



<b>TO:</b>	<b>Mike Flanagan Town of Wellfleet 300 Main Street Wellfleet, MA 02667</b>	<b>DATE:</b>	<b>June 19, 2014</b>
		<b>BCE#</b>	<b>30777</b>
		<b>RE:</b>	<b>Wellfleet – Dredge Feasibility</b>
<b>FROM:</b>	<b>Seth Lattrell/Russell Titmuss</b>	<b>SUBJ.:</b>	<b>Estimated Timeline &amp; Budget</b>

Mike,

Please see the table below for a summary of anticipated regulatory approvals. Due to cost, environmental constraints, and priority of Area I as compared Area II, the permitting effort outlined below, is for Area I (Access Channels and North Anchorage) permitting only. However, we do recommend presenting the potential for future Area II dredging to MEPA in order to avoid future issues with project segmentation, given that Area II dredging is discussed within the feasibility study report.

<b>Agency</b>	<b>Application Type</b>	<b>Note</b>
MEPA	Expanded ENF w/ EIR waiver	Recommend a pre-application meeting prior to filing to identify potential environmental concerns, and to reduce likelihood of a mandatory EIR. Due to the area of dredging (>10 acres), the project categorically requires an EIR, however MEPA may waive this requirement given that the proposed work is strictly maintenance. An EIR requires significantly more thorough analysis of impacts and alternatives, increasing the timeline and cost of the permitting.
USACE Marine Analysis Section	Suitability Determination*	If seeking offshore disposal (recommended), the USACE will likely require biological testing of the material to ensure contaminants will not adversely affect organisms inhabiting the disposal site.
Con Com	Notice of Intent	Will include separate review by the Natural Heritage and Endangered Species Program (NHESP) for impacts to mapped rare wildlife habitat
MA DEP	Water Quality Cert.	
USACE	Category II	Work will be eligible for a Category II, provided that the Corps does not consider NHESP habitat as a “Special Aquatic Site” which would trigger an Individual Permit and extend the review period approximately 2 months.
MA DEP Waterways	Chapter 91 Permit	

\* **Suitability Determination** for offshore disposal will require at a minimum, physical and chemical analysis of the sediment. It is also highly likely that the material will require a full complement of biological testing, including bioassay and bioaccumulation testing. As outlined in the Sampling Plan issued by the Army Corps of Engineers, the project will require 14 samples analyzed for grain size. Grain size results will be submitted to the Corps for compositing prior to chemical testing. Chemical results may then be submitted to the Army Corps and reevaluated for compositing for biological testing. Biological testing will require at least one additional round of sampling and will take approximately 4 months.



Proposed Timeline based on months from Notice to Proceed (NTP)

- |                                                                    |                                                                         |
|--------------------------------------------------------------------|-------------------------------------------------------------------------|
| 1. Kick off meeting                                                | 2 weeks from NTP                                                        |
| 2. Pre-Application meeting                                         | 6 weeks from NTP                                                        |
| 3. Dredge Material sampling                                        | 8 weeks from NTP                                                        |
| 4. Dredge Material Lab Testing                                     | 10 weeks from NTP – Bulk Chemistry only                                 |
| 5. Biological testing (if required)<br>& Suitability Determination | 5 to 8 months from NTP                                                  |
| 6. ENF filing                                                      | 10 weeks from NTP                                                       |
| 7. ENF Review and Decision                                         | 16 weeks from NTP                                                       |
| 8. File all other Permit Applications                              | 16 weeks from NTP                                                       |
| 9. Review time for following permits from filing application       |                                                                         |
| Conservation Commission                                            | 2 to 3 months                                                           |
| MA DEP Water Quality                                               | 3 to 4 months                                                           |
| MA DEP Waterways                                                   | 3 to 4 months                                                           |
| US Army Corps of Engineers Cat 2                                   | 2 to 3 months after Suitability Determination (7 to 10 months from NTP) |

Budget Costs

The following budgets are based upon previous projects using EnviroSystems Inc. and TG&B Marine Services. These are intended to be estimates for planning purposes and are subject to change depending on final compositing plans from the USACE Marine Analysis Section. We have requested quotes to confirm current costs. We have based costs on 3 samples for Biological testing but this could reduce to 2 samples based on determination by US Army Corps. If number of samples is reduced, budget costs would be prorated by 66%.

Testing is typically in three phases although the second and third phases can be combined to reduce timeline. Splitting biological testing into two phases is intended to reduce risk of wasting money on bioaccumulation if material fails bio assay testing. In other words, there is no point in starting very expensive bioaccumulation testing if material cannot pass earlier phases of testing.

Phase 1 – Grain Size & Bulk Chemistry

Phase 2 – Biological Testing – Bio Assay

Phase 3 – Biological Testing – Bio Accumulation

<b>Bulk Chemistry</b>		
Collection of 14 Samples	<b>\$10,000</b>	
Grain size Testing (14 samples)	<b>\$1,750</b>	
Bulk Chemistry Testing (7 samples)	<b>\$6,200</b>	
		<b>\$17,950</b>
<b>Biological Testing</b>		
Collection of 14 Samples	<b>\$10,000</b>	
Bio Assay Testing	<b>\$45,000</b>	
<b>Biological Testing</b>		<b>\$55,000</b>
Collection of 14 Samples	<b>\$10,000</b>	
Bio Accumulation Testing	<b>\$90,000</b>	
		<b>\$100,000</b>
<b>TOTAL for Sampling and Testing</b>		<b>\$172,950</b>

Budget for Engineering Costs to prepare and file all permits listed would be \$35,000 excluding Final Design and Bid Documents. Total budget should be about \$200,000.