

2025 Field Crew Lead

Organization description:

Sierra Streams Institute (SSI) is a watershed monitoring, research, education, and restoration group based in Nevada City, California, dedicated to linking water, science, and people for the benefit of human and environmental health. 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 Bear River, which share historical challenges resulting from gold mining and development, and more recent challenges resulting from wildfire. SSI's emphasis on community involvement and accessible science provides many opportunities for community members to get involved in our work, including ongoing water quality monitoring and seasonal creek surveys.

As part of our summer field crews, you will have the opportunity to get hands-on field experience in a variety of local streams, as well as learn scientific methods for monitoring different aspects of creeks.

Position Description:

Crew Leads will lead teams of members in physical habitat (P-Hab), benthic macroinvertebrate (BMI), organic matter, and algae surveys, and eDNA collection in some cases. Surveys are conducted at sites in the Yuba River and Bear River Watersheds. Leads will be responsible for following scientific protocol, ensuring accurate data collection, maintaining equipment, and overseeing safety of team members. Leads will also be responsible for transporting equipment to and from field sites and assisting with training crew members. There is potential for some field work on other projects and in-house chemistry tasks and analysis.

Surveys will be conducted from the headwaters to the lower watershed in both the Yuba and Bear River, with potential for work in watersheds further afield. Surveys will be along a gradient of stream communities, collecting data on physical habitat (P-Hab), benthic macroinvertebrates (BMI), organic matter, algae, and eDNA in some locations. Our work will be part of a program to document the biodiversity of Sierran stream invertebrates, which has to this point been under-studied.

P-Hab measures in-stream habitat (wood, rocks, flow), riparian habitat (lower and upper plant canopy), and human impacts (channelization, concrete etc.).

BMI diversity and species composition are indicative of overall stream health. Samples are collected in accordance with regional protocols, and macroinvertebrates are identified in our in-house lab.

Organic matter collections measure the amount of coarse and fine particulate matter on the stream bed. Half of this data collection is completed in the field and the other half is completed in our in-house lab.

Algae samples are collected and processed in our lab, where they are analyzed for biomass. Biomass levels help characterize stream conditions.

Time Commitment:

Crew Lead training will begin the week of May 26th. Creek surveys will be carried out through the months of June - August.

Hours/Week: 25-40

Qualifications:

- Strong interest in biology, hydrology, ecology, environmental science or a related field.
 - Completed or pursuing an undergraduate degree is a plus.
- Previous field work experience.
- Experience managing and training teams is a plus.
- 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.
- Must be able to commit to full field season.
- Ability to work with a diverse group of staff/volunteers.
- Strong written and oral communication skills.
- Strong organizational skills.
- Attention to detail.
- Positive attitude and willingness to learn.
- Access to personal vehicle.
- Option for overnight field trips.
- Previous experience working in a chemistry lab is helpful.

Benefits: *We will offer crew leads an hourly rate of \$21-23 an hour, depending on experience.*

- Work with and learn from scientists in a friendly and supportive environment.
- Get involved in your local watershed.
- Enjoy the outdoors, while learning about local ecosystems.
- Participate in a citizen science program
- Contribute to a robust water quality monitoring dataset.
- Gain field and technical experience, as well as professional networking opportunities.
- Opportunities for school-based credit (varies by institution).

Apply:

Applications accepted through May 1st. Please send resume, cover letter, and contact for three references to Malí Valerio at bugs@sierrastreamsinstitute.org.

2025 Field Crew Member

Organization description:

Sierra Streams Institute (SSI) is a watershed monitoring, research, and restoration group based in Nevada City, California, dedicated to linking water, science and people for the benefit of human and environmental health. 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 Bear River, which share historical challenges resulting from gold mining and development, and more recent challenges resulting from wildfire. SSI's emphasis on community involvement and accessible science provides many opportunities for community members to get involved in our work, including ongoing water quality monitoring and seasonal creek surveys.

As part of our summer field crews, you will have the opportunity to get hands-on field experience in a variety of local streams, as well as learn scientific methods for monitoring different aspects of creeks.

Position Description:

Crew members will conduct physical habitat (P-Hab), benthic macroinvertebrate (BMI), organic matter, and algae surveys at sites in the Yuba River and Bear River Watersheds. Members will be responsible for following scientific protocol and collecting data under the direction of the Crew Lead.

Surveys will be conducted from the headwaters to the lower watershed in both the Yuba and Bear River, along a gradient of stream communities, collecting data on physical habitat (P-Hab), benthic macroinvertebrates (BMI), organic matter, algae, and eDNA in some locations. Our work will be part of a program to document the biodiversity of Sierran stream invertebrates, which has to this point been under-studied.

P-Hab measures in-stream habitat (wood, rocks, flow), riparian habitat (lower and upper plant canopy), and human impacts (channelization, concrete etc.).

BMI diversity and species composition are indicative of overall stream health. Samples are collected in accordance with regional protocols, and macroinvertebrates are identified in our in-house lab.

Organic matter collections measure the amount of coarse and fine particulate matter on the stream bed. Half of this data collection is completed in the field and the other half is completed in our in-house lab.

Algae samples are collected and processed in our lab, where they are analyzed for biomass. Biomass levels help characterize stream conditions.

Time Commitment:

Crew members will participate in creek surveys throughout the month of June, and potentially into July and August as well.

Hours/Week: 15-30

Qualifications:

- Strong interest in biology, hydrology, ecology, environmental science or a related field.
- 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.
- Must be able to commit to full field season.
- Ability to work with a diverse group of staff/volunteers.
- Strong written and oral communication skills
- Strong organizational skills.
- Attention to detail.
- Positive attitude and willingness to learn.
- Access to personal vehicle is a plus.

Benefits: *This is an unpaid, volunteer position.*

- Work with and learn from scientists in a friendly and supportive environment.
- Get involved in your local watershed.
- Enjoy the outdoors, while learning about local ecosystems.
- Participate in a citizen science program
- Contribute to a robust water quality monitoring dataset.
- Gain field and technical experience, as well as professional networking opportunities.
- Opportunities for school-based credit (varies by institution).

Apply:

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