

Division of
WATER RESOURCES

Humboldt River

Lovelock
& Winnemucca
May 13, 2015

Elko
May 14, 2015

DEPARTMENT OF
**CONSERVATION &
NATURAL RESOURCES**



Topics

- Drought Monitor and Precipitation Update
- Current stream flows and Rye Patch Reservoir Storage
- Meter Order and Designation Orders
- Q&A with Water Commissioners Kirk Owsley and Steve DelSoldato
- Capture Model Update
- Walker River Curtailment
- Concluding Remarks
- Next Meeting
- Open Discussion

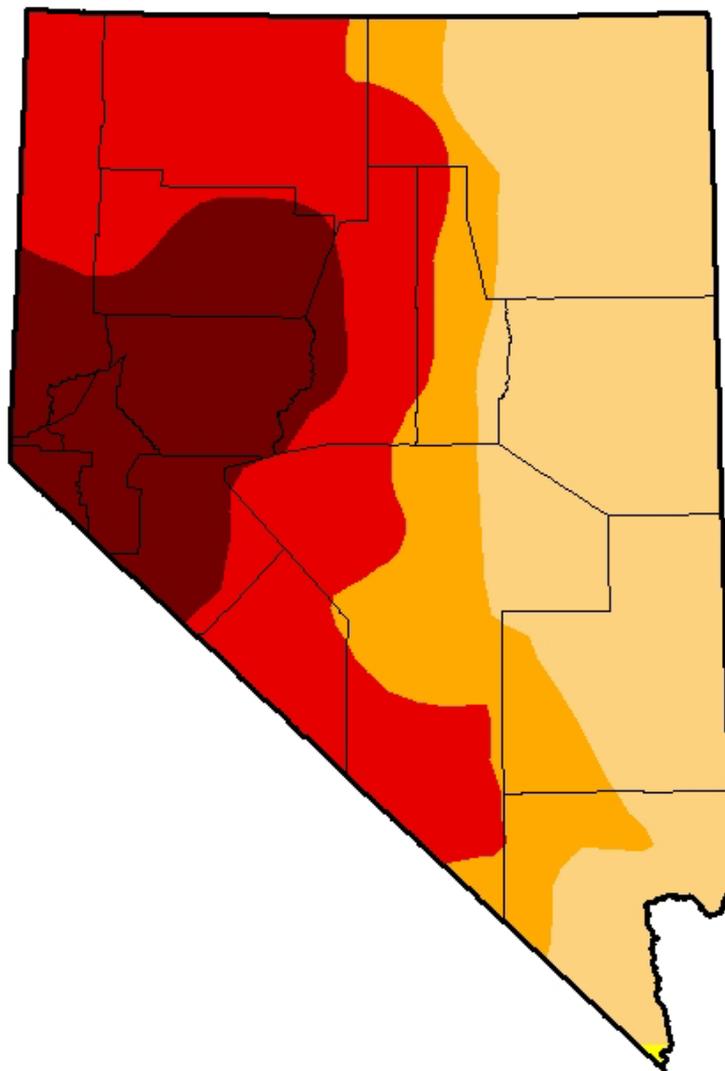
U.S. Drought Monitor

Nevada

February 3, 2015

(Released Thursday, Feb. 5, 2015)

Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	99.93	63.08	47.95	17.43
Last Week <i>1/27/2015</i>	0.00	100.00	99.93	68.25	50.06	17.43
3 Months Ago <i>11/4/2014</i>	0.00	100.00	97.07	69.89	48.38	11.89
Start of Calendar Year <i>12/30/2014</i>	0.00	100.00	96.98	68.25	48.38	11.89
Start of Water Year <i>9/30/2014</i>	0.00	100.00	97.04	69.89	48.38	11.89
One Year Ago <i>2/4/2014</i>	0.00	100.00	96.80	80.30	38.17	5.37

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.

