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
Satlantic surface remote sensing reflectance

Guanica bay

Biobay

Oceanic
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

Falinski_IEA_2014
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)

18 Dec 2012
VIIRS – True Color

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)