



# Good Water, Wild Salmon, Vital Delta: Implementing the Water/Ecosystem/Delta Legislation of 2009

Presented to  
Sisters of the Holy Names

Presented by  
Phil Isenberg  
Chair, Delta Stewardship  
Council

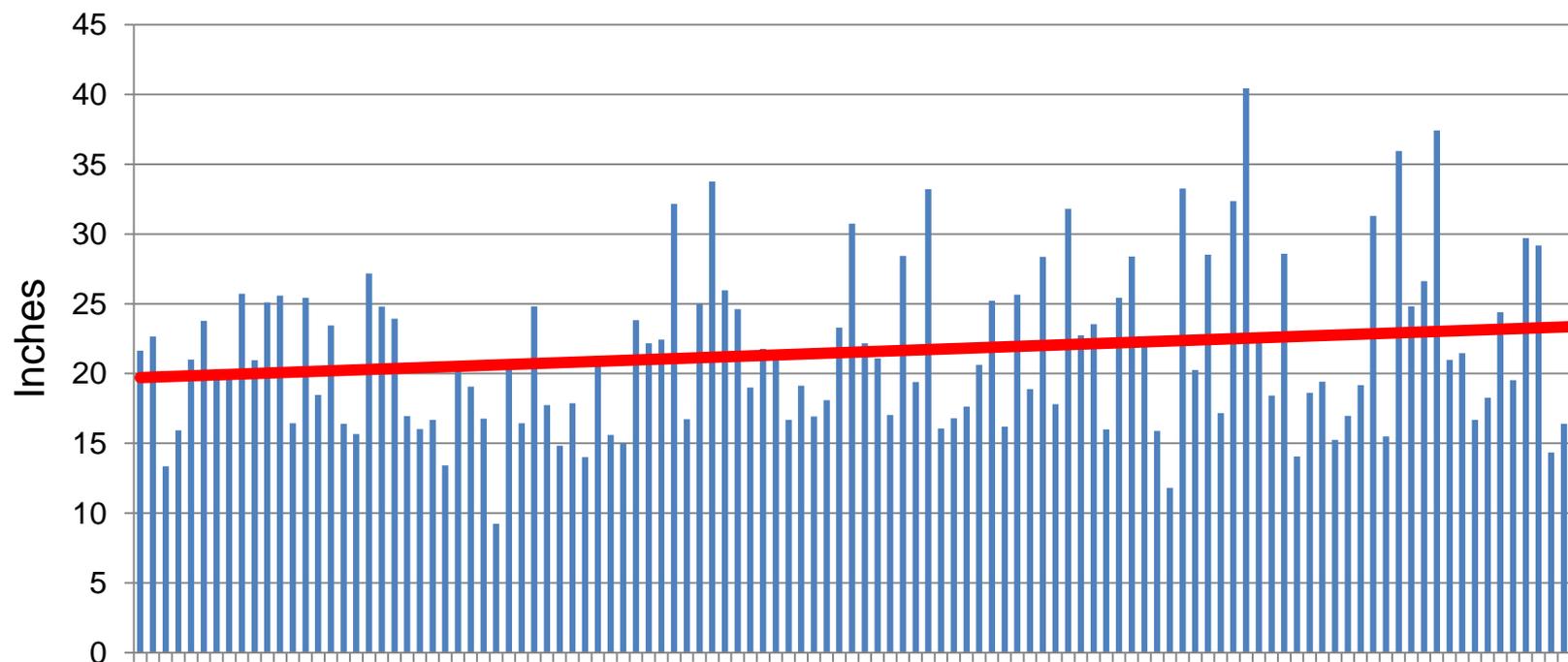
October 16, 2010



DELTA STEWARDSHIP COUNCIL

# Precipitation varies – with a slight increasing trend – and generally provides 97% of California's water supply

California statewide precipitation, 1895-2009



SOURCE: Precipitation from Western Regional Climate Center, 2010



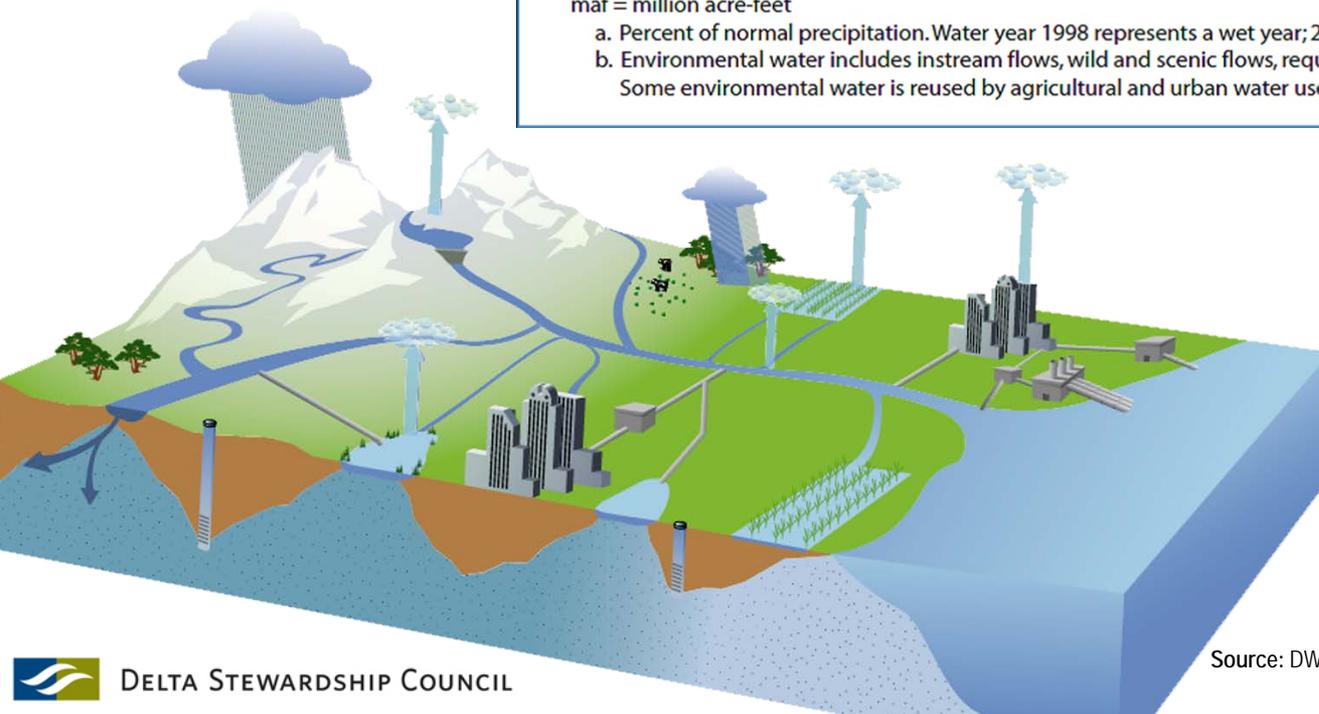
# California water supplies and uses vary among wet, normal and dry years

	1998 (171% of normal) <sup>a</sup>	2000 (97% of normal) <sup>a</sup>	2001 (72% of normal) <sup>a</sup>
Total supply (precipitation & imports)	336.9	194.7	145.5
Total uses, outflows, & evaporation	331.5	200.4	159.9
Net storage changes in state	5.5	-5.7	-14.3
<b>Distribution of dedicated supply (includes reuse) to various applied water uses</b>			
Urban uses	7.8 (8%)	8.9 (11%)	8.6 (13%)
Agricultural uses	27.3 (29%)	34.2 (41%)	33.7 (52%)
Environmental water <sup>b</sup>	59.4 (63%)	39.4 (48%)	22.5 (35%)
<b>Total dedicated supply</b>	<b>94.5</b>	<b>82.5</b>	<b>64.8</b>

