Drifters into Altamaha Rivers Outflow

July 22, 2014

Check out the progress of the drifters that were released months ago. [http://www.nefsc.noaa.gov/drifter/drift_grnms_2014_1.html](http://www.nefsc.noaa.gov/drifter/drift_grnms_2014_1.html). Read the history of the project below:

With funding provided by the Georgia Department of Natural Resources and vessel support from Gray’s Reef National Marine Sanctuary, researchers from Georgia Southern University will release 50 gallons of fluorescent red dye (rhodamine WT) into the Altamaha River outflow during the week of May 12-16, 2014. The plume of dye that results will be monitored visually and with instrumentation as it flows from the release point (just south of Wolf Island) along the Georgia coast and offshore. Tracking the path of the dye will provide estimates of the extent to which the Altamaha River delivers dissolved contaminants and nutrients north and south along the Georgia coast and to hard-bottom reefs, such as Gray’s Reef National Marine Sanctuary, occurring up to 20 miles offshore.

The research team will visually monitor the floating dye for the first 8-9 hours after release and then will rely on instruments, called fluorometers, programmed to scan for the presence of rhodamine WT in the water every minute of the day for two weeks. These fluorometers will be positioned at 4 artificial reefs managed by Georgia DNR (reefs A, SFC, J-Y, and CAT), as well as Gray’s Reef to create an arc of detection points. Marked with yellow crab-pot buoys and clearly labeled, these fluorometers will be easy to spot. If sighted, please do not damage or remove them.

In addition to releasing the dye, the investigators will deploy up to 4 satellite-enabled drifters that will provide information on how larger materials, such as dead stalks of marsh grass, may disperse after being exported from the Altamaha River estuary. These drifters will be constructed from basic materials found in local hardware stores such as bamboo poles, drop cloths, hose clamps, and nylon cord. Data obtained from the drifter paths will be made available to local school teachers for use in the classroom. As with the buoys, these drifters will be clearly labeled so please do not remove them if spotted offshore. Alternatively, please contact the investigators if a drifter is found on shore.

Rhodamine WT is highly visible due to its ability to fluoresce light. During this study, waters with a red tint may appear at various points along the southeast Georgia coast as well as in marinas, bays, and estuaries. If the dye is sighted in any of these locations, there is no reason for concern. Rhodamine WT is non-toxic to humans and aquatic organisms, such as fish and shellfish, and will not cause damage to watercraft. For additional information, contact Georgia Southern University’s Dr. Daniel Gleason (912-478-5957), Dr. Risa Cohen (912-478-1228), or Gray’s Reef Communications and Outreach Coordinator Amy Rath (amy.rath@noaa.gov; 912-598-2397).

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