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January 16, 2024

**2nd AMENDED CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL
AFFAIRS ESTABLISHING A SPECIAL REVIEW PROCEDURE**

PROJECT NAME: Shellfish Aquaculture
PROJECT MUNICIPALITY: Statewide
PROJECT WATERSHED: Statewide
EEA NUMBER: 16583
PROJECT PROPONENT: Division of Marine Fisheries
DATE NOTICED IN MONITOR: December 8, 2023

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61-62L) and Section 11.09 of the MEPA regulations (301 CMR 11.00), I hereby issue this 2nd amendment of the Special Review Procedure (SRP) established on September 9, 2022 and amended on September 11, 2023. The SRP is intended to guide MEPA review of shellfish aquaculture projects proposed on sites licensed by municipalities and whose operations are permitted by the Division of Marine Fisheries (DMF).

A draft SRP was previously published in the Environmental Monitor on August 10, 2022 for a 20-day public review and comment period. I received six comments, including from the Provincetown Shellfish Department, Wellfleet Shellfish Constable, and several nonprofit organizations including MassAudubon, Massachusetts Bays, and The Nature Conservancy. Comments were generally supportive of the effort to streamline regulatory review for smaller, less impactful aquaculture projects, but emphasized the importance of considering the cumulative impacts of multiple operations sited in close proximity to one another. Comments also requested that the scope and scale of the SRP be broadened to provide for a review of best management practices for aquaculture activities as a whole. As noted below, this SRP was proposed as a 1-year pilot to create a consistent review procedure for shellfish aquaculture projects, while allowing for reporting of cumulative impacts of projects located within the same waterbody. Participating Agencies planned to use the data collected during the 1-year

pilot period to consider a broader permitting framework and associated MEPA reviews for aquaculture activities as a whole. As agency discussions were ongoing, the 1st amendment extended the expiration date of the SRP until January 15, 2024.

This 2nd amendment hereby extends the expiration date of the SRP until June 1, 2028 to align with the General Permit for Aquaculture adopted by the U.S. Army Corp of Engineers (USACE). This time period may be modified, for instance, to align with state planning processes such as updates to the Massachusetts Ocean Management Plan.¹ To allow for public transparency, this 2nd Amended SRP was published in the December 8, 2023 *Environmental Monitor* for a 30-day public comment period. Notice of this 2nd Amended SRP was provided by DMF on November 22, 2023 to a list of community-based organizations (CBOs) and tribes/indigenous organizations (“EJ Reference List”) provided by the MEPA Office in consultation with the EEA EJ Director. One comment was received on the 2nd Amended SRP from MassBays National Estuary Partnership (MassBays) and MassAudubon indicating support for removing the exemption for projects under 2 acres, but recommending another 1-year pilot period. Additional suggestions were made relative to data tracking, eelgrass mapping, and consideration of cumulative impacts.

Background

On August 16, 2018, the DMF requested that the Secretary of Energy and Environmental Affairs (EEA) create a Special Review Procedure (SRP) (the “2018 DMF request”) for shellfish aquaculture projects in the Commonwealth. As requested by DMF, notice of the request was published in the September 5, 2018 *Environmental Monitor*, which commenced a 20-day public comment period. I received comments on the 2018 DMF request from state agencies, regional planning commissions, environmental groups, and organizations working in support of the marine aquaculture industry. All comment letters expressed support for the request to establish an SRP. While a draft SRP was not published with the 2018 DMF request, the request letter indicated that the SRP would facilitate the development of a state-wide *Massachusetts Aquaculture Permitting Plan (MAPP)* that would support both private and municipal aquaculture activities. The DMF proposed to work with partner EEA agencies and a Citizen’s Advisory Committee (CAC) to develop environmental and public use standards that would be incorporated into the MAPP. The scope of the MAPP was envisioned to be broad and include shellfish propagation and restoration projects, and as warranted, other activities such as macroalgae and finfish culture. The MAPP would then allow for streamlined MEPA reviews of projects satisfying the standards and best practices set forth in the MAPP.

