## News Release issued by San Francisco State University Communications Office

## Currents on the Bay: There's an App for That!

an. 23, 2012 — A new iPhone and iPad application designed by researchers at SF State provides real-time and predicted information on surface currents within the San Francisco Bay.

The app, called "Bay Currents", relies on data supplied by the Coastal Ocean Currents Monitoring Program in Northern California (COCMP-NC), which

SF BAY CURRENTS

SAN FRANCISCO STATE UNIVERSITY

monitors offshore currents and reports that information to the public. SF State is responsible for monitoring currents in the San Francisco Bay and along the coast from south of Point Reyes to Pillar Point near Half Moon Bay.

SF State monitors land-based sensors along the coast and San Francisco Bay that emit radio waves and measure the Doppler shift of the return frequency to determine the direction of currents. By using information from multiple sensors, researchers get an accurate picture of real-time coastal currents. The COCMP-NC then posts the updated information to its website every half hour.

The app uses Google Maps and GPS to give sailors a real-time look at currents in the Bay, the previous 24 hours of currents and a projection for the next two hours.

"A sailor wants to know what is going on around him. And San Francisco Bay is interesting because the currents are so strong, probably the strongest currents on the

California Coast," said Professor of Geosciences Newell 'Toby' Garfield, who developed the app along with the Project's Operations Manager Jim Pettigrew. "So if you're out as a sailor, both from a safety point of view, as well as being able to plot a route to your destination, it's good to know what the currents are."

Users can locate their current location on the water using the GPS technology or place pins at points in the Bay to get an understanding of the currents at that location. The easily accessible information will help crews competing in the yacht races on the Bay.

The app, which was funded by the California Coastal Conservancy and the National Oceanic and Atmospheric Administration's Integrated Ocean Observing Systems Office, is available for free through the Apple App Store.



