



# SEAGRASS-WATCH E-BULLETIN

## 16 January 2008

Seagrass-Watch's electronic news service, providing marine and coastal news of international and national interest. Abbreviated articles are presented with links to their source. Seagrass-Watch HQ recommends that readers exercise their own skill and care with respect to their use of the information in this bulletin and that readers carefully evaluate the accuracy, currency, completeness and relevance of the material in the bulletin for their purposes. Seagrass-Watch welcomes feedback on the bulletins, and you are free to distribute it amongst your own networks.

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### NEWS

#### **Food for marine life under threat (KUALA LUMPUR, Malaysia)**

10 January 2008, nstoline.com

Seagrass worth millions of ringgit lie unprotected in Malaysian waters. The country is sitting on a treasure trove -- seagrass meadows of about 3.15 sq km in Peninsular Malaysia are worth up to RM20 million a year, based on their value as raw material and for nutrient cycling.

"If we lose our seagrass, we don't get seafood," said Juliana Ooi, a Universiti Malaya lecturer at the Department of Geography who will be doing her doctorate in seagrass geography in Australia. She said the size of the seagrass meadows was vastly underestimated as many places had yet to be surveyed, including areas around Sabah and Sarawak.

The value of the seagrass is also much higher as it plays an important role in food production, climate regulation, genetic resources and recreation. Despite its importance, there has been minimal efforts to conserve the seagrass. Ooi said the problem was that seagrass grew in prime areas along the coastlines which were likely to be converted to ports, jetties or marinas.

more..... <http://www.seagrasswatch.org/news.html>

### ***Slow down for dugong and turtles in Whitsundays (Qld, Australia)***

08 January 2008, Power Boat World.com

Boaties out enjoying Queensland waters during the holidays are urged to slow down through dugong and turtle habitat in the Whitsundays. Queensland Parks and Wildlife Service (QPWS) District Manager Damien Head said increased boat traffic during the summer holidays was a potential threat to marine wildlife, in particular turtles and dugong.

'These are air-breathing marine animals and they're often injured or killed by speeding vessels when coming up for air, especially in and near seagrass beds,' Mr Head said. 'But if boaties 'go slow for those below' it gives turtles and dugongs a chance to get out of the way,' he said.

more..... <http://www.seagrasswatch.org/news.html>

### ***She'll be right on the reef (Townsville, Qld)***

04 January 2008, Townsville Bulletin

University of Queensland researcher Dr Milani Chaloupka said new data suggested the turtle was no longer on the brink of extinction. The green sea turtle has been listed as an endangered species since 1982. "There has been a boom in all the major populations around the world," Dr Chaloupka said.

The researchers looked at six major nesting sites around the world including the GBR, Hawaii, Japan, Florida and Costa Rica. They estimated there had been a global increase rate of up to 14 per cent per year in the past 30 years. "What we don't know is the historic context," Dr Chaloupka said.

"One hundred years ago, they might have been even more abundant. This recovery may just be getting back to where they were or it may have a long way to go." Dr Chaloupka said the turtles were not out of the woods yet. They are threatened by hunting and poaching, marine traffic, fishing nets and marine pollution.

more..... <http://www.seagrasswatch.org/news.html>

### ***Dugong rescued (QLD, Australia)***

04 January 2008, Sunshine Coast Daily

Beachgoers aren't the only ones being affected by the wild weather conditions on the Coast this week – a 300kg dugong was stranded in shallow water off the northern top of Bribie Island on Wednesday. The mammal was spotted by Caloundra City lifeguards patrolling Bulcock Beach and rescue crews were immediately called to help the dugong into deeper water.

Rescue unit manager Brian Coulter said the dugong was stranded by a dropping tide, about 200m from deeper water, but showed no signs of injury and was in a good condition, which assisted the rescue efforts.

He said while large herds of dugongs had been spotted in Moreton Bay and around the Pumicestone Passage, it was unusual to see one so close to shore. "There's a chance that what's happened is, with the large seas and heavy swells we've been experiencing for the last week or so, it has become exhausted and washed through the bar where it became stranded," he said. "There's also large seagrass beds in the area, so it could've been feeding too."

more..... <http://www.seagrasswatch.org/news.html>

### ***Bolinao to sue barge owners for coal spill (Bolinao, Pangasinan, Philippines)***

13 January 2008, By Yolanda Sotelo-Fuertes Philippine Daily Inquirer

The local government of this town plans to sue the owners of the Indonesian barge, which ran aground off Ilog Malino village and spilled 8,373 metric tons of coal into the area in November last year.

