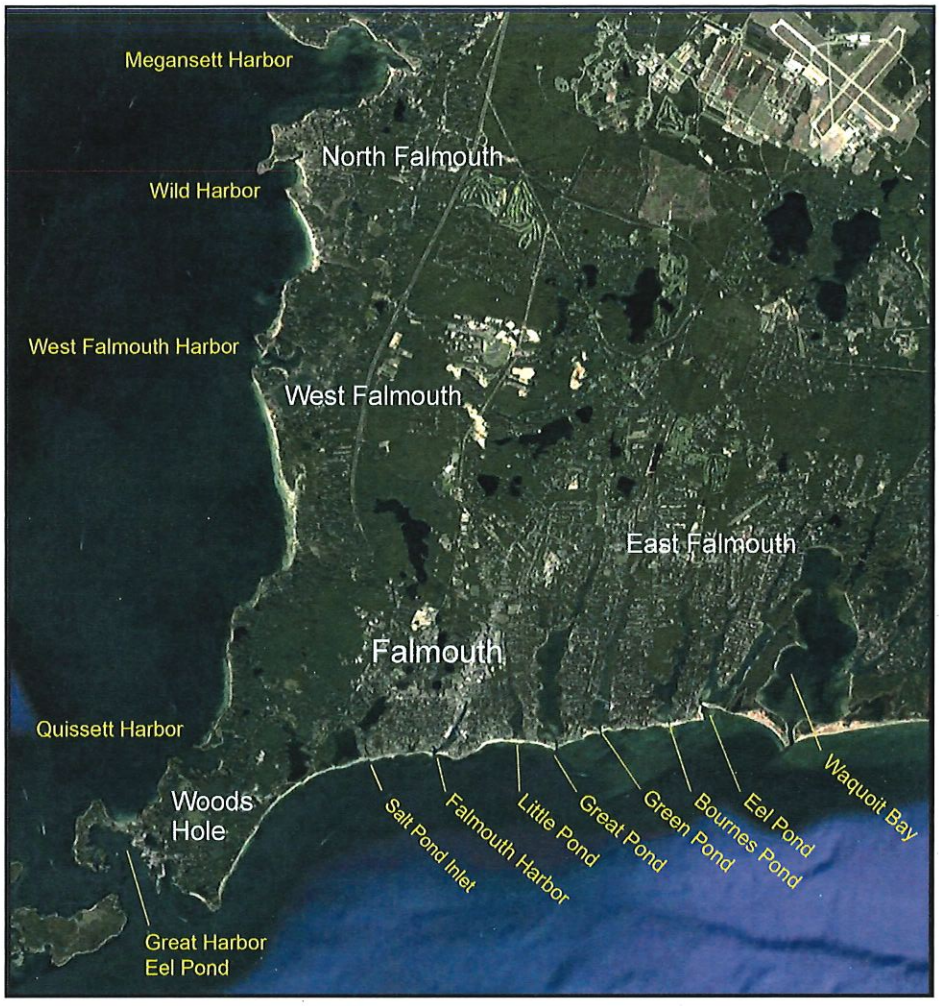
# TOWN of FALMOUTH




## DREDGING PROCESS & GENERAL INFORMATION

**TYPES OF DREDGING:**

1. Maintenance: Consists of dredging which maintains a recently dredged location. Most often associated with annual inlet dredging.
2. Improvement: Consists of dredging areas with no recent maintenance dredging activity.
3. Water Quality: Typically includes mechanical dredging to keep small inlets open for safe fish passage and water flushing. (Trunk River, Fresh River, Salt Pond, Little Pond and other hearing runs) Normally handled by the DPW not Harbormaster/Waterways.

**METHODS OF DREDGING:**

1. Hydraulic: a method used to remove sediment, debris, or other materials from the bottom of water bodies using water flow to transport the material. The most common types of hydraulic dredges are cutterhead pipeline and self-propelled hopper dredges. (Barnstable County Dredge is the former)
2. Mechanical: a method used to remove sediment, debris, or other materials from the bottom of water bodies using mechanical equipment. The most common types of mechanical dredging are dipper dredges and clam shell dredges.

## TYPICAL DREDGE SEQUENCE

A) Request to consider dredging to the Harbormaster and/or Waterways Committee.

B) **Needs Assessment - Phase 1:** Waterways Committee and Harbormaster evaluates the proposal and may include it in their list of future dredging with respective priorities being assigned. Not all requests for dredging will be supported by the Harbormaster and/or Waterways Committee. Dredging priorities are based on the existing condition, cost, use and then availability of funding.

C) **Initial Funding - Phase 2:** Funding is sought for engineering and then permitting. Funding may be obtained for both within the same appropriation. Usually, this funding comes from the capital budget. New items can be added to the capital budget; however, they typically are in subsequent years due to the large number of MES items already existing and waiting in the capital budget.

