Guadalupe River Watershed Mercury TMDL

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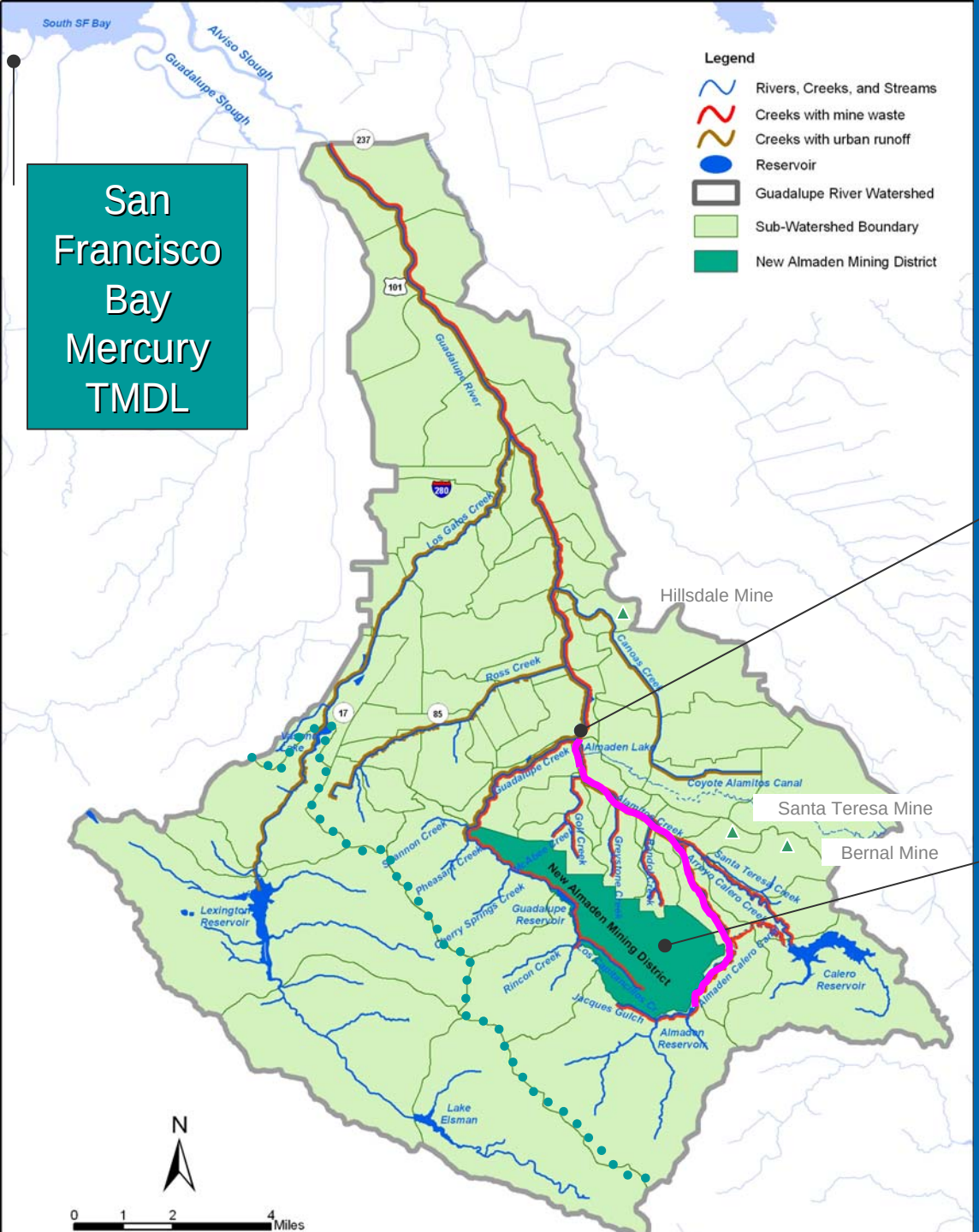
Mercury Mining in the Guadalupe River Watershed

