SLIDES: Delta Overview

Leo Winternitz

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Mission – Founded 1951

- Preserve plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive
- Use innovative conservation to identify and solve the world’s most significant environmental challenges.
- Work in all 50 states and more than 30 countries
- Own and manage Staten Island and McCormack Williamson Tract in the Delta
Sacramento-San Joaquin Delta

Legal Delta and Zones

Primary Zone
Secondary Zone

Source: Department of Water Resources 1995

Delta Protection Commission
**San Francisco Chronicle**
**Peripheral canal, new levees urged for Delta**

By Kelechi Obi
Chronicle Staff

An influential Cabinet-level Friday official
suggested that
the proposed new
Delta levees
would help
improve water
supply and
environmental
benefits.

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**The Sacramento Bee**
**Nature Conservancy backs Delta canal, with conditions**

By Matt Weiser

Navy Conservancy backs Delta canal, with conditions.

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**Contra Costa Times**
**Sierra snow pack low, a dry winter looms**

By Mike Tauber

Ocean conditions have shifted in a way that probably means
Southern California will be thirstier than normal.

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**The Sacramento Bee**
**Federal draft report: Delta system imperils fish**

By Matt Weiser

The impacts are so significant that the
agency is also studying whether
killer whales in the ocean could be
imported by declining Central Valley
salmon, their primary prey.

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**Contra Costa Times**
**Delta fish hit record lows in 2008**

By Mike Tauber

Delta fish numbers sank again to record

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**Los Angeles Times**
**L.A.’s water woes worsen**

By Shelby Grad

Los Angeles has been
told it can expect
a big jump in the
cost of water
— and that
has officials
angry and
has raised the specter
of inaction, according
to the Daily Breeze.

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**Press-Telegram**
**The cost of water may rise in L.A.**

By Rick Orlov

Los Angeles could be facing a 21 percent increase in the cost of water as the continuing
drought potentially
leads to a tougher water
rationing plan limiting
residents to outdoor
watering only three
days a week.

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**San Francisco Chronicle**
**Water rationing likely in SoCal this spring**

By Associated Press

The giant water
wholesalers serving
18 million Southern
Californians says
there’s an increased
likelihood water will
be rationed this spring.

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San Francisco Bay and Delta Tidal Marshes – Historical and Current Conditions

(reprinted from http://sfbay.wr.usgs.gov/general_factsheets/change.html)
The Delta as Conveyance

Sac River

San Joaquin River

1

Sac River / West Delta

2

3

SWP Pumps

CVP Pumps
Delta Ecosystem in Crisis

SOURCE: California Department of Fish and Game.
NOTES: Graphs report the indices for the fall midwater trawl. Circles indicate the rank of indices in 2005. For delta smelt, longfin smelt, and striped bass, the recent indices represent low points in long-term declines of their populations.
6.5 Magnitude Earthquake causing 20-Island Failure

12 – 24 hours: Salt water intruding into Delta
6.5 Magnitude Earthquake causing 20-Island Failure

1 – 7 days: Salt water throughout Delta
6.5 Magnitude Earthquake causing 20-Island Failure

30 days: A saline estuary
Innovative Solution

Economic Cost ($Billions/year)

Likelihood of Fish Viability (%)

No Exports
Through-Delta Exports
Peripheral Canal+

Delta smelt

Likelihood of Fish Viability (%)

Economic Cost ($Billions/year)
Comprehensive approach required

• Habitat restoration
• Restoration of more natural flow conditions,
• Adaptive management,
• A governance structure that will ensure conservation objectives are being met.
Value of Mixing Land and Water: An Expected Result

Photo by Jeff Opperman; from Cosumnes River field study by Carson Jeffres