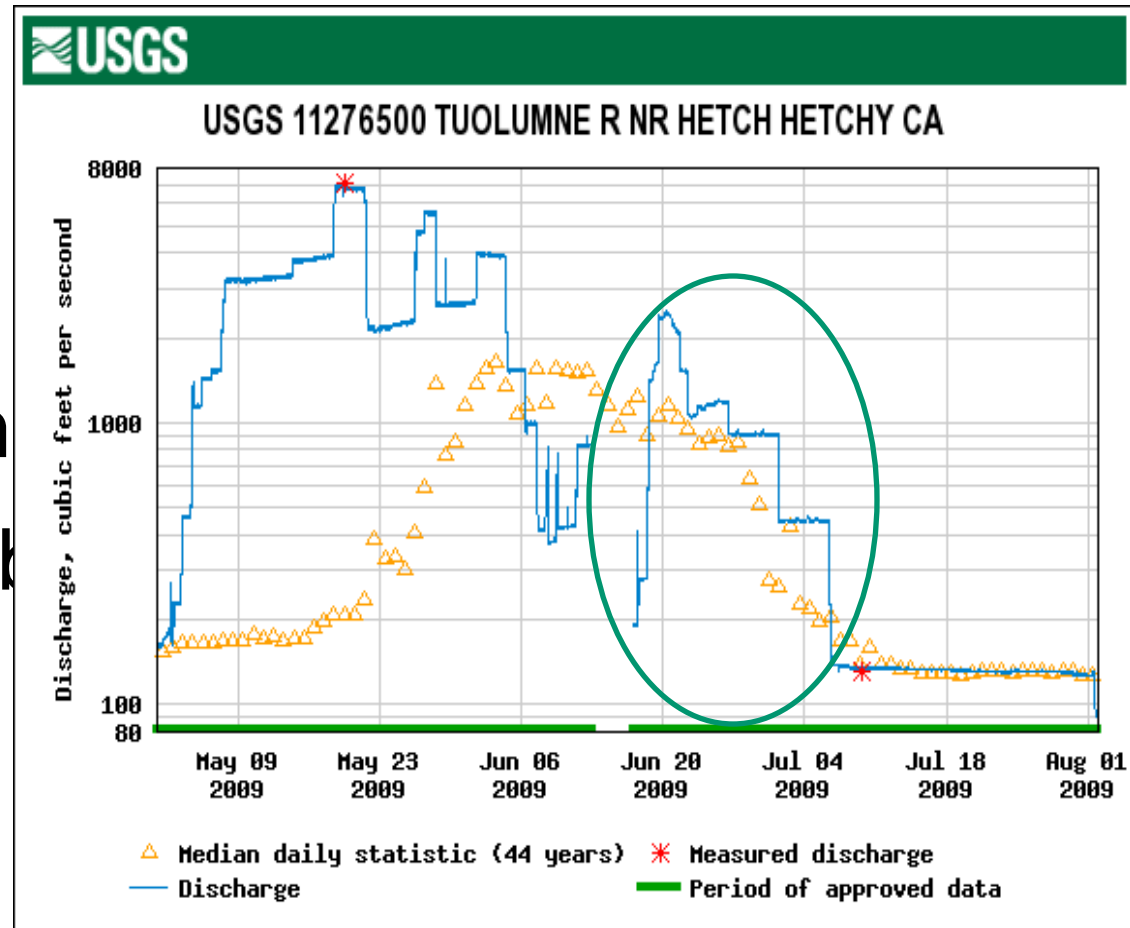
Inflow = 83%

Geomorph OK

Spill OK

June-July pulse may  
have been avoidable

If used for power,  
value was \$960K

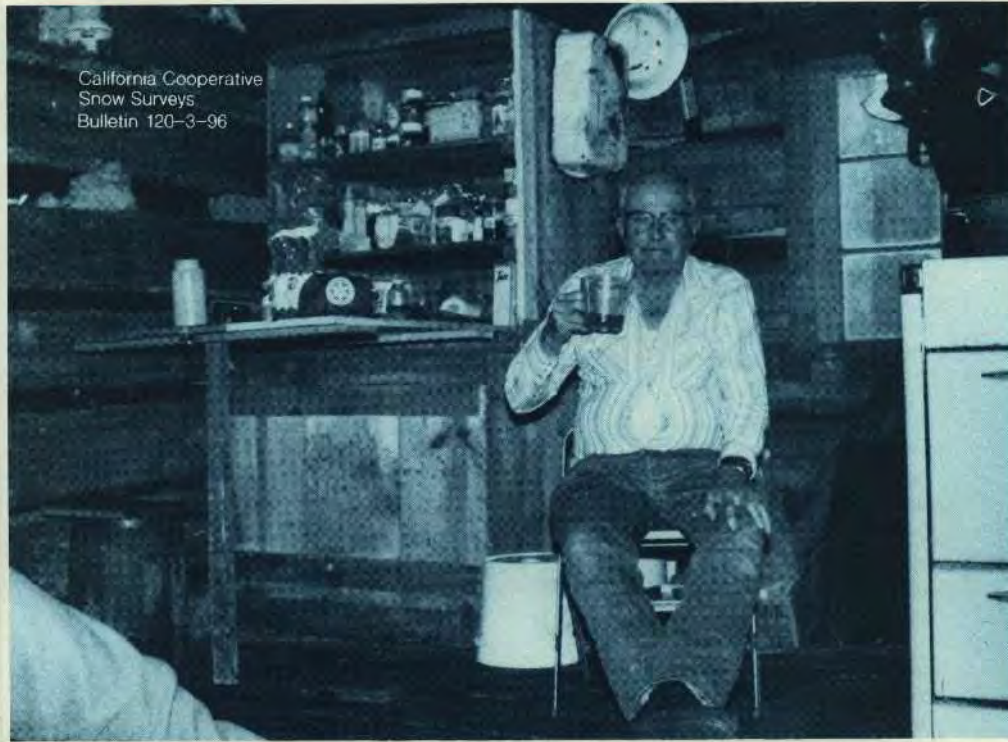




## ● Opportunities

- - Leverage existing networks- RAWS, Coop Snow, PG & E, SMUD and CORPS
- - Add additional instrumentation/sites to complete water/energy balance. For some Southern Sierran basins 1/3 of the water shed area is above the highest elevation of snow data collection
- - Integrate in situ measurements with satellite/ airborne data

California Cooperative  
Snow Surveys  
Bulletin 120-3-96



State of California  
The Resources Agency

Department of  
Water Resources

# Water Conditions in California



Report 3 April 1, 1996

**Pete Wilson**  
Governor  
State of California

**Douglas P. Wheeler**  
Secretary for Resources  
The Resources Agency

**David N. Kennedy**  
Director  
Department of Water Resources