

**From:** Sneeringer, Paul J NAE  
**To:** [Mike Marsh](#)  
**Cc:** ["Ann Williams"](#); ["Phil Colarusso"](#); [Cynthia Catri](#); [ElaineT Stanley](#); ["Ford, Kathryn \(FWE\)"](#); [Jackie Leclair](#); ["Carl Deloi"](#)  
**Subject:** FW: South Marine Terminal - Ratios for Shellfish Mitigation Replacement (UNCLASSIFIED)  
**Date:** Monday, June 11, 2012 12:25:00 PM

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Classification: UNCLASSIFIED  
Caveats: NONE

Mike:

At last Thursday's South Terminal meeting with EOEEA and Apex, basic information about the Massachusetts Division of Marine Fisheries' ("MA DMF") REVISED Shellfish Mitigation Proposal for the South Terminal Project was presented. As part of this presentation, we learned that the shellfish relaying proposal had been dropped and that MA DMF was recommending to seed a smaller number of larger shellfish.

As a result of this presentation, you asked me if the Corps mitigation guidance/checklist included any information on appropriate shellfish reseeding ratio. Although there is no specific information about appropriate shellfish reseeding ratios in the Corps mitigation guidance document, it appears that a 2:1 (replacement : impacted) ratio was used in the development of the essential fish habitat "in-lieu fee" program with MA DMF (see e-mail ladder below for more details).

I was also able to talk with Kathryn Ford of MA DMF this morning. Kathryn indicated that MA DMF usually starts with an assumption that approximately 40% of the seeded shellfish will survive. Therefore, they typically start with a 2.5 : 1 (replacement : impacted) ratio for shellfish replacement work. This ratio can be tweaked dependent upon site conditions, etc.

Kathryn also indicated that their recent recommendation of reseeding 5-6 million shellfish was based upon their understanding that the South Terminal Project would impact between 2-3 million individual shellfish. This reseeding number will need to be increased if shellfish impacts are in fact closer to the 9,285,300 individuals documented in the Commonwealth's January 2012 application. Continued coordination with MA DMF is necessary to determine appropriate estimates for the impacts and reseeding numbers. Feel free to contact me if you have any questions about this e-mail. Thanks.

Paul Sneeringer  
(978) 505-9216

P.S. Feel free to forward this e-mail to EOEEA and Apex, is appropriate.

-----Original Message-----

From: Ladd, Ruth M NAE  
Sent: Monday, June 11, 2012 7:53 AM  
To: Sneeringer, Paul J NAE  
Cc: Adams, Karen K NAE  
Subject: RE: Ratios for Shellfish Mitigation Replacement (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Since the shellfish are unharvestable (due to the contamination, I assume), I think the 2:1 ratio will be OK - unless you feel otherwise!

-----Original Message-----

From: Sneeringer, Paul J NAE

Sent: Friday, June 08, 2012 4:19 PM  
To: Ladd, Ruth M NAE  
Cc: Adams, Karen K NAE  
Subject: RE: Ratios for Shellfish Mitigation Replacement (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Ruth:

The area where the shellfish impacts are proposed is within an area of New Bedford Harbor (upstream of the New Bedford Hurricane Barrier), which is closed to shell fishing due to the PCB and heavy metal contamination. Since this area has been closed to shell fishing for decades, there are actually fairly abundant shellfish in this area.

The estimates are that filling and dredging associated with this South Terminal Project will impact 9,000,000 + shellfish. Due to problems with relaying these shellfish to non-contaminated areas, there is currently no proposal to harvest the existing shellfish. Instead, I am reviewing a proposal to re-seed waterway areas open to commercial shell fishing that are under the control of New Bedford. I am not sure how this should effect shellfish reseeding ratios. Thanks.

Paul Sneeringer  
(978) 505-9216

-----Original Message-----

From: Ladd, Ruth M NAE  
Sent: Friday, June 08, 2012 3:32 PM  
To: Ladd, Ruth M NAE; Sneeringer, Paul J NAE; 'Feeney, Eileen (FWE)'  
Cc: Adams, Karen K NAE  
Subject: RE: Ratios for Shellfish Mitigation Replacement (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Oh, and should the value of the shellfish lost be taken into account?...or will they be harvested before the impact?

-----Original Message-----

From: Ladd, Ruth M NAE  
Sent: Friday, June 08, 2012 3:31 PM  
To: Sneeringer, Paul J NAE; 'Feeney, Eileen (FWE)'  
Cc: Adams, Karen K NAE  
Subject: RE: Ratios for Shellfish Mitigation Replacement (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Is it a native shellfish bed that is productive or it is a commercially leased bed (probably the former)? Cori says that it generally takes a newly established bed 3 years to get to market size so there are some temporal issues.

2:1 is probably a reasonable place to start.

Ruth

-----Original Message-----

From: Sneeringer, Paul J NAE  
Sent: Friday, June 08, 2012 1:58 PM  
To: Ladd, Ruth M NAE; 'Feeney, Eileen (FWE)'  
Cc: Adams, Karen K NAE

Subject: Ratios for Shellfish Mitigation Replacement (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Ruth:

I am confronting the issue of defining an appropriate replacement ratio for shellfish to be impacted as part of the South Terminal Project in New Bedford, MA. I didn't see any specific shellfish replacement requirements in the 2010 Mitigation Guidance Document. Do you have any recommendations on this issue? Thanks.

Paul Sneeringer  
(978) 505-9216

P.S. Eileen, Do you have any suggestions on an appropriate shellfish replacement ratio?

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