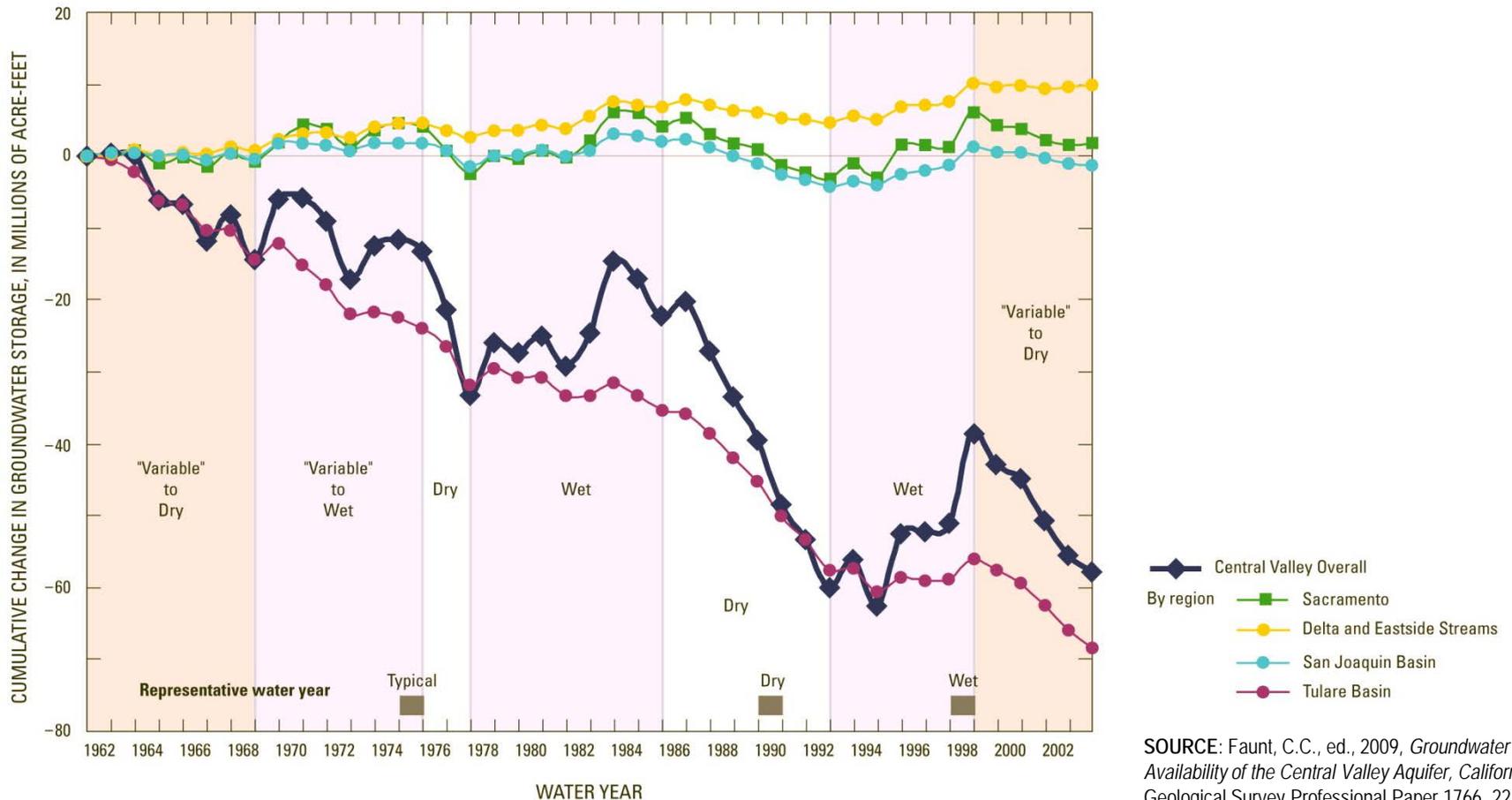
maf = million acre-feet

a. Percent of normal precipitation. Water year 1998 represents a wet year; 2000, average water year; 2001, drier water year.

b. Environmental water includes instream flows, wild and scenic flows, required Delta outflow, and managed wetlands water use. Some environmental water is reused by agricultural and urban water users.

