

# Water and Land Trusts in the Northern Region

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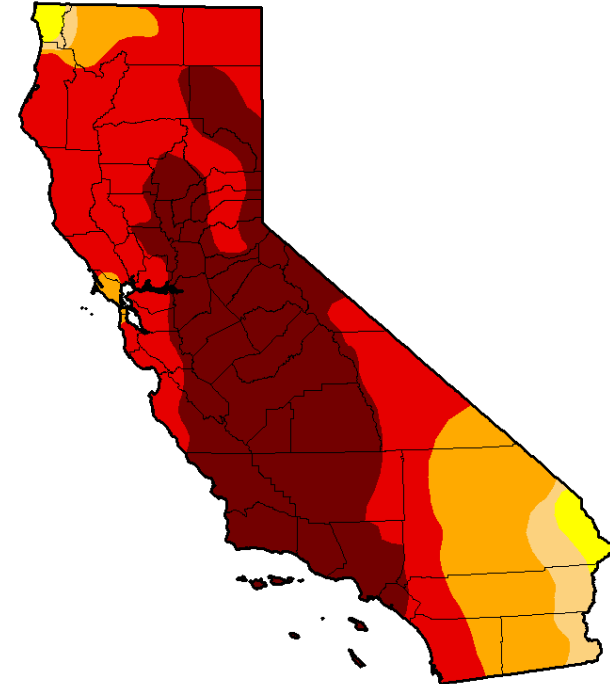
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# Water takes center stage in California

- Big water news items in 2014
  - Historic drought
  - CA Groundwater legislation passes
  - Water Bond (Prop 1) passes
- What we can expect in 2015
  - Drought will continue into 4<sup>th</sup> year
  - Groundwater laws will go into effect
  - New Water Bond funding will become available starting in July
  - People will still be fighting about water



# Land trusts and water

- Water quality vs. water quantity
- Transactions vs. regulation/enforcement
- Property rights vs. public trust

# Measuring the drought – statewide

- Snowpack levels at 25% of normal (Feb 1)
- Lowest levels ever recorded in Northern Sierras
- Rainfall well below average for this year

# Measuring the drought – Northern Region

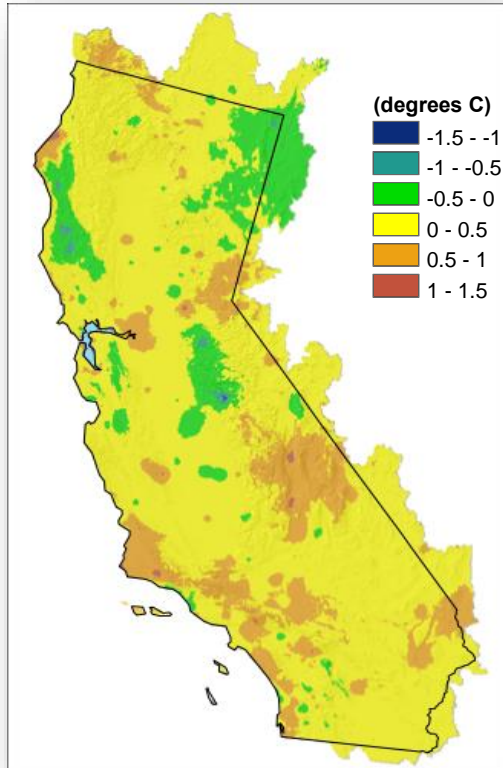
- Lake Trinity : 63% of 50-year avg.
- Lake Shasta: 78% of 50-year avg.
  
- Lake Sonoma: 92% of 10-year avg.
- Lake Mendocino: 101% of 10-year avg

# Measuring the drought – Northern Region

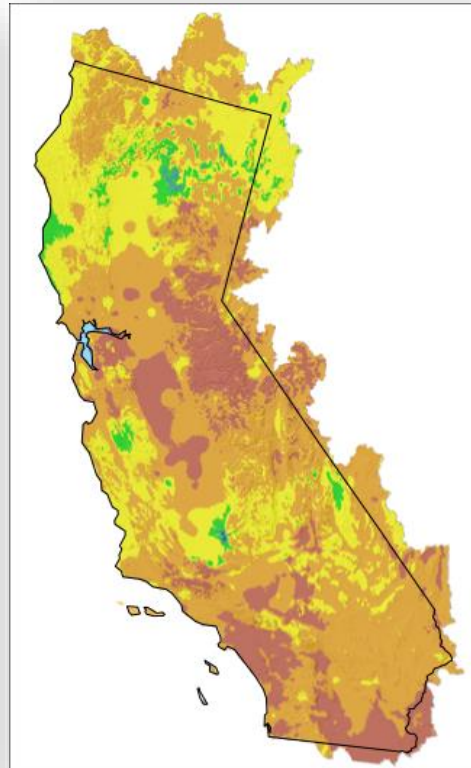
- Klamath River (Orleans): 39% of “historic” avg.
- Eel River (Scotia): 16% of “historic” avg.
- Russian River (Healdsburg): 12% of “historic” avg.
  