The barge was being towed by a tug boat on its way from Indonesia to the power plant in Sual town on Nov. 27 when strong winds and big waves caused by Typhoon "Mina" broke its anchor and rope. The barge was hurled to the reef in Ilog Malino. The impact destroyed its metal flat sheet railing cargo fence, spilling 95 percent of its cargo.

The UPMSI said the coal spill spread to 33 hectares of coral and seagrass areas. It said the spillage of tons of hard coal and the damage caused by the barge had directly harmed marine life in the area.

*Full story and source: <http://newsinfo.inquirer.net/inquirerheadlines/regions/view/20080113-112007/Bolinao-to-sue-barge-owners-for-coal-spill>*

### **Water quality of river to be monitored (West Palm Beach,FL,USA)**

12 January 2008, TCPalm

The South Florida Water Management District along with the Loxahatchee River District and the Loxahatchee River Preservation Initiative, is funding an extensive biological and water quality monitoring program to measure the success of environmental restoration along the Loxahatchee River.

The funding will support a \$356,000 one-year contract for monitoring salinity and nutrient levels, seagrass growth, populations of oysters and macro-invertebrates and other indicators of environmental health throughout the Loxahatchee River watershed.

Under a contract approved by the South Florida Water Management District Governing Board, the Loxahatchee River District will play a role in assessing the success of ongoing Loxahatchee River Preservation Initiative projects and will also evaluate the health of seagrasses and oysters.

*Full story and source: <http://www.tcpalm.com/news/2008/jan/12/water-quality-river-be-monitored/>*

### **Coastal development under scrutiny (Gainesville,FL,USA)**

January 2008 Gainesville Sun

A controversial development on the Taylor County coast continues to be met with objections from environmental groups and state agencies, which question the impact of a golf course, hotel and condominiums on wetlands near the Gulf of Mexico. The project was poised to receive a critical vote of approval this week from the Suwannee River Water Management District - until Florida Department of Environmental Protection Secretary Mike Sole personally intervened.

Now environmental advocates are rallying opposition in advance of a rescheduled Feb. 12 vote. They say the project could harm coastal water quality and nearby seagrass beds, while ushering in the development of a rural area with one of the last stretches of pristine, privately owned coastal land in the state.

The controversy is the latest chapter in a two-year saga in which widespread opposition led to major aspects of the project and even its name being changed.

*Full story and source: <http://www.gainesville.com/article/20080112/NEWS/801120341/1018/news>*

### **Council Seeks Dredging Permit Delay (Tampa,FL,USA)**

10 January 2008, By Christian Wade, The Tampa Tribune

PORT RICHEY - The city council voted Tuesday night to request an extension from state regulators for a permit application to dredge a new channel to the Gulf of Mexico. The resolution, which had been recommended by the city's Port Authority Board, was approved by a vote of 4-0.

City officials hope the extension, if approved by the state Department of Environmental Protection, will allow them to tweak the request to make it more favorable to regulators. In addition to cutting a channel for boats through seagrass beds between Brasher Park and the Pithlachascotee River, the project also would dredge a canal off Old Post Road.

To do that, the city has proposed uprooting 5.76 acres of healthy seagrass, which is a habitat for marine creatures. The city proposed mitigation for the beds, but state and federal officials have said the new channel would destroy too much seagrass. Other agencies involved in the permitting process - the Florida Fish and Wildlife Conservation Commission, National Marine Fisheries Service, the Army Corps of Engineers and the federal Environmental Protection Agency - also oppose it.

*Full story and source: <http://www2.tbo.com/content/2008/jan/10/pa-council-seeks-dredging-permit-delay/>*

### **Manatee deaths dropping (Tampa,FL,USA)**

07 January 2008, MyFox Tampa Bay

ST. PETERSBURG - The number of documented manatee deaths dropped dramatically last year, but the leading causes of death remain roughly the same. The Fish and Wildlife Research Institute counted 317 manatee deaths in 2007, down sharply from 417 in 2006.

