

New Methylmercury Regulations in the Delta and How that Affects DWR

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Carol DiGiorgio
Office of Environmental Compliance
Mercury Monitoring and Evaluation



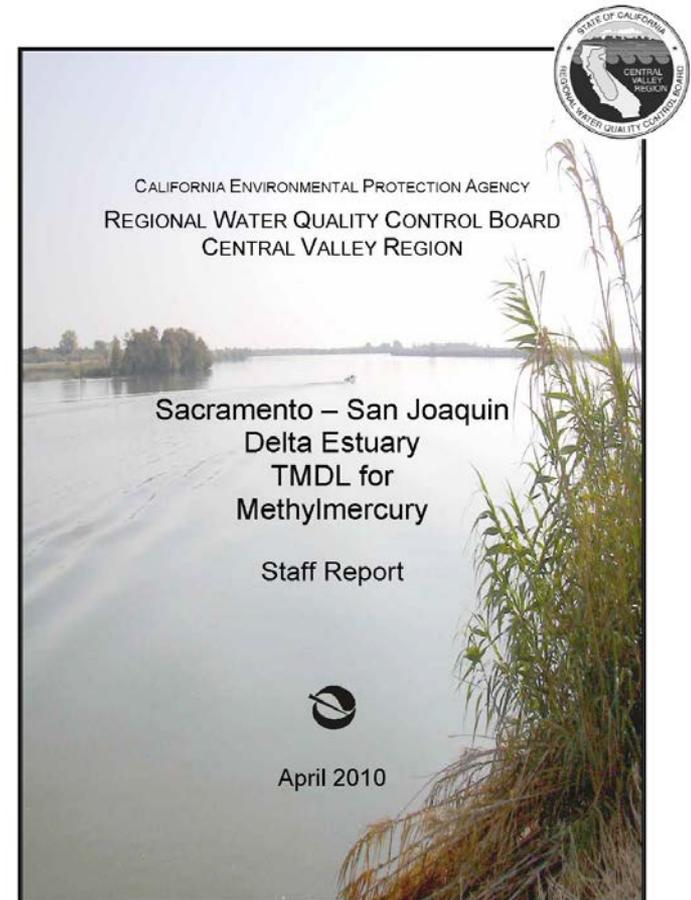
Outline

- What is the problem?
- Why is mercury a problem?
- What does the Board want to do?
- Why is mercury a problem for DWR?
- How can you help us ?

or more importantly, how can we help you? !!!!!!!!

