



**U.S. DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
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FACE Monitoring Program: Bimonthly Report for September, 2010

*Summary: the R/V Hildebrand has completed a number of successful modifications and repairs. The monthly monitoring program will commence in October, weather permitting. AOML's nutrient laboratory has attained certification by the State of Florida. FACE science has been promulgated in a number of reports and presentations.*

**R/V Hildebrand**

The R/V Hildebrand, a former USGC boat "UTB-41" ([www.uscg.mil/d13/units/factsheets/41.pdf](http://www.uscg.mil/d13/units/factsheets/41.pdf), Figure 1) received from NOAA's Beaufort laboratory last year, has undergone a number of repairs and modifications to be ready for the monitoring program. These are summarized below.

- The Hildebrand has been incorporated into AOML's small boat program. This necessitated writing a Vessel Operations Manual for the boat, and revising the AOML Supplemental Small Boat Policy, in accord with the NOAA Small Boat Standards and Procedures Manual. These documents are available upon request.
- Repairs and modifications to the boat have been performed, including painting, cleaning, and engine maintenance. New instruments have been installed: a radio, Furuno GPS, intra-ship walky-talky, and a life raft.
- A spare set of rudders were obtained (free) from the excess government property list, to be used when needed.
- We have established relationships with the personnel at Miami's USCG base, where two UTB-41s are in use. They will be able to assist us with any issues that arise.



*Figure 1. NOAA R/V Hildebrand.*



*Figure 2. New A-frame, winch, and hydraulic controls undergoing sea trials.*

- A new 2000-Lb capacity winch was purchased and installed, as well as a new A-frame (Figure 2) that replaced the original (which had failed during a test run earlier this year). The A-frame design had to be designed and certified licensed Naval Architect. The system was tested with a 2000-lb load by a certified testing organization (Integrity Engineering Corp., OpaLocka, FL).
- A new working table has been designed and installed (Figure 3), so that water sample filtering can be performed immediately after samples have been obtained.
- A new cooler rack was designed and installed which can hold twelve cooler (most water samples must be stored cooled or frozen).
- A Seabird-19 plus V2 CTD/ Eco 55 Rosette has been installed (Figure 4). The unit carries six bottles which can be operated to capture water at specific depths. The unit also measures conductivity (salinity), temperature, pressure (depth), pH, dissolved oxygen, chlorophyll, and turbidity.



Figure 3. Work table installed aft of cabin, for immediate filtration of samples and for storage.



Figure 4. Seabird CTD/rosette during a test of the system, being brought on board the Hildebrand by C. Featherstone.

### Monitoring Program Commences

Now that the R/V Hildebrand has been fitted and certified for coastal work, the Monitoring Program monthly cruises can now begin for Hollywood and Broward sites. The first cruise will take place in October, weather permitting. The site locations (Figure 5) have been selected taking into account previously used sites (for continuity of data) and usefulness in characterizing the coastal ocean.

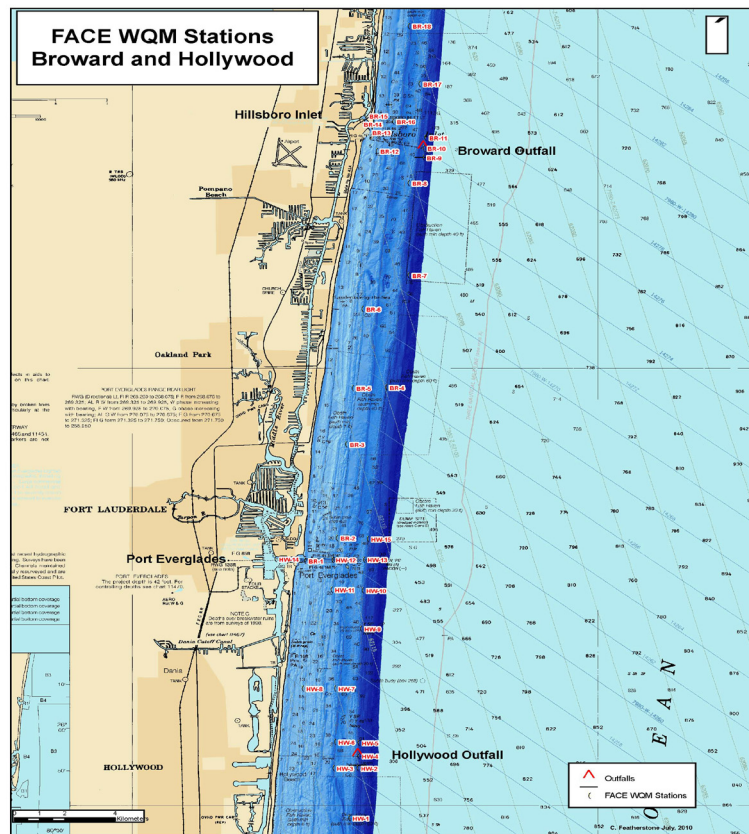


Figure 5. Sample locations for Hollywood (HW) and Broward (BRW) sampling sites.

### **Nutrient Laboratory Certification**

AOML's nutrient laboratory received the Florida Department of Health non-potable water certification from the, Bureau of Laboratories, effective 10-August-2010 through 30-June-2011.

### **FACE publications and presentations**

FACE program work was presented in these reports and presentations:

- "The Florida Outfalls and Coastal Inlet Experiment (FOCITE-1), a dual tracer study of the Boynton Inlet and South Central treated-wastewater outfall plume." (Thomas Carsey, Joseph Bishop, Jules Craynock, Shailer Cummings<sup>1</sup>, Paul Dammann, Charles Featherstone, Denis Pierrot, John Proni, Jack Stamates, Kevin Sullivan, Richard Wanninkhof), was presented at the 2010 AGU-Ocean Sciences meeting in Portland, Oregon, in 22-26 February 2010.
- "FACE Outfalls Survey Cruise--October 6-19, 2006 ", T. Carsey, H. Casanova, C. Drayer, C. Featherstone, C. Fischer, K. Goodwin, J. Proni, A. Saied, C. Sinigalliano, J. Stamates, P. Swart, J.-Z. Zhang, 130+ pages, February 2010. NOAA Technical Report OAR AOML-38.
- "Microbial Water Quality of Treated Wastewater Outfalls", by Chris Sinigalliano, Dave Wanless, Maribeth Gidley, T. Scott, Rene Boiteau, Tom Carsey, and Kelly D. Goodwin, was presented at the American Microbiological Association 110th General Meeting, San Diego, CA, May, 2010.
- "Data collection efforts by NOAA/AOML/OCD Florida Area Coastal Environmental program (FACE)" was presented at Florida DEP's "Development Of Numeric Nutrient Criteria In Florida Estuaries And Coastal Waters" meeting at UM/RSMAS on 3-Mar-2010.

The FACE program is part of the NOAA-AOML-OCD web presence, and can be viewed at <http://www.aoml.noaa.gov/themes/CoastalRegional/projects/FACE/faceweb.htm>

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