



Butte County Drought Task Force Summary of 2008 conditions

Rural Outreach Workshop
January 27, 2009



The Drought Task Force

Is comprised of:

- Water & Resource Conservation Director (as Chair)
- Multiple County Department Heads
- State Agencies

Is charged with:

- Surveying data
- Assessing impacts
- Reporting to the Water Commission and Board of Supervisors

Drought Task Force defined

Drought Cycle

- **Phase I**
 - Years 1-3
 - Monitoring and Reporting overseen by the DTF
- **Phase II**
 - Years 4-6
 - Interagency Coordination Group
- **Phase III**
 - After 6 years of continuous drought

Importance of Snow Surveying

- Snow-water content is important in determining the coming year's water supply.
- ***Feather River Stations***
 - Lower Lassen Peak
 - Kettle Rock
 - Grizzly Ridge
 - Gold Lake
 - Humbug
 - Harkness Flat
 - Rattlesnake
 - Bucks Lake
 - Four Trees

8 Station Index (1)

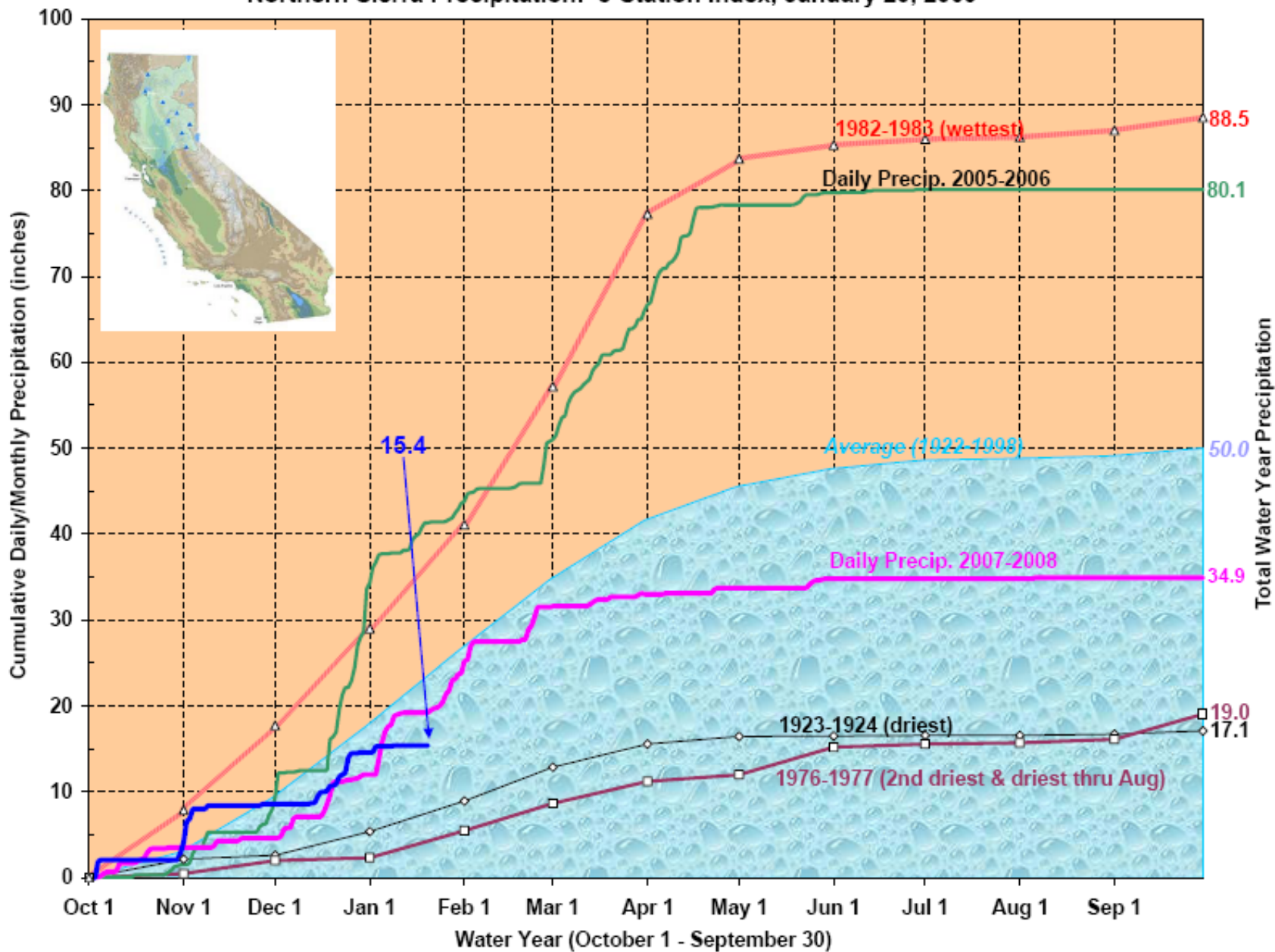
Precipitation Stations are located:

- Blue Canyon
- Brush Creek Ranger Station
- Mineral
- Mt. Shasta City
- Pacific House
- Quincy Ranger Station
- Shasta Dam
- Sierraville Ranger Station

8 Station Index (2)

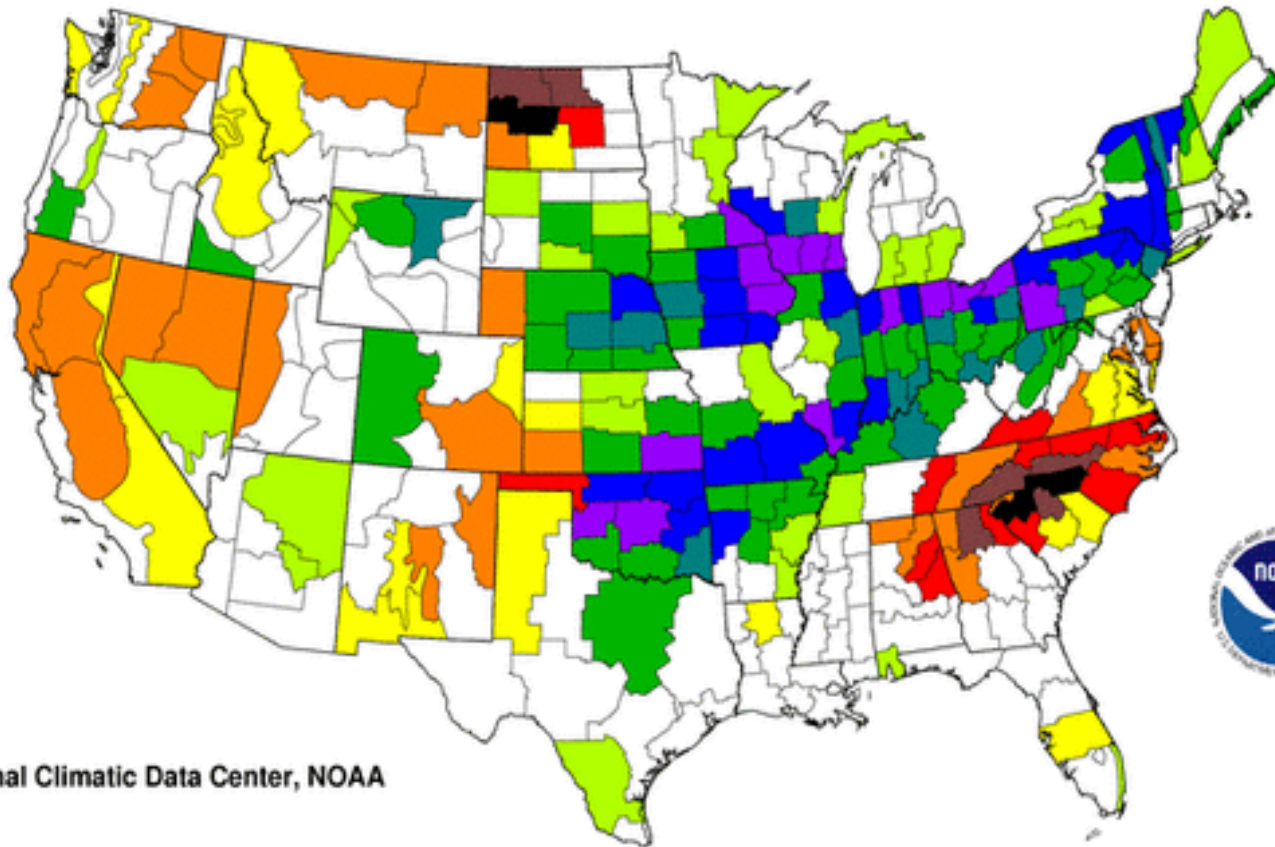
- California Water Year 2008 was a critically dry year!
- For the 8-Station Index, Water Year 2008 was the 15th driest year out of 88 years of record.
- The 2-year combined total precipitation for Water Years 2007 (37.2 inches) and 2008 (34.9 inches) was 72.1 inches, the ninth driest 2-year period on record.

