

Public Scoping Meetings

Statewide Mercury Policy

Control Program for Mercury in Reservoirs

March 2012





Meeting Ground Rules

- Use common conversational courtesy
- Cell phone courtesy
- All ideas and points of view have value
- Avoid editorials
- Honor time



Today's Agenda

- Introduction to
 - Proposed statewide mercury program
 - Proposed control program for mercury in reservoirs
- Update on current mercury-related projects
- Potential implementation measures for mercury sources and reservoirs
- Your comments on potential environmental impacts of the proposed project



Today's Questions

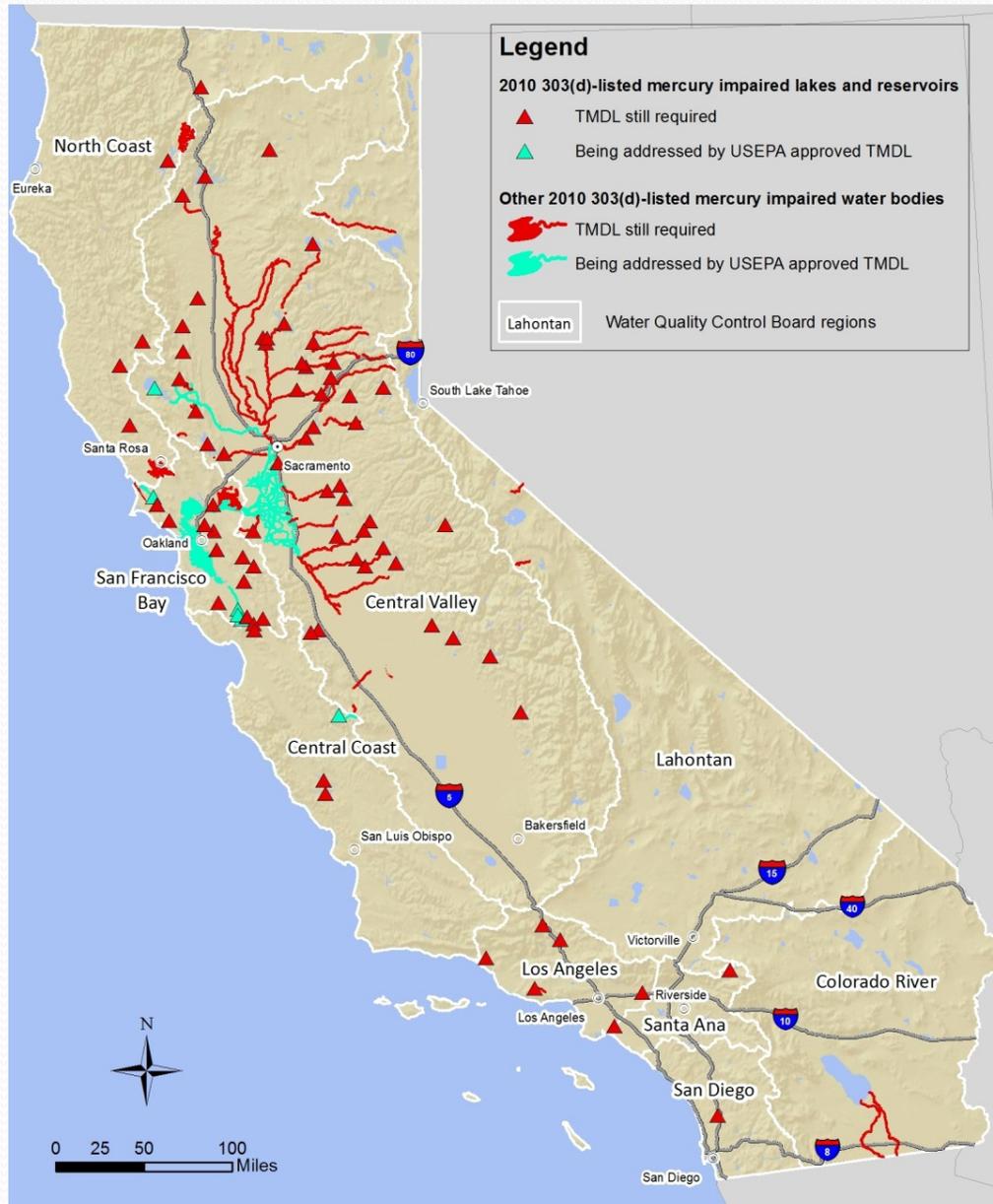
- Should there be a statewide, consistent control program for reservoirs where fish have high levels of mercury?
- What are the environmental risks in a reservoir program?
- What can be done to eliminate or reduce those risks?
- What else should we consider?

Why does California need a Mercury Policy?

- Fish in many of our rivers, creeks, streams, lakes, and reservoirs are unsafe for humans or wildlife to eat, because of mercury in the water.
- Implementing a statewide control program will be more efficient than addressing one water body at a time.



Mercury- impaired waters





What are the Policy's Objectives?

- Protect the health of humans and wildlife who eat fish from California's waters
 - By setting standards for safe amounts of mercury
 - By reducing mercury in water
- Efficiency
- Consistency
- Build on the Water Boards' experience in existing mercury reduction projects

Overall Project Schedule

Statewide Mercury Objectives Policy

Policy and Staff Report preparation	Winter/Spring 2012
Circulate Staff Report for public comment	Fall 2012
State Water Board public workshop	Winter 2013
State Water Board adoption hearing	Summer 2013

Statewide Mercury Policy and Reservoir Control Program

CEQA scoping comments due	March 30, 2012
Policy and Staff Report preparation	March-November
Circulate Staff Report for public comment	Summer 2013
State Water Board public workshop	Fall 2013
State Water Board adoption hearing	Winter 2013-14

What is CEQA, and what is “CEQA Scoping”?

- The California Environmental Quality Act gives the public a voice in public agencies’ environmental project planning
- “Scoping” takes place early in project development
- Designed to reveal any potential adverse environmental impacts



What is “Environmental”?

CEQA requires that we analyze impacts:

Aesthetics

Agriculture and forest resources

Air quality

Biological resources

Cultural resources

Geology and soils

Greenhouse gas emissions

Hazards and hazardous materials

Hydrology and water quality

Land use and planning

Mineral resources

Noise

Population and housing

Public services

Recreation

Transportation / traffic

Utilities and service systems



What could a Policy include?