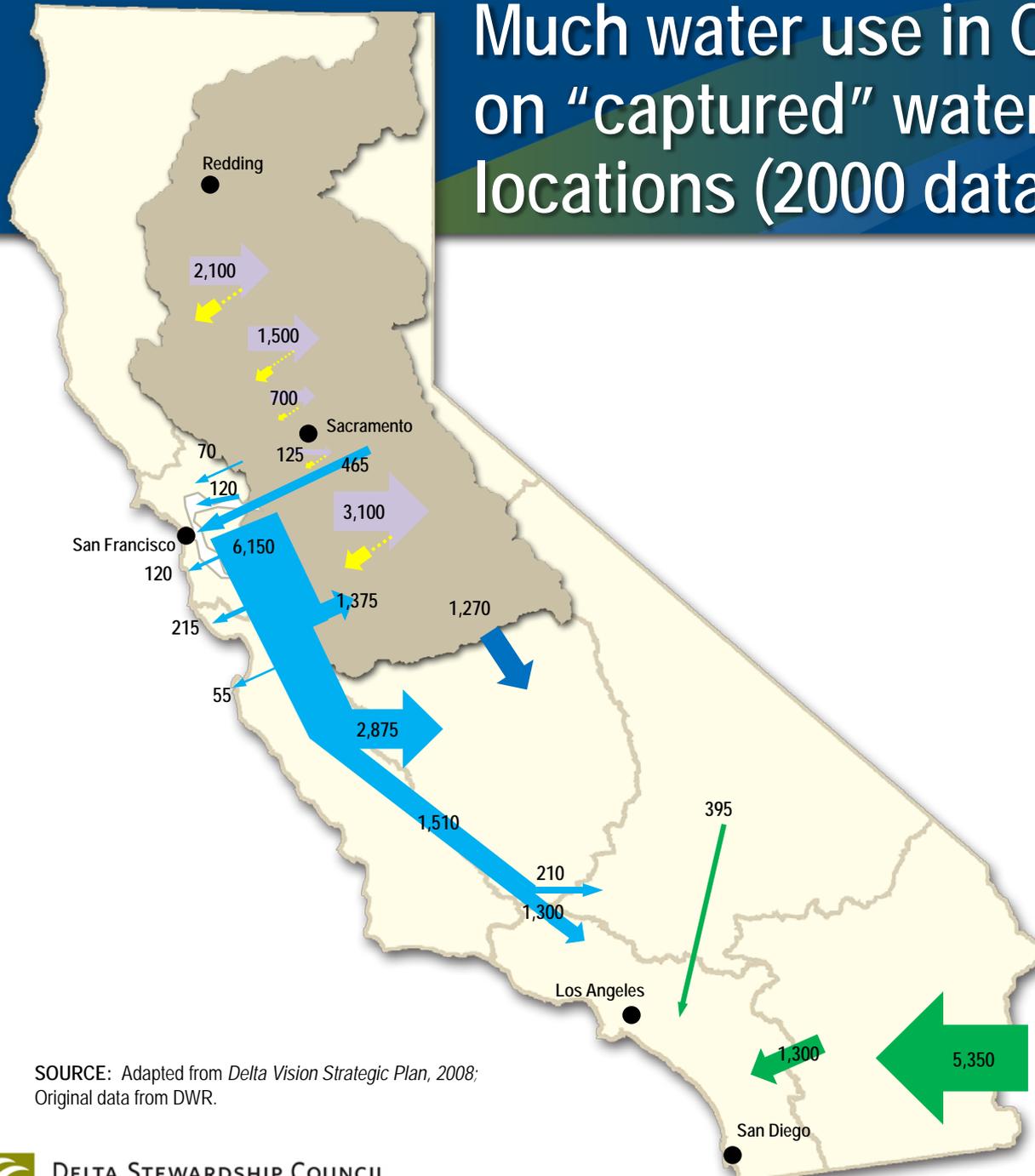


# Ground water levels are falling in the San Joaquin Valley - Cumulative change in groundwater, MAF, 1962-2003



SOURCE: Faut, C.C., ed., 2009, *Groundwater Availability of the Central Valley Aquifer, California*: U.S. Geological Survey Professional Paper 1766, 225 p.

# Much water use in California relies on "captured" water moved to new locations (2000 data)



- Delta Watershed (equal to Sacramento and San Joaquin Hydrologic Regions as defined by DWR)
- Annual Magnitude of Regional Diversion from Within the Delta Watershed (1,000 af) (Dashed arrows represent return flows after diversion)
- Annual Magnitude of Water Directly Diverted from the Delta Watershed (1,000 af)
- Annual magnitude of Water Diverted from a Delta Tributary (1,000 af)
- Annual Magnitude of Significant Transfers and Imports Outside the Delta Watershed
- DWR Hydrologic Region Boundaries

SOURCE: Adapted from *Delta Vision Strategic Plan, 2008*; Original data from DWR.

