**Weekly Estuarine Conditions Update**

**As of October 26, 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** |
| HR1 (N. Fork) | **19.8**(16.3) | **21.1** (19.4) |  |
| Roosevelt Bridge | **21.4** (19.0) | **22.3** (21.1) | 8.0 – 25.0 |
| A1A Bridge | **28.4** (27.2) | **30.3** (29.2) | 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 64 cfs at S-79, 0 cfs at S-78, and 243 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) | **1.6** (0.5) | **1.7**(0.5) |
| Rt. 31 Bridge | **1.8** (0.7) | **4.0** (1.0) |
| I-75 Bridge | **2.1**   (1.2) | **6.2**   (2.4) |
| Ft. Myers Yacht Basin\* | **8.9** (6.0) | **14.3** (8.7) |
| Marker 52 | **9.3** (6.4) | **16.1**(10.1) |
| Cape Coral Bridge | **15.7**(14.3) | **19.6**(16.0) |
| Shell Point | **26.6** (26.0) | **27.2**(26.8) |
| Sanibel | **29.7** (30.2) | **31.0** (31.1) |

\*red values are estimated using a regression relationship between salinity at Marker 52 and salinity at Ft. Myers

Salinity increased throughout the estuary last week.  Salinity conditions in the upper estuary are considered good. The estimated 30-day average salinity at Ft. Myers is 4.9 psu. Salinities at the Cape Coral Bridge are within the preferred range for the oyster, *Crassostrea virginica.* Salinity at Shell Point and the Sanibel Causeway indicate 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, Manatee, Charlotte and Collier counties or offshore of Lee County. Six samples collected alongshore of Sarasota County (out of 27 total samples) and three samples collected alongshore of Lee County (out of 12 total samples) ranged from background to very low concentrations of *K. brevis*. ([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 1.3 – 3.3 ug/l and Dissolved Oxygen ranged from 4.6 – 7.7 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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