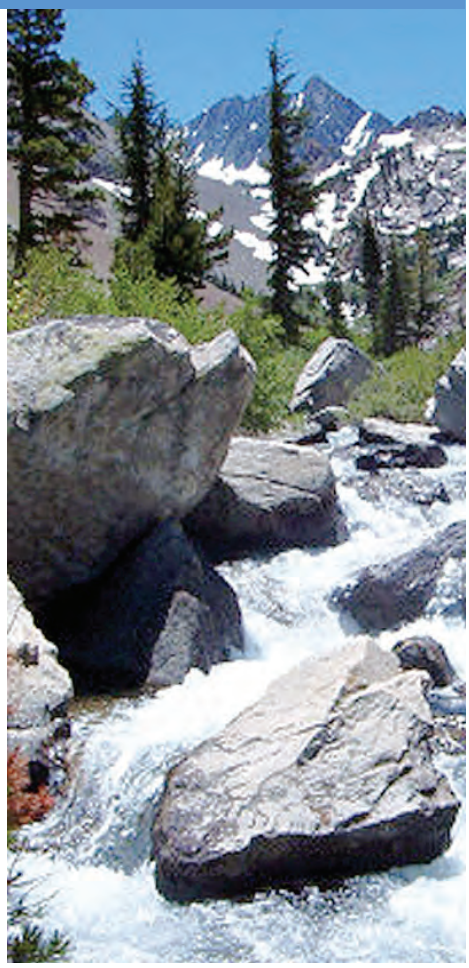
Most of California's Water Starts Here

Mercury may flow into bodies of water like lakes and streams. Bacteria in soils and sediments convert mercury to methylmercury. In this form, it is taken up by tiny aquatic plants and animals. Fish that eat these organisms build methylmercury in their bodies. As even-bigger fish eat smaller ones, the methylmercury is concentrated further up the food chain. This process is called "bioaccumulation".

(Source: US EPA website: http://www.epa.gov/hg/exposure.htm#1)

California's water system is large, complex, and ***interconnected***. Sierra Nevada watersheds are the starting point of the natural infrastructure that collects, connects, filters, regulates, and transports most of the State's freshwater. While much of California's precipitation falls and is stored in the less populated, forested mountains of the Sierra Nevada, most of the state's water use occurs in the agricultural areas below the Delta and heavily populated urban areas along the coast. A perfect example of the interconnection of California's water system is to look at the legacy issues associated with historic gold mining.



Toxic substances, like mercury, ***flow out of abandoned mines in the Sierra and into the Delta*** and beyond with far reaching impacts on water quality, and public health. One particular concern is mercury and its impact on the food chain (see side bar).

This has resulted in warnings to the public to limit their consumption of fish from parts of the Sierra, the Delta, and elsewhere due to serious public health risks. Addressing this link between abandoned mine lands in Sierra Nevada watersheds and urban water users became a focus for the SNC in FY 2012-13.

To address these issues, the SNC is targeting abandoned mine lands in its FY 2013-14 SNC Proposition 84 Grant Program. Additionally, the SNC enhanced work with The Sierra Fund, other State agencies, and other entities to explore opportunities to partner and fund efforts to address issues related to removal of mercury from the water system.

The Great Sierra River Cleanup

On September 15, 2012, the SNC again coordinated the Great Sierra River Cleanup. This annual event, held in conjunction with Coastal Cleanup Day, brought 3,491 volunteers together to remove over 60,000 pounds of trash from waterways throughout the Sierra Nevada Region. The event connects local organizations' cleanup efforts to promote stewardship of California's water from the Sierra Nevada through the Delta out to the sea.