

Falmouth Waterways Committee

Dredging Definitions
August 19, 2020

Jeff Thomas
Chairman



Dredging Definitions

- **Types of Dredging**

- Approaches
- Inlets
- Embayments

General Dredging Rules

	Dredging Aquatics TOY	Beach Nourishment TOY
Approaches	Not required	Unlikely
Inlets	Waivers Possible for Critical Needs	Unlikely
Embayments	Waivers Not Allowed	Unlikely

Note: TOY - Time of Year Restrictions



Dredging Time Restrictions

Time of Year (TOY) Dredging Restrictions

Impacts

Dredging

Aquatic
Species Propagation

15

30

Beach Nourishment

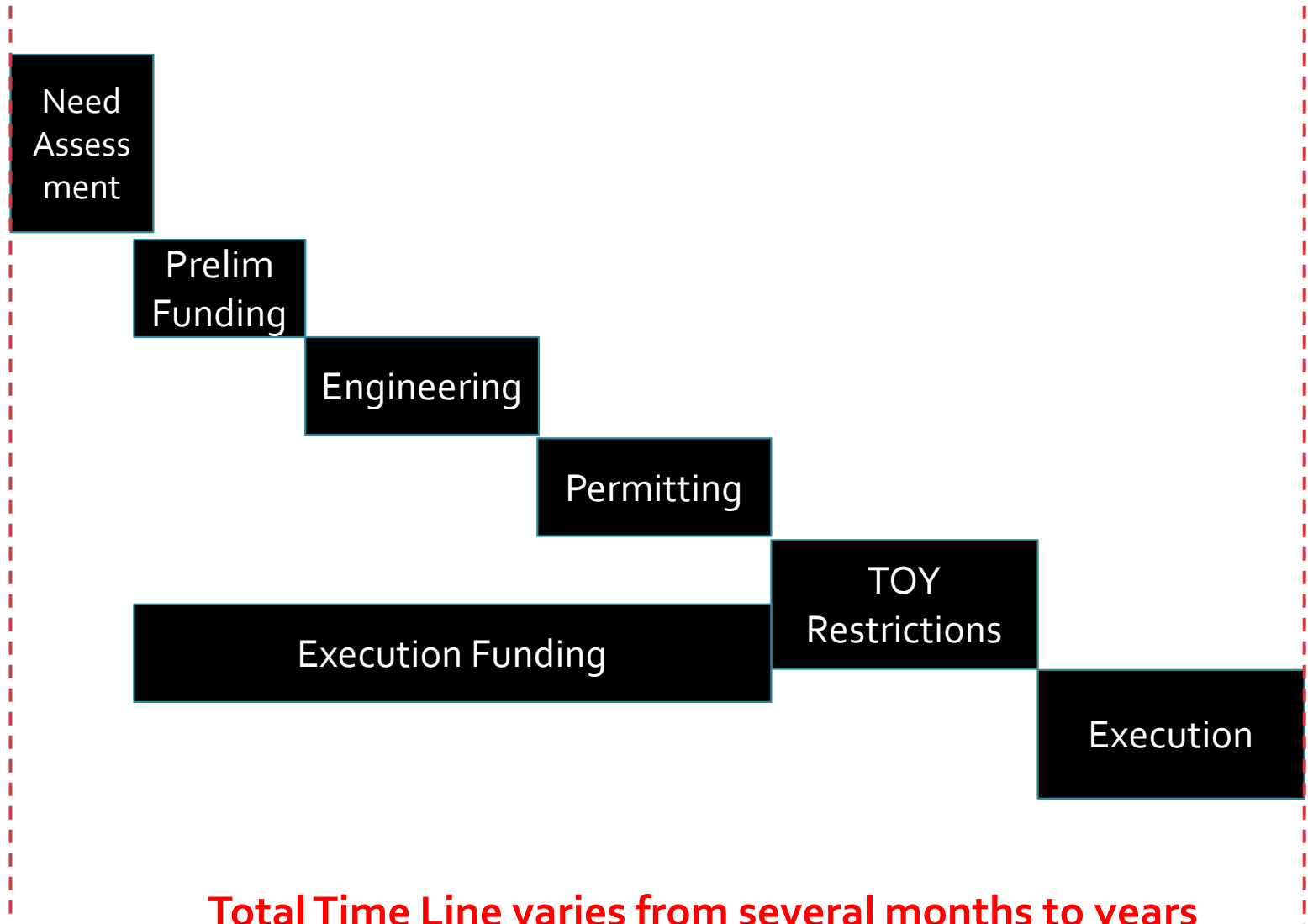
Shore Bird Nesting

1

31

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Aquatic Species Propagation												
Beach Nourishment												
Shore Bird Nesting												

