

Update: Monitoring Land-Based Sources of Pollution for US Coral Reef Task Force Priority Watersheds with VIIRS

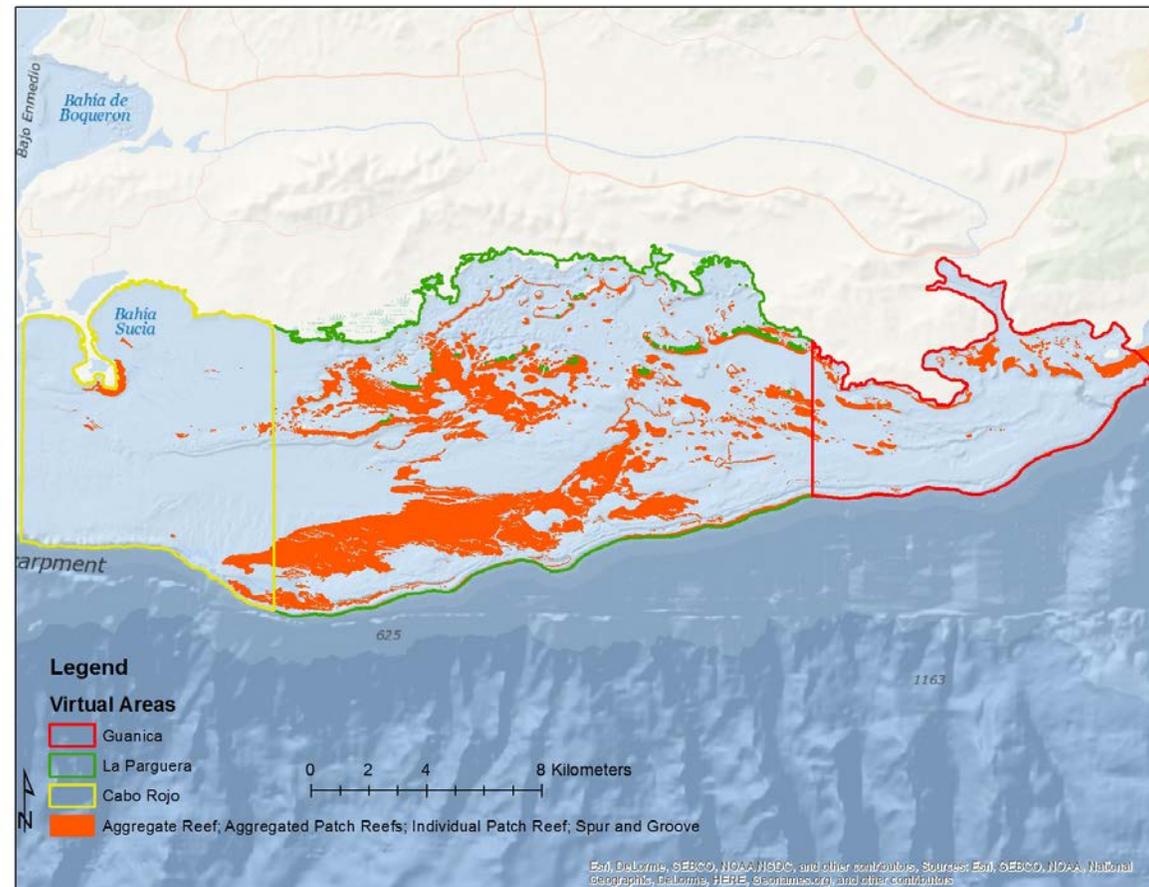
2nd Year: West Maui Expansion Efforts, University of Hawaii Maui College



Alan E. Strong & Rob Warner
with NOAA's Coral Reef Watch
and STAR's Ocean Color Team and NOS/NCCOS
and NOAA's Educational Partnership Program
with funding from NOAA's Coral Program and STAR