Since the publication of the 2018 DMF request, DMF and partner EEA agencies have continued to convene to discuss the SRP request. DMF also launched a website² to provide permitting guidance for Massachusetts aquaculture projects. However, given the large scope and scale of the SRP as originally contemplated and the lack of best management practices for newly emerging aquaculture activities, DMF, in consultation with EEA agencies, has requested that the Secretary establish a more focused SRP to streamline review of smaller shellfish aquaculture projects, while EEA agencies continue to consider a broader permitting framework for aquaculture activities. As noted, comments received on the draft SRP reiterated a desire to develop a broader permitting framework and associated MEPA review that would result in identification of best management practices for the industry. I established an SRP on

¹ <https://www.mass.gov/info-details/massachusetts-ocean-management-plan>

² <https://www.mass.gov/massachusetts-aquaculture-permitting>

September 9, 2022 as a 1-year pilot and anticipated that data collected on shellfish aquaculture projects would be used by Participating Agencies in consideration of this broader effort.

Since the issuance of the September 9, 2022 SRP, DMF has maintained data on requests for DMF certification received under M.G.L. c. 130, § 57, including the watershed, acreage and gear type proposed by each applicant; the existing licensed acreage within the same shellfish growing area; and status of MEPA review. The data collected to date show a total of 20 applications that either received conditional DMF certification after the date of the SRP or are awaiting such certification; of these, ten sites were between 2 and 10 acres in size (and, therefore, eligible to proceed under the SRP), and ten were under 2 acres (no sites were over 10 acres).³ The data indicate that many applications are submitted within the same watershed or shellfish growing area, and often on the same date in order to proceed through municipal licensing collectively (for instance, so that they can be grouped together for a single public hearing). A copy of the data collected by DMF to date is available on the DMF website.⁴ DMF and other state agencies have continued to receive input from stakeholders regarding the SRP and state permitting of shellfish aquaculture, including at a Shellfish Advisory Panel (SAP) meeting held on November 20, 2023.⁵ Some stakeholders continue to urge consideration of cumulative impacts of small projects, and to clarify permitting requirements for all applicable state agencies. As noted, comments received from MassBays and MassAudubon request that another 1-year pilot period be instituted.

Purpose of the SRP

DMF has requested that the Secretary establish this SRP pursuant to 301 CMR 11.09(4)(a) and (e). DMF engages in the certification of municipal licensing and permitting of shellfish aquaculture, along with various other state, local and federal agencies including the Massachusetts Department of Environmental Protection (MassDEP), the Natural Heritage and Endangered Species Program (NHESP), U.S. Army Corp of Engineers (USACE), and local Conservation Commissions. This SRP is proposed only for aquaculture activities associated with “Class 3 / Type 1” permits issued by DMF under 322 CMR 7.01(4)(c) and 322 CMR 15.04(1)(a)3. and 15.04(1)(b)1. (“Authorizes an open water system with minimal structures and no feeding” for “Shellfish”).

Under M.G.L. c. 130, § 57, a city or town, after public notice and hearing, may grant a shellfish aquaculture license to any person to undertake shellfish aquaculture activities at all times of the year in, upon, or from a specific portion of coastal waters of the Commonwealth, of tidal flats or land under coastal waters. The license may authorize the following activities: (1) to plant and grow shellfish, bottom/off bottom culture; (2) to place shellfish in or under protective devices affixed directly to the tidal flats or land under coastal waters, such as boxes, trays, pens, bags, or nets; (3) to harvest and take legal shellfish; (4) to plant cultch for the purpose of catching shellfish seed; and (5) to grow shellfish by means of racks, rafts or floats. The city or town may issue the license only after the DMF director certifies that “issuance of a shellfish aquaculture license and operation thereunder will cause no substantial adverse effect on the shellfish or other natural resources of the city or town.” Failure of the director to so certify is deemed a denial of the shellfish aquaculture license. Shellfish aquaculture

³ The MEPA filings submitted to date by those eligible to proceed under the September 9, 2022 SPR are available at <https://eeaonline.eea.state.ma.us/EEA/MEPA-eMonitor/search> (search by “Aquaculture/Shellfish” in Project Type dropdown in the project search page).

⁴ <https://www.mass.gov/info-details/shellfish-propagation-permits-for-aquaculture>

⁵ [Shellfish Advisory Panel | Mass.gov](#)

licenses issued pursuant to M.G.L. c. 130, § 57 are subject to rules and regulations promulgated by DMF, and may be conditioned by DMF as the director deems necessary and appropriate.

