

WATER QUALITY COMMUNITY-BASED RESEARCH INTERNSHIP

Description: Monitor streams and other drinking water sources and investigate linkages between water quality, land use, and public health.



Project summary:

Water quality is rapidly emerging as one of the leading environmental issues of the 21st century. Land use and land cover largely determine the type and amount of contaminants entering surface and underground water sources, and consequently, the health of human communities that rely on this water for drinking, cooking and bathing. The purpose of this project is to work with local communities on long-term water quality monitoring, and to assess relationships between land use, water quality and human health. The intern(s) will be involved in collecting water quality

data with local research teams from source to sink along four rivers in the region, and work with them to analyze data so far and produce a written and oral report for the public on water quality results.

What you'll do:

- Work independently and with community research teams to collect water quality data in four rivers, from their headwaters in the coastal mountains to their mouth at the Pacific Ocean.
- Participate in assessment and follow-up training for community research teams, including new training on *E. coli* sampling methods
- Establish new sampling points
- Analyze water quality data to date and work with research teams to write a report of results
- Help research teams learn to analyze data and prepare a presentation on results of water quality monitoring

What you'll learn:

- Standard field methods for evaluating water quality of streams, including physical and biological parameters
- Identification of common aquatic invertebrate groups
- Management and analysis of long-term datasets
- GPS navigation and data collection
- Community-based research practices
- Communication techniques for public education on water quality

What we seek: Knowledge or experience in aquatic ecology or water quality issues, or interested and willing to learn; willing to hike long distances in rugged conditions and conduct field work in streams, often in hot weather; knowledge of Excel; organized and pays attention to detail; outgoing and willing to work with local people.