

From: [Nina Toscano](#)
To: [Pat Gayle-Gordon](#)
Subject: Fwd: Seaweed
Date: Friday, August 09, 2019 8:35:15 AM

Good morning, Pat. Please see below. I am @ the dr's and should be there around 9. Thanks. See you then.

Sent from my iPhone

Begin forwarded message:

From: Kirk Blouin <KBlouin@TownofPalmBeach.com>
Date: August 9, 2019 at 8:31:12 AM EDT
To: Nina Toscano <NToscano@TownofPalmBeach.com>
Subject: FW: Seaweed

Nina,

Please add these email thread to the TC books if they have yet to pick up or place in purple folder for next weeks meeting. Thank you.

From: Robert Weber <RWeber@TownofPalmBeach.com>
Sent: Thursday, August 08, 2019 4:18 PM
To: Kirk Blouin <KBlouin@TownofPalmBeach.com>
Cc: Jay Boodheshwar <JBoodheshwar@TownofPalmBeach.com>; Paul Brazil <PBrazil@TownofPalmBeach.com>; Patricia Strayer <PStrayer@TownofPalmBeach.com>
Subject: Re: Seaweed

Kirk,

Removing seaweed from the beach is currently being permitted by FDEP as a one-time event and is not available year-round. Only raking with burial can be permitted long-term.

Assuming the unit rates from the existing contract with the same raking frequency, and that access for the tractor can be provided to the contractor, the cost to rake and bury seaweed for the entire Town would be an estimated \$309,120 annually (\$5,945 per week, or \$25,760 per month).

These values are based on a conversation I just had with Clayton Peart of Universal Beach Services (our current contractor). For the purposes of this inquiry, he suggested that the current unit rate for the public beaches be extrapolated for the entire Town. Although there might be some economy of scale savings, access would be limited and

require some back-tracking.

The current contract is \$42,000 to twice a week (Mondays and Fridays) clean Mid-Town (4,300 feet) and Phipps (4,300 feet). This scope is 13% of the entire shoreline and equates to about \$4.80 per foot per year to cover these public beaches. The entire Town is 12.2 miles (64,400 feet). To take on such a large scope increase, some beaches would need to be cleaned on other days of the week.

A scope increase of more than 750% would certainly require that we re-bid the beach raking work which would result in an actual cost that would be different from the estimate provided above.

Rob

Robert Weber
Coastal Program Manager
Town of Palm Beach

On Aug 8, 2019, at 3:08 PM, Kirk Blouin <KBlouin@townofpalmbeach.com> wrote:

Rob,

Good job putting this together. What is the annual cost to continually remove the seaweed from the entire Town (Weekly, Monthly).

Thank you, Kirk.

From: Robert Weber <RWeber@TownofPalmBeach.com>

Sent: Thursday, August 08, 2019 1:30 PM

To: Kirk Blouin <KBlouin@TownofPalmBeach.com>

Cc: Jay Boodheshwar <JBoodheshwar@TownofPalmBeach.com>; Paul Brazil <PBrazil@TownofPalmBeach.com>; Patricia Strayer <PStrayer@TownofPalmBeach.com>

Subject: Seaweed

Kirk,

In anticipation for questions regarding seaweed that may arise at the upcoming Town Council meeting, I have visited several locations within the Town and throughout the County. In addition, I been in touch with the County, other municipalities within the County, two field representatives from FDEP, and two prospective contractors.

Beach Observations

<!--[if !supportLists]-->• <!--[endif]-->A large amount of seaweed

has accumulated at the north end of the Town along approximately 1,000 linear feet (between the inlet and approximately Arabian Road). It is at least 40 feet wide and at least 3 feet thick. These dimensions roughly equate to more than 4,000 cubic yards of seaweed.

• The amount of seaweed on the beach at the north end is significantly more than the rest of the Town.

• Observations were made at Jupiter Inlet Park, Juno Beach, and Singer Island. The density and volume of seaweed in these areas are consistent with the majority of the Town of Palm Beach shoreline.

Actions by Others

• Palm Beach County is not raking or removing seaweed from its managed beaches.

• The City of Boca Raton rakes their public beaches and buries seaweed (much like the Town) and has not performed anything additional this summer.

• FDEP has confirmed that the only government entity in South Florida that has requested removal of seaweed from the beaches is Miami-Dade County.

Options

1. Do nothing and wait for the U.S. Army Corps of Engineers to bury the sand with dry beach placement of the inlet maintenance dredging project (tentative start in November 2019);

2. Assist the seven homeowners that are directly impacted with obtaining a permit, identifying a contractor, and assisting with project management to remove the seaweed from their respective private properties at their expense; or

3. Obtain a permit, identify a contractor, and assist with project management to remove seaweed from private property using Town funds (cost below).

Estimated Cost

• Public Works staff has reached out to two (2) firms to identify an estimated cost for removal.

• The first firm, Eastman Aggregates, would use a bulldozer to push the seaweed to Angler Avenue. They would then have a loader on the beach pick up the seaweed and load into their trucks. The proposal received is for

\$20,800 using the rates from a continuing services contract with Palm Beach County. The work would be completed in about one week. The seaweed would be hauled to the Solid Waste Authority. The SWA accepts vegetation at a rate of \$42 per ton. Using a factor of 0.20 (400 pounds per cubic yard), a volume of 4,000 cubic yards of wet seaweed could equate to 800 tons. 800 tons x \$42 per ton is \$32,800. With a 15% contingency, a budget would likely need to be established for \$61,640.

• The second firm, Universal Beach Services, currently has a contract to rake seaweed along the Town's public beaches. The hourly rate of \$175 for a tractor with operator would be available. This tractor has a front bucket size of 2 cubic yards. The tractor would need to make approximately 2,000 trips to the nearest access point (Angler Avenue) to load into dump trucks. This process would likely take more than a month and would have a cost that exceeds \$50,000 before the costs of the dump trucks or disposal at the SWA are included. With time and cost, this method is not recommended.

• The use of Angler Avenue for either option would impact the existing sea oats. The estimated cost to replant sea oats in this area following a seaweed removal process would be approximately \$3,000 and would need to be added to the overall cost of the project.

The Town's annual budget for beach raking on the public beaches is \$50,000 per year.

Please let me know if you need any additional information.

Thank you,

Robert Weber
Coastal Program Manager

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