DMF certifications under M.G.L. c. 130, § 57 (“Section 57 Certifications”) are deemed to be an “Agency Action” for purposes of MEPA review because they constitute a “permit, license, certificate, variance, approval, or other entitlement for use, granted by an Agency for or by reason of a Project.” 301 CMR 11.02 (definition of “Permit”). Specifically, they constitute, together with the municipal license, an “approval” and “entitlement for use” for a specific portion of coastal waters for purposes of carrying out shellfish aquaculture; failure of DMF to issue the certification is deemed a denial of the shellfish aquaculture license. Most aquaculture sites range from 0.5 to 2 acres in size, and utilize gear (cages or tents) that are removed seasonally and result in minimal, if any, permanent impact to land under coastal waters. Because these types of operations are expected to have minimal adverse effects on protected areas and resources, state authorizations are often limited to DMF’s Section 57 Certification and shellfish propagation permit. Projects that have the potential to result in greater or more permanent impacts, such as the placement of cultch directly on the ocean bottom and larger scale private aquaculture sites, often require additional state authorizations, including a M.G.L. c. 91 License and/or 401 Water Quality Certification (WQC) from MassDEP and, if federal permitting is required, a federal consistency determination from the Massachusetts Coastal Zone Management (CZM) office. If the site is located in mapped rare species habitat, it also requires additional consultation and/or permitting through NHESP.

This SRP is intended to increase the efficiency of MEPA reviews for aquaculture projects that require a DMF Section 57 Certification, but for which, in most cases, no other Agency Action independently triggers the need for MEPA review.⁶ For these smaller projects, with predictable and minimal individual impacts, DMF seeks an alternative, more efficient, MEPA review process. This SRP also seeks to ensure that the cumulative impacts of multiple projects proceeding in a similar time frame within the same embayment, including potential impacts to wetlands, eelgrass, rare species habitat, and navigable waters, can be reviewed through MEPA in coordination with Participating Agencies. This SRP was initially implemented as a 1-year pilot, and may be modified as appropriate after such period.

To facilitate MEPA review in accordance with this SRP, DMF has developed an Aquaculture Description Form (the “DMF Aquaculture Description Form”), to be submitted by the project proponent when requesting a municipal license and associated Section 57 Certification, for purposes of disclosing site-specific information about the proposed aquaculture activities, gear types, potential environmental impacts, and cumulative impacts when considering other similar activities proposed in the same embayment during a similar time frame. The DMF Aquaculture Description Form will also be used to determine whether the project is subject to the size thresholds established under this SRP and/or may require Agency Actions other than the Section 57 Certification. The form will solicit information related to the project’s environmental impacts and benefits relative to Environmental Justice (EJ) populations.

Since the issuance of the September 9, 2022 SRP, the USACE issued a General Permit for Aquaculture (effective June 2, 2023), with an expiration date of June 1, 2028, which allows, among other things, aquaculture activities in tidal waters consisting of a new or expanded lease site area totaling

⁶ As noted below, projects requiring a Section 57 Certification and 401 WQC may be eligible under certain limited circumstances.

≤2 acres (and not located in salt marsh, natural rocky habitat, or tidal vegetated shallows) to proceed under a “Self-Verification” (SV) procedure in lieu of full permitting. Projects over this size must comply with Pre-Construction Notice or Individual Permit requirements. The SV procedure requires documentation of the DMF Section 57 Certificate, MEPA Certificate (if applicable), and documentation of coordination with the U.S. Coast Guard and local authorities. As noted, DMF has maintained data on the number of applications for Section 57 Certifications, which indicate that most of the sites seeking certification are 2 acres or less and therefore were exempt from MEPA review under the September 9, 2022 SRP. DMF indicates that the general trend among applicants is that proposed sites are under 2 acres or less in most instances. While other state permitting, such as NHESP review and 401 WQC, may be needed even for small projects, it is not clear whether license applicants are fully compliant with these requirements. In addition, DMF has continued to receive feedback from stakeholders, some of whom advocate for a closer review of cumulative impacts of smaller projects that may be proceeding through permitting on a similar time frame. In light of these considerations, I hereby propose to establish a 2nd Amended SRP as indicated below.

