

GFNMS Conservation Science Projects 2016



Research • Education • Conservation • Stewardship

Beach Watch

- Shoreline monitoring since 1993
- Live and dead bird, mammal, human-uses, oil pollution, status of streams and lagoons, and beach wrack
- 2015 added 14 new beaches and 30 volunteers, 56 beaches surveyed by 150 volunteers and 6 staff



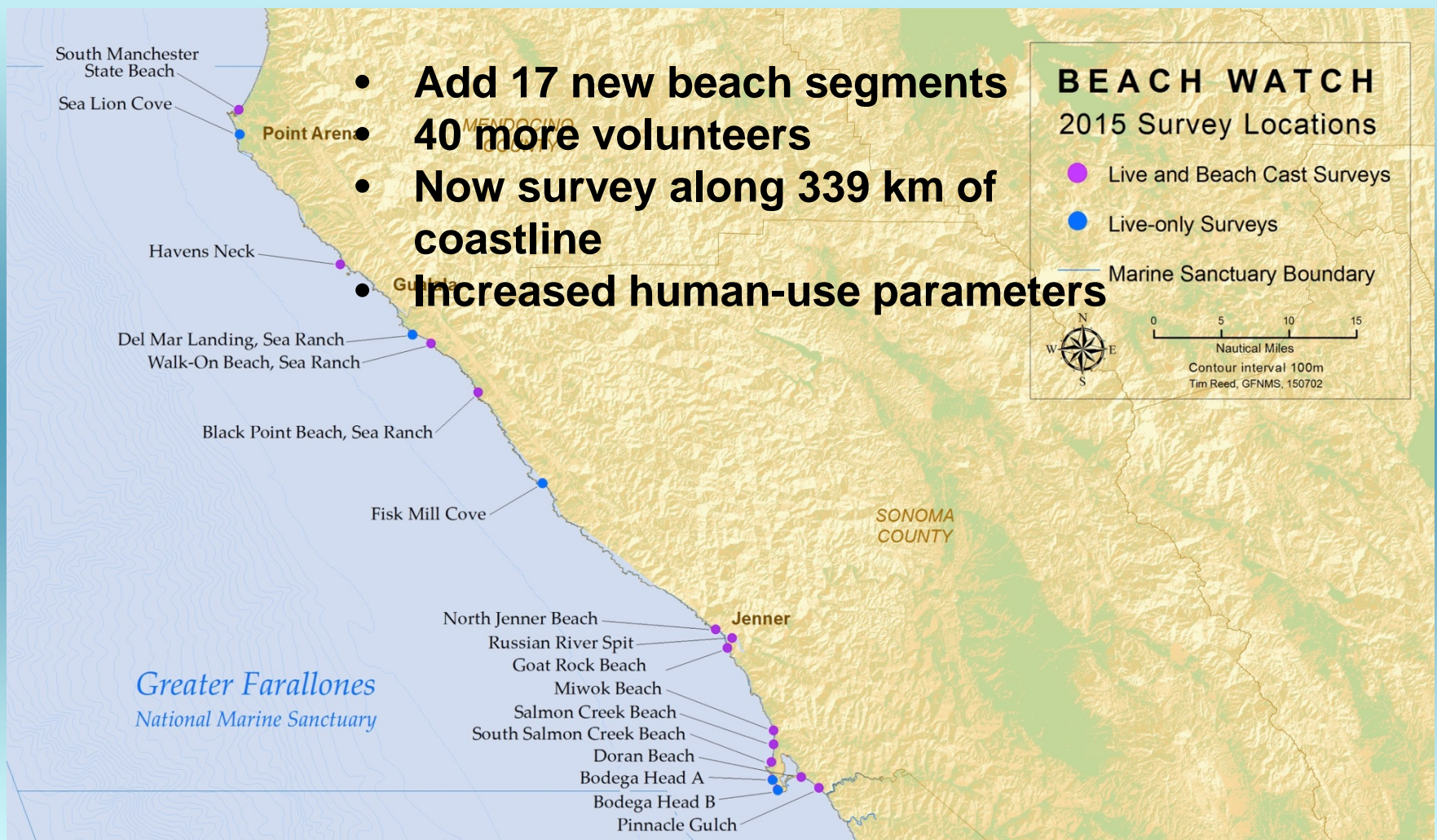
NATIONAL MARINE
SANCTUARIES



Research • Education • Conservation • Stewardship

