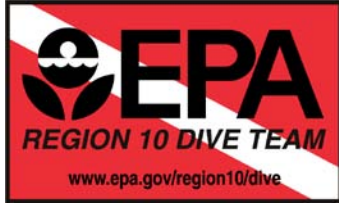


US EPA ARCHIVE DOCUMENT



## [EPA Region 10 Dive Team](#)

### **Coeur d'Alene Lake Benthic Flux Instrument Deployment**

**What:** The EPA Region 10 Dive Team helped USGS to deploy an in-situ benthic-flux meter (lander) to support a pilot study by the Region 10 Superfund program and USGS.

**Why:** The pilot study was designed to determine the magnitude of benthic flux of trace metals (Cd, Cu, Mn, Hg, and Zn) and nutrients (ammonia, nitrate + nitrite, oxygen, orthophosphate, and silica) from contaminated lake bed sediments into the water column of Coeur d'Alene Lake. The primary question posed in this pilot study was, "Is the magnitude of the benthic flux of metals and nutrients in Coeur d'Alene Lake significant relative to riverine inputs?"

**Where:** Coeur d'Alene Lake, Idaho

**When:** The field work was conducted over a two-week period in August, 1999.

**How:** Divers submerged with the instrument, ensuring upright placement and a good seal on the lake bottom so that data collection would occur properly.

**Equipment Used:** USGS vessel with GPS; down lines.

**Results:** In this pilot study, flux estimates were made using both in-situ lander deployments and laboratory based core-incubations. While results were successfully collected using the lander, there were discrepancies between results of the lander and core-incubations. If further studies are planned, then concerns regarding the core incubation study would need to be resolved. To conclusively answer questions regarding benthic flux of nutrients and metals, a more spatially and temporally comprehensive study is recommended.

**More Details:** <http://yosemite.epa.gov/r10/cleanup.nsf/sites/cda> and <http://water.usgs.gov/pubs/wri/wri004132/>

**Contact:** Anne Dailey at [dailey.anne@epa.gov](mailto:dailey.anne@epa.gov)

Photos:



Benthic flux instrument that divers deployed and verified installation of on the Lake bottom.



Flux instrument deployment

Return to [EPA Region 10 Dive Team](#) homepage.