SPECIAL REVIEW PROCEDURE

To effectuate the purposes set forth above, I previously established an SRP on September 9, 2022 to guide MEPA review of shellfish aquaculture projects authorized by DMF through a Section 57 Certification and a Class 3 / Type 1 propagation permit under 322 CMR 7.00 and 15.00. I find that this SRP, as amended by the 1st and 2nd Amended SRP, serves the purposes of MEPA, including providing meaningful opportunities for public review, analysis of alternatives, and consideration of cumulative environmental impacts. The acreage of the entire project site will be considered for determining the applicability of the categories outlined below.

As described below, eligible shellfish aquaculture projects under 10 acres and seeking Section 57 Certification from DMF will be required to make a MEPA filing pursuant to the terms of this SRP. Because DMF has developed a standard Aquaculture Description Form for all projects, DMF indicates that creating a standard MEPA process for all eligible projects would create better consistency for review. In addition, DMF will require projects proceeding under a similar time frame (for instance, intending to file collectively for municipal licensing) to submit Aquaculture Description Forms applicable to those projects collectively with MEPA. This will allow for better review of cumulative impacts for smaller, but closely timed, projects through the MEPA process. The Aquaculture Description Form will support ongoing efforts to standardize state permitting requirements for shellfish aquaculture, so that consistent information will be provided to all applicable state agencies. Because it is anticipated that shellfish aquaculture projects that require other state permits, such as NHESP “take” permit for rare species impacts, M.G.L. c. 91 license, or 401 WQC, will have greater environmental impacts, most projects that require such Permits (“Agency Actions”) beyond the Section 57 Certification are not eligible to proceed under this SRP, and must comply with normal MEPA procedures. However, projects that propose activities covered by M.G.L. c. 130, § 57 and require both a Section 57 Certification and 401 WQC, except for those located in salt marsh or involving cultchling, will be eligible to proceed under this SRP as indicated below.⁷ This 2nd Amended SRP shall remain in place

⁷ As a general matter, activities that result in the discharge of dredged or fill material to resource areas may require 401 WQC permitting. MassDEP has indicated that it will consider the applicability of 401 WQC requirements during review of any Notices of Intent filed with local Conservation Commissions. Questions about applicability should be directed to MassDEP.

until June 1, 2028, to align with the USACE General Permit for Aquaculture. This time period may be modified, for instance, to align with state planning processes such as updates to the Massachusetts Ocean Management Plan. The 2nd Amended SRP and Aquaculture Description Form shall be made available on the DMF website.⁸

Project Sites of 10 or More Acres (≥ 10 acres)

Any shellfish aquaculture sites of 10 or more acres will not be subject to this SRP, and will be required to follow normal MEPA procedures. In most cases, these projects will trigger the 10 acre (EIR) threshold for alteration of “any other wetlands” under 301 CMR 11.04(3)(a)1.b.

Projects Sites Under 10 Acres (<10 acres)

Shellfish aquaculture projects in this size range that require a DMF Section 57 Certification, but no other Agency Actions, are eligible for the MEPA review procedures as described in this SRP. In addition, projects that propose activities covered by M.G.L. c. 130, § 57 and require both a Section 57 Certification and 401 WQC, except for those located in salt marsh or involving cultching, will be eligible to proceed under this SRP. Shellfish aquaculture projects in this size range that require any other Agency Action (in addition to DMF’s Section 57 Certification) are not eligible for the MEPA review procedures described in this SRP and must undergo normal MEPA procedures.

If no other Agency Action has been identified for the project other than the DMF Section 57 Certification and 401 WQC as stated above, projects that are under 10 acres in size shall be permitted to file a copy of the DMF Aquaculture Description Form and DMF’s conditional certification letter (the “MEPA Aquaculture Filing”) to the MEPA Office in lieu of filing an Environmental Notification Form (ENF). The DMF Aquaculture Description Form shall attach a cumulative impacts summary, described in Part IV below. As indicated above, DMF will require that projects proceeding to municipal licensing on a similar time frame submit their respective DMF Aquaculture Description Forms collectively to MEPA. The MEPA Aquaculture Filing shall be published in the Environmental Monitor for a 20-day comment period, and the Secretary shall issue a Certificate within 10 days thereafter determining whether further review is warranted. If no review is required, the Certificate shall determine that the filing adequately and properly complies with MEPA and its implementing regulations. The Secretary may establish a standard format for such Certificates. If, based on comments received and consultation with Agencies, the Secretary determines that further review is warranted, the Secretary may issue a Scope for a Draft or Single Environmental Impact Report (EIR).

