

Carex praegracilis in the Water Conservation Garden at Cuyamaca College, El Cajon, California

SOUTHERN CALIFORNIA STAKEHOLDERS MEETING SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA; JULY 7, 2015

# New tools, next steps for California drought

#### Attendees

California State Parks, San Diego City of San Diego CNRFC, NOAA **Department of Water Resources Desert Research Institute Diane Feinstein Office** Hunter Industries Julian Community Services District San Diego Climate Science Alliance Metropolitan Water District **Nettleton Strategies NIDIS Program Office** NWS San Diego, NOAA Office of Assembly Speaker Toni G. Atkins Padre Dam MWD Pala Band of Mission Indians San Diego Foundation San Diego Gas and Electric Santa Margarita Water District Scott Peters Office Scripps Institution of Oceanography System Operation Services, Inc U.C. Irvine U.S. Geological Survey UCSN US Bureau of Reclamation USGS Valley Center MWD

## Meeting goals:

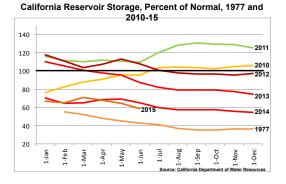
- Understand the impacts of droughts in the region and what different sectors are doing to mitigate impacts
- Present and receive feedback on new drought tools that CNAP and others have developed
- ◆ Determine the best steps forward for Southern California NIDIS community

#### Summary of proceedings:

The meeting began with an introduction by Alicia Marrs from NIDIS, about her group and its goals. This was followed by a presentation by Kelly Redmond from the Desert Research Institute on the evolution of the current drought, the likely causes through the different years, the current El Niño conditions and what this might mean for the next water year (in short, very little). Jeanine Jones of California Department of Water Resources, Alan Hayes of the California-Nevada River Forecast Center and Alex Tardy of the National Weather Service each spoke briefly about what their respective agencies are doing about the drought.

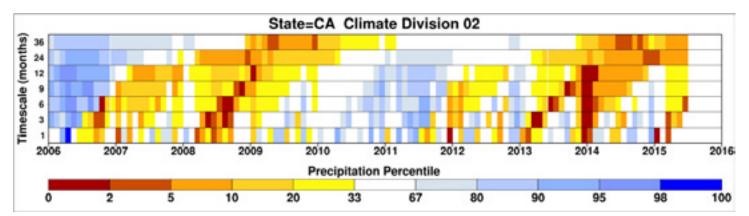
After the presentations, there was discussion about the impacts of





drought and what the different sectors were doing about it. Water agencies said they were putting a lot of effort into educating the public about the drought and their water use. They reported holding seminars, knocking on doors (one agency knocked on over 2,000 doors), reaching out to home owner associations, and including







# Presentations and links

A PDF for all the presentations can be found on this link: http://cnap.ucsd.edu/nidis\_ socal\_20150707.html

- Link to the Precipitation probability tool: http://wrcc.dri.edu/col/
- Link to Climate Division Precipitation Percentiles : http://woodland.ucsd. edu/?page\_id=2956
- UCLA Drought Monitoring website (includes soil moisture): http://www.hydro.ucla.edu/ monitor\_ca/index.html
- Sample El Niño education and updates from NWS: https://www.youtube.com/ watch?v=6QJO39B9XYg
- Sample monthly or bimonthly drought and climate updates from CNAP: https://www.youtube.com/ watch?v=enrwRSo-0Hs
- SDG&E Awareness System: http://www.sdgeweather. com/
- California dept. of Water Resources http:// saveourwater.com/

### More information

 Contact Julie Kalansky, jkalansky@ucsd.edu This figure illustrates California climate division 2 (Sacramento drainage -- see map at left), showing that precipitation during the 6-month period ending with April 2014 (Nov. 2013 to Apr. 2014) was at the percentile level of 11.3%. This signifies that over the 120+ year history (1895 up to mid-2015 as of this writing), 88.7% of the Nov-Apr periods were wetter and 11.3% were drier than the Nov. 2013 – Apr. 2014 period. From Climate Division Precipitation Percentiles website, http://woodland.ucsd.edu/?page\_id=2956.

baseline information in water bills so customers know how much they are conserving. San Diego State Parks are shutting off showers to help conserve water and the Metropolitan Water District said that Southern California has been the leader in turf removal.

The afternoon began with a presentation by Nina Oakley of the Desert Research Institute about a new probabilistic tool that she created to determine the likelihood of receiving a certain amount of precipitation by a certain date based on historical data. Everyone at the meeting was able to test the tool and provide helpful feedback.

Sam lacobellis, of the Scripps Institution of Oceanography, followed by presenting on drought indicators using monthly precipitation values from the climate divisions throughout California.

Julie Kalansky, also of Scripps, gave a brief presentation about the UCLA drought monitor, which includes soil moisture and snow pack. Lastly, Dan Cayan presented new downscaled climate data and how this might be helpful for long term planning for various different agencies.

The meeting ended with discussion on what tools are helpful in decision making. The Remote Automatic Weather Stations (RAWS) data and NOAA's Climate at a Glance were mentioned.

Some water managers said that there

is no time to use tools in the office and they need people to synthesize and consolidate the information for them. Many said that social media tools are not the best way to disseminate information to them because it is either blocked at the office or there is no time to look at it while at work.

San Diego Gas and Electric is sponsoring a water summit at the Del Mar Fair ground on Oct 27th and 28th.

One of the last discussion points was how to develop a uniform message about El Niño, in that El Niño does not necessarily mean a wet winter. Even if the winter turns out to be wet, precipitation may not be enough to get Southern California out of the current drought.

#### Conclusions and next steps:

Discussions highlighted how scientists can help support decision makers by providing credible scientific information and disseminating it.

The presentation of new tools and receiving feedback was helpful on both the stakeholder and developer end.

The group plans to reengage in the fall or early winter for another meeting. They also discussed the possibility of having short webinars about water, weather, and/or climate conditions. There was agreement on the need for a strong message about what the El Niño forecast may (or may not) mean for precipitation and drought throughout California.