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CORRESPONDENCE

Everett-Vehrs Conservation and Research Foundation

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June 18, 2026

Dear Members of the New England and Mid-Atlantic Fisheries Management Councils:

I am writing to recommend changes to current and proposed fishery closures that seek to protect sensitive areas from disturbance. As implemented and proposed, closures cause greater ecological damage overall and harm the economy and our food resources. Collectively, we need a balanced approach that both promotes fisheries production and protects habitat where necessary or beneficial.

The Magnuson-Stevens Act requires NMFS and the Councils to evaluate economic and social impacts, sustained participation of fishing communities, costs, efficiency, sector impacts, and the benefits and impacts of closures, while still meeting conservation requirements. Economic production, fishing-community impacts, food production, and practicable alternatives are primary, not secondary or optional, considerations. That is a strong statutory argument, especially against broad closures adopted without a rigorous comparison of ecological benefits, lost production, fishing-community impacts, and less restrictive alternatives.

Most of us involved in “fisheries” do so because we love nature and our work – and it pays the bills. Some of us think the natural order should not be changed by man, while others look to maximize long-term production for economic benefit. In this message, I acknowledge both points of view, but favor seeking the potential regional and national benefits that come from increased and sustained fisheries production. My concept is very much about farming the sea using carefully timed and controlled disturbance to maintain productive bottom habitat.

This message is 55 years in the making. In 1971, as I left my family’s fishing business in Fairhaven, Massachusetts, to join the new NMFS, my father asked me to find out why quahog production increased a thousand-fold four years after the outer Fairhaven-New Bedford harbor reopened for winter fishing, following six decades of closure due to sewage pollution. In the first year, there were about ten littlenecks among the old “bulls” in the 30-bushel daily limit. By the fourth year, very valuable littlenecks (20X) were so abundant that all large quahogs were thrown back, and many more recruits for the

following years were visible, as can be seen in the photos below. Each of us (three plus the boat) earned a year's pay every six days for a few hours' work.

It took me decades to learn the mechanisms for the observed production – starting with learning of increased North Sea worm/flounder production from bottom trawling. The final two pieces recently fell into place, explaining the difference between the 10 to 100-fold one-time increases seen in New England shell-fisheries from the 1938 and 1954 hurricanes and the steady 1,000-fold increase from hydraulic dredging in Fairhaven.

Ecological Rationale

Fishery management traditionally treats seafloor disturbance as inherently damaging. The very opposite is more often true. Disturbance is key to production - whether corals, mollusks, fish, or their food. When a hydraulic dredge passes, clean shells, shell hash, buried coral, and stones come to the seafloor surface. Larvae of some mollusks, corals, polychaete worms, and others will attach to those shells, stones, and coral for several days. They stay (e.g., oysters, barnacles, corals) or detach (e.g., scallops, worms) or use the shells, stones and corals for temporary shelter while seeking a suitable habitat on the bottom into which they can burrow, and their siphon or mouth can reach above silt and detritus. Juvenile and adult surf clams and other deep-burrowing species can more easily burrow deeply, quickly escaping their predators. Exhaustion for the young comes after a few tries. Soon, baby cod descend, hiding among the shells to avoid predation from crabs and fish (mostly) while feeding on the new arrivals and others.

Without disturbance, the bottom becomes moribund within a year, but if attachment is required, as for oysters, mussels, and scallops (2 times), shell degradation begins in days. Fine sediments and organics build rapidly (fastest on the top), and oxygen declines. Except in very high-current areas, coarse, oxygenated substrate—sand, stones, and shell—becomes covered with fine, anoxic mud and biological growths. Settlement and survival of molluscan and polychaete larvae and young drop sharply, and young fish, lobsters, and others lose nursery habitat and prey.

Periodic disturbance, whether from major storms, bioturbation (e.g., by worms), or periodic fishing, rejuvenates the seabed. Worms of many species benefit, thriving on disturbance that resuspends fine sediments and exposes clean shell, coral, stones, gravel, and refuge spaces (required by mollusks, crustaceans, coral, and young cod). Periodic disturbance recharges the seabed with oxygen. Hydraulic dredging does it best.

This renewal supports robust communities, including fish, scallops, lobsters, and clams. Stable, clean, coarse substrate harbors more young cod and others. Strong recruitment requires disturbance. Areas with strong currents are helpful but not sufficient. Annual, but managed, disturbance is essential. For species needing attachment, fishing should just precede the need for clean surfaces.

Periodic disturbance can be ecologically productive in most habitats, at the right intensity, and at the right season. Hydraulic dredging loosens compacted sediment, removes or disperses accumulated fine material and organic debris, exposes clean shell and gravel, and creates a mosaic of disturbed and recovering patches. That kind of habitat mosaic can provide settlement surfaces, oxygenated sediment, prey production, and refuge for small benthic animals and demersal fish. These are not trivial benefits; they are part of how shallow, high-energy shelf systems remain productive. This is especially important for species whose early life stages depend on the transition from pelagic larvae to benthic habitat.

Young cod, haddock, scallops, clams, polychaete worms, and many other organisms do not need “undisturbed bottom.” They need suitable bottom: oxygenated sediment, clean shell or gravel, interstitial spaces, prey, and places to avoid predators. On Georges Bank and elsewhere in the region, structurally complex sand, gravel, cobble, shell, and boulder habitats are important for juvenile cod and haddock. Year-round absence of fishing gear does not improve those habitat functions. The opposite is true.

Supporting Evidence

Multiple empirical studies support these dynamics, including (full references at end):

- Lambert et al. (2014, 2015, 2017) documented that benthic community structure and productivity were maintained when dredging intensity remained below approximately three passes per season.
- Crawford (2003) showed that dredging in aquaculture areas reduced silt buildup and improved settlement substrate.
- Thrush & Dayton (2002) showed that periodic disturbance prevents habitat stagnation, maintains multiple successional stages, and promotes resilience.
- Hiddink, Rijnsdorp & Piet (2008) showed that prey production for flounders, mostly small polychaete worms, was lowest when the seabed was undisturbed, highest at moderate trawling frequencies, and declined only at very high levels.
- Hiddink et al. (2016), found that flatfish body condition improves where trawling maintains or increases worm production.
- Jennings et al. (2001) showed that heavy trawling increases production per unit biomass by favoring worms and other rapid-turnover groups that flatfish depend on.
- Jennings et al. (2002) found that across a 17.5-fold gradient of trawling intensity, the production of small infauna remained stable, demonstrating resiliency.
- Hiddink et al. (2016), found that flatfish body condition improves where trawling maintains or increases worm production.

- Lough et al. (1989) described ecology and distribution of juvenile cod and haddock vs sediment on Georges Bank.
- Valentine et al, (1990s) describe geology, gravel in relation to young cod habitat.
- Visel collated information from fishermen on the cultivation of marine soils and the response of commercial species. His paper included the importance of loosening soils to enable burrowing and the vertical stacking of clams, and the impact of predator removal during catch sorting.

Closing fishing areas year-round reduces hiding niches and benthic prey for young lobsters, cod, and other fish. Worms (a key food source) depend on disturbance. The coastal shelf supports exceptional productivity precisely because natural storms and fishing activity keep the bottom well-oxygenated, coarse, and biologically dynamic. Eliminating disturbance for extended periods is inconsistent with ecological history and the scientific literature. Since cod do not spawn on the bottom, but some 3-50 ft. above it, and since any pre-spawning behavior that may be closer to the bottom is unlikely to encounter a dredge or even a trawl, and since the eggs are buoyant, disturbance by trawls or dredges is not relevant.

Disturbance of the areas used for spawning is far more important and is essential for providing suitable habitat for returning young and their food. These findings align closely with long-standing observations from fishermen that disturbances keep benthic habitats productive. Without disturbance, mud and organic material accumulate until a major storm resets the system—a process that may take several decades and postpone recovery of shellfish and groundfish. Hydraulic dredging does three things that storms cannot. Dredges soften and mix the sea floor to about 10 inches, as does a farm plow, increasing and mixing the habitat for burrowing clams, lobsters, and worms. Secondly, as the catch is sorted, many predators (e.g., crabs, conchs, starfish) are removed. Thirdly, there is no waiting for decades. Bottom trawling is important, but it does not break up the hardened bottom that burrowing clams, worms, and others require.

Proposed Management Adjustment

I propose allowing dredging and trawling for up to 4 months (winter/spring), and retaining closures for about eight months, based on our Fairhaven experience and the logic herein. This provides time for bottom stabilization and nearly full protection of key species as baby cod, worms, and mollusks come to the bottom, while providing essential disturbances that sustain benthic productivity, including preparing the bottom for the arrival of the baby cod and its food, and further grow-out. When mid-winter dredging begins, the previous class of cod should have already moved on, and the rest should be ready to migrate or to avoid or survive fishing gear.

