**Weekly Estuarine Conditions Update**

**As of October 12, 2009**

**St. Lucie Estuary**

**Current Conditions:**

Over the past week, flow averaged 23 cfs at S-80 and 8 cfs at S308.  Provisional data indicates that discharge of 0 cfs occurred at S-97 on C-23 and 0 cfs at S-49 on C-24. The current weekly average salinities (in bold) at the four monitoring sites in the St. Lucie Estuary are given below in practical salinity units (psu), along with the previous week’s (in parenthesis).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Weekly Average Salinity (psu)** | |  |
| **Sampling Site** | **Surface** | **Bottom** | **Envelope** |
| Palm City Bridge (S. Fork) | **9.8** (5.8) | **11.3**(7.9) |  |
| HR1 (N. Fork) | **11.8** (8.9) | **15.0** (14.7) |  |
| Roosevelt Bridge | **15.6** (12.3) | **16.8** (15.5) | 8.0 – 25.0 |
| A1A Bridge | **22.6** (18.1) | **26.3** (24.1) | 20.0 – 31.0 |

Average salinity increased over the last week.  Weekly average salinities at Roosevelt Bridge and A1A Bridge are within the preferred range.  Salinity conditions in the estuary are good considering the time of year, the location in the estuary, and salinity preference of the oyster, *Crassostrea virginica*.

**Caloosahatchee Estuary**

**Current Conditions:**

During the past week, flow averaged 298 cfs at S-79, 209 cfs at S-78, and 0 cfs at S-77. The concentration of chlorides at the Olga Plant was 58 ppm yesterday.  The current weekly average salinities (in bold) at the six monitoring sites in the Caloosahatchee Estuary are given below in practical salinity units (psu), along with the previous week’s (in parenthesis).

|  |  |  |
| --- | --- | --- |
| **Weekly Average Salinity (psu)** | | |
| **Sampling Site** | **Surface** | **Bottom** |
| Franklin Locks (S-79) | **0.2** (0.2) | **0.3**(0.2) |
| Rt. 31 Bridge | **0.3** (0.2) | **0.3** (0.3) |
| I-75 Bridge | **0.3**   (0.3) | **0.8**   (0.3) |
| Ft. Myers Yacht Basin | **NR** (NR) | **NR** (NR) |
| Marker 52 | **3.7** (2.8) | **8.9** (5.4) |
| Cape Coral Bridge | **10.7** (7.9) | **14.3** (9.0) |
| Shell Point | **25.3** (21.6) | **25.5**(22.7) |

Surface salinity in the upper estuary west of Ft. Myers remained similar to last week, with surface waters being fresh to Marker 52, salinity increased in bottom water.  In the lower estuary, salinity increased last week.  Salinity conditions in the upper estuary are considered good. Salinities at the Cape Coral Bridge are below the preferred range for the oyster, *Crassostrea virginica.* Salinity at Shell Point indicates that conditions are good for seagrass in the lower estuary and San Carlos Bay. Therefore, conditions in the lower estuary and San Carlos Bay are good.

FWRI (Fish and Wildlife Research Institute) reports that *Karenia brevis*, the Florida red tide organism, was not detected in water samples collected this week alongshore of Manatee, Lee and Collier counties. One sample collected at Gasparilla Fishing Pier (Charlotte County) also contained very low concentrations of *K. brevis*. A research cruise currently being conducted offshore of southwest Florida has detected levels of *K. brevis* ranging from background to low concentrations offshore of Lee and Collier counties, west and south of Sanibel Island. ([research.myfwc.com/features/view\_article.asp?id=9670](http://research.myfwc.com/features/view_article.asp?id=9670)).

Monitoring data collected by the River, Estuary and Coastal Observing Network (RECON) of Sanibel-Captiva Conservation Foundation (SCCF) indicated that chlorophyll ranged from 3.0 – 8.3 ug/l at Ft. Myers and 1.1 – 3.4 ug/l at Shell Point;  Dissolved Oxygen ranged from 2.5 – 7.2 mg/l at Ft. Myers and 3.3 – 5.6 mg/l at Shell Point ([www.recon.sccf.org](http://www.recon.sccf.org/)).

<https://my.sfwmd.gov/portal/page?_pageid=1314,2554645,1314_19738269:1314_19738234&_dad=portal&_schema=PORTAL>

click on “Current Week”

click on “Technical Summary”

scroll to the bottom and click on “Coastal Ecosystems”