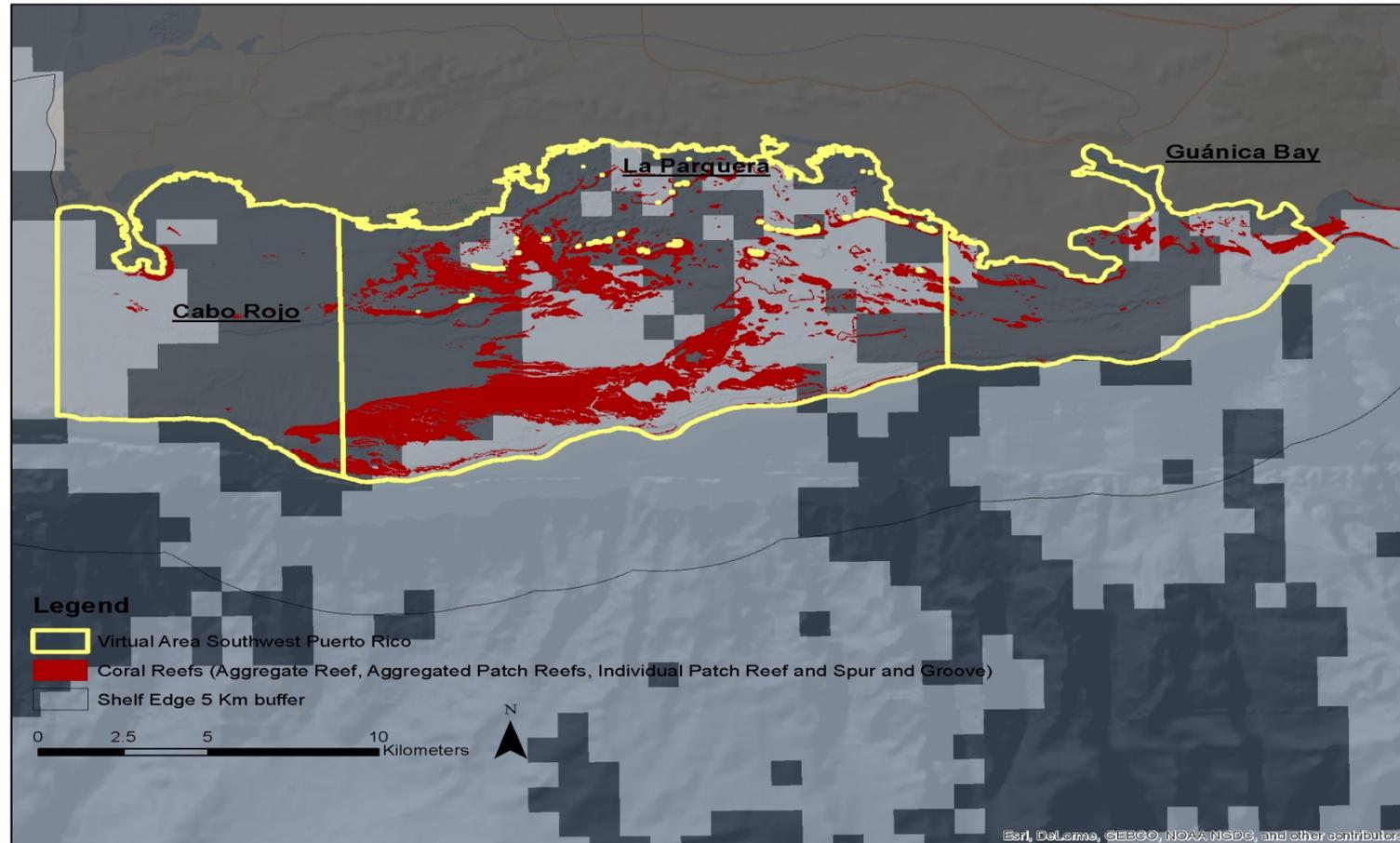


Guánica Effluent Virtual Areas



Guánica Watershed's 3 Virtual Areas

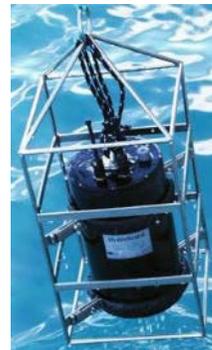
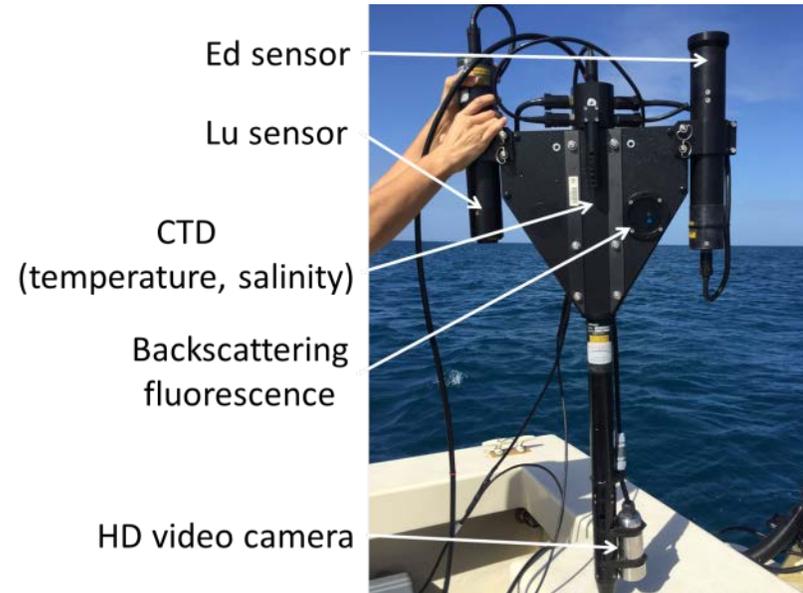
- with 750m VIIRS pixel overlay



Bio-Optical Oceanography Laboratory

Roy Armstrong's BOOL Support

- Simultaneous with Landsat 8 OLI image capture
- Instruments
 - **Satlantic Hyperpro Profiling radiometer (Lu, Ed, Rrs, Lw, Kd)**
 - GER 1500 Spectro-radiometer (Lw, Ed, Rrs)
 - SolarLight Datalogging Radiometer (PAR)
 - Hydroscat-6 (backscattering, fluorescence)
 - SCUFA (fluorescence, turbidity)
 - Water samples
 - CHL, TSS, CDOM



