



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Martin Valdivia	Project Number J1023
Project Title The Ocean's Fate	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My goal is to present evidence to the public as to the amounts of E coli and total coliforms that are going through are storm drains into our oceans and beaches. This will eventually kill our ocean life and even kill us if we were to consume fish, clams,and shellfish that were infected with E coli or total coliforms.I will test four storm drains and four beaches, for E coli and Total coliforms. I will use the method that chemist use, it is called Coliret 18.</p> <p>Methods/Materials methods: *get four water samples from the ocean and four samples from the storm drains. *Mix water samples with pure water. *Add reagent to water till it dissolves. *Pour into Quanti Tray/2000(counts from 1-2,419). *Seal in Quanti Tray Sealer and place in 35 degrees celcius incubator for 18 hrs. *Quanti-Tray-Read result: Yellow wells= Total coliforms, yellow/fluorescent wells= E.Coli.</p> <p>materials: *gloves, *Pen, *sun glasses, *notebook, *8 Sterile sample bottles, *8 snack pack reagents, *8 quanti-tray 2000(49 large wells and 48 small wells), *quanti tray sealer and rubber mold, *biosaftey cabinet, *incubator at 35.0, *color and fluorescence comparator, *uv lamp, *glass pippet, *sterile pure water.</p> <p>Results My results were long beach had the most E coli and total coliforms for both storm drain and beach.Second was manhatan beach the del marina. the cleanest was hermosa beach.</p> <p>Conclusions/Discussion My opinion in this project is that are storm drain should not lead into are beaches te water should be recycled and used for irrigation.It would cost more but it wouldnt put the ocean in danger.</p>	
Summary Statement To see wich beach is most contaminated with E coli and Total Coliforms.	
Help Received I used lab equipment and information from CRG labs under supervision of Anthony Basil a chemist at the lab.	