Northern Sierra Precipitation: 8-Station Index, January 20, 2009














Standardized Precipitation Index Twelve Months

June 2007-May 2008



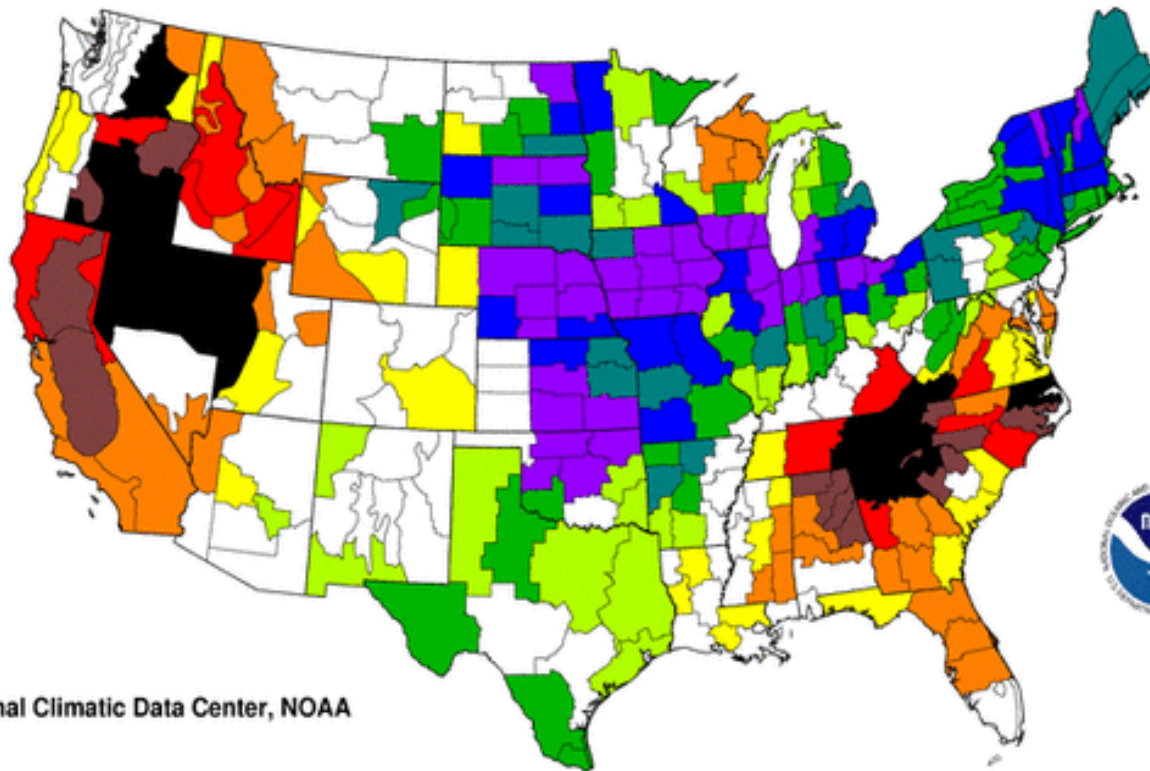
National Climatic Data Center, NOAA

exceptionally dry	extremely dry	severely dry	moderately dry	abnormally dry	near normal	abnormally moist	moderately moist	very moist	extremely moist	exceptionally moist
										
-2.00 and below	-1.99 to -1.60	-1.59 to -1.30	-1.29 to -0.80	-0.79 to -0.51	-0.50 to +0.50	+0.51 to +0.79	+0.80 to +1.29	+1.30 to +1.59	+1.60 to +1.99	+2.00 and above