- Figures above based on aggregated flow data for month of January at above-named USGS gages

# Change in Climate from (1951-1980) to (1981-2010)

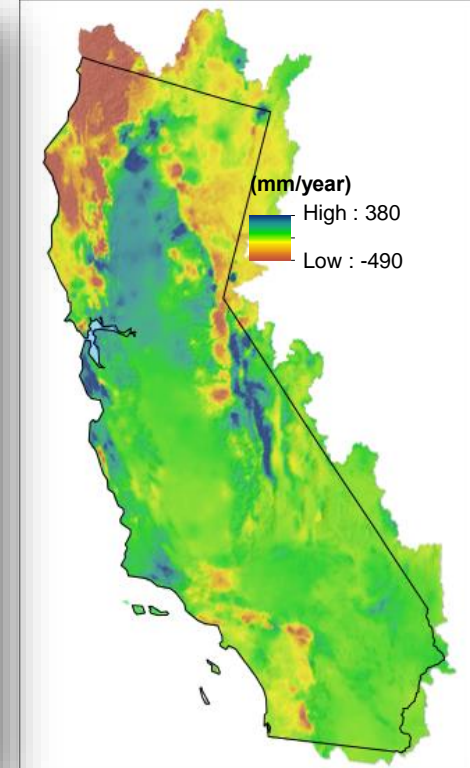
**Minimum Air Temperature**



**Maximum Air Temperature**



**Precipitation**



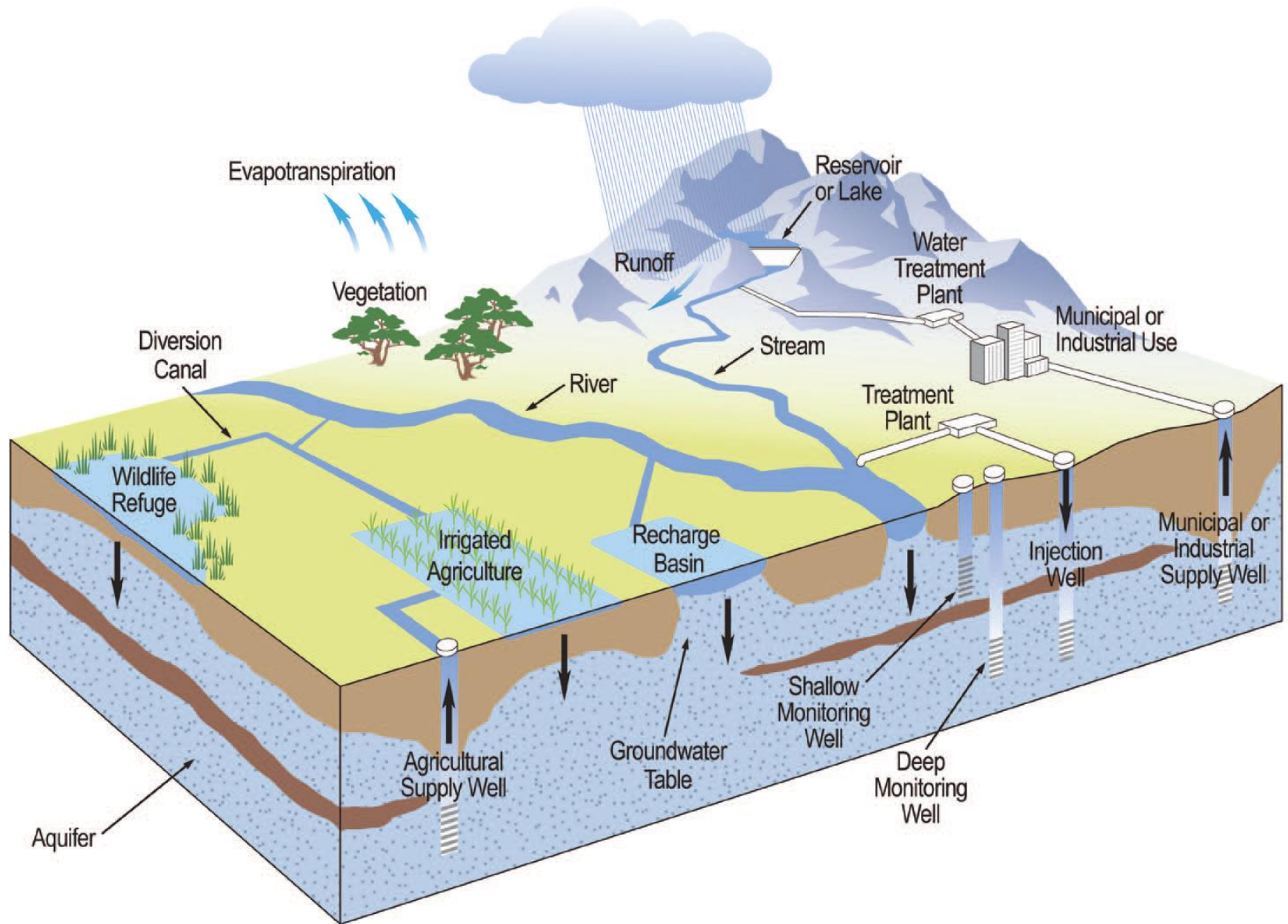
Source: L. Flint, A. Flint, J. Curtis, M. Stern – California Water Science Center, USGS

