CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)
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Project Number
J0821

Project Title
Evaporation Experimentation

Abstract

Objectives/Goals
The objective was to find a way to reduce the loss of drinking water due to evaporation from Crystal Springs Reservoir.

Methods/Materials
Materials: 2 trays
water
7/8" styrofoam balls
dial caliper
thermometer
camera

Method: First I filled up each tray with 1" of water. One tray would be the control, and the other tray had styrofoam balls floating on the water's surface, which would be the variable. I placed the trays where they could get an equal amount of sunlight and shade. Every few days, I measured the amount of water in the trays with the dial caliper. I used a thermomether to keep track of the room temperature. A picture was taken each time this was done.

Results
The measurement in the control tray showed greater loss of water than in the variable tray.

Conclusions/Discussion
In conclusion, based upon my data from the trays and data supplied from the watershed caretaker, if you placed styrofoam balls on the entire surface of Crystal Springs Reservoir, you would save about 68 million gallons (68,000,000) of drinking water per year.

Summary Statement
It's possible to save 68,000,000 gallons of water yearly from Crystal Springs Reservior by covering the entire surface with styrofoam balls.

Help Received
None