CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY

Name(s)
Caitlyn Christensen; Adam Fedak

Project Number
S0704

Project Title
Water Monitoring of Boulder Creek

Abstract

Objectives/Goals
Recently there has been an effort to clean up the San Lorenzo River and reintroduce native fish. In this project we are monitoring Boulder Creek, a tributary of the San Lorenzo River in Santa Cruz Mountains, in order to determine water quality and trends. We are testing the abiotic conditions of the creek to see if it is healthy for aquatic life.

Methods/Materials
To do this, we are using a Vernier LabPro with appropriate sensors.

Results
We found that nitrate is present in levels that can affect the environment, but it is nowhere near the minimum standards set by the EPA. Dissolved oxygen has been present in healthy amounts.

Conclusions/Discussion
Our results show that this creek is healthy enough to support aquatic life. This experiment is important because we can evaluate how people in the San Lorenzo Valley are impacting the streams, creeks, and rivers of their community.

Summary Statement
In this project we are monitoring Boulder Creek, a tributary of the San Lorenzo River in Santa Cruz Mountains, in order to determine water quality and trends to determine if the creek is healthy for aquatic species.

Help Received
Chris Berry and Hugh Dalton with the Santa Cruz City Water Department who helped us by sharing their knowledge of water quality; Mrs. Orbuch, who taught us how to run the tests, and helped us organize data; parents who provided transportation