# Main causes of low streamflows

- Change in amount *and timing* of precipitation
- Increasing diversions (both legal and illegal)
- Reduced groundwater saturation/recharge due to long legacy of man-made “improvements” to land
  - Northern Region spent many decades draining water faster off the land



# Groundwater-surface water connection



# Integrating water into conservation plans

- Two general buckets water-related projects fall into:
  - Land-based projects
    - Altering/restoring the landscape, stormwater runoff, or riparian channel to enhance water supply
  - Water-rights-based projects
    - Changing the amount, timing, purpose, or form of consumption of diverted streamflows

# One-slide California water law primer

- California's unique hybrid system of water rights
  - No other state uses both of these frameworks:
- Riparian rights
- Appropriative rights
- Public Trust doctrine

# Tools for conserving or enhancing your water resources

- Identifying the ecological and/or human needs
  - Are you trying to solve one problem?
  - Or are you trying to correct or improve multiple conditions simultaneously?
- Finding the right legal (or non-legal) tool or method to correct the problem
  - Defining and quantifying the problem is key
  - Without good data, and a solid understanding of your hydrological baseline, you may go down the wrong path
  - New funding sources may make certain tools more readily available than they were before

# Understanding water rights and resources you already own

- Due diligence before you buy
  - Determine what water rights exist
  - Confirm their legal ownership
  - Determine extent of actual historical use
- Creating a hydrological baseline for your property
- Unexercised riparian rights
- Perfecting your water rights

# Land-based streamflow enhancement

- Examples of land-based approaches to enhancing water supply:
  - These might be better called, “non-water-rights-based methods”
- Community water education
- Integrated land/water stewardship
  - Groundwater recharge can be done at a small or large scale; some methods cost little or nothing
- Acquisition of water-producing lands
  - Often restoration will also be required
  - Examples: regional and national

# Funding for water supply enhancement: overview of topics

- 2014 Water Bond (Prop 1)
  - Chapter 6 has gained the most attention from conservation entities
  - Other chapters may have application to landowners with conservation intentions
- Other pre-existing funding sources for enhancing water supply
  - Public moneys and grant programs
  - Private foundation grants: **crucial** for developing innovative projects where data is still limited
- Emerging incentives or funding mechanisms

# Wildlife Conservation Board funding from Prop 1

- Protecting Rivers, Lakes, Streams, Coastal Waters, and Watersheds
  - 79733. Of the funds made available by Section 79730, the sum of two hundred million dollars (\$200,000,000) shall be administered by the Wildlife Conservation Board for projects that result in enhanced stream flows.
- The meaning of this term will be defined over the next several months
  - Your input is needed! Watch for public meetings in March to review draft guidelines



# Other key funds allocated by Prop 1

- \$285 million in new funds to Dept. of Fish and Wildlife for ecosystem restoration (etc.) outside of the Delta
- \$100.5 million in new funds for Coastal Conservancy
- \$26.5 million in new funds for the North Coast IRWMP program
  - Integrated Regional Watershed Management Program
- Many other new funding mechanisms will be created

# Water supply and streamflows in the work of Northern Region land trusts

- Siskiyou Land Trust
  - Sanctuary Forest
  - Others from audience?
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- Is water mentioned in your land trust's mission?

# Questions?

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