Silicon Valley's Role in the Gulf Oil Cleanup -
- NBC News Silicon Valley affiliate KNTV airs segment on CODAR SeaSondes in Gulf of Mexico.

The antenna and computer mapping system developed by Mountain View-based CODAR Ocean Sensors is being used to create maps of the ocean currents in the Gulf of Mexico. The maps show where the millions of gallons of oil are moving, so that crews can target their clean up operations in the largest leak of its kind in U.S. history.

The CODAR SeaSonde radar uses radio waves to detect the speed of ocean currents over time. That data is then used to create models of maps with hundreds of arrows with each arrow marking a data point rich with information about the velocity and direction of that ocean current.

"What you see are patches [of oil]. You don't know how fast they're going," CODAR founder Don Barrick said. "What this allows you to do is measure directly the velocity of the oil and that tells you where it's going in the future and where to go clean up tomorrow morning."

Scientists in the Tiburon lab are monitoring what's happening in the Gulf in real time, using three CODAR radars. More could be installed along the Florida coastline soon because wind currents appear to be moving the oil toward the Sunshine State.

Barrick says it's extremely rewarding to know the technology he invented is being used to help mitigate the damage from this massive leak.

The same radar systems were used during the 2007 Cosco Busan spill in the San Francisco Bay.

- By Vicky Nguyen (KNTV)