For any project located within 1 mile of an EJ population, the project proponent shall also include in the MEPA Aquaculture Filing, as an attachment to DMF Aquaculture Description Form, a supplement containing information describing the surrounding EJ populations and disclosing potential environmental impacts and benefits for such populations. The MEPA Office may provide a standard form to be used for this purpose, and such form shall be attached to the DMF Aquaculture Description Form. Projects subject to this SRP shall be exempt from the requirements of 301 CMR 11.05(4), and I hereby find that the standards for a waiver under 301 CMR 11.11(1) are met in light of the burden posed to proponents and the minimal anticipated impacts of the projects that will be subject to this SRP. Notice

⁸ <https://www.mass.gov/info-details/shellfish-propagation-permits-for-aquaculture>

of the September 9, 2022 SRP was provided on July 22, 2022 by DMF to the EJ Reference List, and notice of this 2nd Amended SRP was provided to the EJ Reference List on November 22, 2023.

Because the DMF Aquaculture Description Form is intended to provide a consistent description of aquaculture projects regardless of size, and is now a requirement of any project seeking a DMF Section 57 Certification, projects that are 2 or less acres in size that were previously exempt from any MEPA filing requirement are now required under this 2nd Amended SRP to submit the DMF Aquaculture Description Form to MEPA for a 20-day public comment period. This provision does not exempt the project from other state permitting requirements that may apply to projects of any size, including a MassDEP c. 91 license, 401 WQC, and consultation and/or “take” permit from NHESP under the Massachusetts Endangered Species Act (MESA).⁹

Cumulative Impacts

Upon conditional certification of a license site, DMF shall coordinate with all project proponents to provide a cumulative impacts summary that addresses other similar aquaculture activities existing and/or proposed within the same embayment during a similar time frame to include with the DMF Aquaculture Description Form. Specifically, such information shall identify other existing and conditionally certified aquaculture sites, gear types, and acreage within the same embayment (contiguous waterbody) as the proposed site. DMF shall determine the appropriate form to record this information, and shall direct the proponent to include this information in the DMF Aquaculture Description Form. As noted, DMF will require that projects proceeding to municipal licensing on a similar time frame submit their respective DMF Aquaculture Description Forms collectively to MEPA, so as to allow for a cumulative review of impacts for those sites. The Secretary’s determination as to whether further MEPA review is required under Part II above shall consider the cumulative impacts of the proposed project in combination with other aquaculture projects proposed within the same embayment within a similar time frame.

Circulation Requirements

Each review document submitted under this SRP must be circulated in accordance with 301 CMR 11.16. Public notice under 301 CMR 11.15(1) is not required

If a full ENF is required for any projects subject to Part I-IV above, the Proponent must comply with all requirements set forth in 301 CMR 11.00 and associated policies and protocols.

Term of SRP and Modification

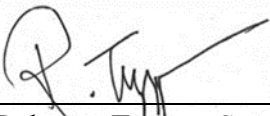
This 2nd Amended SRP shall expire on June 1, 2028, unless extended or modified by agreement of the Parties. If DMF wishes to change any provision in this SRP, it may submit correspondence requesting modification of the SRP. The Secretary will then review the request and issue a further amendment to the SRP if appropriate.

⁹All projects located in designated priority habitat for state-listed species according to the Massachusetts Natural Heritage Atlas, must file with the Natural Heritage and Endangered Species Program (NHESP) pursuant to the MA Endangered Species Act (MESA), regardless of project size.

Conclusion

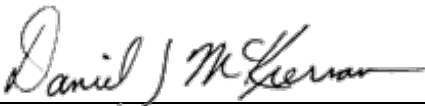
The signatures below indicate consent to the establishment of a Special Review Procedure and the provisions outlined in this 2nd Amended SRP. In addition, DMF shall obtain, through the DMF Aquaculture Description Form, a signed acknowledgment and agreement to follow these SRP procedures by individual project proponents.

