CHARACTERIZATION OF THE DIATOM COMMUNITIES ON SANTA CATALINA ISLAND, CALIFORNIA

Mendoza, Brina, Mendoza, Sergio, Cabasal, Jhen, and Underwood, Dessie California State University – Long Beach, Long Beach, CA, 90805

Recently, California State University – Long Beach formed a collaboration with the Catalina Island Conservancy (CIC), who is steward to 84% of the island. Santa Catalina Island has 14 intact watersheds that are relatively unstudied and, compared to the mainland, these watersheds have experienced very little anthropomorphic disturbance and engineering. In January 2016, eight diatom samples were collected from four freshwater streams or seeps around the island. In June 2018 and April 2019, we resampled six sites, as well as two new sources. We are curious how the diatom communities on the island in 2016 will compare to those found in the same areas after drought conditions in 2018 and after above average precipitation in 2019. We also compared diatom communities collected from the same water way, but on different substrates (e.g. epiphytic, epidendric, sediment grabs, planktonic).