NWS Sacramento
Red Cross
Drought Update and Weather Outlook

Precipitation 2013-14,
Drought update
ENSO, Spring/summer
outlook & other stuff

Presented by: Michelle Mead
Warning Coordination Meteorologist
(916) 979-3041 x 223
How is Nor Cal doing Since January 2014?

- NorCal is running 25-50% of average valleys, 90-120% in the mountains.
Compare with the Water Year (October 1, 2013-Now)

- NorCal is running 25-50% of average for the current water year
How are we Doing for the Water Year?

Northern Sierra Precipitation: 8-Station Index, April 27, 2014

Percent of Average for this Date: 62%

Current Daily Precip: 28.0

1982-1983 (wettest) 88.5
2005-2006 Daily Precip. 80.1
Average (1922-1998) 50.0
2012-2013 Daily Precip. 44.3
1923-1924 (driest) 19.0
1976-1977 (2nd driest & driest thru Aug) 17.1
How are we Doing for the Water Year?

San Joaquin Precipitation: 5-Station Index, April 27, 2014

Percent of Average for this Date: 50%

Current Daily Precip: 18.2

1982-1983 (wettest) 77.4
2005-2006 Daily Precip. 56.3
1976-1977 15.4
1923-1924 (driest) 14.8

Cumulative Daily/Monthly Precipitation (inches)

Water Year (October 1 - September 30)
• The northern Reservoirs are all around 53% of average.

• Water supply forecasts from CNRFC is now 31-55% of average
Reservoirs today and last year

2013

2014
Sierra Snow pack as of April 28th, 2014

**NORTH**
- Data For: 28-Apr-2014
- Number of Stations Reporting: 26
- Average snow water equivalent: 1.9"
- Percent of April 1 Average: 7%
- Percent of normal for this date: 9%

**CENTRAL**
- Data For: 28-Apr-2014
- Number of Stations Reporting: 42
- Average snow water equivalent: 6.7"
- Percent of April 1 Average: 22%
- Percent of normal for this date: 26%

**SOUTH**
- Data For: 28-Apr-2014
- Number of Stations Reporting: 29
- Average snow water equivalent: 4.6"
- Percent of April 1 Average: 18%
- Percent of normal for this date: 22%

**STATEWIDE SUMMARY**
- Data For: 28-Apr-2014
- Number of Stations Reporting: 97
- Average snow water equivalent: 4.8"
- Percent of April 1 Average: 17%
- Percent of normal for this date: 21%
### Sierra Snow Pack 2013 vs 2014

#### NORTH
- **Data For: 28-Apr-2013**
  - Number of Stations Reporting: 30
  - Average snow water equivalent: 4.4"
  - Percent of April 1 Average: 16%
  - Percent of normal for this date: 21%

- **Data For: 28-Apr-2014**
  - Number of Stations Reporting: 26
  - Average snow water equivalent: 1.9"
  - Percent of April 1 Average: 7%
  - Percent of normal for this date: 9%

#### CENTRAL
- **Data For: 28-Apr-2013**
  - Number of Stations Reporting: 40
  - Average snow water equivalent: 7.1"
  - Percent of April 1 Average: 23%
  - Percent of normal for this date: 27%

- **Data For: 28-Apr-2014**
  - Number of Stations Reporting: 42
  - Average snow water equivalent: 6.7"
  - Percent of April 1 Average: 22%
  - Percent of normal for this date: 26%

#### SOUTH
- **Data For: 28-Apr-2013**
  - Number of Stations Reporting: 29
  - Average snow water equivalent: 2.2"
  - Percent of April 1 Average: 9%
  - Percent of normal for this date: 11%

- **Data For: 28-Apr-2014**
  - Number of Stations Reporting: 29
  - Average snow water equivalent: 4.6"
  - Percent of April 1 Average: 18%
  - Percent of normal for this date: 22%

#### STATEWIDE SUMMARY
- **Data For: 28-Apr-2013**
  - Number of Stations Reporting: 99
  - Average snow water equivalent: 4.8"
  - Percent of April 1 Average: 17%
  - Percent of normal for this date: 21%

- **Data For: 28-Apr-2014**
  - Number of Stations Reporting: 97
  - Average snow water equivalent: 4.8"
  - Percent of April 1 Average: 17%
  - Percent of normal for this date: 21%
Updated U.S. Drought Monitor

U.S. Drought Monitor
California

April 22, 2014
(Released Thursday April 24, 2014)
Valid 7 a.m. Eastern

Statistics type: Traditional (D0-D4, D1-D4, etc.)

