

Lower St Johns River

Weekly River Field Brief

2011 June 27

Areas of Coverage: Hastings RSTs and tributaries. Main Stem SJR from Astor, FL to Mayport. Sampling dates: June 20–June 23. Briefing coverage dates: June 17- June 23.

Surface Water quality: Lower Basin river continues to show high salinities down through Hibernia Point (near Black Creek) recorded at 9.40 ppt. Water temperatures measured commonly exceeding 30 deg C.

Collected fractions:

- 1) Full normal analytical WQ suite from mainstem and shoreline areas from Astor to Mayport plus depth profiles with physico-chemical measurements;
- 2) Radiometer readings collected with two units including new prototype, working with NOAA personnel east of Black Creek, Lake George, and Crescent Lake on 6/22 and 6/23, continuing work with identifying cyanobacterial blooms with satellite images;
- 3) Plankton collected for FWRI at Doctors Lake, Plummers Cove, NAS, and Mandarin Point; (see info under algal/HAB) ; shipped overnight (6/22);
- 4) Plankton and bacteria collected for UF taxonomy; (shipment pending);
- 5) Plankton collected for Algal Tox analysis and shipped overnight (6/23) to Michigan for tox analysis and ID (results pending);
- 6) In situ chlorophyll readings continue.

Weather/Rainfall events: Hot and humid. Well above average normal temperatures during day (+47 F total for week) and night (+ 16 F total for week). Precipitation recorded on two of the 7 day period, in the form of thunderstorms. Rainfall recorded at 1.21 inches on 6/17, and 1.78 inches for 6/23 at Jacksonville during the week.

Algal/HAB: No bloom or scum formations observed in this area from Astor to Mayport, with the exception of some filamentous formations near shore at Black Creek on 6/22. (Note disclaimer at end). Some potential striations developing off Black Creek mouth. FWRI analysis indicated no HABs in NAS area sample (jax40). HABs were identified in other three samples : Doctors Lake (3 genera), Mandarin Point (4 genera), and Plummers Cove (1 genus).

Foam: No unusual foam events observed.

Fish Kills: None observed. Single gizzard shad observed at Orangedale, single unidentified species at Lake George.

Wildlife: Manatee activity (2 confirmed near black creek ramp) (6/22). Manatee activity reported on Cunningham Creek (6/21)(D. Campbell). Dolphin activity observed at downtown Jacksonville and San Marco (6/18), Mill Cove, Mayport, Trout River, and Dames Point Bridge (6/21). Midge swarms attenuating near Palatka BR during day.

Other notes: Smoke from area wildfires extremely dense along lower basin river. Triggered respiratory problems observed. Visibility < 50 meters at times.

Citizen Reports:

Unconfirmed Citizen Reports (*reported directly to SJRWMD team but no confirmation available*): Unable to confirm citizens report of algal issues from Plummers Cove area. See FWRI analysis.

Citizen reports through other organizations: None.

Projected areas of operation for next week: Hastings RSTs, Racy point to Dunns Creek.

Disclaimer: Field notes are collected at scheduled areas during sampling events. Complete shoreline surveys are usually not logistically feasible unless work occurs at a designated area at the shoreline. Our primary SJR main stem range is approximately 110 miles.

These “River Briefs” are designed to highlight selected information from the lower SJR. If you would like more details for any of the information put forth, please ask. For questions, comments or suggestions on improving the usefulness of these weekly updates, please email me @ rburks@sjrwmd.com. Your input is appreciated.

Have a good weekend...and 4th.

Robert Storm Burks-SJRWMD