Hydroscat-6

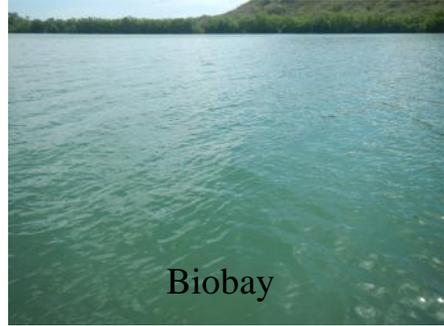
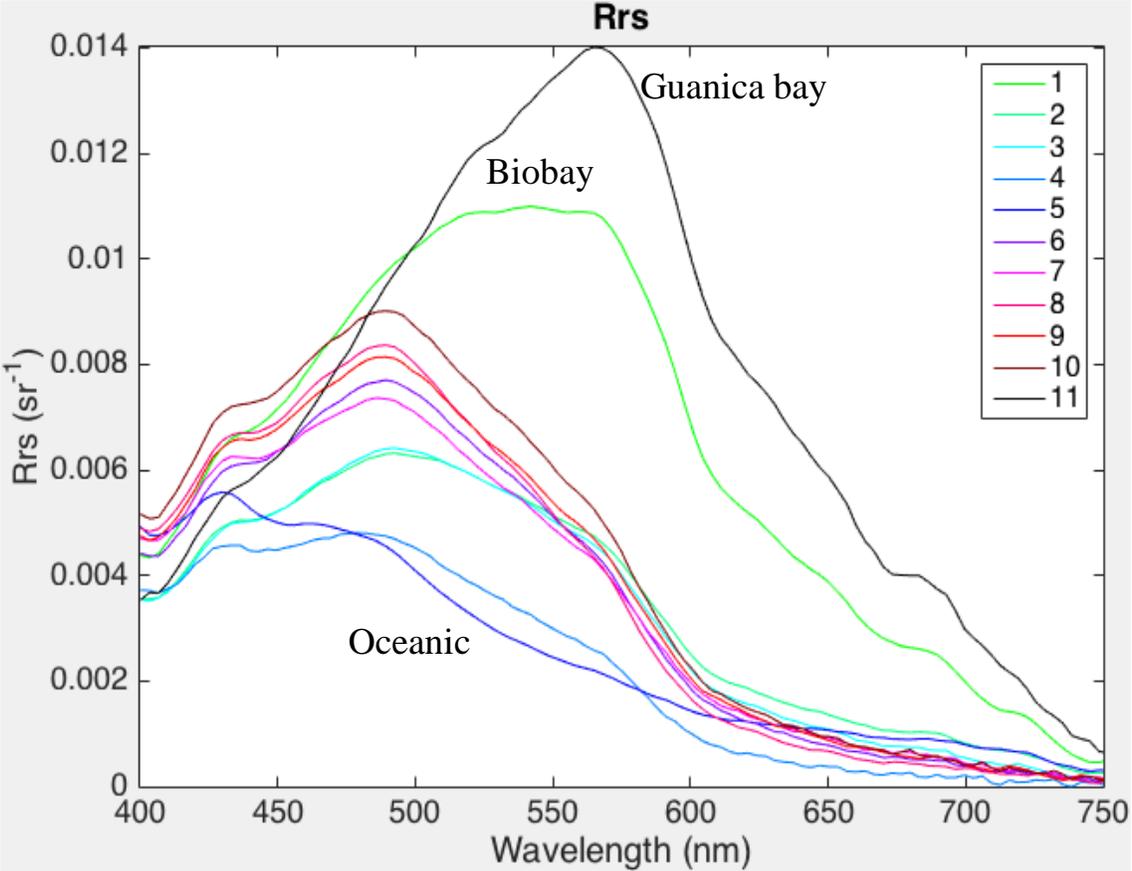


GER1500



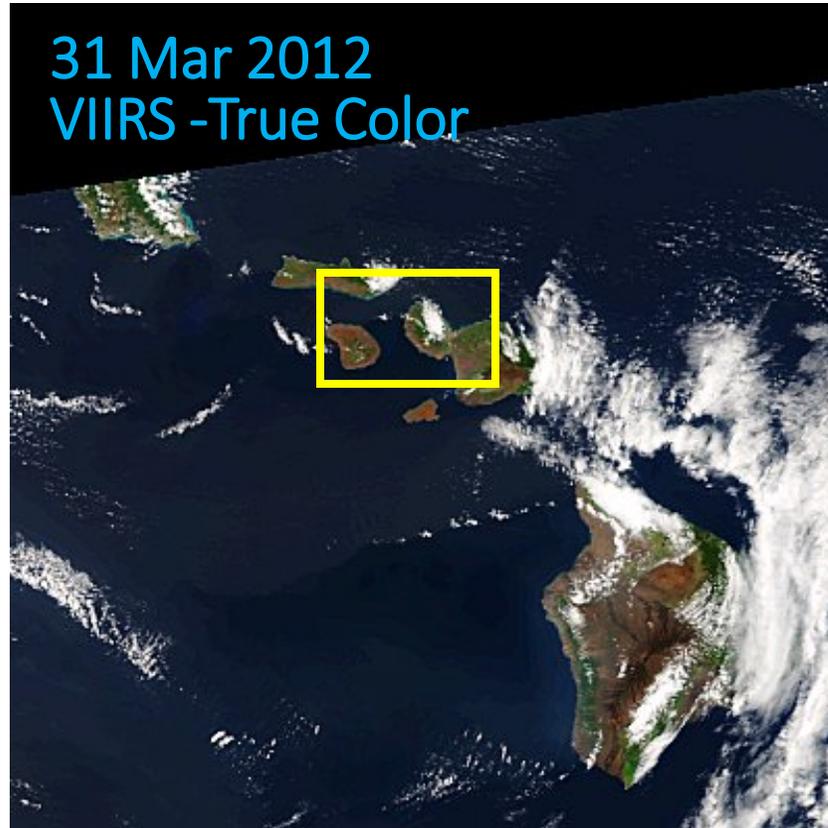
SCUFA

Satlantic surface remote sensing reflectance





Virtual Areas for West Maui Watershed (Hawaii)