- Regulatory standards (“objectives”) for acceptable amounts of mercury in fish
- Control programs for mercury in:
 - Reservoirs
 - Rivers, creeks, streams, bays, estuaries, and lagoons
- Regulatory programs for
 - Wastewater plants and storm water systems
 - Timber, mining, agricultural activities



Mercury Objectives Policy: Background

- U.S. EPA promulgated mercury criteria for the protection of human health – the California Toxics Rule
- U.S. EPA agreed to update California Toxics Rule to address wildlife



Mercury Objectives Policy: Goals

- Establish mercury fish tissue objectives that are protective of:
 - Human health
 - Wildlife
 - Threatened & endangered species
- Provide consistency for statewide mercury control program for reservoirs



Mercury Objectives Policy: Options

- Objective for methylmercury in fish tissue
- Water quality objective for total mercury in water
- Water quality objective for methylmercury in water
- Combination of above



Current Objectives Project Focus

Fish Tissue Objective

- Similar to previous site-specific objectives adopted in mercury TMDLs
- Different objectives protect different beneficial uses
- Policy may contain provisions for site-specific objectives and exemptions for existing TMDLs



Relationship of Objectives and Reservoir Mercury Control Program

Mercury Objective Policy will

- Provide basis for evaluating water quality
- Establish the protection level reservoirs must achieve

May allow for site-specific consumption rates as they are developed

Statewide Objectives Schedule

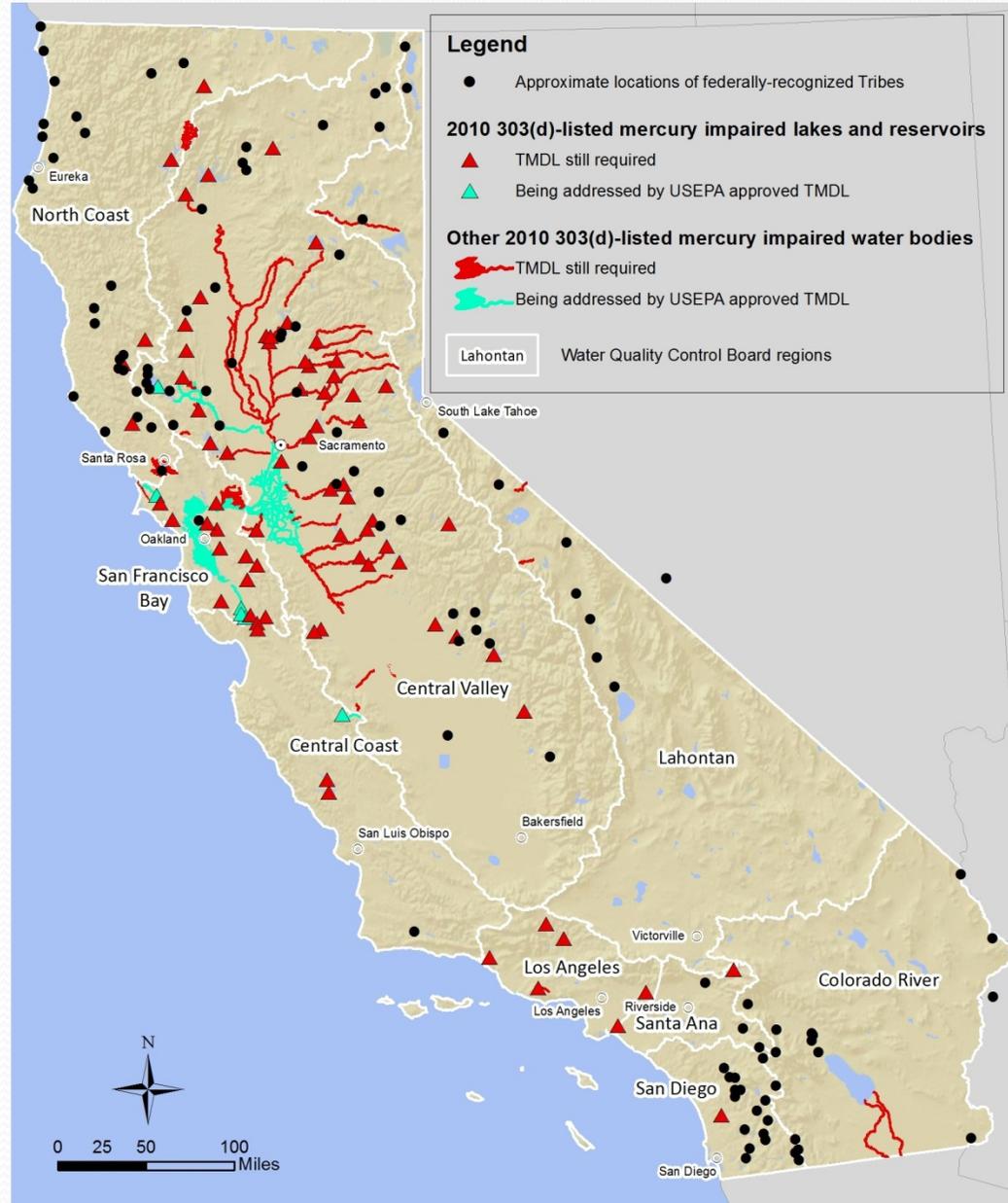
CEQA Scoping Meeting	Complete – Winter 2007
Policy and Staff Report preparation	Winter/Spring 2012
Scientific Peer Review	Summer 2012
Circulate Staff Report for public comment	Fall 2012
State Board public workshop	Winter 2013
State Board adoption hearing	Summer 2013



Considerations for People who Rely on Fish for Food

- Native American Tribes
- Subsistence fishers
- People who rely on local fish for consumption or cultural purposes

Tribal Fish Consumption Study





Questions



Part 2 – Control Program for Mercury in Reservoirs



Today's Questions

- Should there be a statewide, consistent control program for reservoirs where fish have high levels of mercury?
- What are the potential adverse environmental impacts from a reservoir program?
- What can be done to eliminate or reduce those impacts ?
- What else should we consider?