About one-fourth of 2007's deaths were caused by collisions with boats. Sometimes it is the slashing of propellers and sometimes it is blunt trauma. Red tide also caused the death of 42 manatees and is suspected in ten other cases. Red tide is a single-cell organism that produces a paralyzing toxin. High concentrations of red tide are called a "bloom" and cause fish kills. The affect on manatees is indirect. The toxin stays on sea grass long after the bloom subsides. The toxin builds up in manatees grazing on contaminated seagrass and eventually kills them. But the research continues because manatees are still an endangered species.

There are only about 3,000 of the giant creatures left in Florida waters.

Full story and source: <http://www.myfoxtampabay.com/myfox/pages/News/Detail?contentId=5417745&version=1&locale=EN-US&layoutCode=TSTY&pageId=3.2.1>

### **Florida drought has an upside (Sarasota, FL, USA)**

05 January 2008, By ZAC ANDERSON, Sarasota Herald-Tribune

SARASOTA BAY -- Drinking water supplies are low. Farmers and lawns are struggling. But Rick Grasset said his charter fishing business has been "very good," and he believes Florida's severe drought is helping. Grasset sees the drought's positive impacts on local estuaries during near-daily fishing excursions throughout the region. "It's been great out on the water," said Grasset, a fishing guide who has operated out of CB's Saltwater Outfitters in Sarasota for 18 years. "Seagrass is thicker and more abundant. Fish are more plentiful."

Grasset's observations are supported by a variety of environmental researchers. Statewide, rainfall is 20 inches below average over the last two years, diminishing the flow of fresh water into coastal estuaries. Environmental experts say the drought is neutralizing harmful drainage from farms and old developments, reducing water pollution and boosting marine life in local bays. Researchers also predict a banner year for seagrass, a key habitat for juvenile fish and other marine life.

Full story and source: <http://www.heraldtribune.com/article/20080105/NEWS/801050363/1006/SPORTS>

Related links: <http://www2.tbo.com/content/2008/jan/06/me-sea-life-thriving-in-sarasota-waterways/>  
[http://www.sptimes.com/2008/01/06/State/Drought\\_looks\\_like\\_a\\_.shtml](http://www.sptimes.com/2008/01/06/State/Drought_looks_like_a_.shtml)

### **Cockroach Bay Protections Debate to Continue in 2008 (Ruskin, FL, USA)**

03 January 2008, by Melody Jameson Observer News

RUSKIN – Essentially mere blades of vegetation submerged beneath the river surface, they are easily ignored. They make no sound, rarely have fragrance or odor, don't invite caressing and are not high on the human diet pyramid. But, the seagrass beds of Cockroach Bay have become the passion of at least one Ruskin area resident's life - and may shape up to be among the rigorously debated local issues in the new year.

Gus Muench, long-time fisherman on the Little Manatee River, is campaigning for designation of Little Cockroach Bay as a marine sanctuary. Creation of a marine sanctuary to encompass Little Cockroach is necessary now because of continuing damage to the remaining seagrass beds, Muench said this week. Muench's concerns – at least regarding prop scarring – is being verified with an on-going mapping project undertaken by Hillsborough County's Environmental Protection Commission staff. To date, the EPC project has shown 20,000 vegetation prop scars are visible in Little Cockroach, Tom Ash said this week. Ash, general manager in the EPC's restoration section, called the mapping results "pretty dramatic," indicating prop scarring of a "very extreme and damaging" nature.

However, while Ash and Muench agree on the importance of seagrass preservation, Ash questions whether a marine sanctuary designation will accomplish the objective. Would it be any easier to enforce protection standards in a marine sanctuary than it would be under another type of control such as a county level ordinance mandating "pole and troll" crossing of the grasses, he asked rhetorically.

Full story and source:

[http://www.observernews.net/artman2/publish/Top\\_Stories/Cockroach\\_Bay\\_Protections\\_Debate\\_to\\_Continue\\_in\\_2008.shtml](http://www.observernews.net/artman2/publish/Top_Stories/Cockroach_Bay_Protections_Debate_to_Continue_in_2008.shtml)

### **Port Everglades Master/Vision Plan Approved (Norcross, GA, USA)**

02 January 2008, by Steve Hudson Associated Construction Publications

Port Everglades, Fla. – Port Everglades has received approval from the Broward County Board of County Commissioners to move forward with a comprehensive Master/Vision Plan, including a five-year Capital Improvement Plan plus 10- and 20-year Vision Plans.