Author:

Brian Fuchs

National Drought Mitigation Center



<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor Nevada

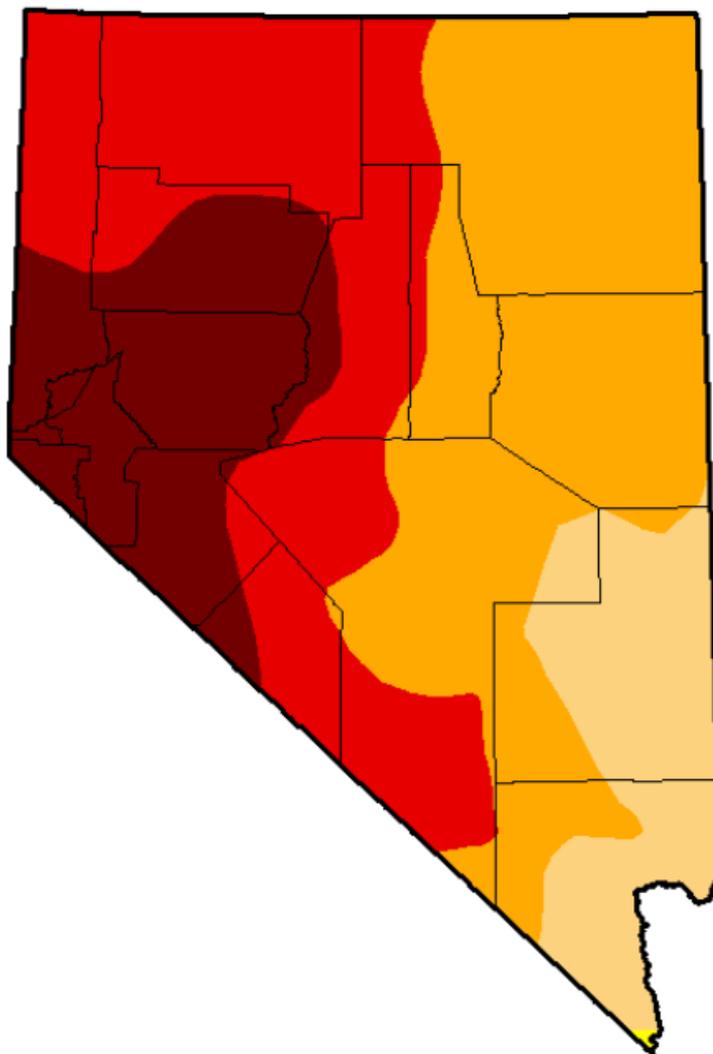
May 5, 2015

(Released Thursday, May 7, 2015)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	99.93	87.00	49.21	18.38
Last Week <i>4/28/2015</i>	0.00	100.00	99.93	87.00	49.21	18.38
3 Months Ago <i>2/3/2015</i>	0.00	100.00	99.93	63.08	47.95	17.43
Start of Calendar Year <i>1/23/2014</i>	0.00	100.00	96.98	68.25	48.38	11.89
Start of Water Year <i>9/30/2014</i>	0.00	100.00	97.04	69.89	48.38	11.89
One Year Ago <i>5/6/2014</i>	0.00	100.00	100.00	84.40	38.73	8.24



Intensity:



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

Author:

Mark Svoboda

National Drought Mitigation Center

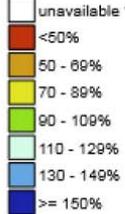


<http://droughtmonitor.unl.edu/>

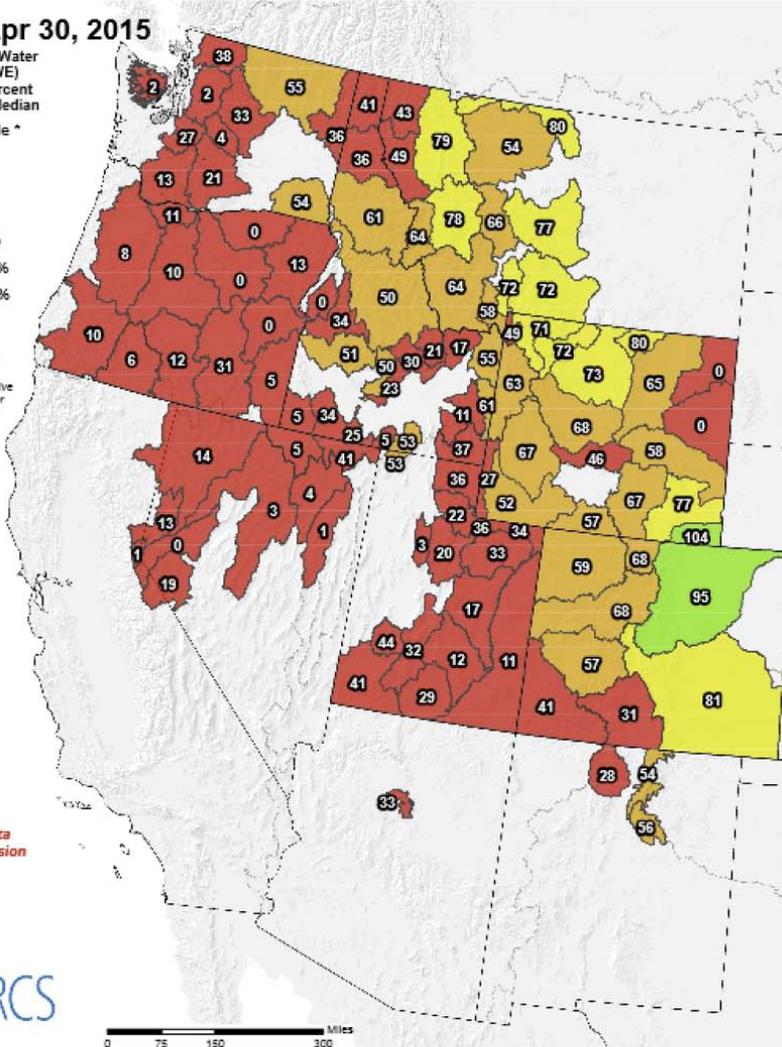
Westwide SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Apr 30, 2015

Current Snow Water Equivalent (SWE) Basin-wide Percent of 1981-2010 Median



* Data unavailable at time of posting or measurement is not representative at this time of year



Provisional data subject to revision



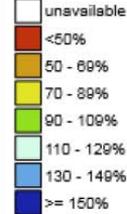
The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

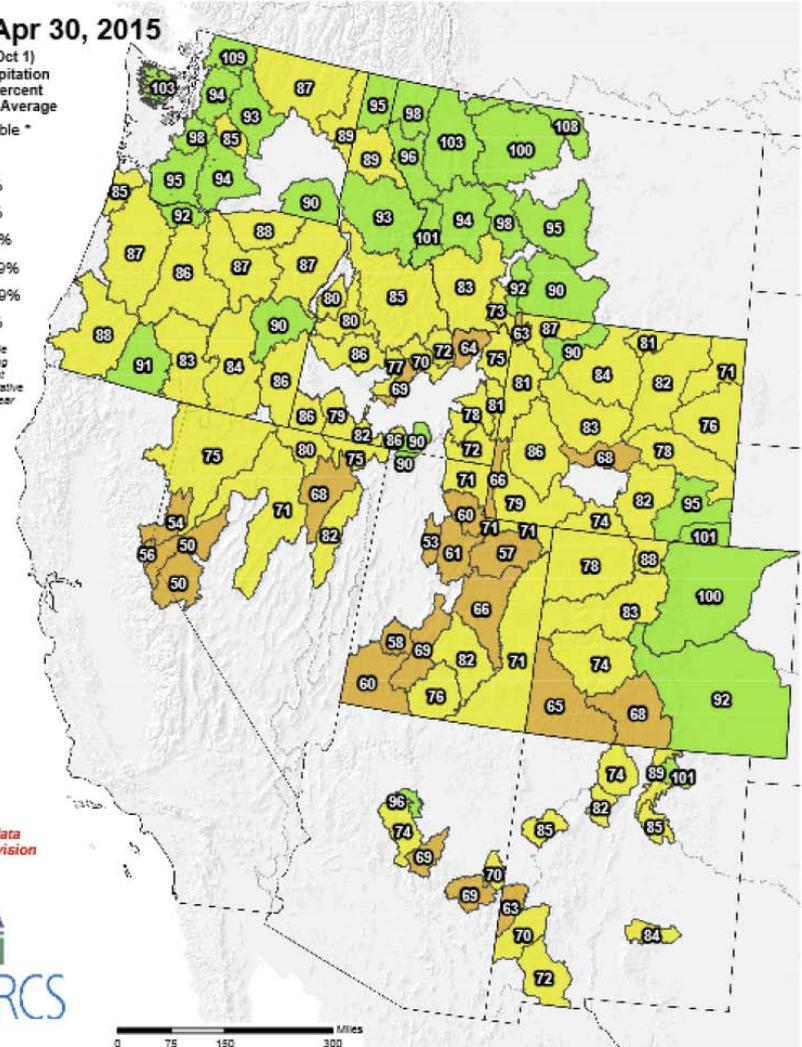
Westwide SNOTEL Water Year (Oct 1) to Date Precipitation % of Normal