Drought Condition (Percent Area):

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Nothing</th>
<th>D0-D4</th>
<th>D1-D4</th>
<th>D2-D4</th>
<th>D3-D4</th>
<th>D4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>4/22/2014</td>
<td>0.00</td>
<td>100.00</td>
<td>100.00</td>
<td>96.01</td>
<td>76.68</td>
<td>24.77</td>
</tr>
<tr>
<td>Last Week</td>
<td>4/15/2014</td>
<td>0.00</td>
<td>100.00</td>
<td>99.80</td>
<td>95.21</td>
<td>68.76</td>
<td>23.49</td>
</tr>
<tr>
<td>3 Months Ago</td>
<td>1/21/2014</td>
<td>1.43</td>
<td>98.57</td>
<td>94.18</td>
<td>89.91</td>
<td>62.71</td>
<td>0.00</td>
</tr>
<tr>
<td>Start of Calendar Year</td>
<td>12/31/2013</td>
<td>2.61</td>
<td>97.39</td>
<td>94.25</td>
<td>87.53</td>
<td>27.59</td>
<td>0.00</td>
</tr>
<tr>
<td>Start of Water Year</td>
<td>10/1/2013</td>
<td>2.63</td>
<td>97.37</td>
<td>95.95</td>
<td>84.12</td>
<td>11.36</td>
<td>0.00</td>
</tr>
<tr>
<td>One Year Ago</td>
<td>4/23/2013</td>
<td>2.84</td>
<td>97.16</td>
<td>63.42</td>
<td>30.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

View More Statistics

Intensity:
- D0 - Abnormally Dry
- D1 - Moderate Drought
- D2 - Severe Drought
- D3 - Extreme Drought
- D4 - Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
Neutral (ENSO) for California

- Neutral conditions now and expected to continue for Summer of 2014
  - *For Spring, we are transitioning to our climatologically drier period this month*
  - *Following outlooks illustrate this*
May/June/July
Temperature Outlook

THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID MJJ 2014
MADE 17 APR 2014
May/June/July
Precipitation Outlook
Winter Predictions for 2014-2015

According to the Climate Prediction Center

- The CPC forecast on ENSO shows an increasing probability (60-70%) of El Nino conditions by late summer to fall 2014.
TYPICAL JANUARY-MARCH WEATHER ANOMALIES AND ATMOSPHERIC CIRCULATION DURING MODERATE TO STRONG EL NIÑO & LA NIÑA

El Niño

La Niña

PERSISTENT EXTENDED PACIFIC JET STREAM & AMPLIFIED STORM TRACK

VARIABLE PACIFIC JET STREAM

NOAA
Climate Prediction Center/NCEP/NWS
Some Good Stuff

• Weather Story
  Weather.gov/sto

• Social Media
  – Facebook
  – Twitter
  – You Tube

Youtube.com/users/NWSSacramento/videos
Wireless Emergency Alerts (WEA) for extreme/life threatening events

NOAA
National Weather Service
## WEA Messages Originated by NWS

<table>
<thead>
<tr>
<th>Warning Type</th>
<th>WEA Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tsunami Warning (coming soon)</td>
<td>Tsunami danger on the coast. Go to high ground or move inland. Check local media. –NWS</td>
</tr>
<tr>
<td>Tornado Warning</td>
<td>Tornado Warning in this area til hh:mm tzT. Take shelter now. Check local media. –NWS</td>
</tr>
<tr>
<td>Extreme Wind Warning</td>
<td>Extreme Wind Warning this area til hh:mm tzT ddd. Take shelter. –NWS</td>
</tr>
<tr>
<td>Hurricane Warning</td>
<td>Hurricane Warning this area til hh:mm tzT ddd. Check local media and authorities. -NWS</td>
</tr>
<tr>
<td>Typhoon Warning</td>
<td>Typhoon Warning this area til hh:mm tzT ddd. Check local media and authorities. -NWS</td>
</tr>
<tr>
<td>Flash Flood Warning</td>
<td>Flash Flood Warning this area til hh:mm tzT. Avoid flooded areas. Check local media. -NWS</td>
</tr>
<tr>
<td>Dust Storm Warning</td>
<td>Dust Storm Warning in this area til hh:mm tzT ddd. Avoid travel. Check local media. -NWS</td>
</tr>
</tbody>
</table>

**Legend**
- tzT = timezone
- ddd= three letter abbreviation for day of the week

**The ones highlighted in Blue boxes are the ones you’ll likely see from NWS Sacramento**
WEA Settings and availability
Built-in on newer smart phones iPhone 4s (IOS6) or higher and newer Androids

Alert Categories
• Presidential
• Imminent threat to life and property (e.g., severe weather, HazMat, earthquake)
• AMBER Alert/child abduction

User defined preferences between cell phones
• iPhones have only Amber alerts and Emergency alerts.
• Android devices have Extreme and Severe categories.

Android Categories

<table>
<thead>
<tr>
<th>Extreme</th>
<th>Severe</th>
</tr>
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<tr>
<td>Tornado Warning</td>
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<tr>
<td>Tsunami Warning</td>
<td></td>
</tr>
<tr>
<td>Hurricane/Typhoon Warnings</td>
<td></td>
</tr>
</tbody>
</table>
Questions

If you have further questions, please contact

Michelle.mead@noaa.gov

(916) 979-3041 x 223 or

Forecaster can be reached (916) 979-3050