**Typical initial funding timeline is 12 months.**

D) **Engineering - Phase 3:** Engineering begins after funding is secured and contract award. Depending on the size, scope and complexity of the project, grant funding may be required. Grants are subject to their own specific timeline

**Typical engineering timeline ls 6-9 months.**

E) **Permitting Phase 4:** Permitting involves obtaining the required permission from all local, state and federal regulatory agencies. Permitting starts after all engineering is completed and contract award. Filing requirements depend on the type, scope and complexity of proposed project.

**Typical permitting timeline is 8-24 months.**

Note, additional engineering may be required during this phase if requested by any of the local, state or federal regulatory agencies. Approved dredge spoil disposal options are required in this phase. (Beach, ocean, upland, contaminated site, Etc.)

Some of the typical permits needed for dredging in Massachusetts include the local Conservation Commission Order of Conditions, Select Board Zoning Permit Chapter 240, 401 Water Quality Certificate, DEP Chapter 91 Permit, MEPA approval, EIR/EIS Filing, CZM Federal Contingency Permit, Army Corp of Engineers Permit. For more information on the extensive permitting requirements in Massachusetts for dredging, please refer to the link below:

https://www.mass.gov/info-details/environmental-permitting-in-coastalmassachusetts-0/download

**F) Construction/Dredging Funding-Phase 5** :Three types of funding are usually involved in dredging.

- MES or DPW Department Line Item: Small amount of funding which covers a few annual inlets only. (Falmouth Harbor, Great Pond, Green Pond and Eel River West, Trunk River, Fresh River, Salt Pond and Little Pond)
- Capital Budget Item: Capital items include all town departmental requests; MES items compete with all other town projects for funding. Capital funding requires submission by the department head, approval is required by the Town Manager, Finance Director, Finance Committee and Select Board. (Executive Branch) Funding approval is then required by Town Meeting (LegislativeBranch). Capital budgets are normally acted upon in the November Town Meeting. Note, annual capital requests routinely exceed the amount of available funding each year. Capital requests are frequently delayed into future years for numerous reasons.

- Depending on the size, scope and anticipated cost of the dredging, grant funding may be required. Grant funding usually requires a town match of at least 20% which must be appropriated in the capital budget. Most dredging grants require all permits to be in place and the town match be appropriated prior to application submission. Grants are subject to their own independent timelines.
- When dredging directly affects and benefits abutting communities, municipal cost sharing will likely be required. Municipal funding from other communities is subject to their own priorities and timelines. (Mashpee & Bourne)
- When dredging includes all or part of a federal channel or project, funding may be required from the ACOE's or other federal agencies. (Falmouth Inner Channel, Little Harbor Woods Hole, Great Harbor Woods Hole)
- **Typical construction funding varies (10-year capital budget item)**

**G) Pre-dredge survey** required prior to construction and prior to contract award.
Depending on the size and scope of the project, bidding may be required pursuant to MGL Chapter 30B, if not covered by an intergovernmental agreement.
**The typical bidding time line is 3-6 months.**

**H)** Town's representative to the Barnstable County Dredge Advisory committee schedules dredging with the county, if applicable.

**I) Dredging Phase 6:** Dredging can take place once all above items are completed subject to the Time of Year dredging (TOY) restrictions imposed by local, state and federal regulatory agencies. As a general guideline, TOY restrictions are typically as follows: page 4

Dredging Eel River Inlet: January 2025

**As a general guideline, TOY restrictions are typically as follows:**

| **Protections:** | **No Dredging Allowed:** |
|---|---|
| Various Fish Species+ | January 15" to June 30th |
| Horseshoe Crabs | May1 st toJuly31 st |
| Bird Restrictions/renourishment | April 1st to August 31 st |
| Combined TOYS | January 15" to August 31 st |

- Currently includes Winter Flounder, American Eel, Blueback Herring & Perch

**Typical improvement dredging timeline is 30-36 months**

**Condensed Timeline Summary**

1. Needs assessment, time varies
2. Funding for professional/technical services for Engineering and Permitting, 12 months.
3. Engineering 6-9 months+
4. Permitting 8-24 months+
5. Construction funding-varies by capital budget
6. Bidding if required 3-6 months
7. Dredging up to 12 months++
8. Total Improvement Dredging start to finish estimate is 30-36 months

All timelines referenced are estimates and subject to frequent changes depending on the scope and complexity of the project being permitted.

\+ depends on the size, scope and complexity of the project

++ depends on availability of the dredge and the Time of Year dredge restrictions imposed by regulatory agencies.

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Salt Pond Inlet: November 2023

Dredging Salt Pond Inlet: December 2023