January 16, 2024
Date



Rebecca Tepper, Secretary
Executive Office of Energy and Environmental Affairs

January 16, 2024
Date



Dan McKiernan
Division of Marine Fisheries

Comments received:

12/28/2023 MassBays National Estuary Partnership and MassAudubon

RLT/TTK/ttk

December 28, 2023

Rebecca Tepper, Secretary
Attn: Tori Kim, Director, Massachusetts Environmental Policy Act Office
100 Cambridge St., Suite 900
Boston, MA 02114

Submitted via MEPA public comment portal

RE: **Special Review Procedure Request #16583, "Shellfish Aquaculture"**

Dear Director Kim,

Thank you for the opportunity to comment on the 2nd amendment to the Special Review Procedure (SRP) for siting and permitting of shellfish aquaculture. The Massachusetts Bays National Estuary Partnership (MassBays) has a long-term investment in the protection of coastal habitats in Ipswich Bay, Massachusetts Bay, and Cape Cod Bay, dating to the designation of the area as an Estuary of National Significance under Section 320 of the Clean Water Act. With this designation, we are mandated to develop a Comprehensive Conservation and Management Plan (CCMP), including targets for coastal habitat extent and condition. MassBays recently incorporated goals for improving seagrass extent and condition which are illustrated in our Ecohealth Tracking Tool (www.MassBaysEcohealth.org), and our 2023 CCMP (<https://massbays.org/wp-content/uploads/2023/08/Full-CCMP-for-web.pdf>). In addition to habitat initiatives, we strive to fill data gaps to advance more sustainable natural resource management, including in the realm of aquaculture. Mass Audubon supports the goals and work of MassBays and the careful management of coastal and marine resources for biodiversity and climate resiliency. Mass Audubon is joining this letter as MassBays' insights provide further details to the comments we previously submitted on the Aquaculture SRP. These comments provide recommendations both for adjustments to the SRP and more generally regarding the need for Best Management Practices (BMPs) and refinements of the regulation of shellfish aquaculture.

For the last year, MassBays has been collaborating with partners and agencies across the Gulf of Maine (GoM) to better understand the nature of interactions between eelgrass and shellfish aquaculture, as existing literature has shown mixed and often negative results (Howarth 2022). In November 2022, MassBays hosted a workshop for scientists and regulators from across the GoM to discuss the current state of science and regulation pertaining to the co-location of eelgrass and aquaculture (meeting recording here <https://www.youtube.com/watch?v=pFJ24PC3faQ>). The workshop presentations and discussions brought to light the fact that across the region, Best Management Practices (BMPs) are scarce on the topic of aquaculture siting and operations to avoid impacts to other habitat types, and the following were identified as priority areas for research and management:

1. Adjust regulatory stance of expansion of eelgrass into leases, to remove unintentional incentives for industry to not report or to remove eelgrass,
2. Quantify impacts (positive and negative) of co-locating or near-locating eelgrass and aquaculture (by gear type, farming practices, etc.),

3. Infuse adaptability to regulations that can adjust to changing conditions (climate change, watershed changes),
4. Permit and support research program to investigate gear- and practice-specific impacts on eelgrass, including demonstration sites, and
5. Improve eelgrass mapping and modeling throughout the region.

The above priorities are also extended to *Ruppia maritima*, or widgeongrass, the other estuarine submerged aquatic vegetation (SAV) species afforded the same protections by the Massachusetts Wetlands Protection Act, and which can also be impacted by aquaculture siting decisions.

MassBays and partners continue to work on this topic, including integrating industry and municipal perspectives. Responses to anonymous surveys sent to growers and shellfish constables indicate a very high degree of interest in participating in research projects and management discussions that address the priorities listed above. To that end, MassBays is currently developing research designs and collaborations to fill these knowledge gaps and to bring the best available science to decision-makers.

Specific feedback on the 2nd amendment to the SRP

We support the amendment to now require projects ≤ 2 acres to submit the DMF Aquaculture Description Form to MEPA for a public comment period. However, the Form continues to fall short in documenting and protecting eelgrass (and widgeongrass) as follows:

