



# Channel Islands

CALIFORNIA STATE UNIVERSITY

Jose Chanes  
Email: [jose.chanes@csuci.edu](mailto:jose.chanes@csuci.edu)

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Dear AASHE STARS Program Staff,

This letter serves as affirmation that California State University Channel Island's "Bio-SWIPE Stormwater Treatment Project" meets the criteria for the AASHE STARS Innovation Credit.

The California State University Channel Islands (CSUCI) campus has as portions of its boundary Calleguas and Long Grade Creeks. Reducing and understanding pollution entering these water bodies during surface storm runoff events is an effective way to improve the quality of adjacent riparian areas. In addition to environmental stewardship, the campus is mandated by the EPA Municipal Separate Storm Sewer System (MS4) Program to pursue certain control over the stormwater that exits the campus into several waterways. Various methods of control are being investigated, including this one. As their capstone project, two students are testing a novel storm drain filter, called Bio-SWIPE, comprised mostly of an organic matrix inoculated with a proprietary microbial community to improve the quality of storm water runoff from CSUCI.

The effectiveness of the prototype Bio-SWIPE filter was tested using water sampled from four sites. Water runoff samples for lab analysis were collected for one rain event, one wash event, and one dry weather event. Each water sample was tested for 37 parameters including California Title 22 metals and other organic materials. Results showed varying levels of pollutants in all samples collected, but the Bio-SWIPE filter significantly reduced pollutants in all four locations tested. In addition, the Bio-SWIPE filter achieved average total reduction of 48.8 to 21.3% for parameters. The continuation of monitoring storm water runoff is required for CSUCI's future plans and MS4 permit compliance.

CSU Channel Islands is committed to improving sustainable practices throughout the campus and community, while continuing to reduce environmental impact. In addition to the benefits of campus treatment, if the results of these tests are desirable to the manufacturer, they will be able to be published and used for promotion of the product and use by additional customers for treatment of their stormwater which will benefit the environment at-large. Thank you for this consideration for an innovation credit.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jose Chanes'.

Jose Chanes  
AD Infrastructure & Energy