

CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

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Project Number

S0901

Project Title

Is the River Doing Its Job?

Abstract

Objectives/Goals

Our objective is to monitor the water quality of the San Lorenzo River in Felton specifically levels of nitrate, turbidity and dissolved oxygen in addition to water velocity and temperature. Our hypothesis is that the river will maintain acceptable levels of these factors, but naturally fluctuate due to rainfall and human impacts.

Methods/Materials

In the field, we use a Vernier Lab Pro, graphing calculator and assorted probes to measure our parameters. We are comparing two sites along the river, Henry Cowell State Park entrance and the Felton Covered Bridge. At our two sites (every Sunday at 8 AM from Nov 07 to Feb 08), we collected our water sample, made observations, calibrated our equipment and performed water testing procedures.

Results

We have found all of our results to be in the healthy range.

Conclusions/Discussion

We are currently analyzing our results to correlate rainfall data and the interaction of each factor.

Summary Statement

By exploring two sites along the San Lorenzo River, we observed whether the difference in location had an affect on the correlation of water quality between the two sites.

Help Received

Environmental Science Teacher Jane Orbuch as advisor; Mentor Chris Berry offered comparision of results; Statistics teacher Kim Armstrong helped analyze results