

# CALIFORNIA STATE SCIENCE FAIR 2016 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J1030** 

## **Project Title**

# Which Is the Most Effective Layer in Helping to Prevent Evaporation from Large Bodies of Water?

# Objectives/Goals

**Abstract** 

The objective of this experiment is to determine which layer is the most effective in helping prevent evaporation in large bodies of water, like reservoirs.

#### Methods/Materials

20 containers that were the same size and shape, 4 different layers (monolayer, monolayer 3x, shade balls prototype, and cover) were tested with different environmental factors (wind, air temperature, and water temperature). Measured evaporation by weight loss for 4 days.

#### Results

In this experiment, the physical pool cover was the most effective in preventing evaporation. The shade balls were also very effective. The monolayers were not very effective.

#### **Conclusions/Discussion**

In conclusion, the shade balls and physical covers were the most effective, but in a large reservoir, they may not be practical or cost-effective. The monolayers weren't very effective in this experiment, but perhaps improvements in the monolayers and how they could be applied could make them more effective.

### **Summary Statement**

I tested to see if monolayers could be just as effective as shade balls and covers in preventing evaporation.

## Help Received

I designed and did the experiment myself.