Apr 30, 2015

Water Year (Oct 1) to Date Precipitation Basin-wide Percent of 1981-2010 Average



* Data unavailable at time of posting or measurement is not representative at this time of year



Provisional data subject to revision



The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

Prepared by:
USDA/NRCS National Water and Climate Center
http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/westwytdprecprctnormal_update.pdf

Current Stream Flows/Rye Patch Storage

<http://waterdata.usgs.gov/nv/nwis/current/?type=flow>

May 12, 2015

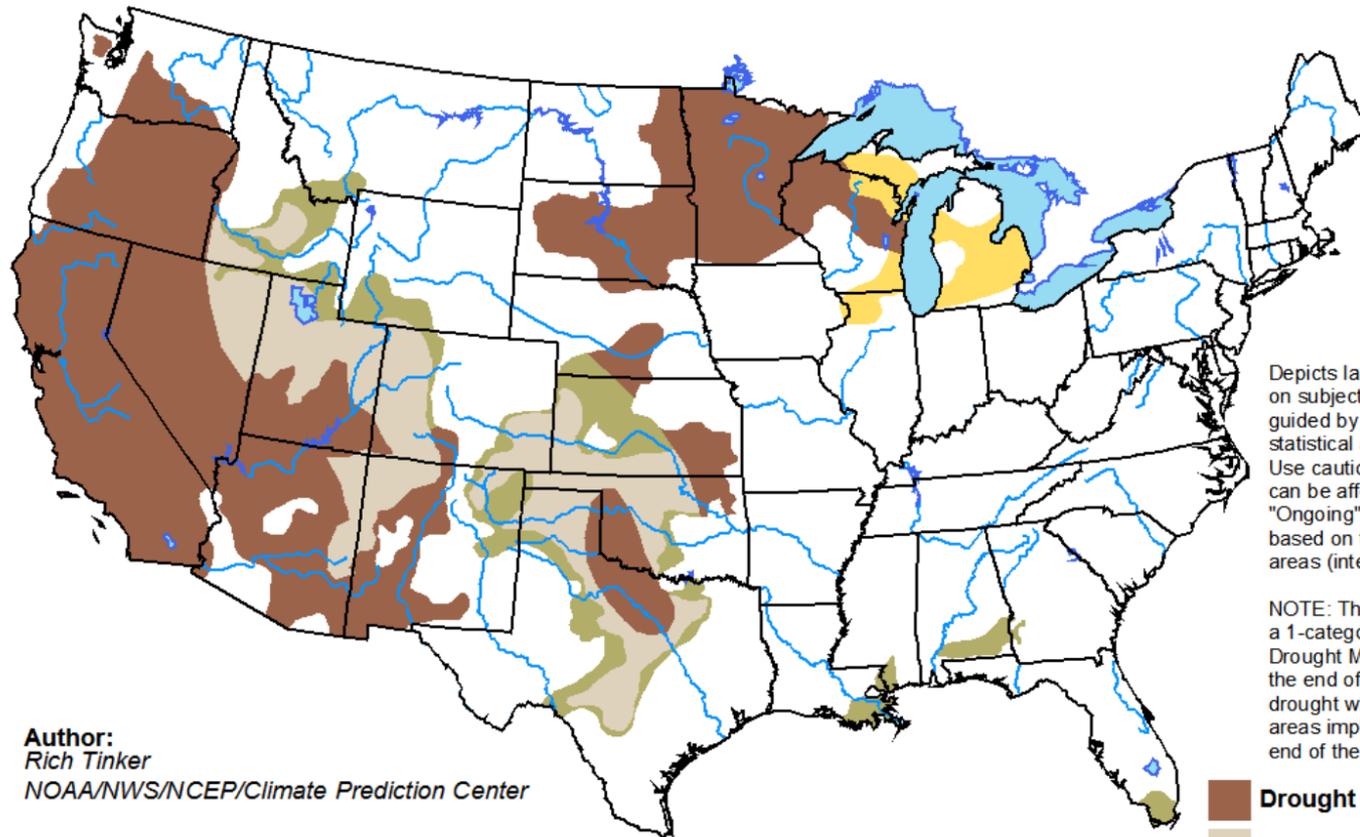
	Long Term Average Flow (cfs)	Current Discharge (cfs)
Humboldt River at Palisade	915	162
Humboldt River at Comus	736	92
Humboldt River at Imlay	586	15