I recommend that three approaches be tested and evaluated. For those opposed to any disturbance, there would be a “Closed Research Area”. For those opposed to any closure, I suggest a similarly-sized nearby “Open Research Area” with year-round unrestricted fishing. The third would follow my proposed management strategy – a winter/spring 4-month open season.

Each area should be monitored. This could include sediment condition, shell and gravel exposure, dissolved oxygen or redox indicators, prey production, predator abundance, juvenile fish use, shellfish recruitment, epifaunal recovery, and fishery yield. The purpose is to determine whether a carefully managed disturbance regime produces better ecological and fishery outcomes than does a year-round closure or unrestricted access. The study would last until after harvest size of the study species is reached.

These three approaches would allow the Council to base decisions on measured ecological and production responses at minimal cost and great potential benefit.

Lastly, there will be a need to prevent a rush for access during the open season. I see the Council as the arbiter of the varied interests: big and small boats, trawlers, dredgers and pots, fish and mollusks, ports, and perhaps others. The Council must restrain effort where needed while maximizing production. All shellfish species are long-lived; no production would be lost, productivity of all or most species would increase, and fishing effort would be concentrated into fewer days, lowering costs.

This proposed adjustment aligns management more closely with benthic ecology, recognizing that managed, seasonal disturbance is often necessary to sustain habitat productivity across trophic levels.

Summary of this thesis. The benefits of hydraulic dredging that goes about 10 inches deep along the US East coast are:

1. Removing silt, detritus, and other organic matter that build up and smother post-planktonic settlement surfaces in many areas. Dredging (and also) bottom trawling redistribute surface sediments, reducing localized buildup of fine sediments and detritus that inhibit the survival of many fish, mollusks, and polychaete worms descending from their pelagic stages.
2. Bringing long-buried, clean shells, shell hash, stones, and corals to the surface, where they (a) serve as attachment points for certain mollusks (e.g., scallops (2 times needed), oysters, mussels), corals, and certain worms (e.g., polychaetes); (b) serve as refuge habitats with interstitial spaces for baby cod and other fish, mollusks, and worms serving as protective cover from predators (e.g., fish, crabs, starfish, gastropods) during the vulnerable early growth stages, and (c) provide shell-derived physical and chemical settlement cues to molluscan larvae and post-larvae indicating suitable habitat for settlement and grow-out.

3. Dredging loosens compacted or cemented sediments that may otherwise function as a near-impenetrable substrate for juvenile through adult-stage burrowing organisms. This improves and expands habitat suitability for species such as surf clams and other infaunal bivalves that require penetrable substrate for deep burrowing and predator (e.g., conchs, starfish) avoidance. In high-clam-density areas, it creates more habitat by allowing nearly vertical stacking. In areas now without clams, it could provide expanded habitat, if the Council provides some incentive to dredge an area with little or no harvestable product.
4. Enhancing future production. When the dredge is dumped on deck, predators of mollusks and fish are separated by the crew and marketed, used as bait (e.g., crabs for conch bait), or destroyed and not returned to the ecosystem. This can have a profound impact on reducing predation on very young cod and other fish and invertebrate species. Cash incentives might help reward the removal of non-useable predators, such as small crabs, starfish and certain gastropods.
5. Creating habitat heterogeneity with disturbed and recovering patches increases habitat diversity and successional variation by creating opportunities for settlement and growth of opportunistic animals. Sensitive high-relief areas are self-protected from dredging by boulders and uneven terrain, but bottom trawls (e.g., rockhopper) have been developed for use in such areas. If protection from fishing is needed in some high-relief areas, such gear may need to be banned.
6. Increasing abundance of benthic prey species after dredging improves foraging conditions for demersal fish and other predators, thereby increasing broader ecosystem productivity.
7. Replicating some ecological functions historically provided by major storms - strong tidal scour, bioturbation by large fauna, and other natural disturbance processes that periodically rework sediments, expose buried substrate, and reset benthic successional stages. Dredging is more consistent than the major storms that are decades apart, and the 10-inch (blade and jets) depth is more similar to the tilling in agriculture, reaching deeper than storms to resurface shells and break up the impenetrable clay or otherwise compacted bottom, thus enabling burrowing species to quickly escape predators.

In closing, hydraulic dredging disperses or buries suffocating sludge, breaks up hard, impenetrable bottom, brings clean shells and stones to the surface, enables predator (crabs, starfish, conchs) removal, and provides clean shells for larval attachment and hiding. Annual disturbance is essential, as is shown by the one-year blip in catch when a major hurricane passes. Closures for a year or more quickly stop production. For example, closing an area to scallop dredging to protect a large set of scallops,

immediately takes that area out of further production. Incoming new scallops need clean shells for initial and then secondary attachment one year later.

Many, if not most, high relief areas are inherently protected from dredging, but not all trawling by rocky ledges, ridges, canyons, and boulders. These were deposited as ancient glaciers retreated and are mapped by NOAA, USGS, and Canada. A vessel's GPS, or its own maps, can help avoid them. In areas where protection is needed, perhaps because of some unique epifaunal life, corals, or other special habitat, these can be defined and avoided. Most likely, there will be a feature, such as canyons, outcrops, or boulders, that will, in itself, cause it to be non-fishable. As an example, when the New Bedford Outer Harbor re-opened, we snagged a lost, huge quahog dredge (non-hydraulic) that had caught on a ledge, probably during a foggy day decades before. One of life's lessons from my father followed: "Nothing dies of old-age out here, my boy".

As noted, two critical needs for scallops, many mollusks, and worms are a clean place to alight, attaching with byssal threads for a few days or months of growth, and then, finding a home where their siphon or breathing apparatus can reach above suffocating silt or detritus. Sea scallops need to let go and attach a second time after about a year. Dredging, trawling, and major storms provide such surfaces. From childhood, my grandfather told us bay scallops would be abundant two years after a hurricane came through Fairhaven. As Hurricane Carol approached in 1954, we were getting ready.

Hydraulic dredging is often treated as an ecological villain. That is too simplistic. In many habitats, it is a tool that can increase productivity if used carefully. The goal should not be to eliminate disturbance but to manage it intelligently.

Much of the information about hydraulic dredging is known by fishermen rather than being a part of the formal academic literature. Fishermen observe bottom conditions, sediment hardness, shell exposure, predator abundance, recruitment pulses, and catch response repeatedly over years and even decades. That knowledge is not anecdotal in the dismissive sense; it is long-term, fine-scale ecological observation. Peer-reviewed work on Georges Bank cod spawning has already shown that fishermen's ecological knowledge can identify patterns missed or blurred by conventional surveys. The same principle should apply to hydraulic dredging and shellfish habitat. A Council decision that treats fishermen's observations as secondary to short-term experimental studies risks missing the actual mechanisms that sustain production. The cited paper by Visel is one of the few that contains views and observations of fishermen about disturbances.

The scientific record is incomplete without fishermen's knowledge. Cooperative research with scientists and fishermen is needed. Any papers without both participants among the authors should be suspect. There must be active roles for fishermen to ensure strategies are practical, enforceable, and acceptable. As my father said, "Fishermen have to agree because there are not enough cops for all the foggy days."

Photos below show the 4th year productivity after the New Bedford Outer Harbor reopened, when the littlenecks reached legal size. Note the sub-legal quahogs “for next year” among the old bulls and littlenecks. 30 large, 110-pound bushels of very valuable littlenecks were caught in 2-3 hours. Only they were kept.

Conclusion

The goal must not be to eliminate disturbance, but to manage it intelligently, in harmony with natural seabed processes. It is essential in many areas. Adjusting closures as proposed herein would maintain strong reproductive protection while sustaining benthic productivity for cod, scallops, corals, lobsters, clams, worms, and other species that depend on a dynamic, oxygenated seabed with hiding and attachment places for the very young. Proper administration, as proposed, can increase fisheries production broadly, create jobs at sea and ashore, and boost the nation’s food supply, while reducing our seafood imports. This proposal is easily testable. Let’s find out!

Thank you for your consideration. I would welcome the opportunity to provide additional references or to discuss these concepts further with your habitat and groundfish committees. If desired, staff and I will participate, at our expense, in the planning and oversight of follow-on investigations.

Lastly, I have had no contact, nor affiliation, with any interest group about this matter. I do not have “a dog in the fight”. I am simply honoring and sharing my father’s request.

Respectfully,

A handwritten signature in blue ink that reads "John T. Everett". The signature is written in a cursive, flowing style.