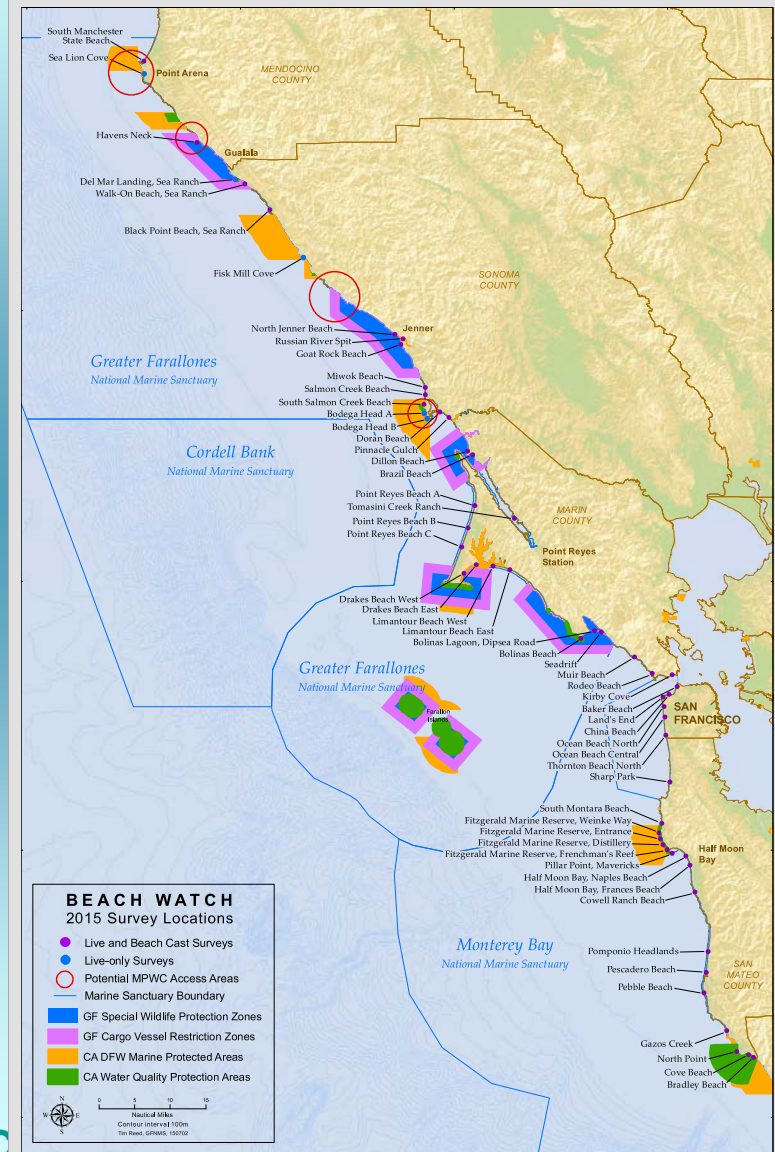
Beach Watch

- Add 17 new beach segments
- 40 more volunteers
- Now survey along 339 km of coastline
- Increased human-use parameters



Beach Watch

- New segments sample in areas where we may investigate management actions and areas where we need more information
 - Extraction
 - Disturbance
 - Trampling
 - Regulatory compliance
- Resources Legacy Fund, data are now directly shared with the state MLPA program