Current Water Board Approach: Total Maximum Daily Loads, 1-by-1

- TMDL = Science-based determination of the amount of a pollutant a water body can hold, and still support human and wildlife uses
- Required by the federal Clean Water Act for every mercury-impaired water body



Statewide Control Program	Individual TMDLs
Statewide consistency	Regulatory approach differs by region
One statewide action to encompass 74 impaired reservoirs and future problems	Individual, local TMDLs for 74 impaired reservoirs and future problems
Same mercury control actions	
Same commitment to adaptive implementation	



CEQA Topic Areas

Aesthetics

Agriculture and forest resources

Air quality

Biological resources

Cultural resources

Geology and soils

Greenhouse gas emissions

Hazards and hazardous materials

Hydrology and water quality

Land use and planning

Mineral resources

Noise

Population and housing

Public services

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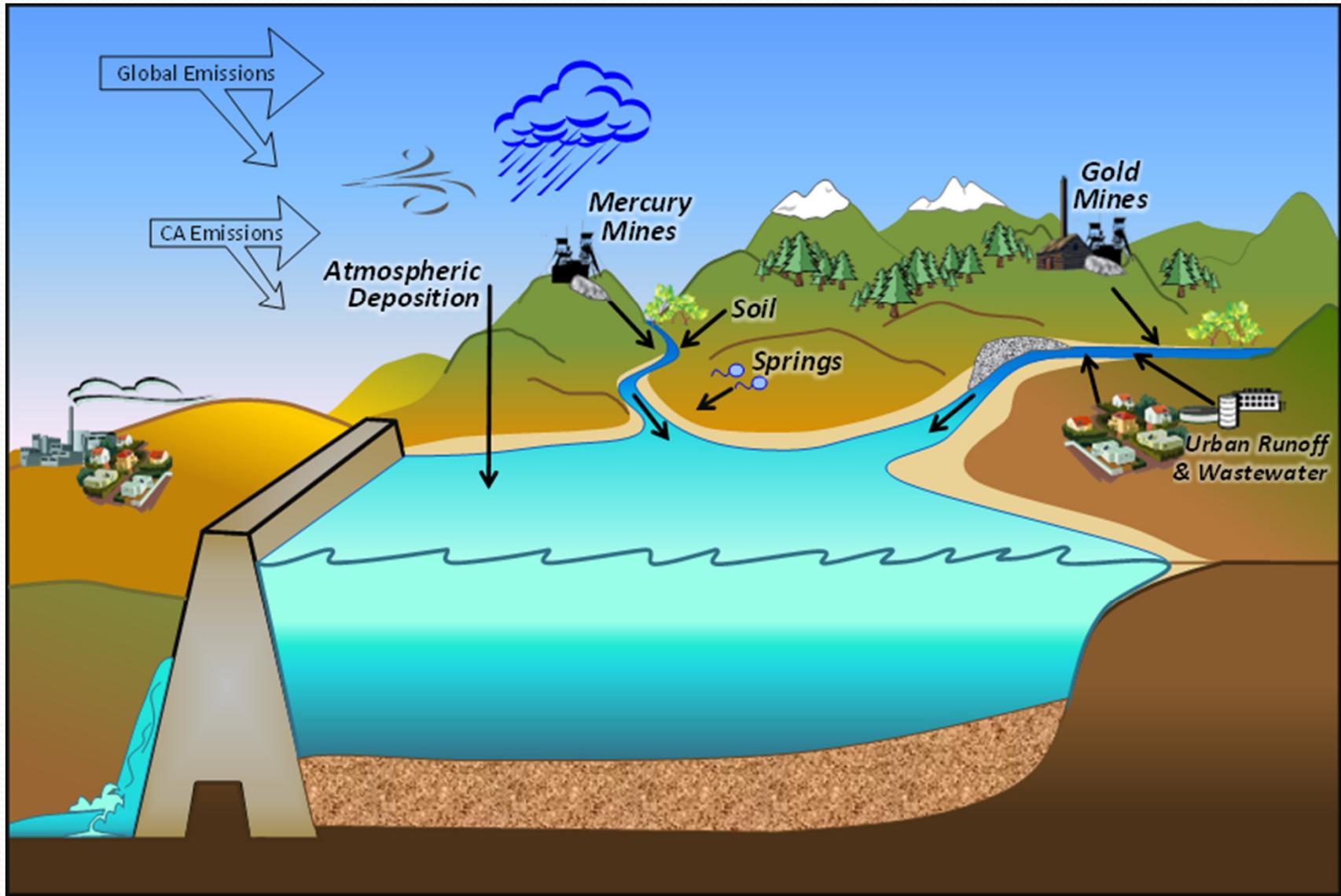
Utilities and service systems