Dr. John T. Everett ([Bio](#))

Chair and CEO. [Everett-Vehrs Conservation and Research Foundation](#), and,

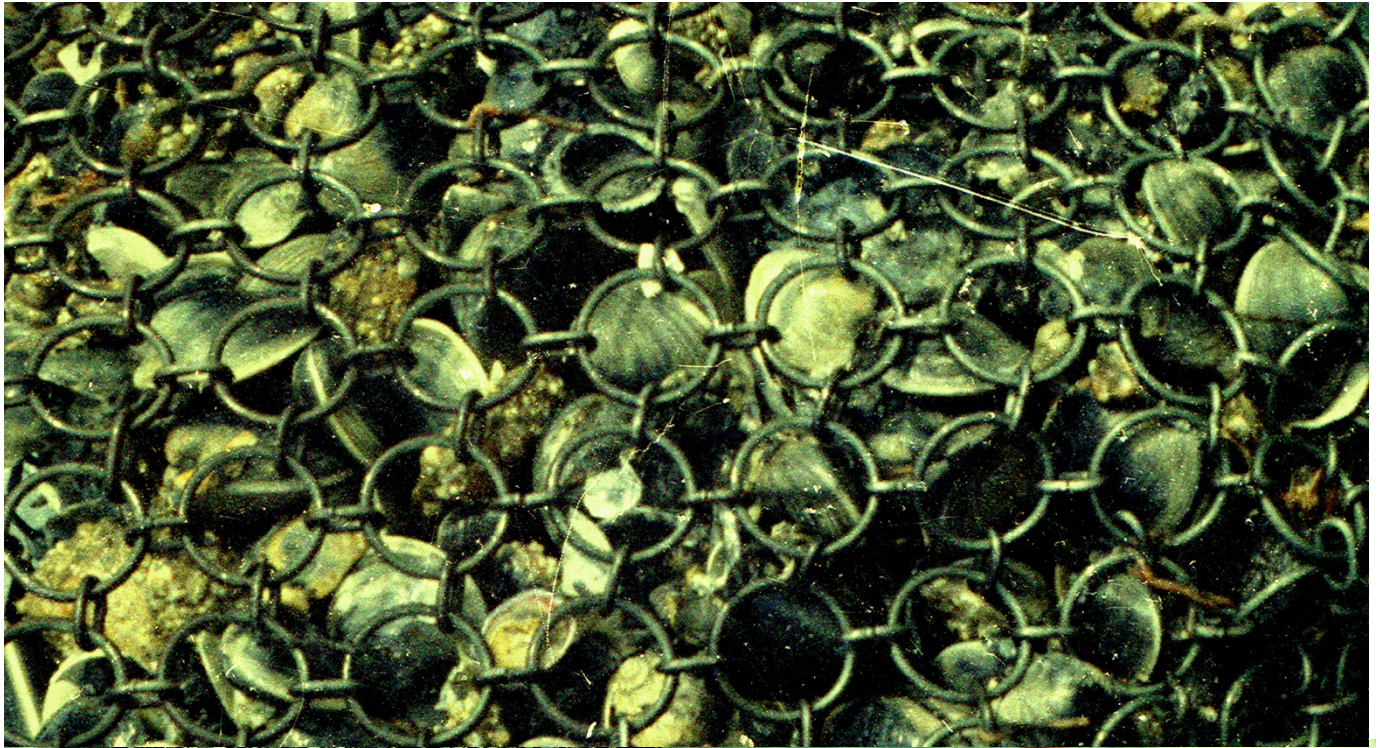
President, [Ocean Associates, Inc.](#)

"Love nature as much as we do? [Help support our work for a healthier planet!](#)"

In the photos on the next page:

Close-up of chain bag and deck, showing little necks and bulls in 12-minute tows in winter 1970 in the 4th year after re-opening of outer harbor after 60 years of closure.

John R. (foreground) and Antone R. Everett, Jr., washing the hydraulic dredge catch (about 3 bushels of littlenecks/tow) for sorting on what had been their father’s boat.



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New England Fishery Management Council

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Daniel Salerno, *Chair* | Cate O'Keefe, PhD, *Executive Director*

June 29, 2026

Mr. Michael Pentony
Regional Administrator
NOAA Fishery Service
Greater Atlantic Regional Fisheries Office
55 Great Republic Drive
Gloucester, MA 01930

Dear Mike:

On June 24, 2026, the Council completed its periodic review of the Dedicated Habitat Research Areas (DHRA) established through Omnibus Habitat Amendment 2 (OHA2). This review is completed every three years and considers whether there is recent, ongoing, or future planned research in the Georges Bank or Stellwagen DHRAs that addresses the objectives set forward in OHA2 and is reliant on the regulations associated with each of the designations. The Council passed the following motions:

That the Council requests administrative removal of the Georges Bank Dedicated Habitat Research Area.

The motion *carried* on a show of hands with one abstention (Mr. Pentony).

That the Council recommends retention of the Stellwagen Dedicated Habitat Research Area.

The motion *carried* with one abstention (Mr. Pentony).

The Council made these recommendations consistent with the evaluation flowchart provided in OHA2 and indicated in the regulations. There is recent, ongoing, and future planned research related to the Council's objectives and reliant on the DHRA regulations in the Stellwagen DHRA, which supports retention of the designation. The Georges Bank DHRA has not seen research focused on DHRA topics during this evaluation period or the prior three-year evaluation period, which supports the Council's request for removal. The Council is interested in the specifics of the rulemaking process that your office will use to remove the Georges Bank DHRA and we would appreciate your keeping us informed about that work.

We anticipate completing our next review of the Stellwagen DHRA in 2029, either as a standalone review or as part of a more comprehensive 10-year evaluation of management measures established through Omnibus Habitat Amendment 2. The Stellwagen DHRA overlaps various Council management areas, including the Western Gulf of Maine Closure Area and Habitat Closure Area. The regulations for these two areas include overlapping fishing restrictions as the DHRA. During this review, the Council affirmed that these are independent management areas with distinct objectives, but they are interrelated such that an omnibus-style review could be useful in the future.

Thank you for your support during this review process. We appreciate the efforts of Christine Ford, GARFO Sustainable Fisheries Division, who prepared a report for us detailing recent research in both areas.

Please let me know if you have any questions.

Sincerely,

A handwritten signature in blue ink, reading "Cate O'Keefe". The signature is fluid and cursive, with the first name "Cate" and last name "O'Keefe" clearly distinguishable.

Cate O'Keefe
Executive Director

CC: Dan Salerno, NEFMC Chair

From: Marc Lareau <waterman2000us@yahoo.com>

Sent: Thursday, July 2, 2026 7:36 PM

To: Cate O'Keefe <cokeefe@nefmc.org>

Subject: Scalloping

To whom it may concern: Reopening of the Northern Edge should have happened years ago which i'am sure were all in agreement. But stacking/leasing and doing away with scallop permit vessel base lines is really a bad decision. It's only going to increase fishing effort. Large fleet owners only care about permit stacking regardless of baselines because of them have mixed baselines. In closing I hope that the council will have a lot of input and discussions on this matter.

Thank you from a concerned former scallop captain and currently a shoreside engineer.

Harriet Didriksen must be rolling in grave. God bless her.



New England Fishery Management Council

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July 7, 2026

Mr. Michael Pentony
Regional Administrator
Greater Atlantic Regional Fisheries Office
National Marine Fisheries Service
55 Great Republic Drive
Gloucester, MA 0193

Dear Mike:

On July 7, 2026, my staff electronically sent the final submission of the 2025 Essential Fish Habitat Framework to your staff. This action is Framework Adjustment 18 to the Monkfish Fishery Management Plan, Framework Adjustment 13 to the Northeast Skate Complex Fishery Management Plan, Framework Adjustment 70 to the Northeast Multispecies Fishery Management Plan, and Framework Adjustment 12 to the Atlantic Herring Fishery Management Plan. The measures in this framework would revise essential fish habitat designations for monkfish, Atlantic herring, the seven species in the skate complex, and Atlantic cod.

After reviewing your letter and comments dated June 1, 2026, on the preliminary submission sent on April 10, 2026, we updated the framework document to incorporate all substantive changes. We have adjusted the final essential fish habitat maps to reflect your recommendations to improve their ease of use in essential fish habitat consultations for inshore projects. Thank you for your input.

Please contact me if you have any questions.

Sincerely,

Cate O'Keefe
Executive Director

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July 11, 2026

Dear Members of the New England and Mid-Atlantic Fisheries Management Councils:

Re: Hydraulic dredging, benthic productivity, and carefully managed access to closed areas

This is a follow-up to my June 18 letter on the importance of hydraulic dredging to the goals of the MSFCMA and NOAA.

On July 2, NMFS Assistant Administrator Eugenio Soler issued a statement that elevates the urgency of this topic: "After considering all input from councils, fishing industry, and the public, we have prioritized actions - many of which align with Council-identified priorities - we believe will reduce burdens on domestic fishing, increase production, stabilize markets, improve access, and enhance economic profitability." Those objectives are precisely what my recommendations are intended to advance, and they are consistent with the 1983 amendments to the Act – which NOAA assigned me to the Senate to help coordinate. And yesterday, the White House issued this related video. [Watch the video here](#). They all are on board.

Requested action

I respectfully ask the Councils to evaluate time-limited openings for hydraulic dredging in most areas, while maintaining strong protection for sensitive spawning periods and genuinely vulnerable habitats. At the same time, studies should be done to determine if such restrictions are needed or are beneficial to sensitive habitats and to production. I think not.