Three proposed VIIRS study areas

- Point source – Hono Lua (**salmon**)
- Ka'anapali – Kahekili (**yellow**)
- West Maui coast (**green**)



University of Hawaii – Maui College

Professor Brown's Student Exploratory Team



West Maui - May 2016

Local UCSD Local Color Enthusiast & Crew



Off Ka'anapali Coast – West Maui May 2016



Hotel Complex – West Maui (south)



Airport Watershed – West Maui (central)



Study Site: West Maui (north)

Wahikuli and Honokowai
watersheds

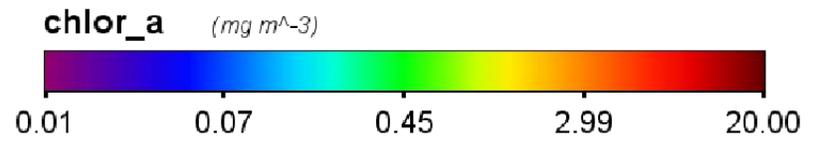
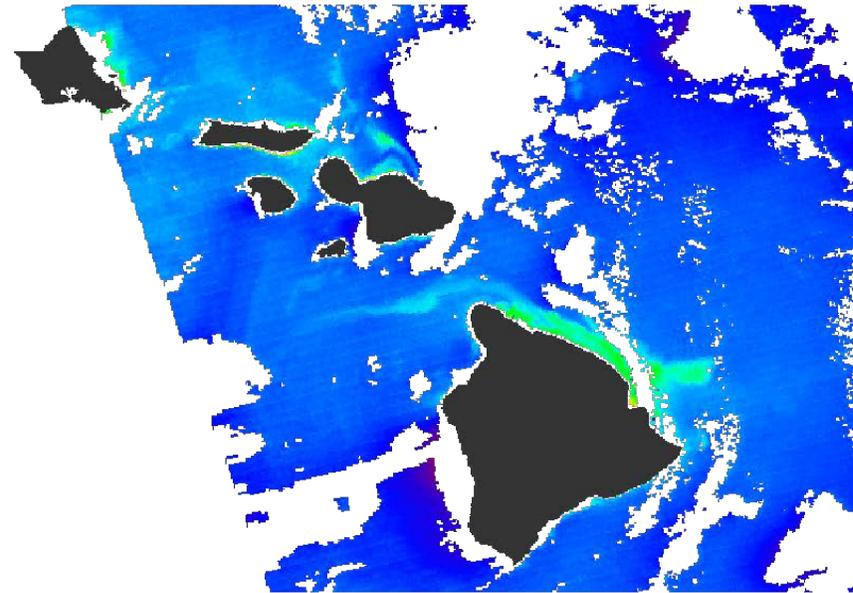