1. The 25-foot buffer between eelgrass and an aquaculture site is not adequate protection from potential effects of shading, turbidity, foot or vehicle traffic, and debris associated with aquaculture activities. New research indicates that MassDEP's aerial eelgrass mapping program consistently under-maps eelgrass, missing approximately 25 meters (m) of eelgrass extent at the shallow edge and over 100 m at the deep edge (Carr and Callaghan 2023). We recommend the adoption of a 100 m buffer to maximize eelgrass protection when aerial imagery is used to map eelgrass. Carr and Callaghan (2023) offer different buffers for other remote sensing mapping methods, including for satellite, side scan sonar and drone imagery. We urge DMF to account for this enhanced buffer when conducting site inspections.
2. The Form should be improved to more clearly document proximity to existing and historic seagrass areas. MassBays' previous letter dated 8/30/22 details the importance of historical eelgrass areas. We appreciate DMF adding the word "historical" to the Form question: "*If eelgrass is present or currently/historically mapped by DEP within the shellfish growing area, what is the shortest distance to actual or mapped eelgrass from the proposed site?*". However, we feel this question assumes the applicant can accurately identify seagrass species and is using appropriate map products. (Further, if the ShellFAST tool is still being recommended, it should be updated with new data layers.)
3. Considering 1 and 2 above, we suggest this section of the Form be restructured to provide resources to assist applicants in using the correct data sources, survey methods, and species identification guides. MassBays is happy to make recommendations pertaining to these resources. Further, the Form questions could be improved as follows:
 - a. Is seagrass (eelgrass or widgeongrass) currently within 100 m of the proposed site boundary? If yes, what is the shortest distance measured between the meadow and the site? The meadow includes seagrass of any density.
 - b. Has seagrass (eelgrass or widgeongrass) been historically mapped by MassDEP on or within 100 m of the proposed site boundary? If yes, what is the shortest distance

measured between the meadow and the site? In what year(s) was seagrass mapped within 100 m?

4. Importantly, there is no guidance or BMP provided on how these data are evaluated by DMF. It is imperative for applicants and other stakeholders to understand how a “yes” answers to 3a or 3b above affects permissibility.

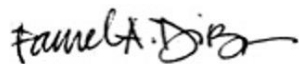
Regarding cumulative impacts, the original SRP details that DMF would require a cumulative impacts summary be included with the Form. The Form also indicates that the onus is on the MEPA office to assess such cumulative impacts. It is critical that a process detailing specific metrics for tracking and evaluating cumulative impacts be developed, along with a decision-making structure that lays out how leases will be granted or denied when thresholds are met. These BMPs must undergo public and industry review. The Shellfish Aquaculture Inventory database provided on the DMF website shows acreage and number of leases per Designated Shellfish Growing Area, which is a good start toward documenting cumulative impacts. However, more is needed to put these numbers in the context of available surface area in the DSGA and the greater waterbody in order to work towards setting thresholds for aquaculture carrying capacity.

The extension of the SRP to five additional years is hasty given that the 1-year pilot promised an evaluation of data to assess the efficacy of the SRP; yet this seems incomplete in terms of cumulative impacts. Further, aligning the SRP expiration with the Army Corps of Engineers General Permit is arbitrary, as the two regulatory processes are not intertwined or effectual on one another. We instead recommend another 1-year pilot period followed by an evaluation of the effects of this revised SRP.

Finally, we continue to urge DMF to demonstrate outreach and enforcement efforts to prevent unauthorized activities on sites, expansion beyond sites, and removal of or adverse impacts on sensitive habitats.

Thank you again for the opportunity to comment. We look forward to working with you to advance aquaculture siting that is sustainable not only for shellfish production, but for the larger estuarine system.

Sincerely,



Pam DiBona
Executive Director, MassBays National Estuary Partnership
Pamela.Dibona@umb.edu



E. Heidi Ricci
Director of Policy and Advocacy, Mass Audubon
hricci@massaudubon.org

cc: Lisa Rhodes, MassDEP
Christian Petitpas, Division of Marine Fisheries

Citations

Howarth, L. M.; Lewis-McCrea, L. M.; Kellogg, M. L.; Apostolaki, E. T.; and Reid, G. K., Aquaculture and eelgrass *Zostera marina* interactions in temperate ecosystems (2022). Aquaculture Environment Interactions, 14(15), 34. <https://www.int-res.com/articles/aei2022/14/q014p015.pdf>

Carr, J.L. and T. Callaghan (2023) Increasing agency confidence in eelgrass maps used for project review and ocean planning. Technical Report to NOAA dated 9/20/23. <https://www.mass.gov/doc/increasing-agency-confidence-in-eelgrass-maps-used-for-project-review-and-ocean-planning/download>