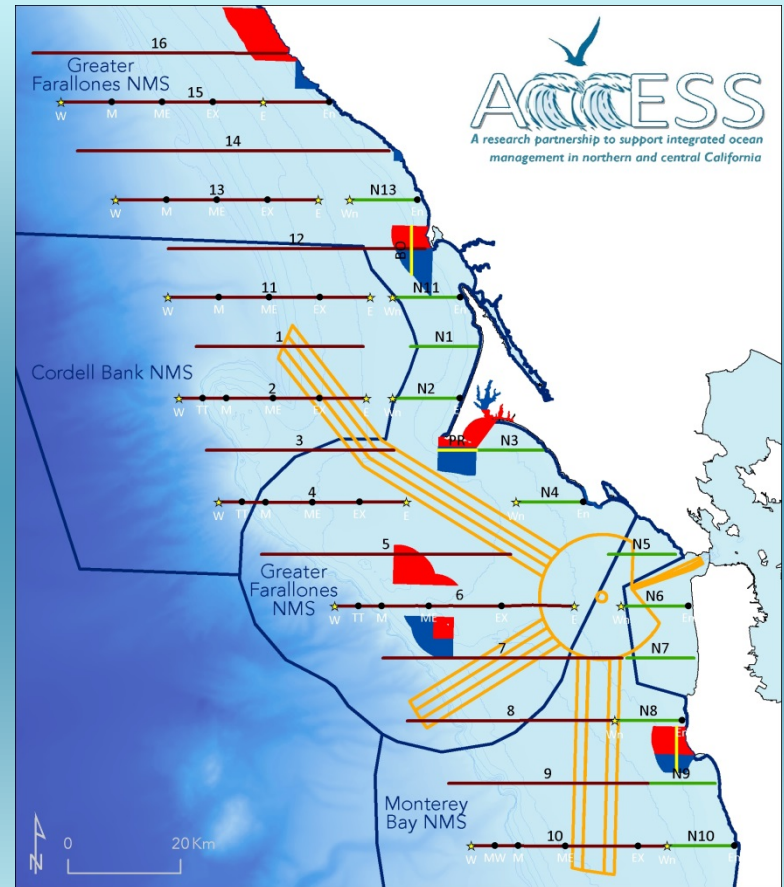


ACCESS

- **ACCESS** monitors oceanographic and biological sampling, including, bird, mammal, turtle abundance and distribution, ship traffic, acoustic and net sampling of zooplankton, phytoplankton for harmful algal blooms, water column nutrients and pH for ocean acidification monitoring.
- **Strong partnership & cost sharing**



NATIONAL MARINE
SANCTUARIES



Offshore and Nearshore Transect Lines and Sampling Stations

- Offshore Transects
- Nearshore Transects
- Limited Survey Transects
- Shipping Lanes
- ★/• CTD/Zoop/Phyto Station
- CA MPA - SMCA
- CA MPA - SMR
- NMS Boundaries