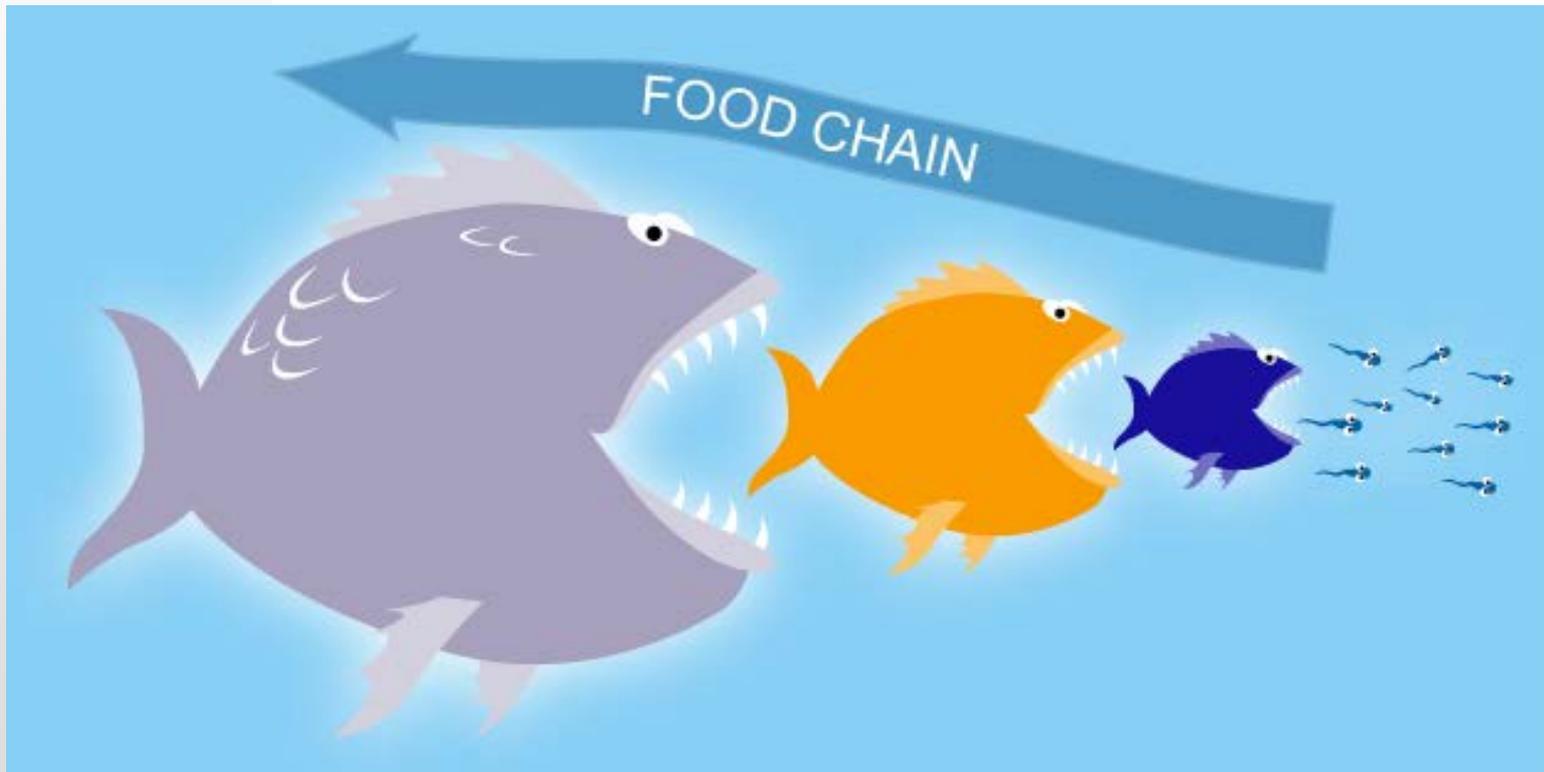
What is the problem?

- In 1990, CVRWQCB identifies the Delta impaired for Hg.
- April 2010 the Board adopted amendments to the Sacramento River and San Joaquin River Basin Plan to establish the Delta Mercury Control Program.
- October 2011 the USEPA approved the amendments (TMDL).
- Includes fish-tissue objectives for the Delta and methylmercury (MeHg).



Why is Hg a problem?

“The primary problem with mercury in the Delta’s aquatic ecosystems can be defined as biotic exposure to methylmercury” (Delta MeHg TMDL Report, April 2010)



