**Weekly Estuarine Conditions Update**

**As of October 19, 2009**

**St. Lucie Estuary**

**Current Conditions:**

Over the past week, flow averaged 0 cfs at S-80 and 25 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) | **13.7** (9.8) | **15.1**(11.3) |  |
| HR1 (N. Fork) | **16.3**(11.8) | **19.4** (15.0) |  |
| Roosevelt Bridge | **19.0** (15.6) | **21.1** (16.8) | 8.0 – 25.0 |
| A1A Bridge | **27.2** (22.6) | **29.2** (26.3) | 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 33 cfs at S-79, 28 cfs at S-78, and 280 cfs at S-77. The concentration of chlorides at the Olga Plant was 55 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) | **0.5** (0.2) | **0.5**(0.3) |
| Rt. 31 Bridge | **0.7** (0.3) | **1.0** (0.3) |
| I-75 Bridge | **1.2**   (0.3) | **2.4**   (0.8) |
| Ft. Myers Yacht Basin | **NR** (NR) | **NR** (NR) |
| Marker 52 | **6.4** (3.7) | **10.1** (8.9) |
| Cape Coral Bridge | **14.3**(10.7) | **16.0**(14.3) |
| Shell Point | **26.0** (25.3) | **26.8**(25.5) |
| Sanibel | **30.2** | **31.1** |

Salinity increased throughout the estuary last week. Salinity conditions in the upper estuary are considered good. Salinities at the Cape Coral Bridge are within 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 Pinellas, Hillsborough, Manatee, Collier and Monroe counties or offshore of Pinellas and Monroe counties. Four samples collected alongshore of Sarasota County (out of 29 total samples) ranged from present to very low concentrations of *K. brevis*. Two samples collected alongshore of Charlotte County and one sample collected alongshore of Lee County contained background levels of *K. brevis*. A research cruise that was conducted last week through early this week offshore of southwest Florida detected levels of *K. brevis* ranging from background to medium 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 and 1.2 – 3.4 ug/l and Dissolved Oxygen ranged from 4.0 – 6.8 mg/l at Shell Point. Reading at Ft. Myers were unavailable. ([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>

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