Standardized Precipitation Index

Standardized Precipitation Index 24 Months

January 2006-December 2008



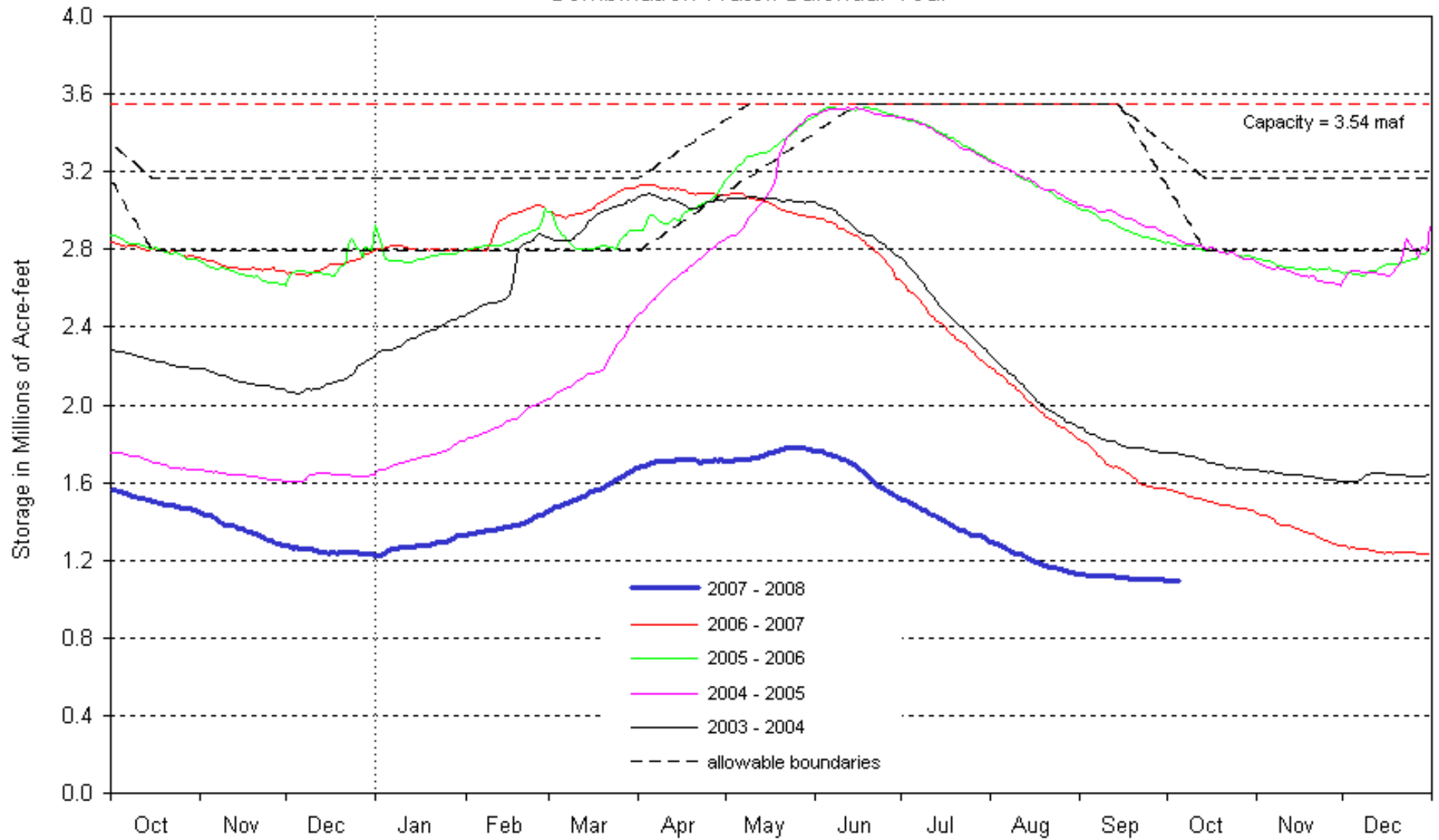
National Climatic Data Center, NOAA

exceptionally dry	extremely dry	severely dry	moderately dry	abnormally dry	near normal	abnormally moist	moderately moist	very moist	extremely moist	exceptionally moist	illegally
-2.00 and below	-1.99 to -1.60	-1.59 to -1.30	-1.29 to -0.80	-0.79 to -0.51	-0.50 to +0.50	+0.51 to +0.79	+0.80 to +1.29	+1.30 to +1.59	+1.60 to +1.99	+2.00 and above	

SPI is a probability index that considers only precipitation.