Capital works include: reconfiguration of berths to accommodate larger ships, construction of an intermodal container transfer facility, expansion of cruise terminals to allow for the new generation of mega-cruise ships,

Environmental highlights of the 20-year Vision Plan include: maintaining a safe habitat for the abundant manatee population that migrates to Port Everglades each winter; Improving the functionality of the sensitive environment in Westlake Park, including the mangroves, seagrass and wetlands that support the park's wildlife; Implementation of a "Green Port Program" to manage the Port environment through integrated decision-making with Port operations, tenants, customers and the general public.

Full story and source: <http://www.acppubs.com/article/CA6516197.html>

### **Plan for Midnight Pass is headed to Tallahassee Sarasota, FL, USA**

02 January 2008, by Roger Drouin, Sarasota Herald-Tribune

SARASOTA -- Sarasota County officials will travel to Tallahassee next month to push their plan for reopening Midnight Pass. The trip is the latest effort in a three-year campaign to persuade the Florida Department of

Environmental Protection to issue a permit allowing the county to dredge the 400-foot channel that was closed 24 years ago.

Spencer Anderson, coastal program manager with the county, will unveil the county's detailed plan to plant 24 acres of seagrass beds and restore a lagoon and mangrove environment. This mitigation plan is designed to recreate habitat that would be removed during the dredging project. In addition, Anderson plans to highlight studies that county officials believe show the dredging will trigger a recovery of Little Sarasota Bay.

Supporters of the project have argued for two decades that reopening the pass would allow salt water to flush into Little Sarasota Bay. This would trigger a recovery of sea grass habitat and make the area once again hospitable to a variety of small animals and fish. The county now has data showing that reopening the pass would lead to an additional 86 acres of sea grass beds.

Some environmentalists oppose reopening the pass because they say that a new ecosystem, a hatchery for fish and shellfish, has been created, and that the pass would destroy parts of that environment.

*Full story and source: <http://www.heraldtribune.com/article/20080102/NEWS/801020599/-1/newssitemap>*

### **Fertilizer limits feed debate (Fort Myers, FL, USA)**

02 January 2008, by Kevin Lollar The News-Press

After years of nutrient-related algal blooms in Lee County waterways, the county is working on a fertilizer ordinance that doesn't sit well with many in the landscaping industry.

Lee County's big water problems started after extremely wet rainy seasons in 2004 and 2005. Heavy rains filled Lake Okeechobee to record levels, so water managers released huge amounts of nutrient-rich water down the Caloosahatchee River; at the same time, nutrients from land between the lake and Gulf of Mexico poured into the river. These added nutrients triggered massive algal blooms that smothered seagrass beds and depleted oxygen in the water.

Critics say the county's ordinance is too strict and doesn't follow a manual called "Best Management Practices for Protection of Water Resources in Florida," which makes recommendations on fertilizer use. The manual was developed by state agencies, universities and private industry. One sticking point about Lee County's ordinance is that it would allow no fertilizer use during an as-yet unspecified "blackout period" of the rainy season because rain flushes nutrients into waterways.

*Full story and source: <http://www.news-press.com/apps/pbcs.dll/article?AID=/20080102/NEWS0105/801020347/1075>*

### **Seagrass Bald Spots Cause Head-Scratching (Tampa, FL, USA)**

30 December 2007, by Susan M. Green, The Tampa Tribune

APOLLO BEACH - Standing ankle-deep in clear water, Robin Lewis doesn't really need his snorkel and mask to see what he came to see. Under his wading boots, gleaming between the ripples of sunlight on the water's surface, the sand looks as white and barren as a sun-bathed beach temporarily flooded at high tide. A half-century ago, a visitor likely would have been ankle-deep in seagrass.

Scientists are pretty sure they know what killed the grass: untreated sewage and other polluted runoff into Tampa Bay in the 1960s and '70s. But much of that was cleaned up in the 1980s and '90s, and seagrass beds across the Bay have been making a dramatic comeback. Still, some big patches, including a spot where Wolf Branch Creek empties into the Bay, stubbornly remain bald or sport a few sprigs where lush meadows used to be.

Lewis, a wetland scientist who has studied Tampa Bay for more than 40 years, is among experts trying to figure out why and come up with a formula to promote seagrass growth. One theory: There used to be a symbiotic relationship between seagrass and underwater sand bars, including a long mound that stretched maybe two miles along the shoreline from Apollo Beach to Ruskin.