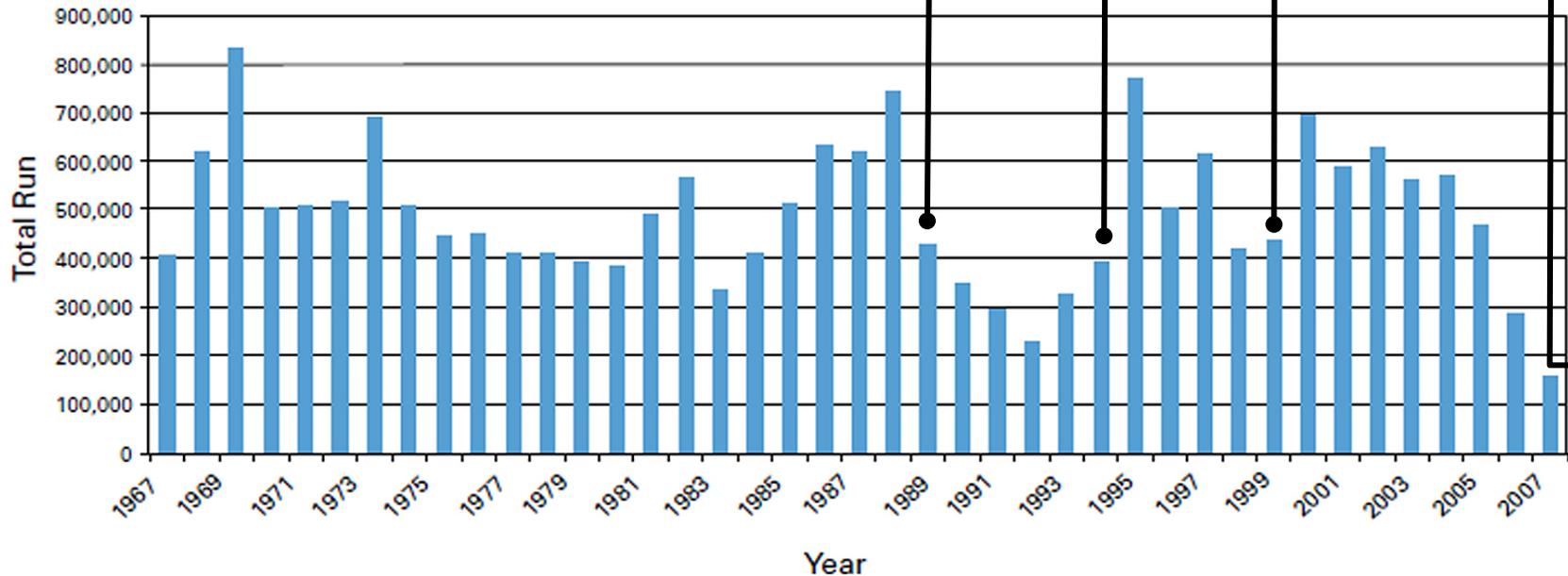
# Long-term decline in Delta dependent salmon leads to listing under Endangered Species Acts and closures