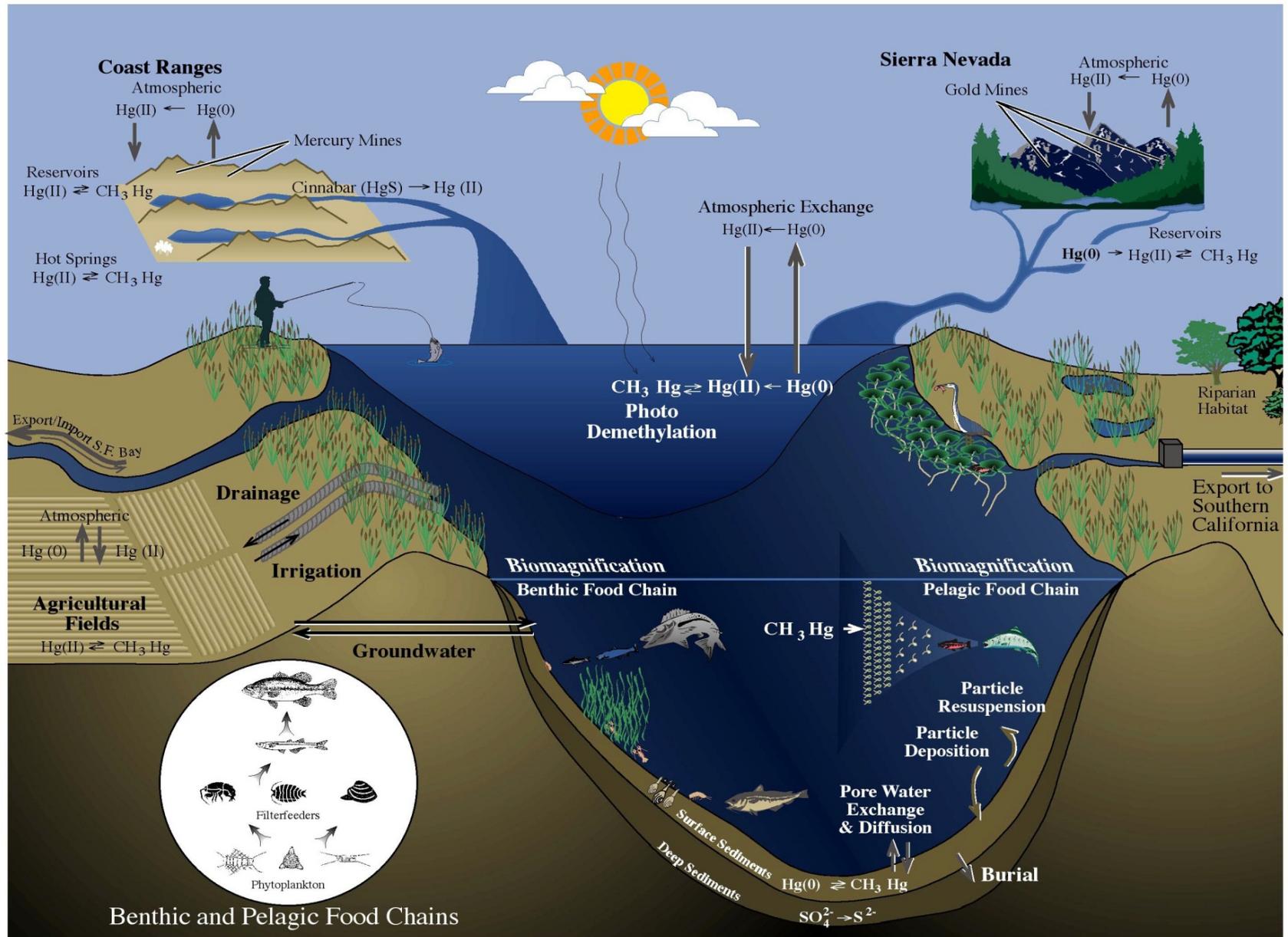
Why is Hg a problem?

In the Delta

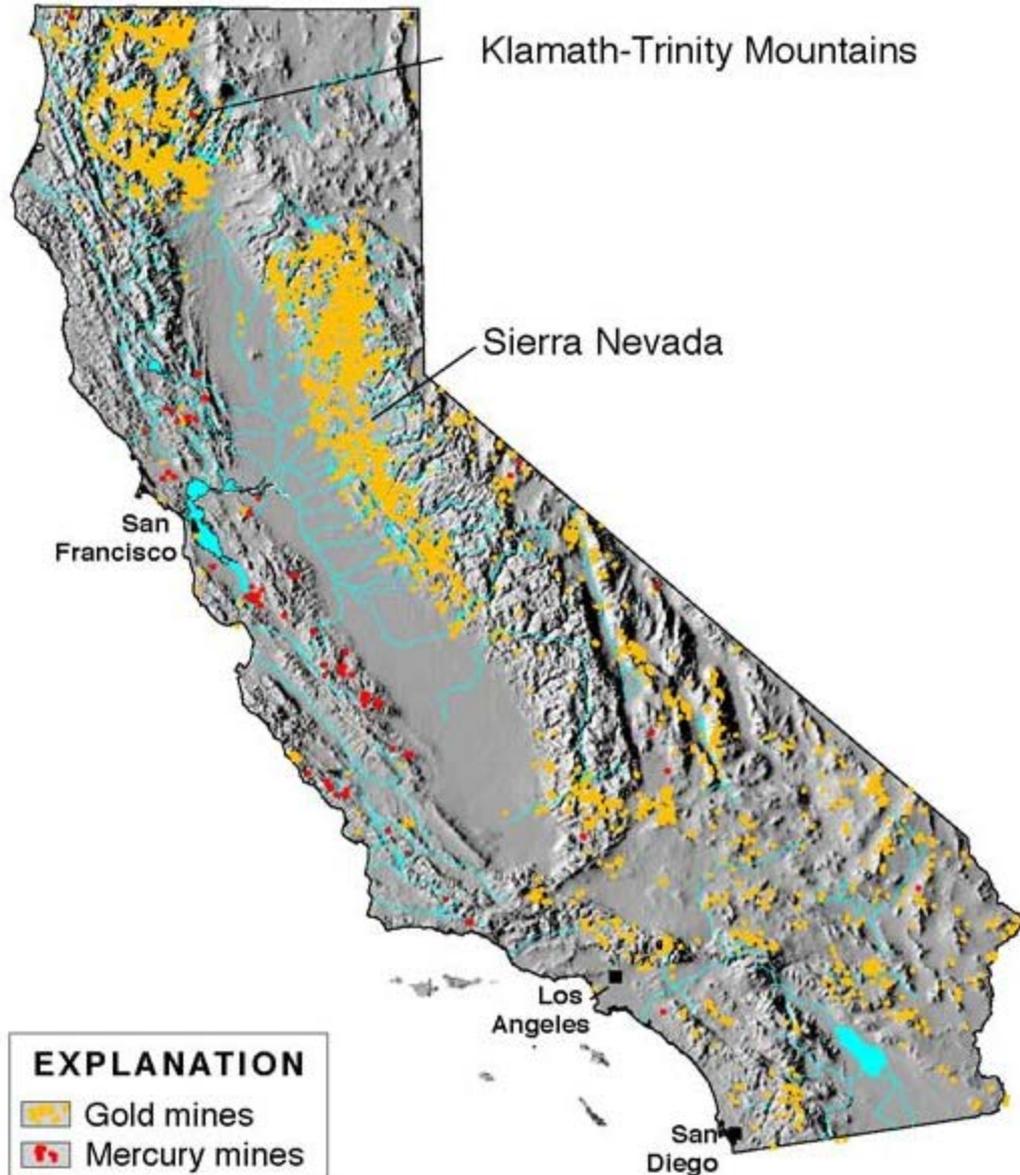
- ~ 300,000 licensed sport and subsistence anglers/year use the Delta.
- Unknown number of unlicensed anglers.
- Multiple ethnicities, communities, & income levels.
- 5% of fish consumers in Northern Delta have Hg intake 10Xs above the safe dose.



