

Total Maximum Daily Load Progress Report		Cache Creek Watershed Mercury TMDL	
Regional Water Board	Central Valley, Region 5		
Beneficial uses affected	REC-1, COMM, WILD		
Pollutant(s) addressed:	Methylmercury and mercury		
Implemented through:	Cleanup and Abatement Orders, 13267 Orders for Technical Reports, 401 Certifications, EPA Removal Action.		
Approval date:	February 2007		

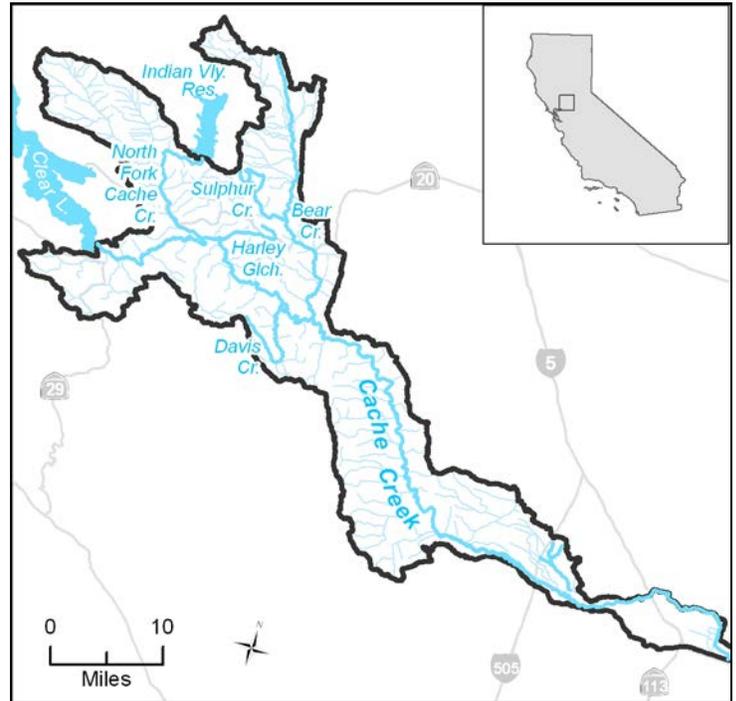
### STATUS

- Conditions Improving
- Data Inconclusive**
- Improvement Needed
- TMDL Achieved/Water Body Delisted

### TMDL summary:

Cache Creek and three of its tributaries (Bear Creek, Sulphur Creek, and Harley Gulch) are impaired by mercury because concentrations of mercury in fish exceed levels safe for consumption by humans and wildlife species that eat the fish. Sources of mercury are 14 inactive mercury/gold mines, naturally mercury-enriched soil, springs, and deposition of mercury transported in air. The TMDL establishes aqueous methylmercury allocations in Cache Creek, Bear Creek and in Harley Gulch calculated to achieve fish tissue objectives and requires load reductions from inactive mines. The TMDL requires mine owners to submit cleanup plans and requires land managers, landowners, and Caltrans and other road managers to control and reduce erosion of mercury-contaminated soil. Entities that operate or construct impoundments and wetlands must minimize methylmercury discharges to the creeks and set erosion control requirements for work within floodplains.

### Cache Creek Watershed



### TMDL Waste Load Allocations/Load Allocations

Methylmercury Load Reduction (as % of existing annual load)	
Cache Creek u/s North Fork confluence	30%
Harley Gulch	4%
Davis Creek	50%
Sulphur Creek	10%
Bear Creek	15%
Cache Creek at Yolo	54%

Mercury Load Reduction (as % of existing, average annual load from mining and anthropogenic activities)	
Inactive Mine Sites	95%

### Water Quality Outcomes

- Cleanup actions at the inactive Abbott and Turkey Run mercury mines controlled the most significant sources of mercury entering Harley Gulch.
- Central Valley Water Board issued Orders for characterization and cleanup of inactive mines in the Sulphur and Bear Creek watersheds.
- Colusa County Resource Conservation District and U.S. Bureau of Land Management received a 319(h) grant to prepare for stabilization of mercury-laden material that is eroding into Bear Creek. Shovel-ready design plans and environmental documentation will be completed by 2013.
- Central Valley Water Board staff completed an inventory of mercury in sediment in the Cache and Bear Creek canyons.
- Caltrans monitored mercury in soil and employed stringent sediment management practices at projects within the watershed.

### Cache Creek Watershed Water Quality

- Limited water quality data are available. Mercury load reductions are expected near the projects sites, but have not been fully quantified. For the mine sites that have been cleaned-up, vegetation is established over previously barren waste piles and observations confirm a reduction in erosion of mercury-contaminated soils into nearby water courses.