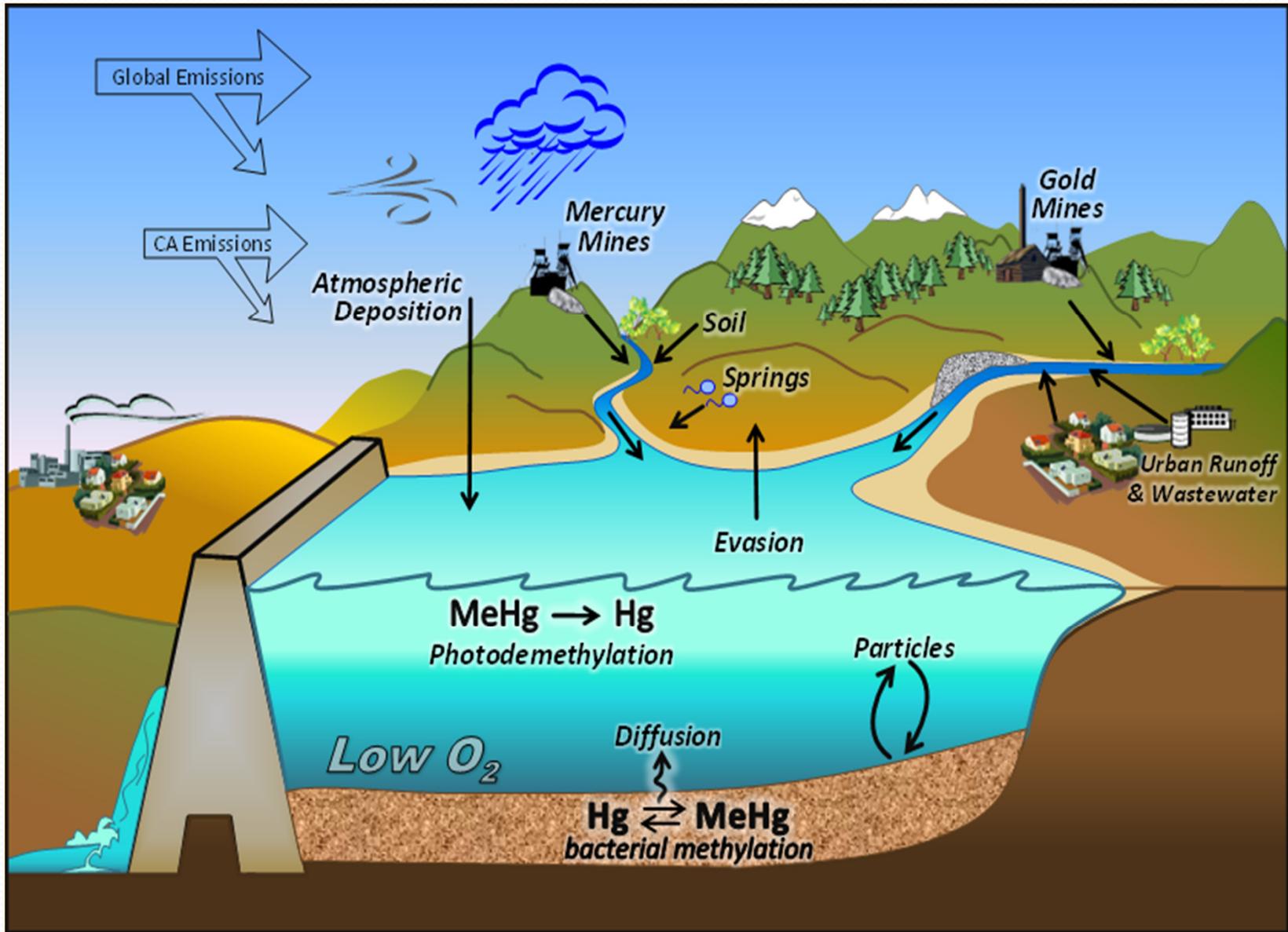
Mercury Control Actions for Reservoirs

- Source control
- Reservoir chemistry
- Fisheries management
- What else should we consider?