New Dredging Project Timeline



Public Input Submitted to the Falmouth Waterways Committee
Special Meeting for Aug 19, 2020
Dredging List Finalization for Town Priorities

Jeff Thomas
Chairman

Fresh River – John Mullen

Megansett Inner Harbor – Molly Kammerer

Megansett Harbor – Brian Crowley

Megansett Harbor and Rands Canal – John J. Gallagher

Perch Pond – Peter Walsh

Waquoit Bay – Chris Dunn

West Falmouth Harbor – Daniel Shearer

Fresh River

From: John Mullen [REDACTED]
Sent: Monday, August 10, 2020 3:18 PM
To: Gregg Fraser; Falmouth Waterways Committee
Subject: Dredging Fress river

Hi All

My name is John Mullen and my wife and I have a home at [REDCATED] that borders Fresh river. I saw the article in the 8/7 enterprise about dredging lists and there priorities. I have emailed with Gregg before on the dredging that took place back in mid-February on Fresh river and several others. The town was only able to dredge what they could reach from Surf Dr. about 50/75 feet in. as you can see in the photo below. The picket fence on the right is our property.

Most importantly the dredging that took place back in February made a big difference in the water quality at least at the end. This Spring for the first time in many years I saw several Herring taken by Osprey close by the dredging. And more recently this summer I see kids across the river catching crabs/eels/and even a small flounder.

So the amount of dredging that took place in February did a lot for the water quality at the end of Fresh river. So now I would ask that Fresh river be added to the list and prioritized as ASAP because of the ability of the town to use properties such as mine and I have two other key neighbors that will allow the town on there property and I'm sure with little effort I can get more property owners to allow. But the urgency comes with the fact that many homes are in the process of permitting to rebuild and go up, and the Conservation committee insists they put thousands of dollars worth of remediation plantings in on the waters edge to help catch nitrogen and other pollutants from entering the river, and once that happens the town will lose access for future dredging. I think all the dead sea weed and sand that has washed in during storms is much more detrimental to the health of this river and dredging has proved vital .

I also have some thoughts on how to block the inlet to Fresh river and others prior to storms so we could stop all the seaweed and sand from entering and saving \$\$\$ by not having to dredge as much in the future. I have a machine / Heavy Fabrication shop and could build a prototype for Fresh river inlet, if you thought my idea could work.

If you have any questions please call me cell# is [REDACTED]

Thank You
John Mullen



Megansett Inner Harbor

From: Molly Kammerer [REDACTED]
Sent: Tuesday, August 18, 2020 7:47 AM
To: falhmast@falmouthmass.us; Falmouth Waterways Committee; Gregg Fraser
Subject: Public Comment for Hearing dtd August 17, 2020 - Megansett Inner Harbor and Current River Dredging
Attachments: 1981photoofMegansettInnerHarbor.jpg.jpeg

Good day,

My name is Molly (Mary) Kammerer. I am co-owner of three properties in North Falmouth. My family has been vacationing in the Megansett area for over 100 years.

I was happy to hear that dredging within Megansett Harbor will be discussed Wednesday evening. I am hopeful that this will include Megansett Inner Harbor and Current River leading up to Squeteague.