Why I am writing

This letter summarizes the key points I learned while trying to answer my father's question: why did hydraulic dredging in Fairhaven increase quahog production by roughly 1,000 times?

It took more than 50 years to understand the mechanism behind what we observed after the Fairhaven-New Bedford Outer Harbor was reopened following several decades of closure for pollution. The final pieces came together only recently.

First, I found records of landings from coastal New England towns before and after the devastating 1938 and 1954 hurricanes. Those records showed that major seabed disturbance can produce a 10- to 100-fold increase in landings a few years later, as young quahogs, scallops, and other animals reach legal size. That helped explain part of the Fairhaven experience, but not the full 1,000-fold increase.

The remaining explanation appears to stem from the fact that hydraulic dredging is performed repeatedly and at greater depths. It loosens compacted sediment, brings clean shell and shell hash to the surface, creates hiding and attachment habitat, and the crew removes predators during sorting. Most importantly, dredging can occur every year, while major hurricanes come only a few times per century.

The mechanisms are summarized below. My full [June 18 letter contains additional detail and references](#).

What storms and dredging have in common

The basic mechanisms that increase production of fish, mollusks, worms, and other benthic organisms are common to major seabed disturbances, whether caused by storms or by carefully managed fishing activity:

- **Removal of smothering deposits.** Disturbance can clear the bottom by removing, dispersing, or burying accumulated silt, detritus, and other organic material, thereby exposing cleaner surfaces for settlement.
- **Restoration of clean substrate.** Clean shell, shell hash, stones, and corals provide attachment surfaces required by scallops, oysters, mussels, corals, and certain worms.
- **Creation of refuges for the very young.** Interstitial spaces among shells, stones, and shell hash provide hiding places for baby cod, other fish, mollusks, worms, and other small organisms in a predator-rich environment.
- **Settlement cues.** Shell-derived physical and chemical cues help molluscan larvae and post-larvae identify suitable habitat for settlement and growth.
- **Oxygenated and usable bottom.** Clams, scallops, quahogs, and worms need to keep their mouths and gills above suffocating deposits, while burrowers move into usable substrate for protection and growth.

Sea scallops illustrate the point. They need clean shells for initial attachment with byssal threads and again about a year later. If an area is closed to protect a strong year class but then remains undisturbed, further production will slow or stop until dredging resumes or a major storm resets the bottom.

Why hydraulic dredging is different from storms, strong tides, and trawling

Hydraulic dredging adds important functions beyond the one-time disturbance created by a storm:

1. **Loosening compacted sediment.** The blade and jets work roughly 8 to 10 inches into the bottom, breaking up hard or otherwise compacted sediments. This improves habitat for surf clams and other burrowing organisms that need penetrable substrate for predator avoidance and growth.
2. **Expanding habitat in high-density areas.** In productive areas, loosened sediment allows nearly vertical stacking of clams and quahogs, creating more usable habitat. I saw this in Fairhaven in 1961 near a sewage outfall, where food levels were high. The quahogs were destined for transplanting and stocking in other towns on Cape Cod under state supervision. In one tong covering 2 sq. ft., I counted 144 quahogs – amidst most things that are flushed down toilets. In normal beds, getting 6 would be rare.
3. **Removing predators.** When the dredge is dumped on deck, predators of young fish and mollusks are separated by the crew and marketed, used as bait, or destroyed. Incentives could reward the removal of non-useable predators such as small crabs, starfish, moon snails, periwinkles, and whelks.
4. **Creating habitat diversity.** Dredging creates a mosaic of disturbed and recovering patches. These patches can provide settlement and growth opportunities for opportunistic animals.
5. **Increasing benthic prey.** Increased abundance of post-pelagic benthic prey after dredging can improve foraging opportunities for bottom fish and other predators. Flounders flourish with the extra worms.
6. **Repeating useful disturbance.** Major storms are decades apart. Hydraulic dredging can repeat the valuable ecological functions - sediment reworking, exposure of buried substrate, and reset of benthic succession - on a managed schedule.

Protecting truly vulnerable habitats

This is not an argument for indiscriminate dredging. Many high-relief areas are inherently protected from hydraulic dredging and some trawling by rocky ledges, ridges, canyons, and boulders. These features were deposited as ancient glaciers retreated and are mapped by NOAA, USGS, and Canada.

Vessels can avoid such features using GPS, vessel records, and crew knowledge. For additional protection - for example, because of unique epifaunal life, corals, or other special habitats - those places can be defined and avoided. The features that make an area biologically special, such as boulders, outcrops, or canyons, also can make it impossible to dredge. The whole area need not be closed to all fishing.

Management implication

The management goal should not be to eliminate disturbance but to manage disturbance intelligently, in harmony with natural seabed processes.

Properly timed and carefully monitored hydraulic dredging can mimic useful natural disturbance, restore clean substrate, reduce predator pressure, and increase production of shellfish, bottom fish, and their food - worms. Time-limited openings outside sensitive spawning and settlement periods could maintain strong reproductive protection while restoring productivity in areas that otherwise become increasingly silted, compacted, and less useful as nursery habitat.

Conclusion

Hydraulic dredging disperses or buries suffocating sediment, breaks up hard bottom, brings clean shells and stones to the surface, enables predator removal, and provides physical and chemical cues for larval attraction, attachment, hiding, and growth. Annual or periodic disturbance is essential, as shown by the short-lived increase in catch a few years after major hurricanes.

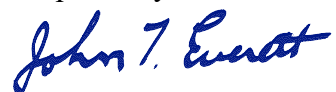
Adjusting closures as proposed in my June 18 letter would maintain strong reproductive protection while sustaining productivity for cod, scallops, corals, lobsters, clams, worms, and other organisms that depend on a dynamic, oxygenated seabed with hiding and attachment places for the very young.

Proper management can increase fisheries production broadly, create jobs at sea and ashore, boost the nation's food supply, and reduce imports. These are fundamental objectives of the MSFCMA, and Mr. Soler has just echoed these same objectives.

Thank you for your consideration. I would welcome the opportunity to provide additional references or to discuss further. If wished, staff and I would participate, at our expense, in planning and oversight of research.

I have had no contact or affiliation with any interest group about this matter. I have no financial, organizational, or advocacy interest in the outcome. I am simply honoring and sharing my father's request. The photos below show what we found. On the last page is a note from Senator Bob Packwood, Chair of the Senate Commerce Committee, who had jurisdiction and oversight of the FCMA. NOAA assigned me to his office for one year to coordinate the needed changes to the Act and serve as liaison with NOAA.

Respectfully,



Dr. John T. Everett ([Bio](#))

Chair and CEO. [Everett-Vehrs Conservation and Research Foundation](#), and,
President, [Ocean Associates, Inc.](#)

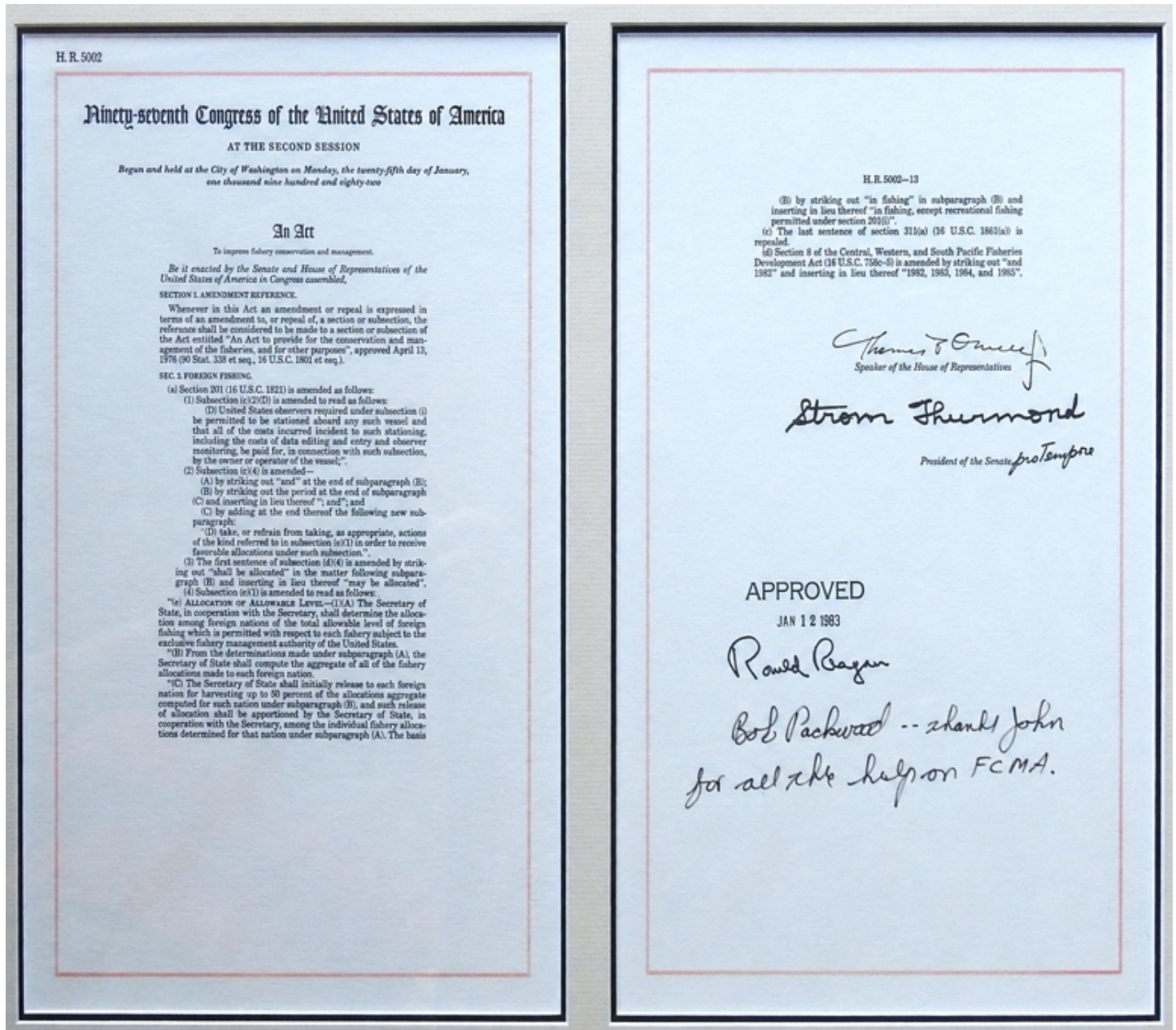
Appendix A. Fairhaven/New Bedford Outer Harbor photographs