Why is Hg a problem?



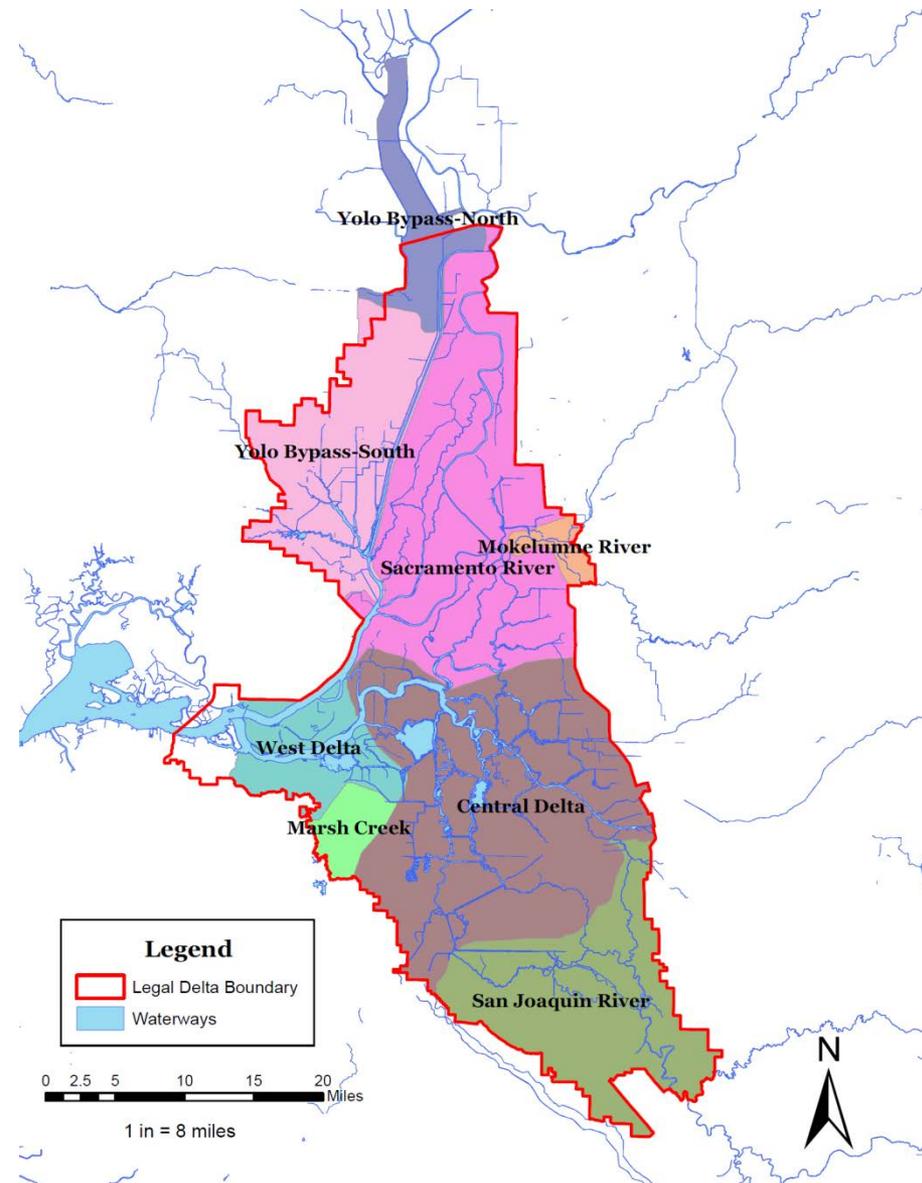
Why is Hg a problem?