Aerial photographs dating to the 1930s and '50s show seagrass on both sides of the underwater linear mounds. Could the vegetation on the outer edge of the bars have anchored the sand and kept it from washing away? Or did the bars buffer the seagrass beds that nestled in the crevice between sand and shore? Lewis' efforts are among several projects examining the role of longshore bars in seagrass recovery being coordinated by the Tampa Bay Estuary Program. Lindsay Cross, an environmental scientist overseeing the longshore bar projects for the estuary program, said about \$700,000 in state, federal and local grants has been allocated for related studies.

*Full story and source: <http://www2.tbo.com/content/2007/dec/30/me-seagrass-bald-spots-cause-head-scratching/>*

*Related links: [http://www.upi.com/NewsTrack/Science/2007/12/30/seagrass\\_disappearance\\_caused\\_by\\_pollution/5686/](http://www.upi.com/NewsTrack/Science/2007/12/30/seagrass_disappearance_caused_by_pollution/5686/)*

*[http://www.mysuncoast.com/Global/story.asp?S=7558221&nav=menu577\\_2\\_1](http://www.mysuncoast.com/Global/story.asp?S=7558221&nav=menu577_2_1)*

*<http://www.heraldtribune.com/article/20080101/NEWS/801010363>*



## **Red tide claims manatees (Melbourne, FL, USA)**

29 December 2007, by Jim Waymer, Florida Today

At least two manatees died an agonizing death from red tide in Brevard County and another five also are suspected victims of the toxic algae, officials said Friday. "They actually asphyxiate," said Ann Spellman, a marine mammal biologist with Florida Fish and Wildlife conservation Commission. "The animal suffocates."

Spellman collected a dead manatee near the Kennedy Space Center on Friday and another Wednesday near the Florida Power & Light power plant in Port St. John. Florida wildlife officers towed another dead manatee to Kelly Park in Merritt Island on Friday. Through the end of November, red tide killed at least 46 manatees this year in Florida, including two confirmed in Brevard and two in Volusia County.

Manatees die from red tide because the algae toxin concentrates on the seagrass they eat and the mammals breathe the poison right at the water's surface. Resting manatees that don't move much are normal, but Spellman said people should call a state hotline to alert biologists to rescue a manatee if they notice the animal's face and lips twitching with tremors and the animal struggling to stay at the surface.

*Full story and source: <http://www.floridatoday.com/apps/pbcs.dll/article?AID=/20071229/NEWS01/712290339/1006>*

## **Stormwater project ahead of schedule in Indian River County (West Palm Beach, FL, USA)**

28 December 2007, By Ed Bierschenk, TCPalm

INDIAN RIVER COUNTY — The first stage of a multimillion-dollar project to clean up stormwater flowing into the Indian River Lagoon from the Main Relief Canal is ahead of schedule and the second stage could begin by May. A filtration system designed to remove plants and other material that can prove harmful to the lagoon currently is being constructed southeast of the Vero Beach Municipal Airport, west of the railroad tracks.

A 300-mile long network of canals that drains about 53,000 acres of county land are overseen by the water control district, but the county's stormwater engineering division has a memorandum of understanding allowing it to erect structures to clean up the water. Pollution discharged into the river through the Main, South and North relief canals causes symptoms to marine life such as open lesions and tumors and is killing sea-grass beds, according to a 2005 report by the county's Stormwater Engineering Division.

The almost \$5 million structure being built near the airport, scheduled to be completed around the end of July, will remove items as small as 1/16th of an inch, including a variety of freshwater vegetation. According to Keith McCully, head of the stormwater engineering division, these plants die off in the salty water of the lagoon and cover up seagrasses and also release nutrients into the water, which helps algae growth that can harm the aquatic environment.

*Full story and source: <http://www.tcpalm.com/news/2007/dec/28/stormwater-project-ahead-of-schedule/>*

## **Improving outlook for seagrass could complicate development of some waterfront properties (North Carolina, USA)**

24 December 2007, by Gareth McGrath, StarNews

For decades state regulators have treated the underwater forests of grass in North Carolina's shallow coastal waters like gold, limiting dredging and dock building around them. Then a funny thing happened.