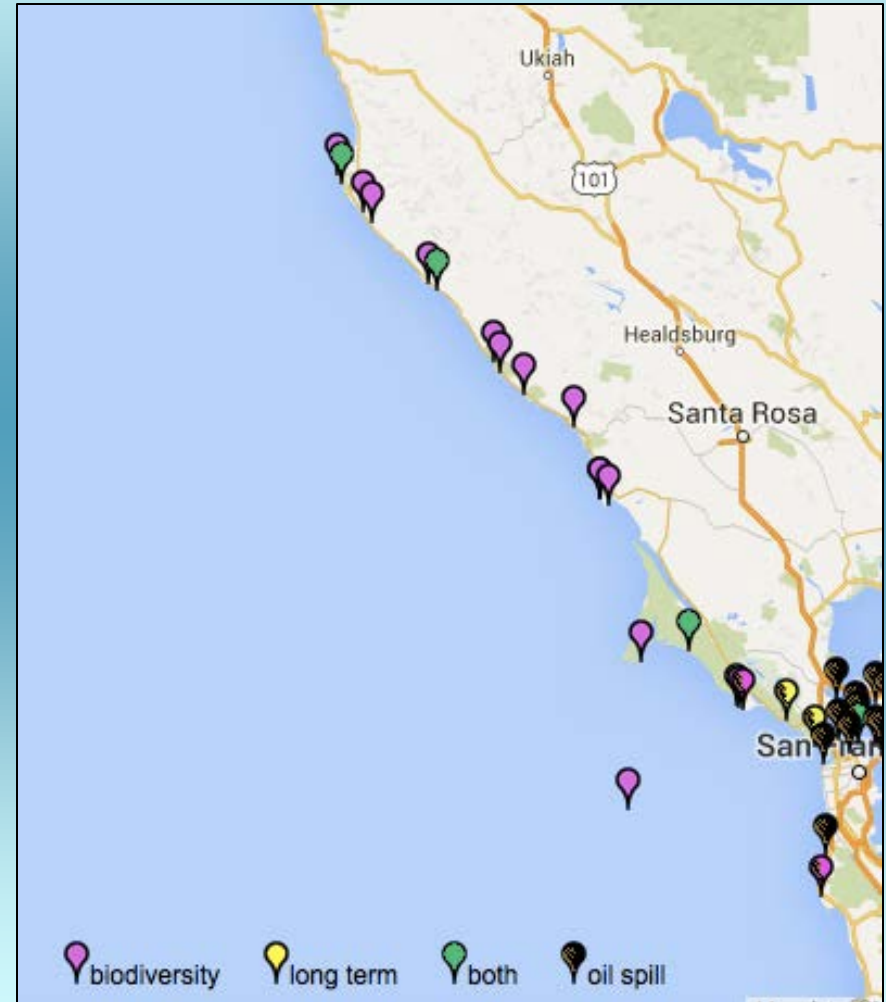
Applied California Current Ecosystem Studies (ACCESS)

For more information please visit www.accessoceans.org or contact Jaime Jahncke at jjahncke@pointblue.org

Research • Education • Conservation • Stewardship

Rocky Intertidal Monitoring - PISCO

- PISCO surveys 25 locations within our current boundary and northern portion of MBNMS
- Point Arena to Fitzgerald Marine Reserve
- Some of the biodiversity sites are sampled much more frequently than others



Kelp Forest Monitoring

- Staff from MBNMS explored former PISCO monitoring to test a proof of concept on use of FULMAR
- PISCO has several sites in at State's MPAs
- Reef Check samples at Timber Cove
- We are currently working to assess if there is a need, and if the priority



Deep-Sea Corals & Sponges

- Mapping and characterization of deep rocky reefs and slopes
- Rittenburg Bank, Cochrane Bank, Farallon Escarpment, The Football, Point Arena Biogenic Areas I & II, and in MBNMS Deep Reef
- Participate in EFH Committee, review and recommend to NMFS areas for additional protection



Research Workshops & Symposia

- GFNMS & partners hosts research workshops and symposia
- The most recent symposium was Nov. 2011
- New, on-going and recently completed research & monitoring
- Interval between symposia is dictated by available funding



NATIONAL MARINE
SANCTUARIES

Research • Education • Conservation • Stewardship

Beyond the Golden Gate Research Symposium 2011



Host Institutions

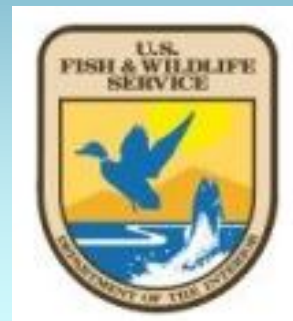
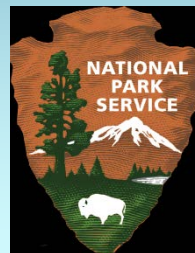
*Cordell Bank National Marine Sanctuary
Gulf of the Farallones National Marine Sanctuary
Point Reyes National Seashore
San Francisco Bay National Estuarine Research Reserve
University of California, Bodega Marine Laboratory*

Sponsors

*Cordell Marine Sanctuary Foundation
Farallones Marine Sanctuary Association*



Partnerships



Research • Education • Conservation • Stewardship