Winter 1970, fourth year after reopening of the outer harbor after decades of closure. Photos show littlenecks and bulls in 12-minute hydraulic dredge tows. John R. Everett is in the foreground; Antone R. Everett, Jr. is washing the catch for sorting on what had been their father's boat.



Appendix B. Recognition from Senate Commerce Committee Chairman Bob Packwood

*Historical note referenced in the conclusion: Chairman Bob Packwood's handwritten recognition:
"Thanks John for all the help on FCMA."*





July 21, 2026

Geoffrey Wikel
Bureau of Ocean Energy Management
Office of Strategic Resources
45600 Woodland Road
Sterling, Virginia 20166
BOEMVAMineralLeaseSale@boem.gov

Dear Mr. Wikel,

Please accept these comments from the Mid-Atlantic Fishery Management Council (Mid-Atlantic Council), the New England Fishery Management Council (New England Council), and the South Atlantic Fishery Management Council (South Atlantic Council) on the Request for Information (RFI) regarding commercial leasing for minerals on the Outer Continental Shelf off Virginia.

The Mid-Atlantic Council manages more than 65 marine species¹ in federal waters and is composed of members from the coastal states of New York to North Carolina (including Pennsylvania). The New England Council has primary management jurisdiction over 28 marine fishery species in federal waters and is composed of members from Maine to Connecticut. The South Atlantic Fishery Management Council (Council) is responsible for management of over 64 species of finfish, crustaceans, and corals in federal waters from the North Carolina/Virginia border through Key West, Florida.²

In addition to managing these fisheries, our three Councils have enacted measures to identify and conserve essential fish habitats (EFH), protect deep sea corals, and sustainably manage forage fisheries. The marine fisheries throughout our region are profoundly important to the social and economic well-being of many communities and provide numerous benefits to the nation, including domestic food security.

General Comments

The RFI states that heavy mineral sands and phosphorites are of potential interest for mining in a large area off Virginia. However, the area shown in the RFI "is not necessarily indicative of the area that may ultimately be offered for lease." Lease areas could be

¹ Fifteen species are managed with specific Fishery Management Plans (FMPs), and over 50 forage species are managed as "ecosystem components" across all the Mid-Atlantic Council's FMPs.

² Species managed by the Councils are listed at the end of this letter.

identified “in or around” the RFI area. In addition, the RFI does not contain any information on the methods that may eventually be used to survey the area and extract minerals. For example, it is unclear if the extraction methods will suspend sediment and/or create sound impacts that may be of concern to our managed species, other protected species, and marine habitats. Different methods of exploration will likely have different environmental impacts; therefore, without details on the methods expected to be used, we are only able to provide general comments at this time. We will provide more detailed comments if this potential leasing process advances to later stages such as a proposed lease sale.

Several important commercial and recreational fisheries exist in and around the RFI area. Given that BOEM may consider leasing areas outside the RFI area, we will not provide details on specific fisheries of concern at this stage, as this will vary based on the areas under consideration. Several online tools exist for evaluating potential overlap with important fishery areas and habitats, such as the [Mid-Atlantic Ocean Data Portal](#), the [Northeast Ocean Data Portal](#), and the [NOAA Deep Sea Corals and Sponges Data Portal](#). However, it is important to keep in mind that these portals do not always contain the most recent information. We encourage BOEM to coordinate early and often with NOAA Fisheries (including the Greater Atlantic Regional Fisheries Office, the Southeast Regional Office, and Headquarters) to ensure all relevant data on marine habitats and commercial and recreational fishing and transit are considered, to understand the limitations of each data set, and to determine how to appropriately incorporate confidential data. More detailed information on fisheries data can be found in our prior comment letters to BOEM on offshore wind energy leasing.³

As we have said in past comment letters, risks to the health of marine ecosystems, ecologically and economically sustainable fisheries, and ocean habitats must be avoided. To the extent that risks cannot be avoided, they should be minimized, mitigated, or compensated for.

Areas to Avoid

Some impacts can be mitigated through permit conditions on a specific project. However, other effects will be best avoided by excluding them from all relevant exploration and development activities. This is not limited to the lease area but should also include areas that will be impacted by shoreside infrastructure, project related transit, and other relevant activities. The following areas should be excluded from further consideration for potential development:

³ For example, our October 2024 letter on the Central Atlantic 2 call for information is available at https://www.mafmc.org/s/2024_10-21_MAFMC-SAMFC-NEFMC-to-BOEM-CentralAtl2.pdf.

- Sensitive habitats such as wetlands, shellfish beds, fish spawning and/or nursery habitat areas, submerged aquatic vegetation (SAV), deep sea coral and sponge habitats (including all designated coral protection zones), and other hard/structured habitats.
- Important commercial and recreational fishing areas, including, but not limited to:
 - Areas identified as important based on NOAA Fisheries Footprint data and other sources.
 - Sandy ridges, lumps, shoals, and rises named on maps - the naming of these is often the result of the area being an important fishing ground.
 - Artificial reefs.
- Habitat Areas of Particular Concern (HAPCs) and Coral Habitat Areas of Particular Concern (CHAPCS).
- Special Management Zones (SMZs), including Spawning Special Management Zones (SSMZs).
- Shipping safety fairways.
- Areas without sufficient available information on fisheries and/or habitat types.

BOEM should consider an appropriate buffer distance around all the areas listed above to ensure impacts are sufficiently avoided and minimized. The appropriate buffer distance will likely vary based on the specific area and type of impact.

The RFI area is close to but does not overlap with the Coastal Virginia Offshore Wind (CVOW) lease area and the Frank R. Lautenberg Deep Sea Coral Protection Areas. We are concerned with this proximity, especially given that BOEM may consider leasing areas outside the RFI area and a sufficient buffer distance has not been established. BOEM should carefully consider how the impacts of minerals exploration and mining may interact with the impacts of the CVOW project on fisheries and habitats.

Minimization, Mitigation, and Compensation

When impacts cannot be avoided, they should be minimized, mitigated, or compensated for. This should include consideration of restrictions on exploration, extraction, and other relevant activities during times of year that overlap with important fishing seasons (such as, but not limited to, fishing tournaments) and sensitive life stages of marine species (such as, but not limited to, spawning and migration).

The Councils support the development of a compensatory mitigation fund for damages that occur to the marine environment and fish habitat as well as damages or losses to fishing vessels or their gear, or reductions in operations/revenues, resulting from extraction, exploration, and other relevant activities. The Councils also support the creation of funds to support fisheries development and research related to ecosystem changes associated with minerals mining.

Public Engagement

BOEM and project developers should engage early and often with the fishing community, including individual fishermen, fishing businesses, and recreational and commercial fishing organizations. BOEM should also engage with the Regional Fishery Management Councils, NOAA Fisheries, state marine resource and coastal zone management agencies, National Marine Sanctuaries, the Southeast Area Monitoring and Assessment Program (SEAMAP), regional science entities (e.g., the Responsible Offshore Science Alliance and the Regional Wildlife Collaborative), regional ocean observing systems (MARACOOS, NERACOOS, and SECOORA), other NGOs, universities with relevant programs and research, the U.S. Department of Defense, and any other interested stakeholders. We encourage as much public engagement and transparency as possible. Engagement should move beyond only information sharing to focus on collaboration, shared problem identification, option generation, and problem solving.

