CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY

Name(s)
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Project Number
36456

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

Abstract

Objectives/Goals
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.