	Capacity (KAF)	Current Storage (KAF)
Rye Patch Reservoir	194.3	9.6

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for April 16 - July 31, 2015
Released April 16, 2015

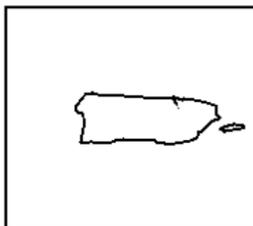
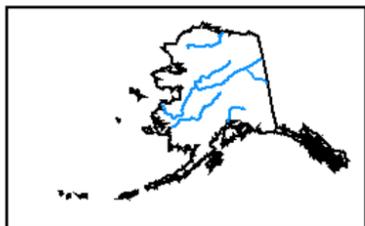


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Rich Tinker
NOAA/NWS/NCEP/Climate Prediction Center

-  Drought persists/intensifies
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/hHTe>

Recent Orders – Basin Designations

1241 - Pumpnickel Valley

1242 - Little Humboldt Valley

1253 - Lovelock Valley

1254 - Carico Lake Valley

1255 - Upper Reese River Valley

1256 - Antelope Valley

1257 - Middle Reese River Valley

1258 - Hardscrabble Area

1259 - Paradise Valley

1260 - Rock Creek Valley

1261 - Willow Creek Valley

Other Recent Orders

1246 – Closes Winnemucca Segment to new appropriations

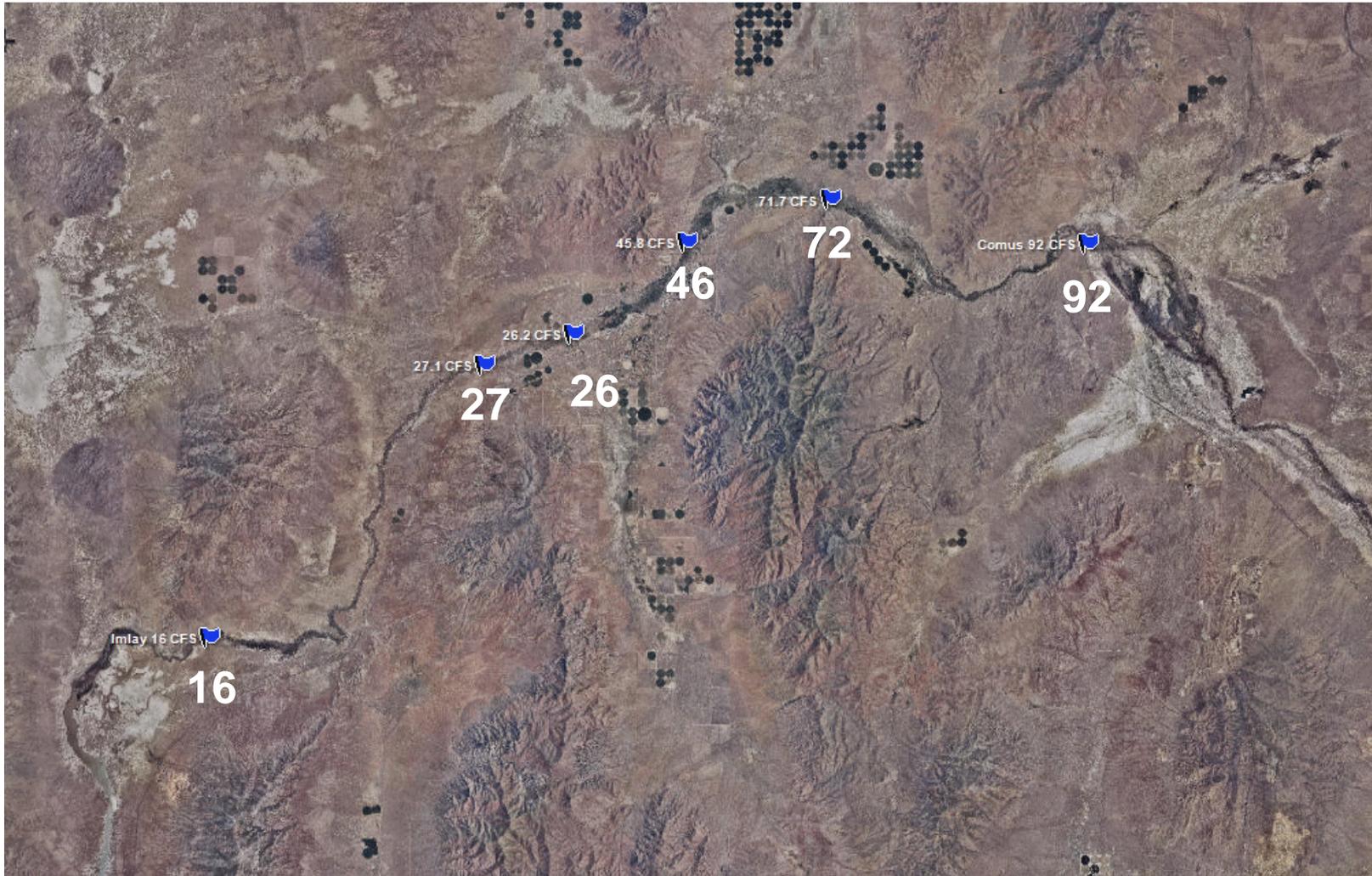
1247 – Closes Grass Valley to new appropriations

1251 – Meter requirement for Humboldt River Basin groundwater wells

Water Commissioner Discussions

- Tributary measurements/illegal diversions
- Diversified pasture deliveries
- Priorities/Exceptions
- Current status

Humboldt Flows 5/12/15



Flow (cfs) measured by NDWR and USGS

Capture Model Update

- Now in design phase with USGS and DRI
- Update and adapt existing models to reduce time to completion