The RFI states that BOEM conducted an evaluation of “the available OCS mineral resource and environmental information pertaining to the area of interest.” BOEM should share the results of this evaluation. Detailed maps of habitat types within the area under consideration should be provided to the public, including the Councils, to assist with evaluation of potential impacts. This will help stakeholders provide input on potential impacts and identification of areas to avoid.

Other Comments

Federal and state-operated fishery independent monitoring surveys are critically important for stock assessments and setting fishery catch limits. Impacts to these surveys should be avoided whenever possible and minimized and mitigated when avoidance is not possible.

It is also important to consider that impacts of exploration, extraction, and other relevant activities will not be limited to the lease areas. There will also be impacts to nearshore and coastal areas due to infrastructure and vessel traffic. These impacts must also be considered.

BOEM should clarify if leases must be awarded to the highest cash bidder or if other mechanisms such as bidding credits may be used. For example, the offshore wind lease

auctions for the Gulf of Mexico, Central Atlantic, and Gulf of Maine allowed bidding credits for fisheries compensatory mitigation.

Conclusion

We appreciate the opportunity to provide comments to BOEM to ensure issues of social and ecological importance are considered through the next steps for this process. We look forward to working with BOEM to ensure that any relevant activities avoid and minimize impacts to the marine environment and occur in a manner that ensures coexistence with commercial and recreational fisheries.

Please contact us if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Moore".

Dr. Christopher M. Moore

Executive Director, Mid-Atlantic Fishery Management Council

A handwritten signature in blue ink, appearing to read "Cate O'Keefe".

Dr. Cate O'Keefe

Executive Director, New England Fishery Management Council

A handwritten signature in black ink, appearing to read "John Carmichael".

Mr. John Carmichael

Executive Director, South Atlantic Fishery Management Council

Council Managed Species

Mid-Atlantic Council	Atlantic mackerel, Atlantic surfclam, Black sea bass*, Bluefish*, Blueline tilefish, Butterfish, Chub mackerel, Golden tilefish, Longfin squid, Ocean quahog, Scup*, Shortfin (<i>Illex</i>) squid, Spiny dogfish*&**, Summer flounder*
New England Council	Acadian redfish, American plaice, Atlantic cod, Atlantic halibut, Atlantic herring*, Atlantic salmon, Atlantic wolffish, Barndoor skate, Clearnose skate, Haddock, Little Skate, Monkfish**, Ocean pout, Offshore hake, Pollock, Red crab, Red hake, Rosette skate, Sea scallop, Silver hake, Smooth skate, Thorny skate, White hake, Windowpane flounder, Winter flounder*, Winter skate, Witch flounder, Yellowtail flounder
South Atlantic Council	King mackerel***, Spanish mackerel****, Gulf cobia***, Common dolphin, Pompano dolphin, Bullet and Frigate mackerel, Wahoo, Coral , Golden crab, Sargassum, Penaeid shrimp, Rock shrimp, Spiny lobster***, and 55 species of Snapper Grouper
* Also managed by the Atlantic States Marine Fisheries Commission. ** Jointly managed between the Mid-Atlantic and New England Fishery Management Councils. ***Jointly Managed by the South Atlantic and Gulf Fishery Management Councils ****Co-managed with the Atlantic States Marine Fisheries Commission and jointly managed by the South Atlantic and Gulf Fishery Management Councils	



NEW ENGLAND/MID-ATLANTIC

July 21, 2026

NOAA Fisheries Announces a Negative 90-day Finding on A Petition Request to Revise the Critical Habitat Designation for the North Atlantic Right Whale

NOAA Fisheries received a petition from Save Long Beach Island, Inc. to revise the critical habitat designation for North Atlantic right whales under the Endangered Species Act. The petition requests a revision to the current critical habitat designation to include a migratory habitat in waters between Maine and Georgia.

NOAA Fisheries reviewed the petition, references provided by the petition, and information readily available in our files, and found that the petition does not present substantial scientific information indicating a revision to North Atlantic right whale critical habitat may be warranted. Therefore, a negative 90-day finding was made.

Read the [notice](#) as filed in the Federal Register today.

Questions?

Industry: [Jean Higgins](#), Protected Resources, 978-281-9345

Media: Contact [GARFO Public Affairs](#)



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930

August 3, 2026
via electronic email

Steven Squibb
Transportation/Area Engineer
FHWA NJ Division
U.S. Department of Transportation
840 Bear Tavern Road
Suite 202
West Trenton, NJ 08628

RE: Essential Fish Habitat Consultation for Rt 71, Bridge over Shark River, Avon-by-the Sea and Belmar Townships, Monmouth County, NJ

Dear Mr. Squibb:

On behalf of the U.S. Department of Transportation's Federal Highway Administration (FHWA), the New Jersey Department of Transportation (NJDOT) has requested an abbreviated essential fish habitat (EFH) consultation under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and consultation under the Fish and Wildlife Coordination Act (FWCA) for the replacement of the Route 71, Bridge over the Shark River project, between the townships of Belmar and Avon-By-The-Sea, Monmouth County, New Jersey. The FHWA is the lead federal agency under the National Environmental Policy Act (NEPA) and the NJDOT is the non-federal representative for this review.

The proposed project involves the complete replacement of the existing 10-span double-leaf bascule bridge on its existing alignment. To facilitate bridge demolition and construction, temporary access trestles will be constructed using approximately 168 open-ended steel pipe piles (30 to 36-inches in diameter). Temporary steel sheet pile cofferdams (~737 sheet pile pairs) will also be installed and the work areas will be dewatered to isolate foundation demolition and new pier construction. The new bridge substructure will be supported on 79 60-inch diameter drilled shaft concrete piers, and a new fender system consisting of 116 24 to 30-inch diameter Fiber Reinforced Polymer (FRP) piles. In-water construction is anticipated to span approximately three years, from July 2029 through July 2032.

Because project activities will result in a temporary structure remaining in place for over 12 months and will exceed 1,000 square feet of temporary impacts to intertidal mudflats, the project is not covered by the January 2024 FHWA Programmatic Essential Fish Habitat Consultation and General Concurrence, and project-specific EFH consultation is required. Specifically, construction trestles will shade 2.337 acres of subtidal habitat and shellfish beds and 0.239 acres of intertidal mudflat for more than one year. In addition, approximately 4.682 acres of subtidal habitat and shellfish bed will be disturbed by construction barges.



We have reviewed the EFH assessment provided and agree with your conclusion that the adverse effects of this project on EFH will not be substantial. The following provides our basis for this determination.

Magnuson Stevens Fishery Conservation and Management Act

The MSA and FWCA require federal agencies to consult with one another on projects such as this, that adversely affects EFH and other aquatic resources. In turn, we must provide recommendations to conserve EFH. These recommendations may include measures to avoid, minimize, mitigate, or otherwise offset adverse effects on EFH resulting from actions or proposed actions authorized, funded, or undertaken by that agency. This process is guided by the requirements of our EFH regulation at 50 CFR 600.905, which mandates the preparation of EFH assessments and generally outlines each agency's obligations in this consultation procedure. While our regulations also allow a federal agency such as FHWA to designate a non-federal representative such as NJDOT to conduct the EFH consultation, it is important to note that the FHWA remains ultimately responsible for compliance with sections 305(b)(2) and 305(b)(4)(B) of the MSA.

The project area has been designated as EFH under the MSA for a number of federally managed species including winter flounder (*Pseudopleuronectes americanus*), windowpane flounder (*Scophthalmus aquosus*), Atlantic herring (*Clupea harengus*), bluefish (*Pomatomus saltatrix*), summer flounder (*Paralichthys dentatus*), scup (*Stenotomus chrysops*), black sea bass (*Centropristis striata*), cleannose skate (*Raja eglanteria*), little skate (*Leucoraja erinacea*), winter skate (*Leucoraja ocellata*) and others. According to the NJ Department of Environmental Protection (NJDEP) 1979 submerged aquatic vegetation (SAV) maps, sea lettuce (*Ulva lactuca*) was historically present within the project area. SAV is designated as a habitat area of particular concern (HAPC) for summer flounder by the Mid-Atlantic Fisheries Management Council (MAFMC). Additionally, NJDEP shellfish maps from the 1980s to present identify the project area for blue mussels (*Mytilus edulis*). The Shark River is also a migratory corridor for anadromous fishes such as alewife (*Alosa pseudoharengus*), and blueback herring (*Alosa aestivalis*) (collectively, river herring). Anadromous fishes such as these serve as prey for federally managed species. As a result, adverse effects to their migration and spawning can be considered an adverse effect on EFH.

