

Orange County High Schools Place at 2018 Solar Cup™ Competition

By Sarah Wilson and Jeannie Bui



Last month, Metropolitan Water District of Southern California held their 16th annual Solar Cup™, the nation's largest student-based, solar-powered boating competition. More than 600 students throughout Southern California assembled at Lake Skinner in Riverside County's Temecula Valley to compete in the three-day competition. Of the 38 high schools that participated this year, three were high schools in the Municipal Water District of Orange County's (MWDOC) service area: Coast High School in Huntington Beach, Costa Mesa High School, and Oxford Academy in Cypress.

The team from Costa Mesa High School, sponsored by MWDOC and Mesa Water District, took first place in the rookie division, and Oxford Academy's team, sponsored by MWDOC and Golden State Water Company, placed second in the veteran division.

The annual Solar Cup competition begins each fall when teams are sponsored by their local water agencies and other organizations to design, build and race 16-foot-long, single-seated boats powered entirely by the sun. This year-long program educates students about sustainability, alternative energy development, and resource management, while also providing the unique opportunity to apply skills in engineering, math, and physics.

Before the boats hit Lake Skinner, Metropolitan furnished teams with identical kits to build the hull, as well as a technical advisory team from Occidental College to provide their expertise regarding the boats' mechanical systems. On the first day of the competition, teams competed in a qualifying event to ensure that their boats met the program's requirements and were safe and seaworthy. The next day, teams competed in two, 90-minute endurance heats around a 1.6 km course with solar panels fastened to their boats. On the final day, the solar panels were removed and the boats, running solely on solar energy stored in batteries, were raced down a 200-meter course.

Along with racing results, students earned points for creating a social media campaign on the importance of water conservation, as well as for technical inspections and reports. The competition concluded with an awards ceremony hosted by Metropolitan to celebrate the winning teams. Additionally, the Costa Mesa High School team was recognized at Mesa Water's June Board Meeting by MWDOC President Brett R. Barbre and Vice President Joan C. Finnegan as well as members of the Mesa Water Board for placing first in the rookie division.

The Solar Cup program first commenced in 2002 with eight teams and approximately 80 students, and has since grown to more than 10,000 student participants over the past 16 years. The complete list of final scores for 2018 Solar Cup™ are posted on Metropolitan's website: http://www.mwdh2o.com/PDF_In_The_Community/2018_Solar_Cup_Final_Scores.pdf