

Science & Engineering Fair

The City of San Diego Environmental Services Department is pleased to recognize the following students whose Science Fair projects were selected as outstanding examples of environmental science and research. The department's panel of environmental professionals judged more than 80 projects and these students were selected as winners because of their clear, concise presentation, thorough research and the value of their projects to the preservation of San Diego's environment.

Senior Division

First Place **Magnolia Hills, High Tech High School**

The Effect of Gray Water on Native Plants

Magnolia analyzed the effects of gray water on four native vegetation species. The purpose of the project was to evaluate the use of gray water systems for landscaping in low-rainfall areas.

Second Place **Ronit Abramson, Canyon Crest Academy**

Use of Epilithic Diatoms as Biological Indicators of Pharmaceutical Runoff

Acetaminophen is widely used in urban areas and Ronit studied whether its presence in urban runoff has an effect on biological indicators (diatoms).

Junior Division

First Place **Foster Collins, Warren-Walker Middle School**

Urban Solar Electric Panel Steering Tests & Proposed New Design

Foster created a rooftop system to continually orient solar panels in the optimal direction throughout the day and seasons to increase their efficiency.

Second Place **Stephanie Merrill, Warren-Walker Middle School**

Green Concrete

Stephanie evaluated the use of recycled materials (rubber, styrofoam, and cardboard) in concrete, and compared the effect of each one on the strength of the concrete

Honorable Mention

Rui Jin

Scripps Ranch High School

Automobile Gasoline Consumption Alarm

Kevin Young

Marshall Middle School

Yikes! Are We in Hot Water?

Meredith Brown

Marshall Middle School

Solar Energy: Friend or Foe:

A Matter of Perspective

***Congratulations to all Students for their
Outstanding Scientific Achievements!***