We have reviewed the EFH assessment, the June 12, 2026, SAV survey report, and the June 12, 2026, wetland delineation memorandum. We note that the June 2026 field survey confirmed the absence of rooted vascular seagrasses (i.e., eelgrass (*Zostera marina*) or widgeon grass (*Ruppia maritima*)) within the project footprint and 150-foot buffer, confirming that historical mapping of SAV in the project area represents sea lettuce, a non-vascular macroalgae, which is not considered to be summer flounder SAV HAPC. However, active blue mussel (*Mytilus edulis*) beds and intertidal mudflats are present and will experience direct and temporal loss. Filter feeding blue mussels provide many important ecological functions including improving water quality by removing nutrients and reducing turbidity, stabilizing sediments, providing refuge and serving as a food source for many other aquatic species.

As discussed in the EFH assessment, project activities will be designed to avoid and minimize impacts as practical, which includes best management practices (BMPs) that reduce turbidity and

noise. Such BMPs include the use of a vibratory hammer and a turbidity barrier surrounding the work areas. Since the means, methods, and materials for construction will ultimately be determined by the contractor, we also recommend that the project implement a mandatory "soft-start" protocol for all impact pile driving, which must be repeated after any delay in driving that exceeds 30 minutes. Many of these BMPs are included in the [NOAA Fisheries/Federal Highway Administration Best Management Practices Manual for Transportation Activities in the Greater Atlantic Region](#). We encourage NJDOT to continue to use this BMP manual to identify opportunities to avoid and minimize impact to NOAA trust resources. To avoid affecting the spring river herring migration to their upstream spawning habitat, we also recommend in-water construction activities, which include steel pile pipe and sheet pile coffer dam installation, not occur between March 1 and June 30 of any given work year.

Essential Fish Habitat Conservation Recommendations

Pursuant to Section 305(b)(4)(A) of the MSA we recommend that you adopt the following EFH conservation recommendations to minimize or offset adverse impacts on EFH:

- Avoid the installation of steel piles and sheet pile cofferdams between March 1 and June 30 to minimize impacts to migrating anadromous fish every work year. Work inside dewatered cofferdams are not subject to this protective work window. Should activities necessitate work during this protective window, consultation should be reinitiated and additional BMPs may be necessary to ensure a safe zone of passage is provided for migratory fish.
- Use a vibratory hammer for all pile driving (i.e., trestle pipe piles, sheet piles, FRP fender piles) to the maximum extent practicable. Implement a mandatory "soft-start" protocol for all impact pile driving, consisting of an initial set of three strikes at 40 percent energy, followed by a 1-minute waiting period, repeated for three sets prior to initiating continuous driving. Soft-starts must be repeated after any delay in driving exceeding 30 minutes.
- Barges and other vessels used during construction must float at all stages of the tide.

Please note that Section 305(b)(4)(B) of the MSA requires you to provide us with a detailed written response to these EFH conservation recommendations, including a description of measures adopted by you for avoiding, mitigating, or offsetting the impact of the project on EFH. In the case of a response that is inconsistent with our recommendations, Section 305(b)(4)(B) of the MSA also indicates that you must explain your reasons for not following the recommendations. Included in such reasoning would be the scientific justification for any disagreements with us over the anticipated effects of the proposed action and measures needed to avoid, minimize, mitigate, or offset such effects pursuant to 50 CFR 600.920(k). This response must be provided within 30 days after receiving our EFH conservation recommendations and at least 10 days prior to final approval of this action. Please also note that further EFH consultation must be reinitiated pursuant to 50 CFR 600.920(j) if new information becomes available, or if the project is revised in such a manner that affects the basis for the above determination.

Endangered Species Act

Federally listed species may be present in the project area. Consultation, pursuant to Section 7 of the Endangered Species Act (ESA) of 1973, may be necessary. The FHWA will be responsible for determining whether the proposed action is likely to affect listed species. The determination of effects from the project along with justification for the determination, and a request for concurrence should be submitted to nmfs.gar.esa.section7@noaa.gov. After reviewing this information, our Protected Resources Division would then be able to conduct a consultation under Section 7 of the ESA if appropriate.

Conclusion

As always, we are available to coordinate with your staff so that this project can move forward efficiently and expeditiously as possible while still meeting our joint responsibilities to protect and conserve aquatic resources. If you have any questions or need additional information, please contact Jessie Murray in our Highlands, NJ field office at 732-872-3023 or Jessie.Murray@noaa.gov.

Sincerely,



Louis A. Chiarella
Assistant Regional Administrator
for Habitat and Ecosystem Services

cc:

GARFO HESD – K. Greene
GARFO PRD – B. Barnhill
NJDOT – R. Dekovitch, J. Mikusa
New York District ACOE – S. Ryba
NJDEP – G. Nickerson, K. Davis
FWS – R. Conover, M. Ciappi
EPA Region II – M. Finocchiaro
NEFMC – C. O’Keefe
MAFMC – C. Moore
ASMFC – R. Beal

Comments to the NEFMC Habitat Committee for the Council Meeting on 20 August 2026

To: Daniel Salerno, Chair, New England Fishery Management Council

Cc: Cate O'Keefe, Executive Director, Habitat Committee and Habitat Advisory Panel

Subject: Comments on the Great South Channel Habitat Management Area Clam Exemption Program Evaluation – Request to Evaluate Potential Beneficial Effects of Periodic Seabed Disturbance

Dear Chairman Salerno, Members of the Habitat Committee, and Members of the Habitat Advisory Panel:

I respectfully request that, as part of its evaluation of the Great South Channel Habitat Management Area clam dredge exemption program, the Committee explicitly consider and respond to the scientific questions I raised in my June and July communications to the Council and NMFS concerning hydraulic dredging, seabed disturbance, and Essential Fish Habitat.

I am not asking the Committee to accept my conclusions, nor am I asking it to recommend opening currently closed areas at this meeting. I am asking that the alternative habitat hypothesis I present be evaluated objectively against the available scientific evidence.

Much of the existing management discussion begins with the premise that disturbance by mobile bottom-tending gear is necessarily adverse to seafloor habitat. I believe the opposite is true in many, if not most, areas.

I raise a testable question: In high-energy sedimentary habitats such as portions of Nantucket Shoals and the Great South Channel—and particularly in less dynamic areas—can periodic seabed disturbance under some or many circumstances maintain or improve habitat characteristics important to the production of bottom fish, shellfish, worms, and other seafloor residents?

This is not an idle question. As a third-generation Massachusetts fisherman for lobsters, quahogs, cod, and conchs, I learned much about how the ocean works from my father and grandfather. That knowledge, combined with further education, led me to senior positions in NOAA. I retired as NMFS Chief of the Research Division, where I coordinated and advocated for the national fisheries research program. I subsequently founded one of NMFS's largest support contractors and a conservation foundation.

When I left fishing for NMFS in 1971, my father asked me to determine how our hydraulic dredging in the New Bedford–Fairhaven outer harbor had produced a 1,000-fold increase in

quahog production within four years of reopening, after decades of closure due to sewage pollution. Over many years of research, the pieces came together. Clean shells, shell hash, and a cleaned bottom explained a 10- to 100-fold increase of the kind (but just one-time) also observed after major hurricanes. This spring, Sherman Butler of Fishery News brought to my attention a Sea Grant paper (not in the peer-reviewed literature) that shared fishermen and aquaculture insights capable of explaining the remaining order-of-magnitude increase: removal of predators during sorting, and breakup of compacted seafloor that allows rapid burrowing by clams and lobsters to escape predators, and vertical stacking of clams that permits high densities. I had seen such densities while tonging for quahogs at the Fairhaven sewage outfall in the 1960s (under state supervision for transplanting to clean waters on the Cape), where we routinely caught well over 100 quahogs per tong versus a commercial maximum of about four (in about 1 square foot). They must have been vertically stacked, though I did not recognize it at the time.

In the prolonged absence of disturbance, fine sediment, organic detritus, and biofilm accumulate; sediment becomes more compacted; clean shell and shell-hash surfaces are covered and lose their “ancestral-home settlement smell”; and interstitial hiding spaces are reduced. These changes affect settlement, attachment, burrowing, refuge from predators, and post-settlement survival of benthic organisms—fish, mollusks, and worms. Conversely, periodic disturbance uncovers clean shell and other substrate, loosens sediments, creates interstitial refuges needed by young cod and other species, and produces a mosaic of disturbed and recovering habitat. Oyster farmers report that biofilms begin to impede spat collection within three days, which is why shells are set out only when spat are ready to attach. I see little evidence that this practical knowledge has been incorporated into the scientific documents guiding management.

These propositions should be treated as hypotheses to be tested, not accepted or rejected by assumption.