Clusters of seagrass, collectively known as submerged aquatic vegetation, since it includes several grass species, began popping up in places where it hadn't been seen in years. Whether the grasses are recolonizing old habitat or expanding their range, and why, isn't entirely understood by researchers.

But the growth of seagrass beds along the coast comes as state agencies are working on a revised definition of SAVs that could significantly expand the shallow waterway areas protected from human disturbance, and that could have a profound effect on how waterfront property owners develop their properties.

Officials with the N.C. Division of Marine Fisheries have said the definition must be modified to more accurately describe SAV habitat and ensure areas that could support seagrass are properly identified. Fisheries officials have said a broad-based definition is important because some SAVs are seasonal while other grass species can appear one year but not the next, making it difficult to determine where they're located.

*Full story and source: <http://www.starnewsonline.com/article/20071224/NEWS/712240361/-1.xml>*

*In the previous E-bulletin (28 December 2007), an article stated that the area of seagrass (submerged aquatic vegetation) in North Carolina was expanding. This in fact was not correct, nor can it be substantiated, as there are no monitoring programs currently in place. To help clarify the issue, the original article was sourced and is presented with it's link above.*

*Although Seagrass-Watch HQ does not guarantee the accuracy of media articles, if you find an article which you believe is inaccurate, please let us know so we can make our readers aware.*

## Virtual Herbarium

### New Herbarium specimens from

#### Australia

**Mackay** [http://www.seagrasswatch.org/herbarium\\_australia.html#MAC\\_HEB1](http://www.seagrasswatch.org/herbarium_australia.html#MAC_HEB1)

Sarina Inlet

**Mission Beach** [http://www.seagrasswatch.org/herbarium\\_australia.html#Miss\\_HEB1](http://www.seagrasswatch.org/herbarium_australia.html#Miss_HEB1)

Dunk Is

Lugger Bay

**Western Australia** [http://www.seagrasswatch.org/herbarium\\_australia.html#WAus\\_HEB1](http://www.seagrasswatch.org/herbarium_australia.html#WAus_HEB1)

Chile Creek

One arm Point

Roebuck Bay

**Whitsundays** [http://www.seagrasswatch.org/herbarium\\_australia.html#WHIT\\_HEB1](http://www.seagrasswatch.org/herbarium_australia.html#WHIT_HEB1)

Hamilton Is

Hydeaway Bay

Pioneer Bay

**Torres Strait** [http://www.seagrasswatch.org/herbarium\\_australia.html#TStrait\\_HEB1](http://www.seagrasswatch.org/herbarium_australia.html#TStrait_HEB1)

Thursday Is

Horn Is

Hammond Is

**Indonesia** [http://www.seagrasswatch.org/herbarium\\_asia.html#INDO\\_HEB1](http://www.seagrasswatch.org/herbarium_asia.html#INDO_HEB1)

Bali

**Singapore** [http://www.seagrasswatch.org/herbarium\\_asia.html#SING\\_HEB1](http://www.seagrasswatch.org/herbarium_asia.html#SING_HEB1)

Cyrene Reef

P. Semakau

**Fiji** [http://www.seagrasswatch.org/herbarium\\_pacific.html#FJ\\_HEB1](http://www.seagrasswatch.org/herbarium_pacific.html#FJ_HEB1)

Denarau Is

Ovalau

**New Caledonia** [http://www.seagrasswatch.org/herbarium\\_pacific.html#NCAL\\_HEB1](http://www.seagrasswatch.org/herbarium_pacific.html#NCAL_HEB1)

Anse Vata

## FROM HQ

**Seagrass-Watch News Issue 31** <http://www.seagrasswatch.org/newsletters.html>

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**Virtual Herbarium** <http://www.seagrasswatch.org/herbarium.html>

**Giveaways** <http://www.seagrasswatch.org/shop.html#GIVE1>

- Seagrasses of Australia
- Phytoplankton Guide
- Seagrass Biology (Volume 2 only)
- Bookmarks
- Stickers
- Seagrass-Watch Newsletter 31 (hardcopy)
- Seagrass-Watch Newsletter 30 (hardcopy)
- Seagrass-Watch Newsletter 29 (hardcopy)
- Seagrass-Watch Newsletter 28 (hardcopy)

**Future sampling dates** <http://www.seagrasswatch.org/sampling.html>

**Handy Seagrass Links** <http://www.seagrasswatch.org/links.html>

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