Bonnet Shores Fire District Little Beach Summary

The Fire District has to obtain a CRMC Maintenance Certification every 3 years to work on Little Beach

It allows us to rake and remove seaweed in swim area and dinghy beach

Conditions of assent- valid till August 2021

Sea weed removal limited to beach and dinghy beach

Vegetation shall remain in undisturbed condition

No alterations or activities are allowed in area of beach grass, no stockpiling on beach grass and no heavy machinery can operate in this area,

Seaweed may be place on adjacent beach or disposed of at a suitable and legal upland location **Beach grading and sand/ and cobble removal is prohibited.**

What we have tried:

Pushing seaweed over beach jetty which works with certain tides

Pushing seaweed into water as tide going out

Moving it to a different area of beach so at least part of beach is usable

Burying it- limited area

Clean and hauled it – Martinez Landscaping and Construction \$4450 plus (\$2200 to haul which was paid by a taxpayer to a dump) Seaweed had to dry in a dumpster on road for 2-3 weeks.

Road had to be repair due to weight. Seaweed returned. Not interested in doing again.

Hired another contractor (\$1000) this year to breakup dried foot high wall of seaweed and pushed to water –back in 12 hours

Spoken to:

Rose Hill Dump- found out the seaweed is waste and therefore it is charged at 6 cents a pound dry (wet seaweed is 10x heavier)

Spoke to Town: They can't help with seaweed- they bury.

RIRREC- it can't be recycled due to the sand, small rocks, trash and fecal coliform and other possible contaminants

Farms can't take it because it is not processed and too much sand and rock in it

Tried to find multiple contractors in Ct, Mass and RI - no one interested

Spoke to H.S Plaut, Environmental Specialist in CT (leader in beach cleaning technology)-his rake machine is used on Charlestown beach, which is a real sandy beach. He was estimating the cost at our Little Beach to be \$8000-\$10,000 for a one shot deal, and stated it could come back in an hour. In addition, the district would need to rent a truck, a crane, a dumpster and pay to haul the seaweed which would bring the project over \$15,000. Also if you did not dry it the weight would be 10x heavier and you need to make sure that the weather conditions were not hot, because weight of truck would destroy the road.

He also stated size of equipment is an issue due to power lines and access to the beach. We also spoke about bringing a barge into harbor and off loading equipment,but cost was prohibitive

CRMC

Have spoken multiple times over the years and again in July.

Blames Mother Nature

Her suggestion was to have volunteers rake and put in a dumpster.

Suggests continuing to do what we are doing.

There are too many nitrates in the water which doesn't help situation

Newport having same problem and tried skimming – didn't work

Idea of netting/ or marine curtain —can't do due to boats

I asked if we could have boats bag it and dump at sea- the answer was **no**

URI

Marlene had a conversation with Dr. Carol Thornber, Marine Community Ecologlist regarding seaweed at Little Beach. She is familiar with Little Beach.

South Kingston having the same issues.

She also stated it is Mother Nature.

It is not red tide and knows that it smells horrible.

Over time the beach hardens and the beach shrinks which in her opinion is happening.

We can continue to keep cleaning it and it will comeback.

Below are links to three articles: URI professors involved that have looked at the issue all along the coast. This red algae is invasive and aggressive

https://www.sciencedaily.com/releases/2012/09/120913122842.htm

 $\frac{https://www.boston.com/uncategorized/noprimarytagmatch/2012/06/27/invasive-seaweed-threatens-environment-along-new-england-coast}{}$

https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0062261

Other Facts:

We have cleaned the beach as many as 4 times a week with volunteers —each cleaning takes 2-4 hours This summer we only had about 5 days of westerly winds- which takes the seaweed out.

The hurricane coming up the coast will probably make it worse according to Harry Pault.

Months of May, June and July are the worse months for seaweed.

Cleaning the beach is only possible during low tides.

If we bought a surf rake or hired Pault, we would need to get a dumpster every day and have it hauled away.

Also if we were to buy the surf rake or hired contractor-we would need to build a ramp for it to get on the dinghy side, not sure how we would get in on beach side, we would need to move rocks which is prohibited.

Also looked at leasing a bigger tractor, but cost, availability and weight were issues.