San Francisco Bay Mercury TMDL

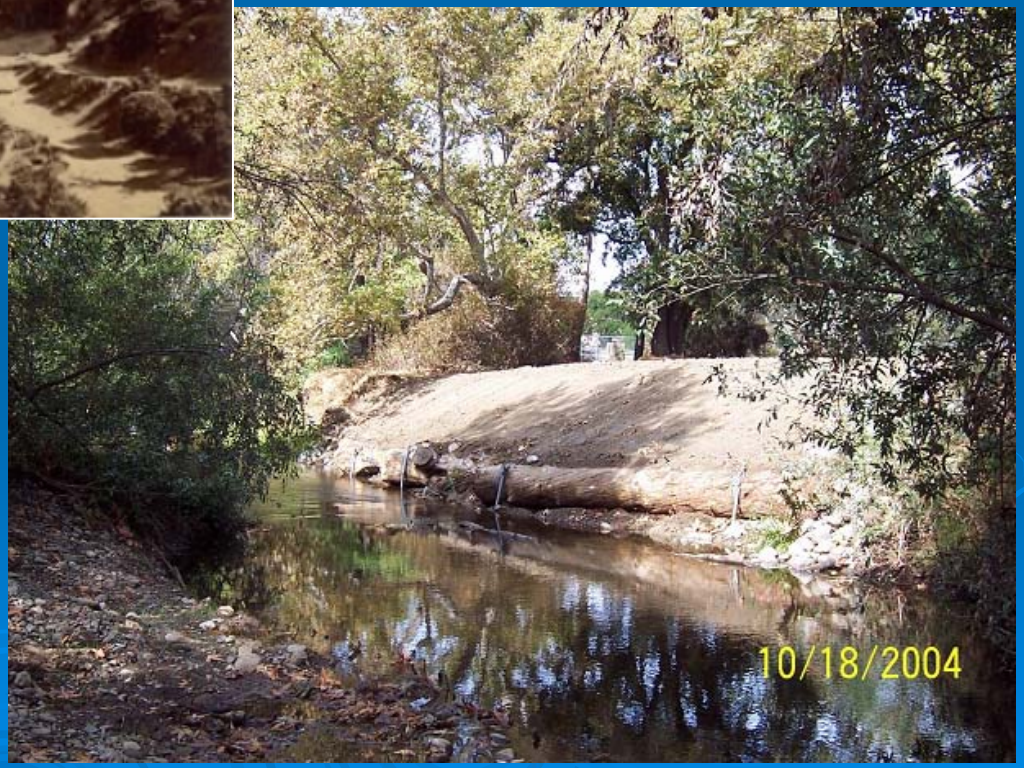


Valley Water District Headquarters

New Almaden Mining District

Map: Tetra Tech , Inc

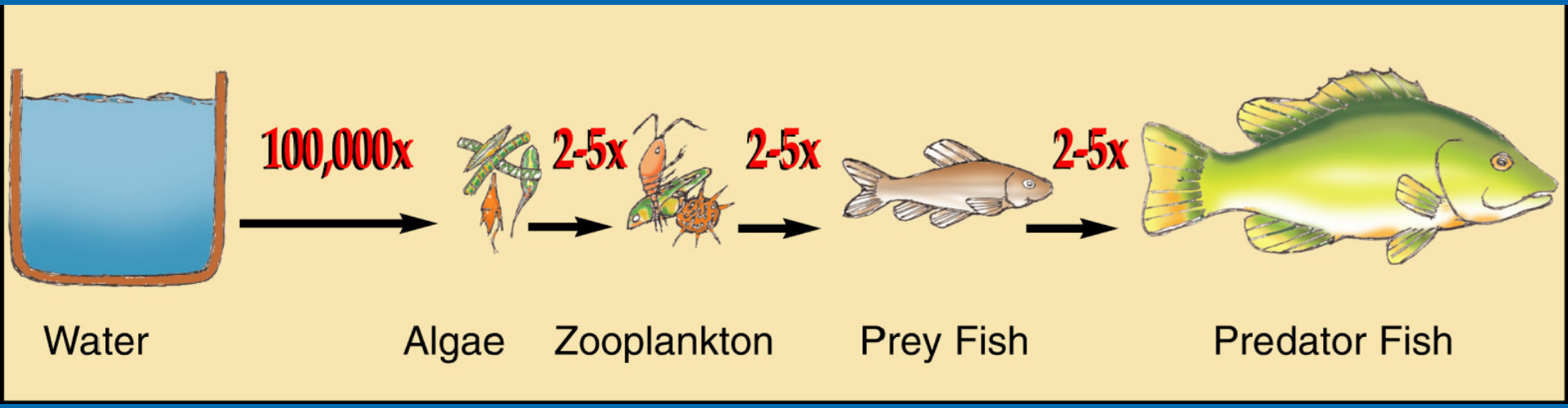
Alamitos Creek



TMDL Process and Presentation Outline

- Technical Report & Peer Review
- Problem (mercury in fish)
- Targets (goals)
- TMDLs & Allocations
- Implementation (solving the problem)