There are a few items I would like to convey:

1. Some dredging history within Megansett Inner Harbor: Dredging has been performed in Megansett before, I had heard that if we had proof that dredging had been performed before, we might have an easier time with permitting. We have a picture that was taken during the subsequent flooding from the 1938 hurricane that includes the dredge that was dredging the harbor at that time. My father, David Mattson, tells the story that my great aunt was saved by the dredge that was in Megansett Harbor working there just before the hurricane struck. I would be happy to send you a copy of the picture. Additionally, my dad can attest that the Perrinis and another family arranged to have some sand dredged in the harbor in the 1950s.
2. Harbor picture from 1981: I include for your review a picture of the harbor in 1981. Please note that there are at least four moorings on the left side of the picture that can no longer be maintained due to extensive silting. I would speculate that this silting is most likely from the installation of the breakwaters.
3. Speaking of history: My dad when he was a kid (now 85) used to dig a canal between Squeteague Harbor and Megansett Inner Harbor making Lawrence Island an island. This connection is now at least 50 feet wide at high tide.
4. Groundings/Safe Transit Needed: We have seen a steady increase of groundings within Megansett Inner Harbor just inside the mooring field. There isn't a week that goes by that we don't see at least one if not two groundings within this area.
5. Cooperative Effort: I am hopeful that if, as a town, we do move forward with Rands Canal that since the equipment is almost on location, we could tackle Megansett Inner Harbor, Current River, and perhaps work with Bourne and Squeteague Harbor to provide them much needed access. It sounds like your work with Waquit might have similar challenges with working with another town, but I am hopeful we can use the same process to make this much needed dredge action possible.

Historically, Megansett Inner Harbor and Current River has ALMOST been selected several times. I am hopeful that this push will be successful.

Thank you for your time and your consideration.

Megansett Inner Harbor 1981 Photo



Megansett Harbor

From: Crowley, Brian [REDACTED]
Sent: Wednesday, August 19, 2020 2:35 PM
To: Falmouth Waterways Committee
Subject: Megansett Harbor Dredging

To Whom it may concern:

Please receive this letter as a recommendation to dredge Megansett harbor. Dredging is needed throughout the harbor. Beginning at the harbor side of the Public beach over to the boat ramp and dock area. Sand has built up in all these areas over the last twenty years. Areas that you can sit down on a chair today used to be under water. Moving toward the back of the harbor, sand bars now reach across from the Falmouth side to almost the Bourne side. Boats can no longer navigate safely and effectively unless it is high tide. This also used to be great place to swim across the channel but today the water is not as clean as it used to be. These areas have been dredged before but probably 50-60 years ago. It is time to fix the harbor. It is for the public good and environmentally sound.

Thanks for considering my request.

Brian and Jane Crowley

[REDACTED]
Megansett

Megansett Harbor and Rands Canal

JOHN J. GALLAGHER

[REDACTED]

N. Falmouth, Massachusetts 02556

[REDACTED]

August 19, 2020

To: Falmouth Waterways Committee (waterways@falmouth.gov)
From: John J. Gallagher
Re: Dredging of Megansett Harbor and Rands Canal

This is a request to have both Megansett Harbor and Rands Canal prioritized as critical for dredging.

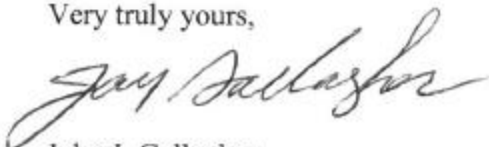
Megansett Harbor – There is major silting of the harbor, especially at the narrow channel where the “Point Beach” and Lawrence Island are on the opposite sides from each other on the channel. This area is very shallow from mid-tide down, substantially limiting the access to the scenic Squeteague Harbor. This also causes a problem for swimmers in the limited area of deeper water that boats are forced to go into also. The silting negatively affects the “flushing out” of the back of the harbor for the hundreds of daily swimmers in the harbor. Also, this now very shallow area is the only access into the Squeteague Harbor (Bourne) and negative quality of the waterways appears to be degrading because of the silt. In the over 50 years I have enjoyed Megansett Harbor, the current silting, shoaling, and water quality is the worse of all those years. My belief is that the town/county have never dredged that area in all that time.

Rands Canal – Huge silting in the channel to the main access and throat into Rands. Often boats drawing 4' or more have to anchor outside of Rands and wait for the tide to allow adequate draft for them to come into the channel. The reciprocal affect is often boats have to leave when it is mid-tide or higher. The quality of the water is not being flushed out because of the large amount of silt in Rands Canal. Rands is the waterway for the million-dollar Herring Run installed in the past 5 years to allow herring to spawn up to Cedar Pond (behind the N. Falmouth library), the high siltration levels will affect this.