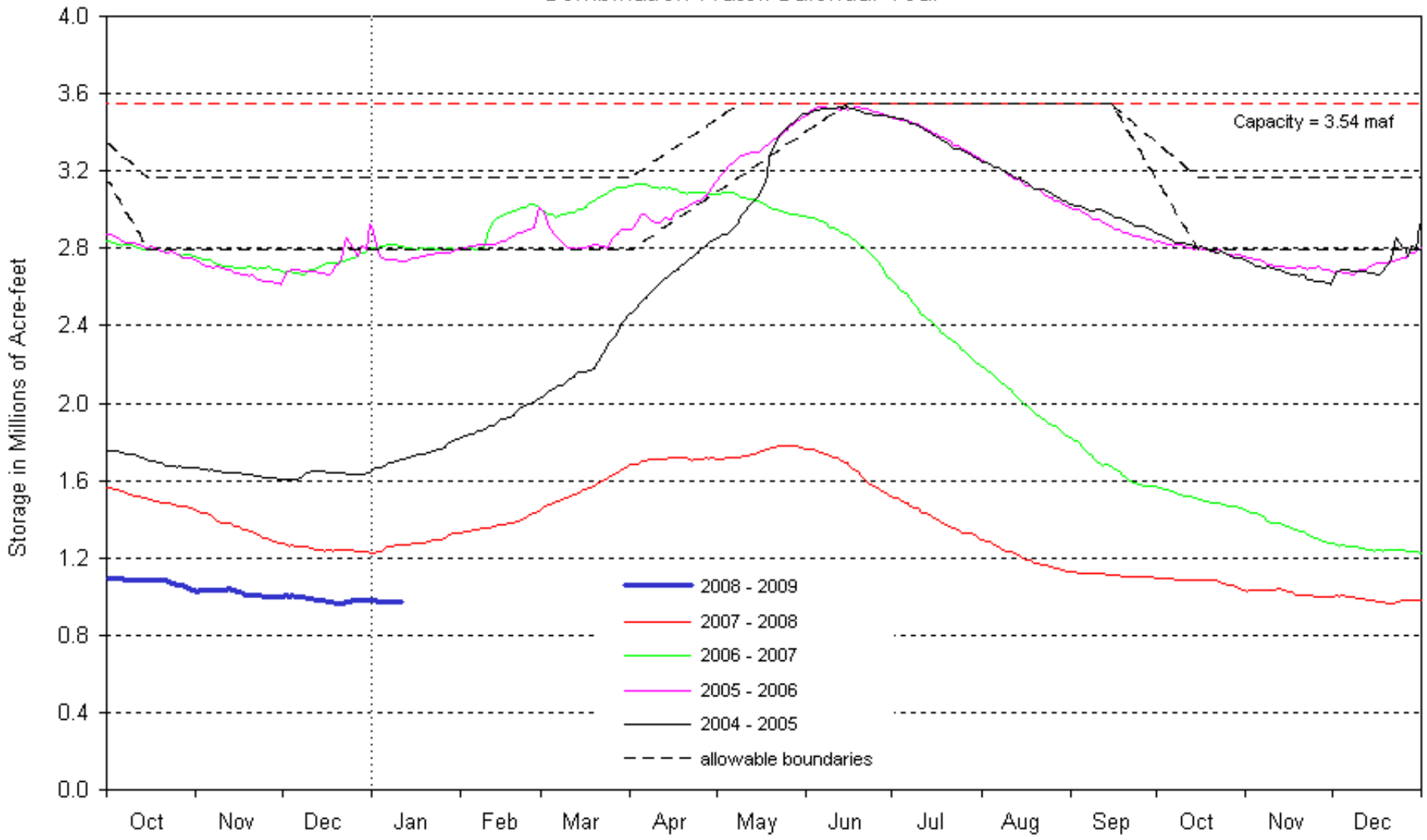
Lake Oroville Storage

Combination Water/Calendar Year



Lake Oroville Storage

Combination Water/Calendar Year



www.woco.water.ca.gov/monthly/storage/stororo.html
www.lakeoroville.water.ca.gov/about/swp.cfm



Lake Shasta

Current Reservoir Conditions

Oroville – lowest carryover storage since 1977

- Shasta 29% of capacity
- Oroville 29% of capacity
- Folsom 23% of capacity
- San Luis 16% of capacity





Lake Oroville



November 2008

2005



August 2008

Feedback on Drought Impacts (1)

Pumping Issues

- Reduced efficiency (higher lift/less pressure)
- Increased lift costs
- Lowering of well depths

Dry Soil Profiles

- Stress on trees this year
- Impact on 2009 tree crop production
- Impacts to rangeland
- Increased fire danger

Feedback on Drought Impacts (2)

- Fire Damage
 - Rangeland losses
 - Scorched trees
- Surface Water
 - Facing CVP and SWP cutbacks
 - Shortages for rice straw decomp
 - Drought Water Bank (DWR)

Long Term Options: Planning for our Future

This Drought will not last forever, but...

- we will face droughts in the future
- changes in land use will increase water demand
- population continues to grow while supply does not
- state policies may affect surface water reliability

What can we do to strengthen our water resources in the future?



Long Term Options: Planning for our Future

Additional ways to protect and strengthen our Water Portfolio:

- Administration of Chapter 33
- Continued protection of water rights
- Expand and improve data collection and monitoring
- Proactive flood management
- Management of State Water Project Table A Allocation
- Coordinated management of shared resources
- Policy oversight



Long Term Options: Planning for our Future

- Ongoing groundwater management through the BMO process includes:
 - Collection of sound scientific data.
 - Evaluation of that data by the TAC.
 - Sound management decisions based on that data.
- Information included in the annual BMO report will be a critical indicator of the health of the Butte Basin.



www.buttecounty.net/waterandresource

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