West Maui (north) Runoff Example



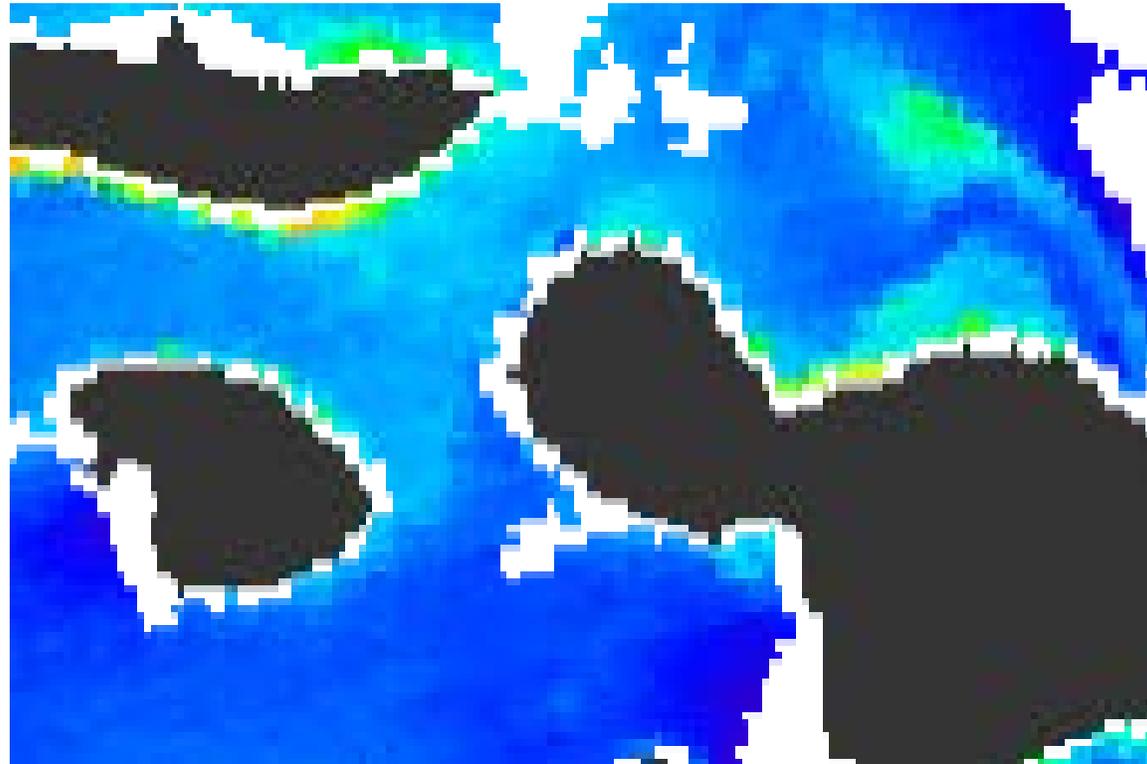
Following TS Darby – 25 July 2016

VIIRS Chl-a

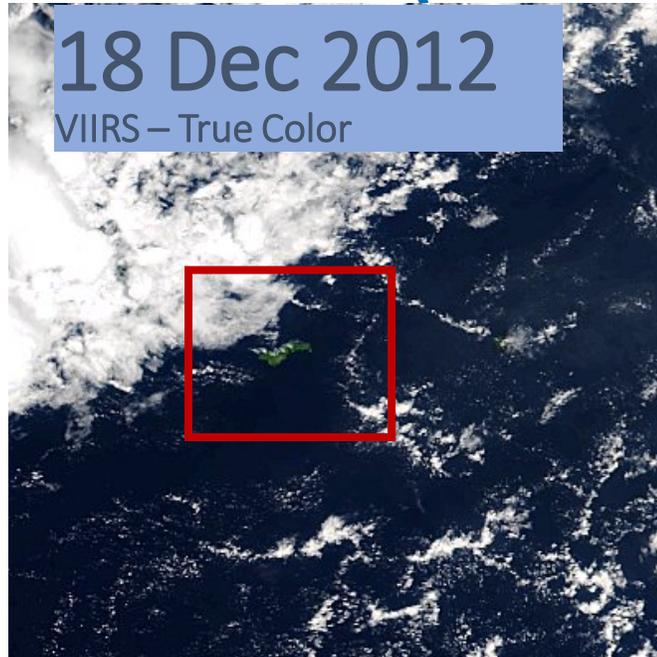


West Maui Watershed – 25 July 2016

VIIRS Chl-a



Virtual Areas for Faga'alu Watershed (American Samoa)



Three proposed VIIRS study areas for
LBSP American Samoa Watershed[s]

- Point source – Fa'agalu (**salmon**)
- SW plume:
 - Fa'agalu to Fagatele Bay (**yellow**)
- North Coast – Vatia (**green**)