I am grateful to your board for reviewing these details as reasons why the Megansett Harbor and Rands Canal should be put on your Dredge List as areas of critical importance.

Thank you for your work on this project.

Very truly yours,



John J. Gallagher

Perch Pond

From: Peter Walsh [REDACTED]
Sent: Friday, August 14, 2020 12:35 PM
To: Falmouth Waterways Committee
Cc: 'Matt Sleeper'
Subject: Dredging Projects for August 19th Meeting

Waterways Committee,

I suggest that the dredging of the channel between Great Pond and Perch Pond should be on the list of potential projects. Many people feel strongly about this project.

According to the Falmouth Enterprise there is a Great Pond Dredging project, but this is different. This dredging project has had several different names, but I am referring to *"Dredging the channel from the Northwest corner of Great Pond to the Southeast corner of Perch Pond."*

The waterways committee has never been turned down for this project by the Conservation Committee. Various residents through last twenty years have unsuccessfully tried to obtain approval and all failed since the last time the Waterways was successful.

Apparently the Waterways Commission is the only group that can obtain approval because local residents have tried and failed to dredge it several times. Here is a little history of the channel dredging.

History of Perch Pond Access Dredging since for the last 20 years

July 1998 – Selectman establish yearly funding for town dredging including this channel.

Nov 2000 – Channel was partially dredged by the town on the Great Pond end but the large county barge was unable to navigate the channel to complete the dredging.

Dec 7, 2002 – A private dredge was able to finish most of the project. This was dredging with the towns permitting and local people paying for the dredging. At this time the time the local people understood that the town would take over all costs to dredge in the future.

March 2007 – When residents inquired about the next dredging, they were told the town would not pay for the dredging this time. From this point Bob Fredette organized a fund raising and applied to the town for a dredging permit. The Conservation Committee turned the group down for not following all the procedures. The group was disbanded in August 2008 when Bob moved from Falmouth.

June 2012 – Perch Pond Preservation Inc. was formed to obtain dredging for the channel. They collected enough money to dredge, but the Conservation Committee required additional expensive biology and engineering studies until the group exhausted their funds. All their money was spent on required studies and PPPI was closed down in 2017.

Since – Other channels were dredged by the town, but not the channel between Great and Perch Pond.

Request

- 1) Please list this channel for dredging and financially support it.
- 2) Please let me know what interested people could do to help raise it's priority.

Thanks for your consideration.

Peter Walsh
Teaticket [REDACTED]

Waquoit Bay

From: Chris Dunn [REDACTED]
Sent: Wednesday, August 19, 2020 6:37 AM
To: Falmouth Waterways Committee
Cc: Jeff Thomas; John Eldert
Subject: Comments for the Public Record - August 19th Waterways Committee Special Meeting

To the Waterways Committee (WWC), the Waquoit Bay Yacht Club (WBYC) offers the following comments for incorporation into the public record of the August 19th WWC Special Meeting and asks that they be included in their entirety as written here.

The published agenda is as follows:

- Special Committee Meeting to complete a list of all of Falmouth's areas that have been dredged in the past, and will potentially be planned to be dredged in the future.
- Prioritize that list in terms of Falmouth's resources, both financially and scheduling.

In establishing priorities for Waquoit Bay, the WBYC wishes to put forth the following for consideration. As previously reported to the WWC by the WBYC in our summary briefing dated February 6, 2019, and as reported at the regular WWC meeting on March 6, 2019:

1) The navigational channel inside of Waquoit Bay is exempt from the ACEC designation, and is further defined in that designation as having a depth of 6 ft. at mean low water (MLW), and a minimum width of 100 feet up to a point off of the existing town landing.

Current survey work completed over two seasons by the WBYC has shown shoaling in the channel such that depths of less than 4 ft MLW now exist in the designated channel between the stretch marked by Green Can 3 and Green Can 7.

The ACEC designation was developed with significant public input through a comprehensive public process. If the WWC is proposing to change the dimensions of the designated channel, the WBYC would like to understand the mechanisms for the incorporation of public input into the adoption of any proposed changes.