Problem: Bioaccumulation of Methylmercury



Citation: Tetra Tech 2005

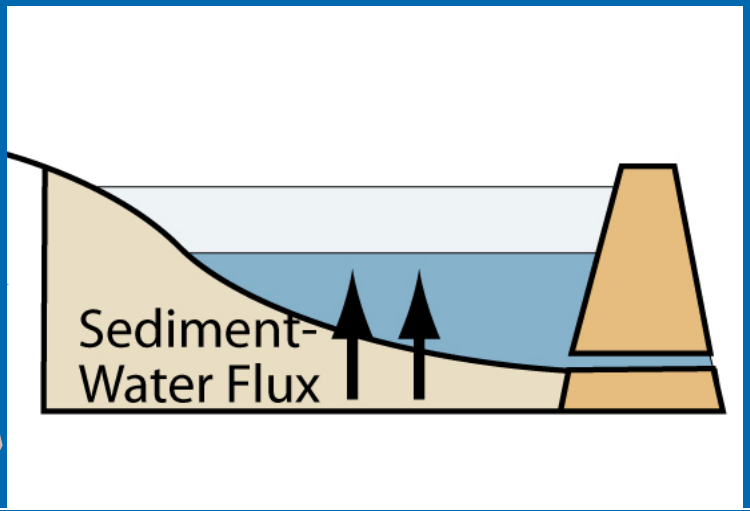
Problem: Mercury in Fish

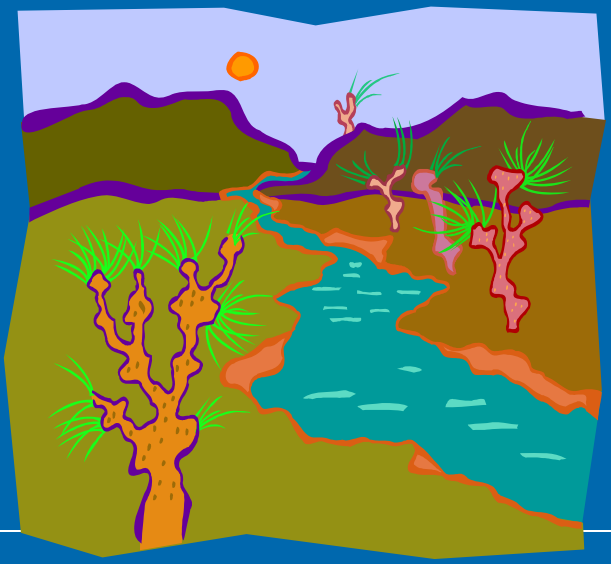
Targets

0.05 mg methylmercury per kg fish

0.1 mg methylmercury per kg fish

TMDLs & Allocations





Mines

0.2 mg mercury per kg mining waste

Reservoirs

1.5 ng total methylmercury per liter water (summer maximum)

