



Legislation & Communications Committee

Report on Solar Cup Program

Item 6b
November 19, 2024

Legislation & Communications
Committee

Report on Solar Cup Program

Subject

Report on Solar Cup TM Program

Purpose

To provide update on Solar Cup TM Program

Solar Cup Program Overview

- Solar Cup™ Program ran 2002-2019 in person (2020-2022 online)
- 16 Member Agencies participated in 2019 with 40 schools and 800 students
- Introduction to water and technical careers



Program Elements & Resources

- Year-long program and workshops culminating in three-day competition event at Lake Skinner
- Required one full-time and two part-time staff; weekly meetings with core team; contract with technical consultant



- Significant in-kind and volunteer services were needed for event:
 - Three Valleys MWD
 - Member Agencies
 - Southern California Edison Foundation

Budget Reductions for External Affairs

FY 2017: \$10,615,000
FY 2018: \$9,163,000
FY 2019: \$10,332,000
FY 2020: \$9,074,000
FY 2021: \$8,520,000
FY 2022: \$8,771,000
FY 2023: \$7,350,000
FY 2024: \$6,725,000
FY 2025: \$6,934,000



External Affairs' non-labor budget has **decreased 35%** in recent years while workload demands on the group have increased

Budget Reductions

- Solar Cup™ – no funding, no staff positions
- Director Inspection Trips (50% reduction beginning in 2023)
- Sponsorship budget cut 50% that typically supports NGOs, other community organizations
- Closed DVL Visitors Center
- Research and polling – no funding in 2024, 2025
- Significant cuts for advertising and outreach, and reduction in travel, professional services

Primary Activities and Workload for External Affairs

Legislative activities, advocacy and community leader briefings; monitor key business/community orgs, member agency and local govt. meetings (60 to 70/month)

Inspection trips (~40/year), facilitate foreign delegation visits

Community outreach for shutdowns, emergencies, CIP, repairs and in-Delta/Palo Verde

Sustainability initiatives – CAMP4W, Pure Water

Press Office (160 interviews, 2,200 news stories generated)

Graphic design, speechwriting, video, animation and exhibit design services



Primary Activities and Workload for External Affairs (cont)

Education programming for K-college students

Creation of multilanguage, multimedia conservation advertising campaign strategy and assets

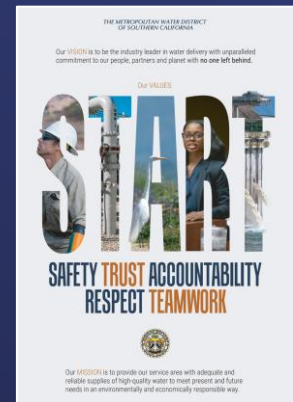
Management, content creation for social media and websites

Production of special events.

Organize member agency meetings for managers, PIOs, legislative, education coordinators (50+ mtgs/year)

Manage & negotiate benefits for 120 sponsorships, 100 organizational memberships

Support all areas of the organization with reports, talking points, presentations, branding, training & safety materials



Looking Forward



Solar Cup® Partnering Opportunity





Teamwork



Hands-on learning



Meeting Goals

The Metropolitan Water District of Southern California is seeking funding partners for its acclaimed Solar Cup® program. High school students throughout Southern California put their teamwork, leadership and communication skills to the test along with the application of academic concepts at the nation's largest solar powered boat racing competition. Throughout the year, students learn real world skills of budgeting, research, design and construction, with technical training in electrical systems and boat construction. The integration of science, technology, engineering and math in a hands-on competition has created a very popular program with waiting lists each year.

Solar Cup® began in 2002 with eight teams and about 100 students. In the 20 years since, more than 10,000 young men and women have participated in Solar Cup® competitions, learning about water resource management, alternative energy development and sustainability. Many have been inspired to pursue careers in math, physics, engineering and environmental science.

Estimated annual program budget\$1 Million
Partner funding needed\$750,000 per Year
Target date to restart program Fall 2024
In-person event Spring 2025

Inquiries: Carolyn Schaffer, Section Manager for Member Services and Public Outreach
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- In 2023, MWD staff reached out to other agencies, businesses, organizations

- Cal Poly Pomona Capstone Project

Current Programming

Metropolitan's Education Program

- Classroom visits and field trips, online learning
- Curriculum collaborations with organizations
- Partnerships with colleges and universities on sustainability initiatives
- Summer internships
- Calendar program featuring student art
- Water Engineering 4 Good online STEM competition for middle and high school students

WATER ENGINEERING 4 GOOD

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Water Engineering 4 Good



Thank You Teachers



In 2024, Venice High School sponsored 16 teams for **Water Engineering 4 Good**, under the leadership of teacher Stanley Johnson.

Stanley Johnson, math & engineering teacher
Venice High School

Estimated Annual Expenditures

MWD Labor - program, administrative, event staffing. Would need funding and authorization for new position	\$ 573,000
Professional Services (Occidental College served this function previously)	\$ 80,000
Equipment and Supplies	\$ 300,000 in first year \$ 80,000 in future years
Competition Weekend and Workshops (rental costs, food for participants, clean-up, staff lodging and travel and security)	\$ 260,000
Total for First Year to Restart Program	\$ 1,213,000

Member Agency Survey

10 Agencies want to bring back the Solar Cup™ program

Eight are willing to pay the \$3-\$5K per team participation fee (2 are not)

None of the Agencies are willing to pay \$50K or more to share program costs

Three Valleys is willing to host the boat building workshop and other events; MWDOC directors want to see the program sponsored by outside entities

