

Mercury Bioaccumulation in High-Elevation Lakes

Study Description:

Long-range and local transport of mercury in the atmosphere can result in deposition into pristine, high-elevation lakes and their surrounding catchments, resulting in risk to wildlife in these areas. However, a clear understanding of drivers of mercury cycling and bioaccumulation in these habitats is lacking. This study is designed as the first stage of a multi-phased approach toward understanding the magnitude and spatial distribution of mercury in 25 high-elevation lakes within the Wallowa-Whitman National Forest, located in northeastern Oregon. Additionally, we will evaluate the influence between landscape, geochemical, and food web drivers on mercury cycling across these lakes.



Study Location:

Wallowa-Whitman National Forest, Northeastern Oregon

Media Sample and Parameters Analyzed:

Fish and invertebrates samples will be analyzed for mercury concentrations and stable isotope ratios, water samples will be analyzed for basic water quality parameters, as well as sulfate and dissolved organic carbon.

Study Timeline:

This is an ongoing study that is occurring between summer 2011 and Spring 2012.

Agencies and Partners:

USGS Pacific Northwest Contaminant Ecology Program
USDA Forest Service
US EPA Region 10
Oregon DEQ
Wallowa Resources

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