Creeks

0.2 mg mercury per kg suspended sediment

Implementation Actions

- Phase 1 – Erosion control at mines, methylmercury controls at Reservoirs; assess Alamitos Creek
- Phase 2 – Cleanup and Restore Creeks
- Attain fish targets in 20 years

Mining waste in Alamitos Creek

Mine Sites

Implement erosion control within 10 years

Reservoirs

Creeks

Common Problems in Alamitos Creek

Eroding bank

Undercutting of mining waste in bank along Alamitos Creek

Undercut Bank with mining waste deposits

Strategy for cleaning up and restoring Alamitos Creek

- Technical Lead:
  Santa Clara Valley Water District
- Phase 1: studies, surveys, design & permitting
- Phase 2: construction & post-construction monitoring
- Creekside property owners:
  - Cooperate: Allow access to creek
  - Do not increase erosion of creekbanks

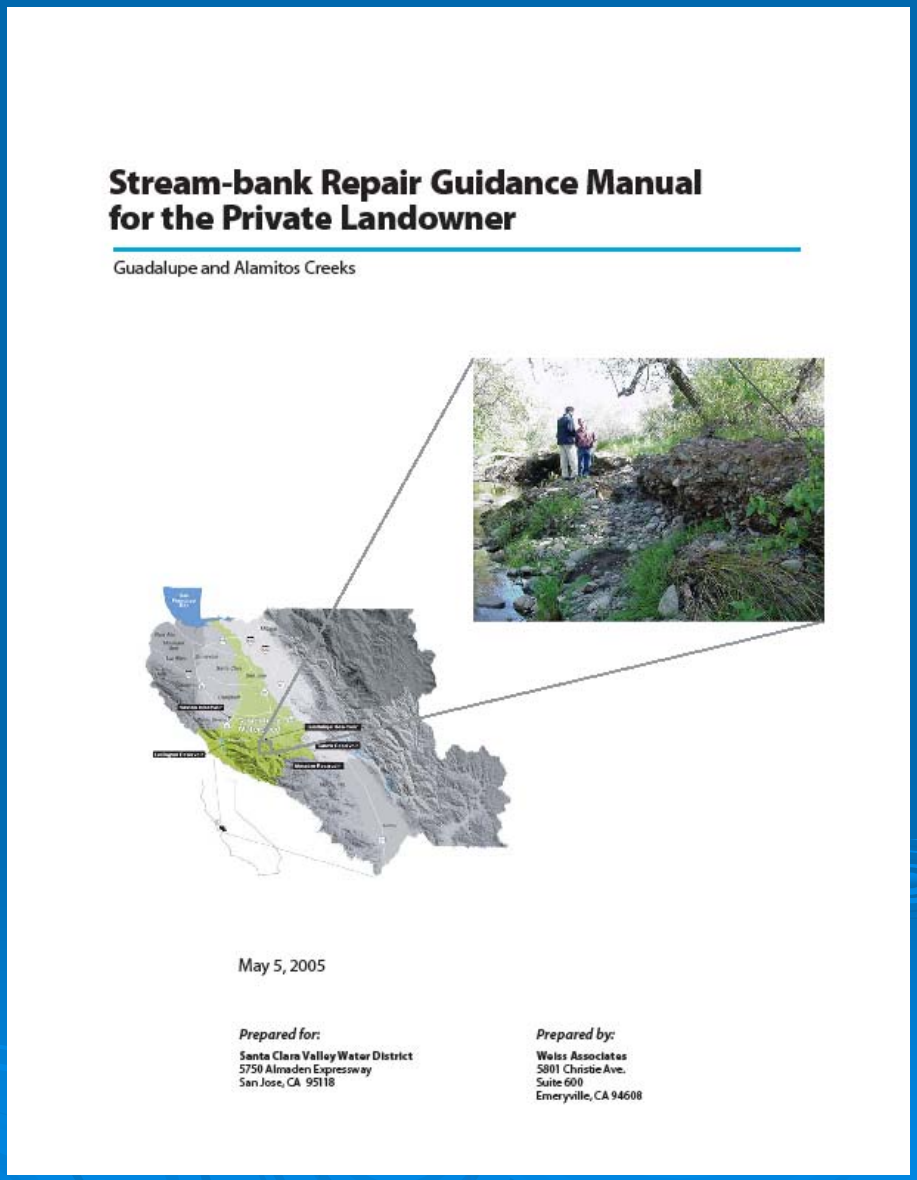
Strategy for cleaning up and restoring Alamitos Creek

