2016 Snowpack Status and Streamflow Outlook for the Truckee, Carson, Walker, and Humboldt River Drainages

March 23, 2016

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Reno, NV

Photo:
Hope Valley
W Fk Carson R
3/17/16
2015 vs. 2016

Westwide SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Mar 23, 2015

Mar 23, 2016
Statewide % of Average Monthly Total
Oct - 119%
Nov - 111%
Dec - 142%
Jan - 136%
Feb - 33%
Mar – 108%
March 1-22 precipitation amounts of 11-17 inches along Pacific Crest.

Miracle March?
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March 1-22 was 3\textsuperscript{rd}, 4\textsuperscript{th} or 5\textsuperscript{th} wettest 11 SNOTELs in Sierra.

Lake Tahe Miracle March Stats

1991
Precip 260% of Ave
Snow +62% (17% → 79%)

1995
Precip 299% of Ave
Snow +61% (138% → 199%)

2011
Precip 225% of Ave
Snow +67% (146% → 213%)

2016 to date
Precip 207% to date
Snow +9% (97% → 106%)
## March 1-22, 2016 Precip as % of Average Monthly Total

<table>
<thead>
<tr>
<th>Location</th>
<th>Basin Index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAKE TAHOE</td>
<td>145</td>
</tr>
<tr>
<td>TRUCKEE RIVER</td>
<td>140</td>
</tr>
<tr>
<td>CARSON RIVER</td>
<td>131</td>
</tr>
<tr>
<td>WALKER RIVER</td>
<td>93</td>
</tr>
<tr>
<td>NORTHERN GREAT BASIN</td>
<td>125</td>
</tr>
<tr>
<td>NEVADA</td>
<td></td>
</tr>
<tr>
<td>UPPER HUMBOLDT RIVER</td>
<td>70</td>
</tr>
<tr>
<td>LOWER HUMBOLDT RIVER</td>
<td>94</td>
</tr>
<tr>
<td>CLOVER VALLEY &amp; FRANKLIN RIVER</td>
<td>63</td>
</tr>
<tr>
<td>SNAKE RIVER</td>
<td>78</td>
</tr>
<tr>
<td>OWYHEE RIVER</td>
<td>81</td>
</tr>
<tr>
<td>EASTERN NEVADA</td>
<td>144</td>
</tr>
</tbody>
</table>
Range
80-113%
Mar 1 Streamflow Forecasts - 50% Exceedance - April to July Period

- Tahoe/Truckee Basin: Average 91%
- Carson Basin: Average 102%
- Walker Basin: Average 96%
- Upper Humboldt Basin: Average 109%
- Lower Humboldt Basin: Average 100%
### Humboldt River April-July Volume Forecast
Based on March 1, 2016 Data

<table>
<thead>
<tr>
<th>Streamflow Point</th>
<th>NRCS KAF (%)</th>
<th>NWS KAF (%)</th>
<th>Average KAF NRCS / NWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elko</td>
<td>168 (109%)</td>
<td>140 (91%)</td>
<td>154 / 133</td>
</tr>
<tr>
<td>Palisade</td>
<td>240 (156%)</td>
<td>249 (162%)</td>
<td>225 / 227</td>
</tr>
<tr>
<td>Comus</td>
<td>210 (136%)</td>
<td>235 (153%)</td>
<td>215 / 213</td>
</tr>
<tr>
<td>Imlay</td>
<td>165 (107%)</td>
<td>188 (122%)</td>
<td>188 / 178</td>
</tr>
</tbody>
</table>
Curtailment Thresholds
Mason 70%
Smith 50%
Summary

– Statewide 2016 snowpack is near basin average peak amounts.
– Best snowpack since 2011.
– March precipitation near “miracle” status, but melt and rain didn’t boost snowpack like in 1991, 1995 or 2011.
– March 1 streamflow forecasts (50% exceedence) were 80-113% of average.
– March 22 forecast update indicate slightly better amounts for points on Truckee, while Carson R nr Fort Churchill and EF Walker near Bridgeport forecasts down 14-20%.
– Next official forecasts will be issued on ~April 7th.
www.nv.nrcs.usda.gov/snow/

Or just Google…

“Nevada NRCS Snow Survey”

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