



Watershed Science Summer Internship

Organization Description: Sierra Streams Institute is a watershed science organization based in Nevada City, California, dedicated to increasing watershed stewardship capacity throughout the Sierra Nevada region and beyond. We work with local, state, and federal agencies as well as universities and community groups to find solutions to the problems that afflict Deer Creek and other watersheds (i.e. Bear River, Yuba River in the region that face challenges resulting from more than a century of gold mining, development, and agriculture. SSI's emphasis on rigorous science and community engagement provides the basis for restoration decisions that are made on behalf of Sierra watersheds and makes us a valuable partner of local and state government agencies.

Position Description:

- **Physical habitat (PHab) Surveys:** PHab surveys include in-stream habitat, riparian habitat, and human impacts. Surveys are conducted at several sites along Deer Creek following the Surface Water Ambient Monitoring Protocols (SWAMP). Interns will walk upstream in the creek for a 150m reach at each site and collect information on the habitat observed. After data is collected, interns will enter, proof, and have the opportunity to conduct analysis on the data they collected.
- **Benthic macroinvertebrate (BMI) Surveys:** BMI samples are collected at several sites along Deer Creek following the Surface Water Ambient Monitoring Protocols (SWAMP). Interns will walk upstream collecting BMI samples in the creek along a 150m transect at each site. Samples are processed in our laboratory. Interns will utilize microscopy and taxonomic skills to identify the macroinvertebrates to family level and become proficient using dichotomous keys.
- **Algae Sampling:** Algae samples are collected at Deer Creek monthly from April through October. Samples are processed in our laboratory and algae biomass is analyzed. Data entry and data proofing may be involved.
- **Water Quality Lab:** Our water quality lab is responsible for processing and analyzing all water, macroinvertebrate, and algae samples. Data entry and proofing will be involved. This position will primarily be based in the laboratory and will allow interns to develop skills in water chemistry, lab protocols, and data analysis.
- **Independent Project (optional):** Guided by SSI staff, interns will develop an independent project on a topic of their choosing to work on for the remainder of their term. Possible projects include wildlife or vegetation monitoring, herbarium work, developing interpretive materials, or another project that fits your interests.

Qualifications:

- Strong interest in biology, hydrology, ecology, environmental science or a related field.
- Pursuing or completed an undergraduate degree (open to students entering an undergraduate program in fall 2019)
- Ability to work independently as well as with other staff and a diverse group of volunteers and interns.
- Strong written and oral communication skills; strong computer and organizational skills, and attention to detail.
- Ability to follow scientific protocols.

- Ability to hike through uneven terrain, creeks, and vegetation (occasionally poison oak or Himalayan blackberry) and be on your feet for up to 10 hours a day.
- Ability to carry monitoring equipment that weighs up to 50 lbs.
- Ability to work in the office sitting at a computer station.
- Positive attitude and willingness to learn.
- Access to a personal vehicle is a plus.

Additional Benefits:

- Work with scientists in a great environment to develop professional skills.
- Professional networking opportunities.
- Gain field and technical experience.
- Potential assistance in finding housing, if needed. Please note in your application if you would need housing assistance.

Details:

- May-August (Flexible based on intern's schedule)
- Part-time and Fulltime positions available, 15-40 hours per week

To Apply: Send resume, two references, and a cover letter including why you are interested in the position and what you hope to gain from the experience to Anna Shampain at info@sierrastreamsinstitute.org by April 15th, 2018. Please indicate whether you are interested in pursuing an independent project.