Mining waste in Alamitos Creek

Strategy for cleaning up and restoring Alamitos Creek

Creekside property owners:

- Do not increase erosion of creekbanks



Stream-bank Repair Guidance Manual for the Private Landowner

Guadalupe and Alamitos Creeks

May 5, 2005

Prepared for:
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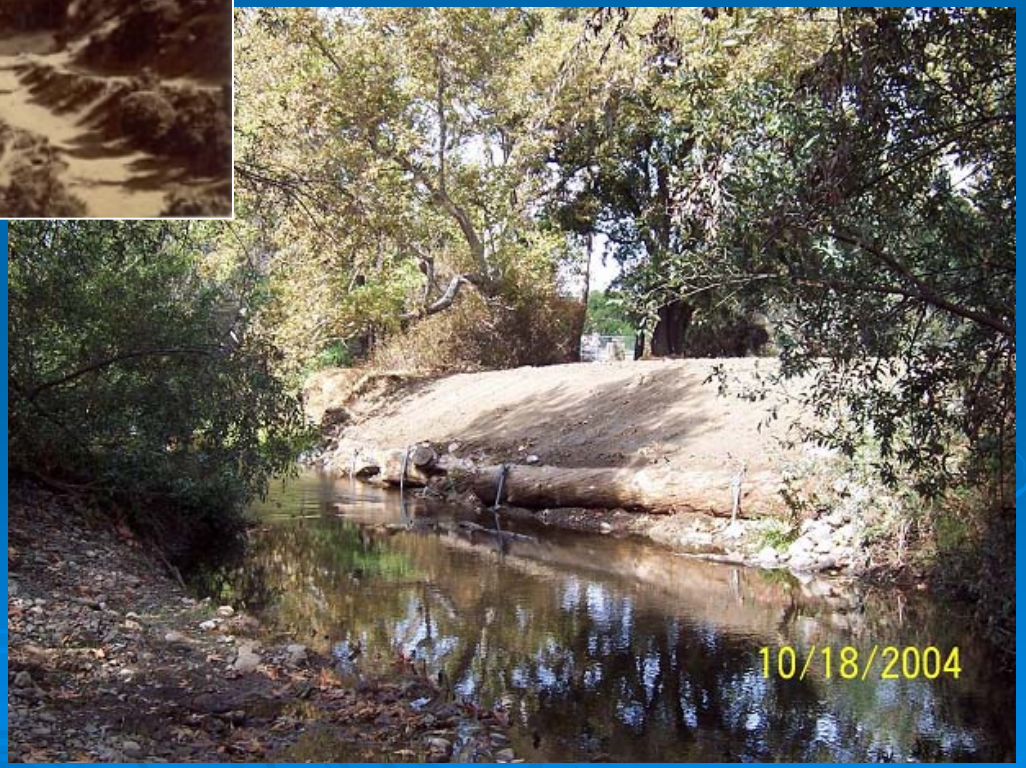
Solving the Mercury Problem



Important Dates

- October 1: Revised documents posted on Water Board website

- October 8: Hearing before the SF Bay Regional Water Quality Control Board, 1515 Clay St., Oakland (see website for public notice)

http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/tmdls/guadaluperivermercurytmdl.shtml