


BAL HARBOUR

- V I L L A G E -

OFFICE OF THE VILLAGE MANAGER

LETTER TO COUNCIL

NO. 090-2019

To: Mayor Gabriel Groisman and Members of the Village Council
From: Jorge M. Gonzalez, Village Manager 
Date: May 24, 2019
Subject: **Recent Excessive Accumulated Sargassum Seaweed Removal Activity**

The purpose of this Letter to Council (LTC) is to transmit to you information regarding the recent actions taken by the Village to address the sargassum seaweed accumulation on the northern section of the Bal Harbour Beach near the Baker's Haulover Inlet Jetty and throughout the beach.

This seaweed accumulation is a natural occurrence annually and there are many factors such as winds, tidal movement and seawater temperature which influence the volume of seaweed in the Atlantic Ocean which may accumulate on our beach shoreline. The observed volume of sargassum seaweed this year is again extremely large with much of the State of Florida and the Caribbean Region experiencing this occurrence. The excessive Sargassum Seaweed shoreline accumulation occurred much earlier than previous years. Last year this phenomenon occurred in early July. During this past month, we have experienced consistent eastern and southeastern winds. These winds are causing the large amount of seaweed that is in the ocean to wash ashore.

We continue to monitor the wind, seaweed accumulation, and the tides on a daily basis in order to plan for the cleaning efforts at the best possible time for seaweed raking. Typically, services are performed in the mornings between the hours of 7:00 am to 9:00 am. This time period falls immediately after the sea turtle nest inspections performed by staff from Miami Dade County and before the hotels and condominiums place their beach chairs and equipment on the sand. The objective is to begin at the northern area of the beach and proceed southward performing these services to address the accumulation of seaweed from the previous evening's high tide periods. If high tide occurs after the morning cleaning window has passed, Village staff and the Beach cleaning service provider are limited in their ability to perform beach cleaning due to the presence of patrons and the beach chairs and equipment placed throughout the beach areas. The removal of seaweed within the water is not authorized under the beach cleaning permit.

Additionally, the Village has obtained the annual re-authorization from the Florida Department of Environmental Protection (FDEP) to utilize Village-owned equipment on the beach for small cleanups and general beach raking. This annual permit allows for the dressing of the beach sand and rolling of the deposited seaweed several inches beneath the beach. If the volume of seaweed is greater than the amount which can be rolled into the sand, a special emergency permit is required from FDEP. This emergency permit authorizes the removal of seaweed from the beach area and disposal at an authorized disposal location for a limited short specified time period.

Recently the Village also obtained a four-day emergency permit to remove seaweed using machinery from May 14th - 17th. The Village assisted Beach Raker with Village-owned machinery to remove seaweed near the Jetty on May 14th. Beach Raker collected and piled up seaweed for two (2) days and hauled away seaweed for two (2) days. One (1) of the days contained overlapping work and the project lasted for a total of three (3) days. Beach Raker removed one hundred eighty (180) cubic yards of seaweed from the beach. This amount is equivalent to nine (9) dump truck loads of seaweed. It should be noted that prior to removal, the seaweed collected must be inspected to ensure no turtle hatchlings are present in the debris collected. This emergency seaweed removal and disposal was performed at an additional cost of twelve thousand six hundred fifty dollars (\$12,650), with most of the cost due to the disposal fees.

On May 1st the Village also ordered a secondary afternoon cycle of beach raking to bury the seaweed that accumulated on shore. This work was primarily performed on the northern portion of the beach.

The additional work was performed by the vendor at the same rates which were recently approved by the Village Council on May 21, 2019. The Village has also performed daily inspections of the work being performed by the contractor. The seaweed is still washing ashore and will likely continue throughout the summer. The removal of seaweed from the beach utilizing dump trucks will be a last resort as the operation is costly and requires special permission from FDEP which is reluctant to give permission due to the current Sea Turtle Nesting Season.

In anticipation of the Memorial Day Holiday weekend, a review of the anticipated tide conditions was conducted to plan for the cleaning of the beach at the optimum time periods. The expected high and low tide periods is provided in the chart below:

Day	High	Low	High	Low	High
Sat 25	2:54 AM	9:39 AM	3:09 PM	9:56 PM	
Sun 26	3:42 AM	10:34 AM	4:04 PM	10:52 PM	
Mon 27	4:33 AM	11:29 AM	5:02 PM	11:48 PM	

As detailed within the chart on the previous page, low tide occurs during the later morning hours which will limit the Village's ability to collect and remove any excessive seaweed deposits. However, the predominate wind directions is forecast to be east to northeast with winds speeds predicted to be at seventeen (17) to nineteen (19) miles per hour. Due to the forecasted wind direction and speed, while seaweed will be present in the water, wave activity will serve to break-up the seaweed and excessive deposits are not likely to occur during this period.

If you have, any questions please feel free to contact John Oldenburg directly.

JO/JMG