**1989:** Chinook, winter-run, Sacramento River. Endangered listing under California Endangered Species Act (CESA)

**1994:** Chinook, winter-run. Endangered listing under Federal Endangered Species Act (ESA)

**1999:** Chinook, spring-run. Threatened listing, CESA, ESA

**2008 and 2009:** salmon season closed

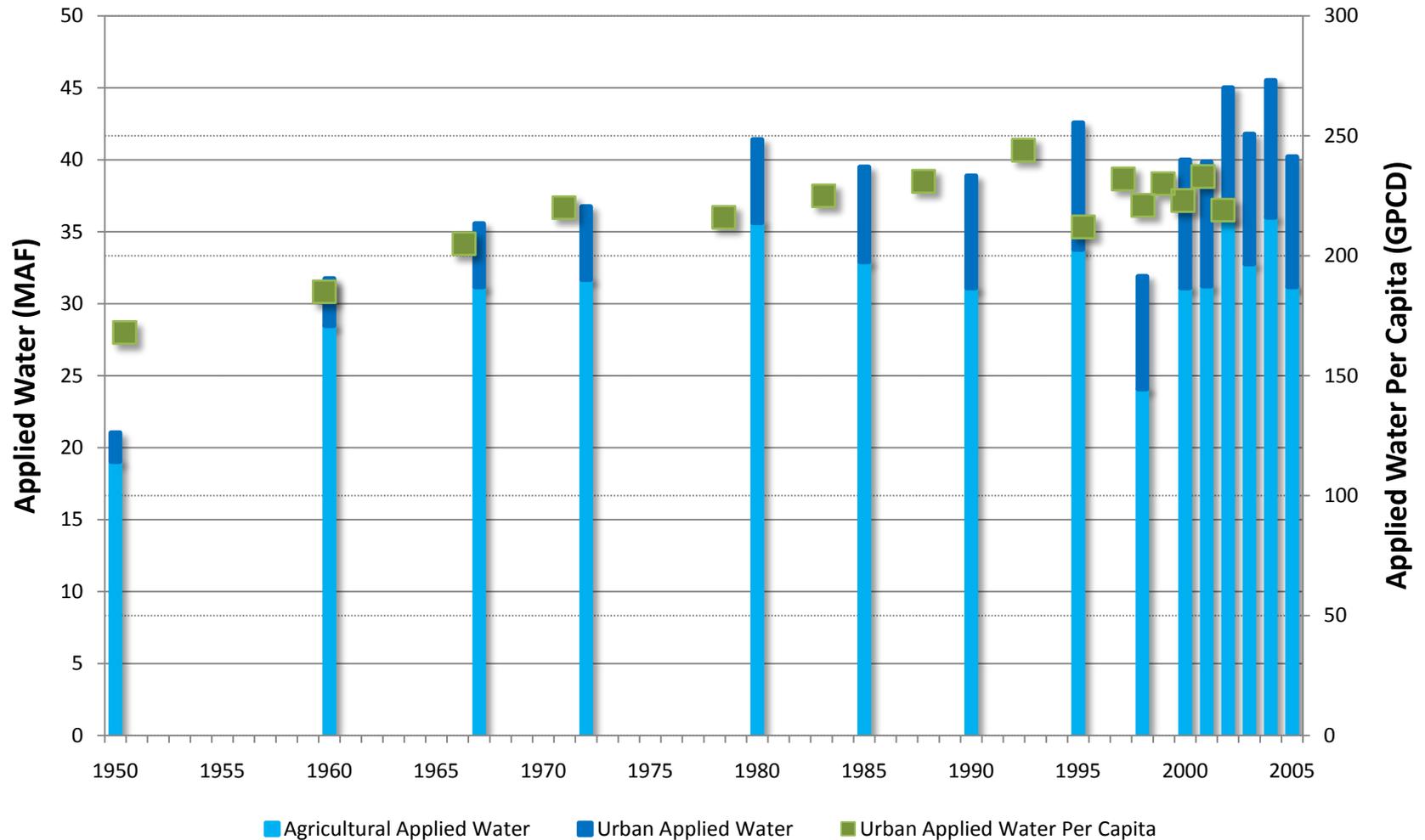


**Total Production of Salmon in the Central Valley, 1967-2007**





# Agriculture uses most applied water and urban per capita use remains over 200 gallons per day statewide



# Four policy bills and a bond bill – seeking to address decades of prior actions (and failures to act)

-  Policy and governance – Delta Stewardship Council, Delta Conservancy, changed Delta Protection Commission - SBX7 1
-  Groundwater monitoring (SBX7 6); water use conservation (SBX7 7); water diversion and use reporting (SBX7 8)
-  Council is an independent state agency to:
  - *Follow state coequal goals and 8 policies to reach them*
  - *Appoint Independent Science Board (done) and adopt Interim Plan (done)*
  - *Review and recommend early actions (underway)*
  - *Develop, adopt and begin implementation of Delta Plan by 1.1.12*
  - *Review BDCP recommendation and hear any appeal from DFG determination*
  - *Determine consistency of state/local agency actions. Review and approve/reject covered actions after 2012*
-  A \$11.14 billion General Obligation bond bill to be presented to the voters in November 2010, delayed to 2012 (SBX7 2)