# California's New Normal: A Call for Action

Mindy McIntyre Planning & Conservation League

#### 2009: Our new normal?

- Driest spring on record
- Reservoirs are at lowest levels since 1977
- Delta continues to decline
- Water quality and environmental laws are being relaxed
- Economic crisis, State budget crisis
- TIME FOR NEW THINKING, OPPORTUNITY FOR CHANGE

*"For California water managers, the future is now. Climate change is already having a profound impact on water resources as evidenced by changes in snowpack, river flows and sea levels."*– Lester Snow, Director Department of Water Resources Oct 08



### Climate Change in CA



25% reduction (4.5 Million Acre Feet)

Snowpack Reduction Projected by 2050  According to the Department of Water Resources California could lose 25-40% of the Sierra snowpack by 2050

 Sierra snowpack supplies up to 65% of CA's water.

**"Or to put it another** way, though *wet* years will still occur, on average they will be *drier* than prior wet years while the *dry* years will be *drier* than prior dry years." - DR Richard Seager **Columbia University** reprinted in DWR's April 2008 report, "California Drought, An Update."





#### The State Water Project

"The analysis shows that annual SWP deliveries would decrease virtually every year in the future (93% of future years).

These reductions would amount to a 20% reduction from current levels about onefourth of the time, and greater than 30% in one-sixth of future years."

- 2007 SWP Delivery Reliability Report (DWR)



Lake Oroville 2008

### The Colorado River

#### MSNBC.com

#### Study: 50-50 chance of dry Lake Mead in 2021

Study cites warming, water use and growing Colorado River deficit. MSNBC staff and news service reports updated 10:57 a.m. PT, Tues., Feb. 12, 2008

What are the chances that Lake Mead, a key source of water for more than 22 million people in the Southwest, would ever go dry? A new study says it's 50 percent by 2021 if warming continues and water u is not curtailed.



#### The Bay Delta Watershed Crisis

Largest estuary on the west coast of North America
80% of California's salmon rely on the watershed of the Bay Delta



Due to over pumping, invasive species & declining water quality:

- Native Delta species are at historic lows
- The 2008 West Coast commercial and recreational salmon fishing season was CANCELED

 "I don't think the American public has gripped in its gut what could happen. We're looking at a scenario where there's no more agriculture in California. I don't actually see how they can keep their cities going either."
 – Steven Chu, U.S. Secretary of Energy

# A Growing State



- California's population may nearly DOUBLE to 59 million by 2050, an increase of 23 million people (CA Dept. of Finance)
- Currently the State Water Project (dependent on snowpack) supplies water to 24 million people

## A Growing State

- At a per capita use of 184 gallons per capita per day\* the increase in population will result in the annual use of 4.74 million acre feet.
- That's equivalent to California's share of the Colorado River. Where will we find another Colorado River?

\*(20% less than the current California average of 230 gallons per capita/day)

#### Facing the New Normal

- Must serve more people with less water
- Must re-operate the system to allow for efficiency under our new hydrology
- Aggressively develop climate-resilient water supplies
- Reform our water governance to better balance the ecosystem and the need for clean, reliable water supplies
- Sustainable funding

#### Where will we find the water?



2005 California State Water Plan, Department of Water Resources

#### Water Conservation Tools

- Water neutral development
- Reduced per capita water use standard
- Retrofit on resale
- Remove barriers to low water using landscapes

#### Water Neutral Development

- Encourage developers to incorporate water efficiency in new development
- Allow for water offset- offsite water conservation within the service area-that results in zero net demand within the service area.
- Target offsets for disadvantaged communities to ensure those communities will not be left behind.



#### **Retrofit on Resale**

- Water agencies taking the lead
- Ensures existing housing will be efficient
- Some discussion about when to implement the retrofits
- Will need strong support to pass

# 20% reduction in per capita Spot bill introduced AB 49

- Baseline is still a challenge
- New approach may emerge

#### **Recycled Water**

- Orange County has targeted reuse of 49% of water that would have been discharged by 2030.
- Statewide, a similar goal would produce around 2 million-acre feet- around the historical average delivery from the SWP
- Legislators support recycled water



### **Reform Delta Governance**



- Create governance that will better balance to co-equal goals of ecosystem health and water supply reliability.
- Sustainable funding
- Adaptability must be integrated into the new system for ecosystem & water supply.
- Ensure expectation of water is consistent with available supply

#### End unsustainable water use

- Retiring 600,000 acres of drainage impaired lands would:
  - Return about 1 maf to the Delta
  - Increase reliability for other Delta users
  - Inccrease storage to maintain cold water
  - Stop ag drainage pollution
  - Allow for viable ag to continue



# **Questions**? Mindy McIntyre **Planning & Conservation** League mmcintyre@pcl.org