- 47,000 abandoned mines in California.
- Legacy gold and mercury mine waste continues to enter the Delta through tributaries.

Where is Hg a problem?

- Delta TMDL load allocations assigned to 7 subareas in the Delta and Yolo Bypass.
- Load reductions range between 45%-82%.
- For DWR, load reductions focus on:
 - Wetlands
 - Open Water
 - Dredging





Why is Hg a problem for DWR?

- To achieve load allocations, the Board wants to control activities that enhance production and degradation of MeHg .
- TMDL is divided into phases. The first phase primarily focuses on **Control Studies**.
- DWR must develop **Control Studies** that evaluate Hg management practices in the Delta and Yolo Bypass for:

Wetlands	Open Water
Permanent	SWP operations
Seasonal	Flood Management
Tidal	

What are these Control Studies anyway?

- Don't necessarily know what management practices will work best.
- Phase 1 study period to evaluate different management practices.
- Board will revisit the load allocations in 2020. Control studies will be critical in their assessment of current load allocations.

What does the Board want to do?

Phase 1

Phase 2

TMDL Review
2020

2011

2030

- **MeHg Control Studies**
- **Pollution prevention for Hg**
- **Human Health Exposure Reduction Program**
- **Upstream TMDLs**

Reassess allocations & schedules

- **Implement MeHg controls**
- **Pollution prevention and source control for Hg**
- **Exposure Reduction**
- **Offsets Projects**
- **Upstream TMDLs**

How can we help you?

We are here to help smooth the TMDL transition for the Department

- If a linkage can be made to our control studies, your 401 certification may require **little to no** MeHg monitoring for your project!!!!!!!!!!!!



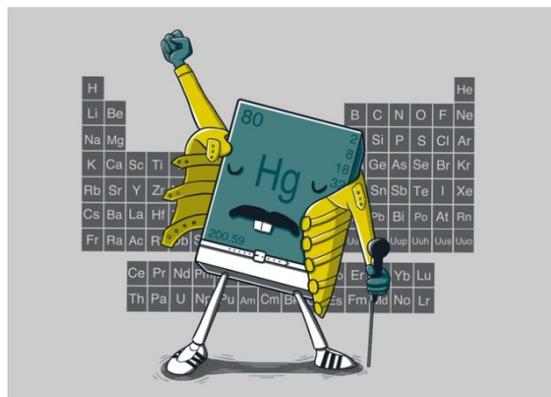
How can we help you?

- Our group is currently designing control studies for wetlands (focusing on tidal wetlands).
- Want them to be representative of the wetland restoration projects being implemented by the Department now and in the future.

How can you help us?

- Are you planning wetland restoration or have dredging involved with your project in the MeHg TMDL subareas??
- Does your project require a 401 certification???

Contact Us!!!!!!!!!!!!!!!!!!!!



(um, why?? Cuz Freddie Hg says so)

Contact us!

- Carol DiGiorgio (916)376-9743 caroldi@water.ca.gov
- Petra Lee (916)376-9735 petralee@water.ca.gov
- Julianna Clark (916)376-9816 jlclark@water.ca.gov

