First for a bit of formal introduction, I am a researcher and Program Director of the COMPS (Coastal Ocean Monitoring and Prediction System) project operated at the University of South Florida's/College of Marine Science (USF/CMS). COMPS is a regional coastal ocean observing system operating along the Gulf of Mexico's west Florida coast and was implemented in 1997 as a State of Florida legislative initiative. Data and model products are disseminated in real-time to federal, state, and local emergency management officials by various means including the Internet (URL <a href="http://comps.marine.usf.edu">http://comps.marine.usf.edu</a>). The COMPS overall program goal is to provide real-time data for emergency management use and to improve description and understanding of the relevant physical processes that control coastal flooding, and gulf circulation driven effects on red tides, oil spills and Coast guard search and rescue operations. In addition to COMPS, USF/CMS is involved in a recently funded and evolving federal project called SEA-COOS (SouthEast Atlantic Coastal Ocean Observing System) whose goal is to develop a regional coastal ocean observing system for the southeast (NC, SC, GA, FL) United States.

As part of a combined COMPS/SEA-COOS effort, funds have been awarded to install a Coastal Ocean Radar (CODAR) system along our Tampa Bay/West Florida shelf coastline to measure the near-shore surface currents and direction. In CODAR, a transmitter sends out a radio frequency that bounces off the ocean surface and back to a receive antenna (See the following web site for information on CODAR and the company http://www.codaros.com/about.htm). Using this information and the principles of the Doppler shift, CODAR is able to calculate the speed and direction of the surface current. The output of the CODAR system is radial surface currents, calculated about every half mile across the surface and when two systems are close enough together you can get the whole surface current field extending as far as about one hundred miles offshore. This essentially real-time data, obtained from the sites requested in license application, will be made available via the Internet from our COMPS web page http://seacoos.marine.usf.edu/HFRadar/ and will assist in our program goal to improve description and understanding of the relevant physical processes that control coastal flooding, and gulf circulation driven effects on red tides, oil spills and coast guard search and rescue operations.