

CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s) Project Number

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J0903

Project Title

Waters of Change

Abstract

Objectives

We wanted to learn how different commercial building materials affect the contamination of rainwater. This project will help our community, nation, and world, because it will prove which materials do not pollute local water systems. It may also tell construction sites what materials they leave around are polluting our water.

Methods

Methods:

Rainwater is poured over commercial building materials, corrugated steel roofing, pressure treated wood, tar composite roofing shingles, concrete and sheet rock. The rainwater was collected and tests were conducted to determine the dissolved solids, salinity and pH of the rainwater.

Material:

2x4 wood, Plywood, Nails, Hammer, Saw horses, Plastic bag, Fresh rainwater from the same source, Plastic funnel, Big glass bottle, Glass bowls, Measuring cups, Hannah PH tester, Hannah TDS tester, ExTech salinity tester, Sheetrock, Concrete, Corrugated steel, Pressure treated wood, Tar composite roofing shingles

Results

We found that sheet rock produced the most contamination followed by concrete, tar composite roofing shingles, pressure treated wood. Corrugated steel polluted the water least.

Conclusions

Our results supported our hypothesis because the steel roofing resulted in the least contamination while sheet rock resulted in the most.

Summary Statement

Our project is testing of water runoff from materials found around your house and construction sites to prevent pollution of water.

Help Received

Mrs. Makenzie Neves Junior High Science teacher Mount St. Mary's, Mr. Chris Buti AP Environmental Science Nevada Union High School, Mrs. Kristy Billingsley.