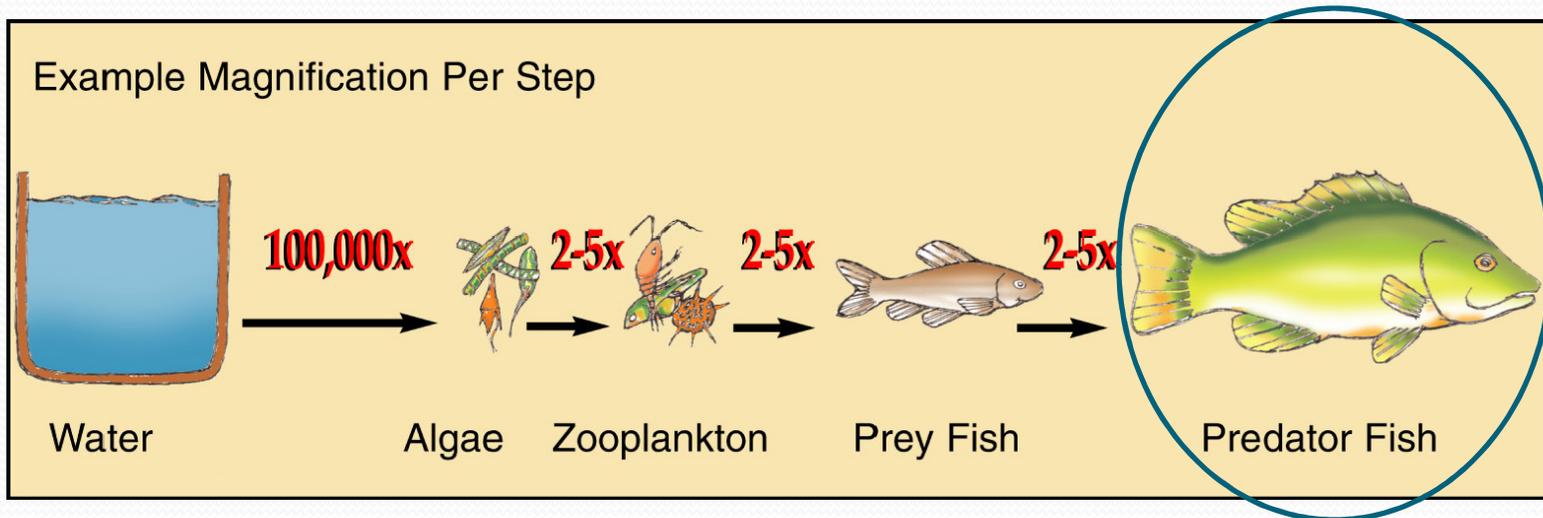
Sources of Mercury



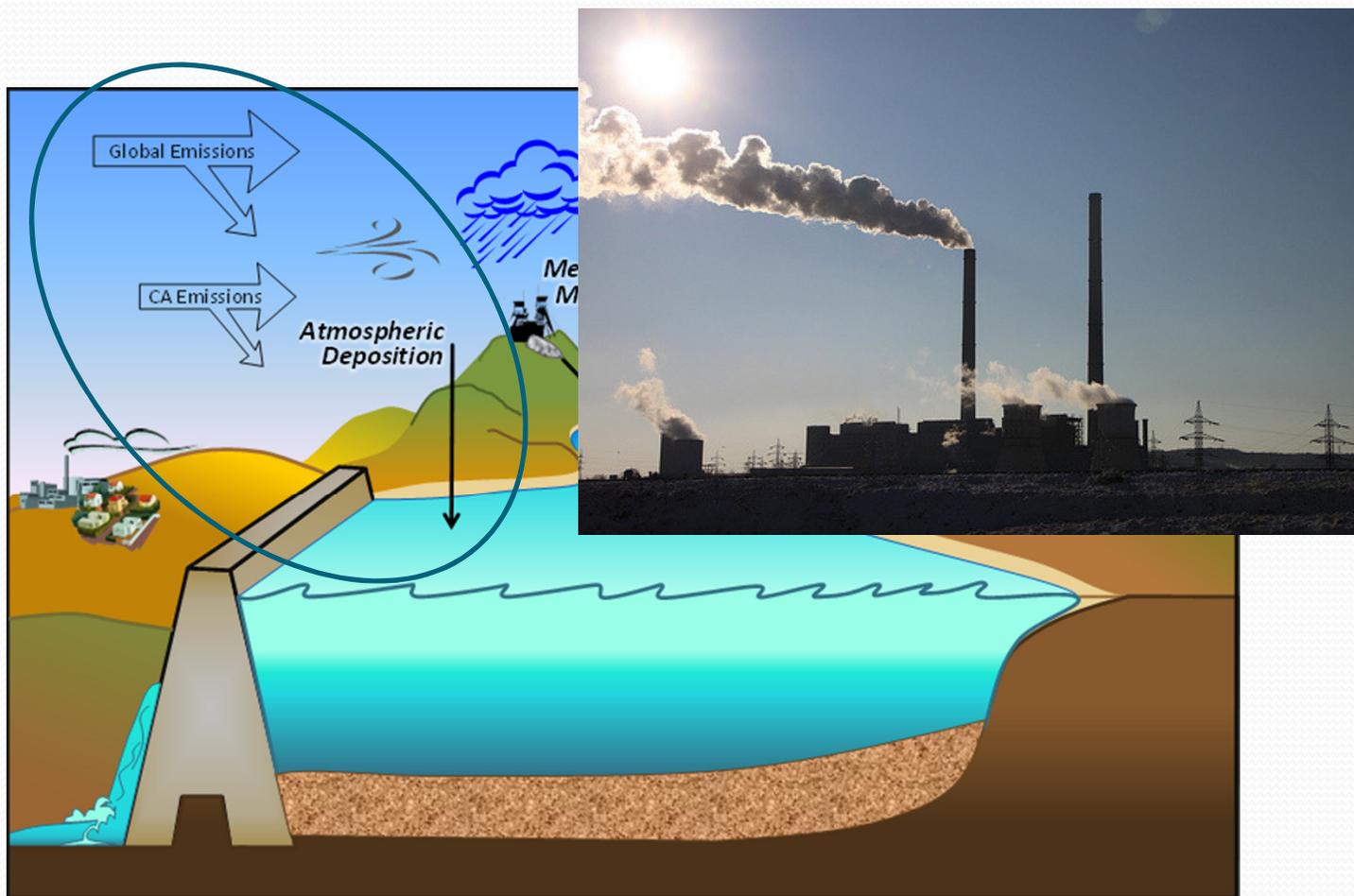
Reservoir Chemistry



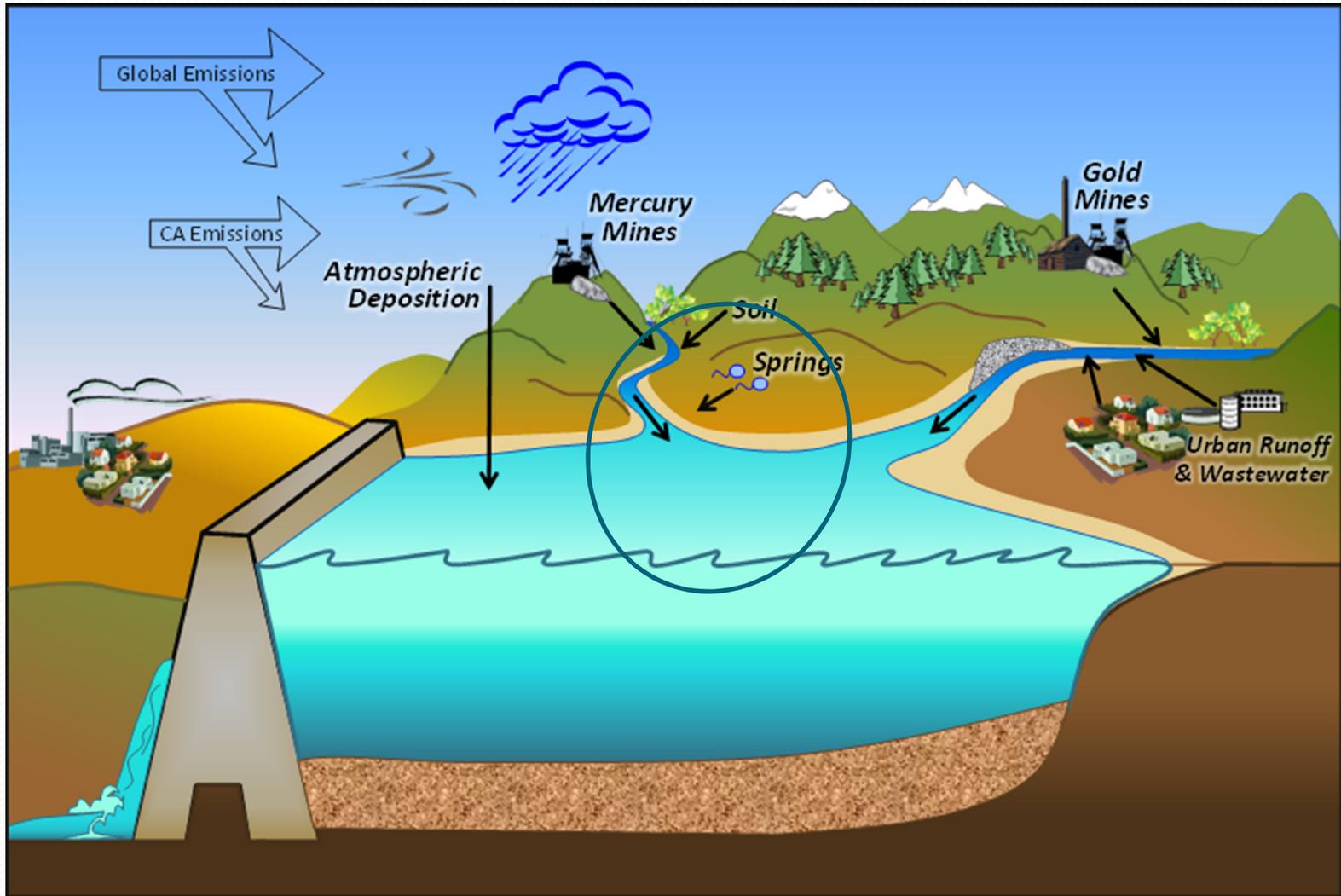
Mercury Bioaccumulation



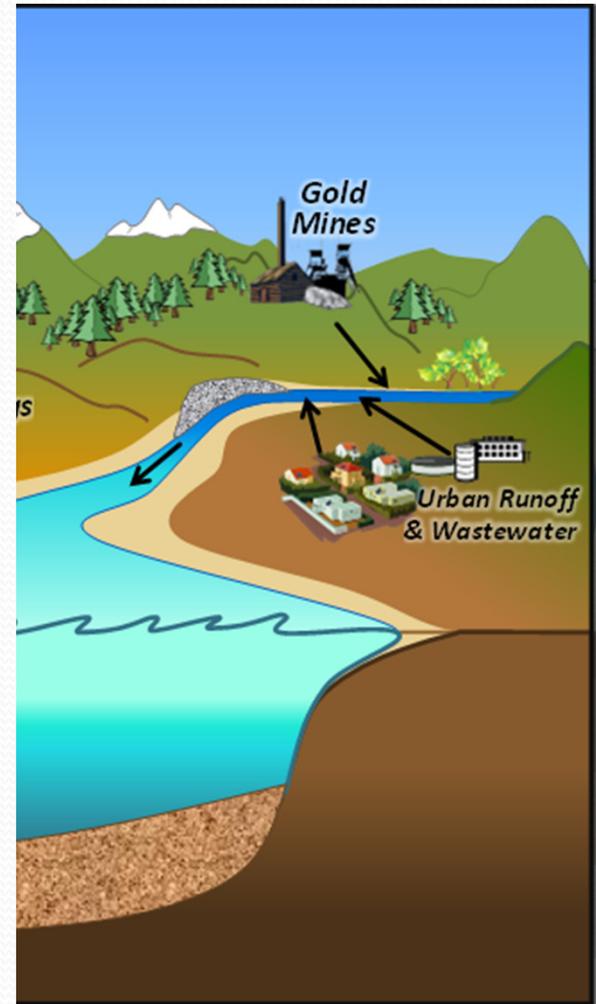
Source Control: Air Emissions



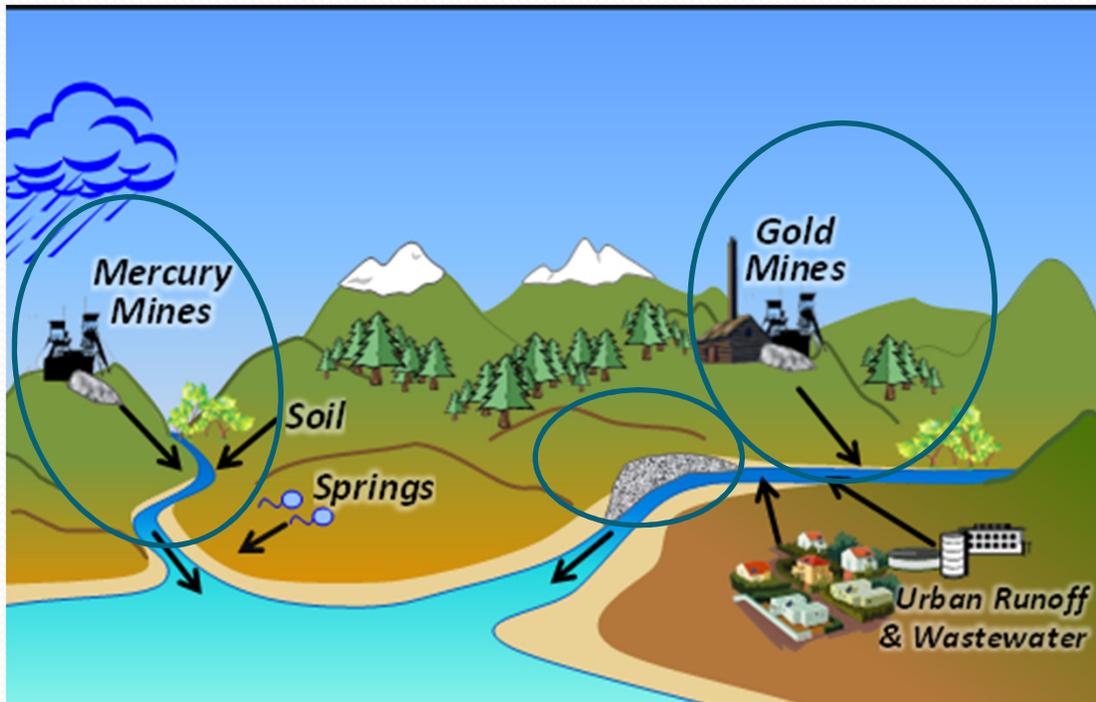
Natural Sources: No Action



Source Control: Urban Areas



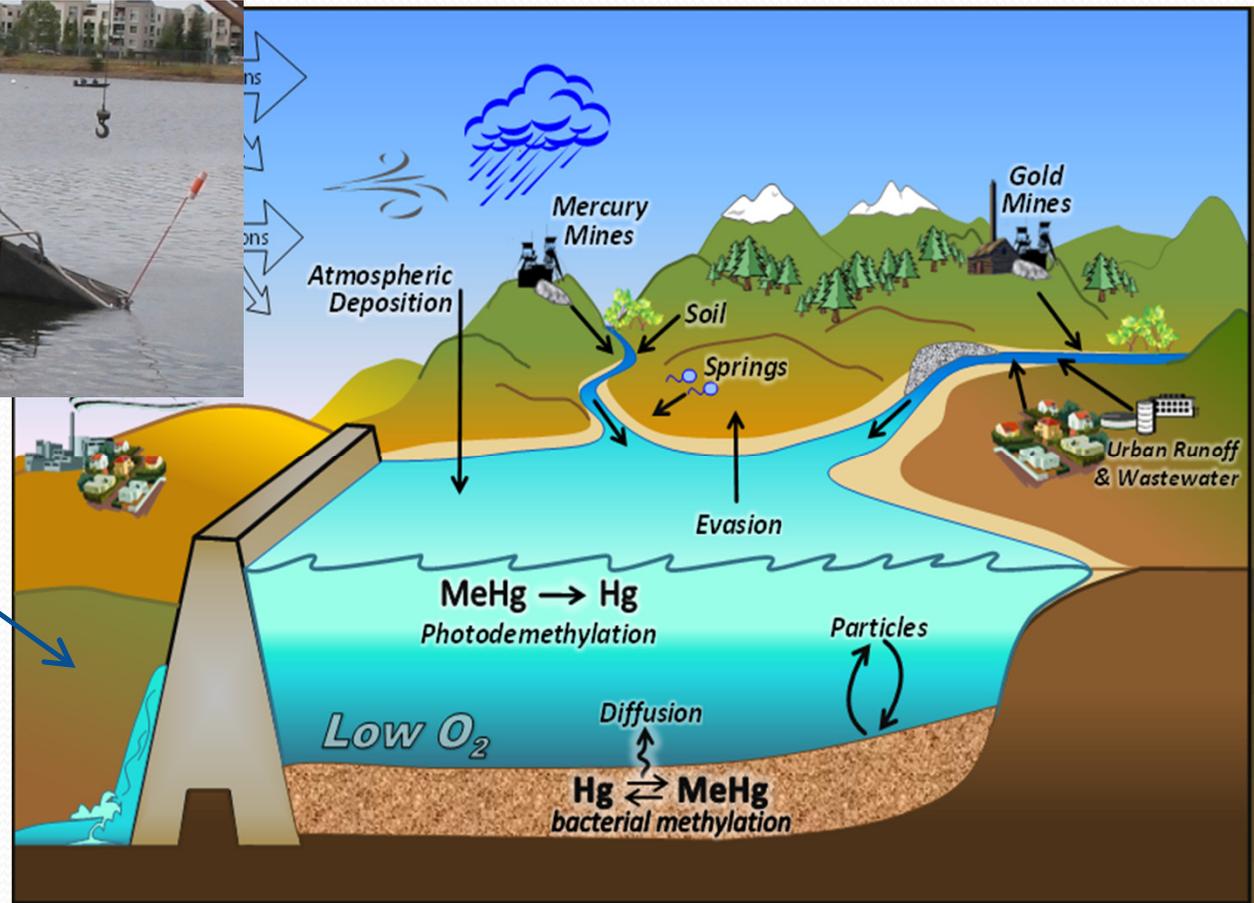
