

# Sediment and Mercury Loads from Creeks to Reservoirs: A Golden Opportunity



A Science Speaker Series presentation by:

### Carrie Monohan, PhD

California State University, Chico and The Sierra Fund, Nevada City, CA

## Tuesday October 10<sup>th</sup>, 2017

#### 6-6:30pm - Refreshments 6:30-7.30pm - Presentation

#### Sierra College Multipurpose Center N12 250 Sierra College Dr. Grass Valley, CA 95945

More than 10,000,000 pounds of mercury (Hg) were used during hydraulic and hard rock mining during the California Gold Rush era, and it is estimated that 10-30% of liquid Hg was lost to the environment. Mercury is entrained in river gravels containing hydraulic mining debris and is incorporated into the aquatic food web, causing numerous environmental and public health problems for California communities today. Mercury-contaminated sediment accumulates in water-supply reservoirs such as the Combie Reservoir. Sand miners and irrigation districts have removed these accumulated materials for more than 30 years. The Combie Reservoir Sediment and Mercury Removal Project will excavate Hg-contaminated sediment from Combie Reservoir while implementing an innovative recovery process to separate the free elemental Hg (Hg(0)) from the material. The project is estimated to take 3 to 5 years to complete and would remove and treat an estimated 135,000 cubic yards of sediment from the upstream reach of Combie Reservoir. Source control, or hydraulic mine remediation, and removal of sediment from reservoirs should be integrated into region wide efforts to restore water storage space and reduce mercury contamination.

#### For information contact: jgiuliani@sierracollege.edu or (530) 274-55275