2) At the prior regular WWC meeting held on August 5, 2020, Harbormaster Fraser noted that the shoaling in the channel in Waquoit Bay is "not a problem for the average boat" in the bay, and is a problem "only for a few larger boats".

As a matter of principle, constructed facilities are designed and built to accommodate some type of reasonable peak load with a safety factor. Consider the case of a bridge designed to carry only average vehicles. As a public facility, it would fail to service larger vehicles such as trucks, leading to an unsafe condition, and potential bridge collapse. Design for an average vehicle or for an average use does not meet with the standard of practice in an engineered solution and should be seen as the inappropriate approach that it is.

As a working proposal, the established 6 ft depth MLW, 100 ft width should be taken as the relevant design target since these parameters were established during the development of the ACEC. Changes to these design parameters should be undertaken only in concert with public input and perhaps additional input from appropriate

regulatory agencies. These parameters were developed with an understanding of mixed use of the bay by both commercial and recreational traffic of vessels up to the 30 to 35 foot range. (Reference the EIS and Draft Management plan cited below).

3) The Final EIS and Draft Management Plan for WBNERR dated Sept 1984 notes that "Falmouth is developing a management plan for boating and such related activities" within Waquoit Bay.

By this document, the WBYC is requesting information on that plan for review by the WWC as part of its decision making process, if it was developed and published as noted.

Thank you for the opportunity to provide comment for the record.

Chris Dunn

WBYC Dredging Committee

West Falmouth Harbor

From: Daniel Shearer [REDACTED]
Sent: Monday, August 17, 2020 1:49 PM
To: Falmouth Waterways Committee
Subject: Fwd: Attached

Subject: Attached

Good morning:
Attached my reasons for WF harbor to be on list.

Why West Falmouth Harbor Should Be Dredged

West Falmouth Harbor is a recreational harbor with just over 300 registered moorings. The deepest draft boats need 5 feet or so - at all tides. There are no commercial boats but there are many transient boaters using the about-to-be-rebuilt launching ramp. The Town Pier has been rebuilt; donated floats and ramp have been installed. Many fishermen try their luck casting off the pier. The West Falmouth Boat Club is an active participant in keeping the harbor safe and provides a guest mooring for public use.

Previously, WFH has been omitted from the dredging list because of eel grass and oil contamination. Most of the eel grass has disappeared because of excess nitrogen in the harbor. After major efforts by the Town and the Buzzards Bay Coalition to upgrade the sewage treatment plant and to replace aged septic systems around the harbor eel grass and shellfish have started to return. However, the majority of the eel grass is not in the WFH channel and the few sections that are are down quite deep and can be bypassed by the dredging operation. For the ecological recovery to continue, the tidal flushing of the harbor must be maintained and improved, a direct consequence of dredging.

As far as the oil, from a spill from a barge damaged in Buzzards Bay that affected West Falmouth and Wild Harbor, much time has gone by. Wild Harbor was dredged last year with no problems. I am told that the oil, if any is left, is 5-6 feet below the harbor bottom and would not be disturbed by dredging.

A large positive for putting the dredging of WFH on the list is that there is a nearby need for all that sand. The popular Chapoquoit public beach has lost most of its sand to the point where 80% of the beach is under water at high tide. In addition, the newly repaired Chapoquoit Road causeway is no longer protected by sand and is particularly threatened by waves from the prevailing southwest winds and by any long-overdue hurricanes. The town has spent literally millions of dollars on permits and reconstruction of the road but it is still endangered by

constant erosion from waves breaking directly onto the ripwrap and pulling the underlying material back out into the bay.

This missing sand has migrated northward and is now mostly in WFH. It is good, clean sand, of the right consistency and size to put back on the Buzzards Bay side beach. This transfer has historical precedent as WFH sand was piped out to the beach when dredging was done back in the fifties (or maybe the sixties?).

So, WFH needs to be placed on the dredging list, for boaters, shellfishers, eel grass, shellfish, the Town's budget (income from the beach and expenditures on the road) and the beach-going public. Therefore, please add West Falmouth Harbor to the list.