Source Control: Mine Waste



Source Control: Mine Waste, Downstream



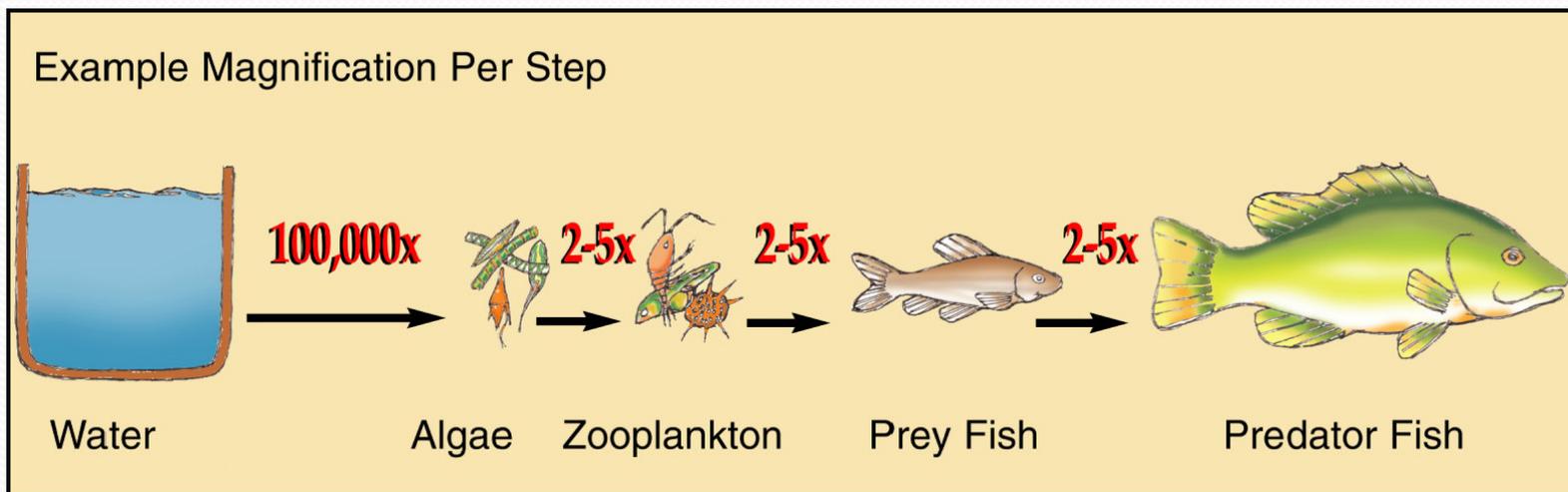
Evaluate Reservoir Chemistry and Water Management



Add
 O_2

Evaluate Fisheries Management to Reduce Mercury in Fish

- Species
- Catch/release
- Size limits
- Signage





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Your input on potential environmental impacts

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Air quality

Biological resources

Cultural resources

Geology and soils

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Hazards and hazardous materials

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Submit CEQA Comments by Mail or Email

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Email: commentletters@waterboards.ca.gov

Please indicate in email subject line:

***Comment Letter – Statewide Mercury Policy
– CEQA Scoping Comments***

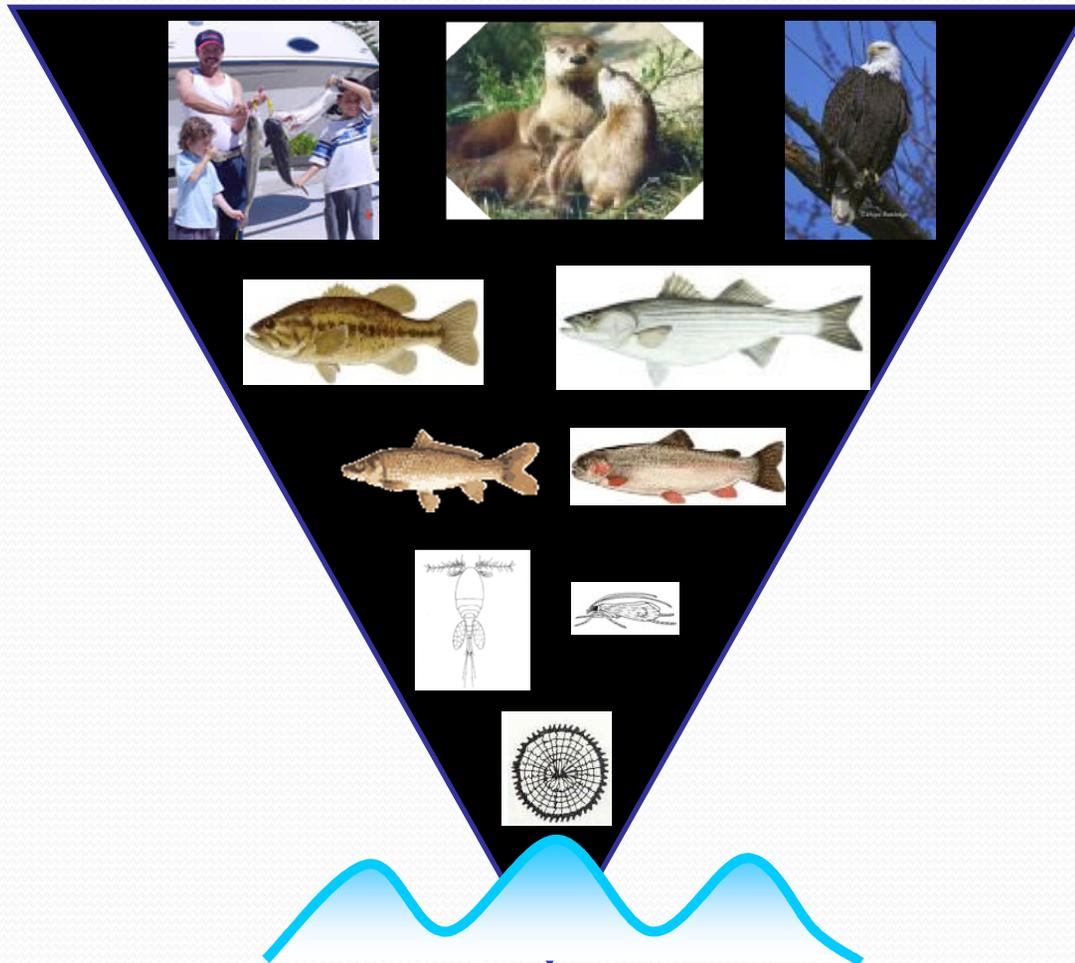
Find Out More, Stay in Touch!

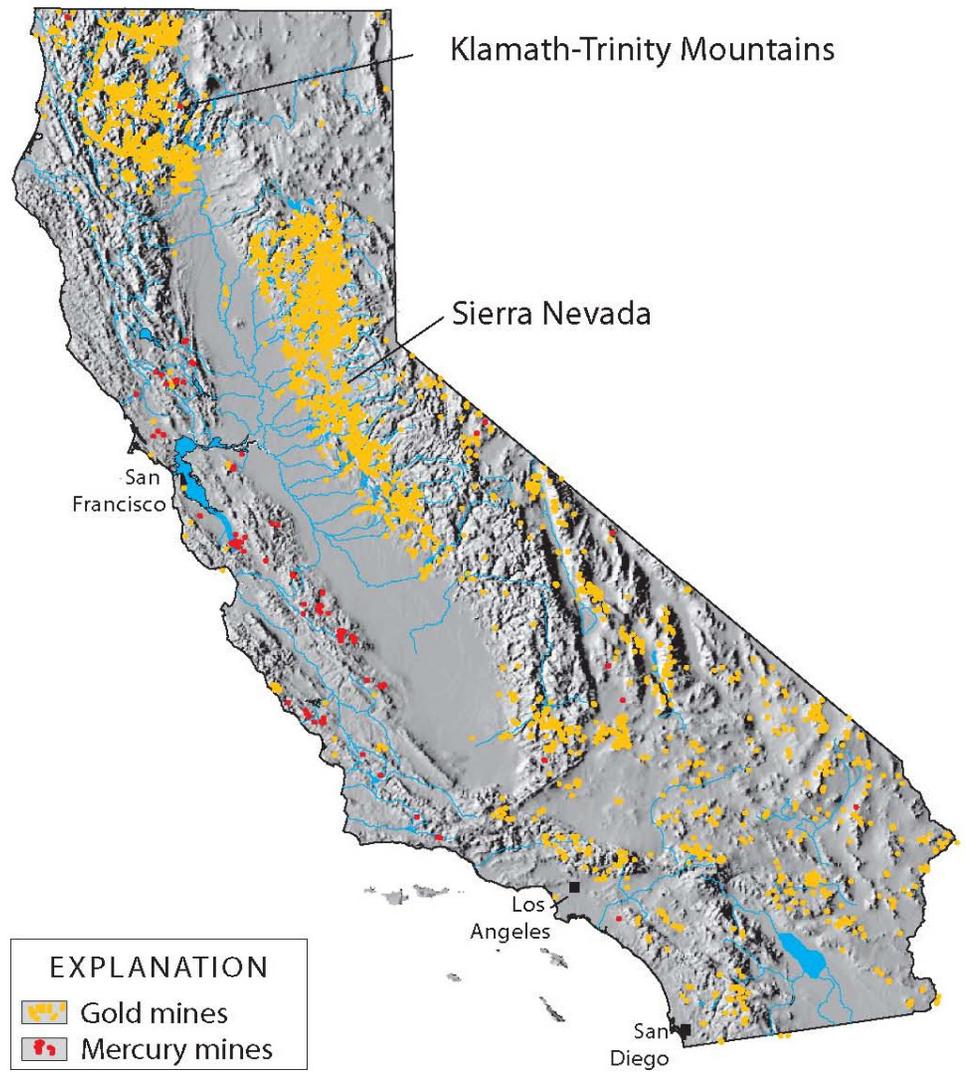
- Project web page:
[www.waterboards.ca.gov/
water_issues/programs/mercury](http://www.waterboards.ca.gov/water_issues/programs/mercury)
- Sign up for email notices for both projects at:
[www.waterboards.ca.gov/resources/
email_subscriptions
/swrcb_subscribe.shtml#quality](http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml#quality)
- Email: MercuryProject@waterboards.ca.gov



Additional slides

Mercury through the food web





Source: USGS
Fact Sheet
2005-3014