- Estimated time to completion: 4 years
- Will provide opportunity for stakeholder input

Walker River Basin Groundwater Curtailment

- Approximately 180,000 acre-feet of groundwater pumping in Smith and Mason Valleys in 2014
- Cumulative PY of 42,000 acre-feet
- Widespread groundwater-level declines of 8-12 feet per year over last 3 years
- Hundreds of wells, including domestic wells, at risk of possible failure if water levels continue to decline at similar rates
- Data shows water table will recover with reduced pumping and/or increased stream water supply

Walker Curtailment

- Order 1250 - curtailment of 50% of pumping from all supplemental irrigation groundwater rights in Smith and Mason Valleys
- Order appealed by local farmers (FACO)
- Order of preliminary injunction issued in district court
- Hearing scheduled for October

Concluding Remarks

- Conditions have not improved since January – unprecedented drought
- Will not deliver to diversified pasture in 2015
- Curtailment of groundwater pumping in Humboldt Basin will not provide significant additional flows

Next Meeting

November 2015 ???

NRCS Snotel data and Streamflow Forecasts:

www.nv.nrcs.usda.gov/snow/

NWS Climate Forecasts:

www.cpc.ncep.noaa.gov/

United States Drought Monitor:

<http://droughtmonitor.unl.edu/Home/StateDroughtMonitor>



Questions