



CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

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Project Title A Catastrophic Pacific	
<p style="text-align: center;">Abstract</p> <p>Objectives The purpose of this experiment is to decide which Southern California beach has the highest overall rating based on our own rating system that we researched and created.</p> <p>Methods 1 liter handheld box core, 1 mm stainless steel mesh sift, mason jars, rubbing alcohol, a dissecting microscope that can go up to 4x, and a squeeze bottle. We collected 3 samples from 0 ft, 50 ft, and 100 ft into the ocean and sifted it through the mesh sift. Then, we collected all algae, pollutants, and shells from a 100 ft stretch.</p> <p>Results Treasure Cove ranked 1st, Laguna Beach was 2nd, Newport 3rd, Corona del Mar 4th, Huntington 5th, Seal Beach was 6th, and Long Beach was 7th. Huntington Beach in the rain was ranked lowest. This shows that Treasure Cove is the safest beach to visit and Long Beach is the most hazardous; additionally, it shows that rainfall has a negative effect on the health of the beach.</p> <p>Conclusions Our hypothesis was both correct and incorrect. We've concluded that Treasure Cove is the safest beach to visit and Long Beach is the worst beach to visit. This will help our society discover which beaches need to be protected and which beaches we need to continue to clean up. Additionally, these results can assist in finding ways to manage runoff and organize cleanups that are necessary for the lower ranked beaches.</p>	
Summary Statement After collecting from several beaches, we've concluded that Treasure Cove is the safest beach and Long Beach is the most hazardous beach.	
Help Received Mr. Briner helped in the design of the tools; he also showed us how to use them.	