I therefore request that the Habitat Committee, Advisory Panel, and Habitat PDT explicitly address the following questions in the Great South Channel evaluation:

1. What happens to the substrate during prolonged closure? Is there evidence that fine sediments, organic material, or biofilms accumulate and stifle settlement of scallops, mussels, and oysters, or that sediments become more compacted, in areas from which mobile bottom-tending gear has been excluded for long periods?
2. Can disturbance create biologically useful habitat features? Does hydraulic dredging or comparable natural disturbance expose clean shell, shell hash, stones,

or other settlement surfaces; increase sediment penetrability; or create interstitial refuges useful to newly settled benthic organisms and juvenile fish?

3. How does hydraulic dredging compare with natural disturbance? In the energetic portions of the Great South Channel and Nantucket Shoals, what are the frequency, depth, and biological effects of seabed disturbance caused by storms, tides, and currents, and how do those effects compare with disturbance and recovery following hydraulic dredging? What about less active areas? (The observations that prompted my father's question were mostly in the northeast corner of the New Bedford–Fairhaven outer harbor, far from routine natural disturbance except for hurricanes.)
4. What does the empirical evidence show over relevant time scales? Over a 10-year span, are there measurable differences in productivity of all species, recruitment, species abundance, substrate characteristics, or prey production between areas dredged at least annually and comparable areas that have remained closed for many years? (Most existing literature is of too short duration.)
5. What does research from the Great South Channel itself show? I encourage the Committee to make full use of before-and-after multibeam sonar, drop-camera, compensation-fishing, and other field observations from dredged and undredged areas, and to determine what those observations actually demonstrate about disturbance and recovery over the 4–10 years from spat/juvenile settlement to market size. I am aware of no research that has considered this full time lag.
6. Are the existing restrictions spatially and temporally matched to the resources they are intended to protect? In particular, the evaluation should consider cod spawning locations and seasons and distinguish protection of demonstrated sensitive habitats from broad restrictions on mobile sand-bottom areas. If spawning cod aggregate and spawn above the bottom, and their eggs never approach the seafloor, area closures to hydraulic dredging are not needed to protect them; such closures may instead remove hiding places and food for newly settled juvenile cod and other fish.
7. Could controlled experiments resolve the disagreement? If the available evidence is insufficient to determine whether periodic disturbance is beneficial, adverse, or neutral in particular habitat types, the Council should consider carefully designed experimental openings conducted outside important spawning or settlement periods, with quantitative long-term before-and-after monitoring and appropriate undisturbed control areas.

I also recommend that the final Great South Channel evaluation contain a distinct section on the potential benefits of seabed disturbance. That section should review the evidence supporting and contradicting this hypothesis and identify important uncertainties, rather than presuming that the ecological effect of disturbance can only be negative.

My father considered the 1,000-fold increase in catch beneficial - particularly the year's pay every 6 days for each of us for a very few hours of work. Others may not. The mechanisms that produced it have only recently been clarified after 55 years of research and questioning, and they have now been shared with the Council.

The management question should not simply be whether hydraulic dredging disturbs the seabed—plainly it does. The biologically relevant questions are what that disturbance does, how long its effects persist, how the habitat responds afterward, how it compares with natural disturbances, and what happens to the same habitat when disturbance is excluded for decades. Does it become dead and moribund, as occurred in the outer harbor of New Bedford after many decades of closure to dredging?

I believe periodic hydraulic dredging can serve as a habitat-maintenance process in most fishable environments and recommend monitored, time-limited access rather than permanent closure. Whether or not the Committee ultimately agrees with that conclusion, the mechanisms and observations underlying it deserve explicit scientific evaluation by a team of scientists and fishermen nominated by their peers.

I therefore respectfully request that:

(1) my June and July 2026 communications to the Council and NMFS be included in the record for the Great South Channel HMA evaluation; (2) the Habitat Committee and Advisory Panel discuss the principal scientific questions raised therein at the August 20 meeting; and (3) the Habitat PDT address those questions in the final evaluation, identifying the evidence supporting or contradicting each hypothesis and, where the evidence is insufficient, identifying research capable of resolving the uncertainty.

The purpose of this request is not to predetermine the Council's conclusion. It is to ensure that the Council examines both the adverse and the potentially beneficial ecological consequences of disturbance and non-disturbance before deciding what constitutes effective protection of Essential Fish Habitat.

Thank you for your consideration. I plan to attend the New Bedford session on August 20 and would like to make a brief (two-minute) public comment during the Surfcclam Exemption Program Review concerning the potential habitat benefits as well as impacts of hydraulic dredging. Could you let me know when the Chair would prefer that I make that comment?

Respectfully,

Dr. John T. Everett ([Bio](#))

Chair and CEO. [Everett-Vehrs Conservation and Research Foundation](#), and

President, [Ocean Associates, Inc.](#)

My letters, most recent is first

1. FMC_Letter_11July26. <https://tinyurl.com/yu3shsx4>

2. The initial complete letter with references is here (FMC Letter_18Jun26): <https://tinyurl.com/3h8scpky>



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930

August 20, 2026
via electronic email

Jason Simmons
Transportation/Area Engineer
U.S. Department of Transportation
Federal Highway Administration
New Jersey Division
840 Bear Tavern Road, Suite 202
West Trenton, NJ 08628

RE: Essential Fish Habitat Consultation for Monmouth County Three Bridges (W-7, W-8, W-9) Replacement Project, Boroughs of Brielle and Manasquan, Monmouth County, NJ

Dear Mr. Simmons:

On behalf of the U.S. Department of Transportation's Federal Highway Administration (FHWA), the New Jersey Department of Transportation (NJDOT) has requested an abbreviated essential fish habitat (EFH) consultation under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the Fish and Wildlife Coordination Act (FWCA) for the replacement of three existing interconnected transportation structures located on the Glimmer Glass, Debbie's Creek, and Watson Creek at the border between the Boroughs of Brielle and Manasquan, Monmouth County, New Jersey. The FHWA is the lead federal agency under the National Environmental Policy Act (NEPA) and NJDOT is the non-federal representative for this review.

The proposed project involves the complete demolition and replacement of Structure W-7 (Green Avenue Bridge), Structure W-8 (Fisk Avenue Culvert), and Structure W-9 (Glimmer Glass Bridge). Specific disturbance activities include excavation, grading, filling, and other ground disturbance associated with demolition, construction access, substructure installation, and other proposed improvements; the installation of cofferdams, piers/piles; bulkhead replacement; and barge operations. In-water construction is anticipated to span approximately three years, from 2029 through 2031.

Project activities will result in a combined total 4,050 square feet (SF) of permanent coastal salt marsh fill, 2,325 SF of permanent intertidal mudflat loss/conversion, 9,900 SF of permanent subtidal benthic conversion, 5,000 SF of new overwater deck shading (1,750 SF at W-7; 3,250 SF at W-9), 4,775 SF of temporary wetland disturbance, and 10,050 SF of temporary open-water and intertidal mudflat disturbance (5,000 SF open water; 5,050 SF mudflat). Additional field investigations, including topographic and bathymetric survey and delineation of wetlands and special aquatic sites, are proposed to be completed during final design efforts, which may result in changes to resource boundaries and disturbance areas.

While a mitigation plan has not been included with the EFH assessment, you anticipate that compensatory measures will be required and may include a combination of: purchasing in-kind



compensatory credits, payment to the NJDEP in-lieu fee program or dedicated account for shellfish habitat mitigation, and/or permittee-responsible mitigation (PRM), either on-site or off-site. This mitigation plan will be subject to regulatory review and approval as part of the Clean Water Act permitting process. Following completion of detailed environmental field studies and tabulation of disturbance totals, potential project-specific mitigation plans may include clam salvage and relocation plans (for anticipated shellfish impacts) and restoration/creation planning at a 1:1 creation to loss ratio for tidal water and intertidal and subtidal shallows (for anticipated tidal water and mudflat disturbance) and 2:1 creation to loss ratio for coastal wetlands (for anticipated permanent wetland disturbance). Compensatory mitigation measures that involve out-of-kind habitat restoration and/or enhancement may be subjected to higher ratios.

Because project activities will exceed 1,000 SF of permanent impacts to tidal special aquatic sites, the project is not covered by the [January 2024 FHWA Programmatic Essential Fish Habitat Consultation and General Concurrence](#) (programmatic), and project-specific EFH consultation is required. We have reviewed the EFH assessment provided and agree with your conclusion that the adverse effects of this project on EFH will not be substantial, provided the conservation recommendations below are fully implemented. The following details the basis for our determination.

Magnuson-Stevens Fishery Conservation and Management Act

The MSA and FWCA require federal agencies to consult with one another on projects such as this that adversely affect EFH and other aquatic resources. In turn, we must provide recommendations to conserve EFH. These recommendations may include measures to avoid, minimize, mitigate, or otherwise offset adverse effects on EFH resulting from actions or proposed actions authorized, funded, or undertaken by that agency. This process is guided by the requirements of our EFH regulation at 50 CFR 600.905, which mandates the preparation of EFH assessments and generally outlines each agency's obligations in this consultation procedure. While our regulations also allow a federal agency such as FHWA to designate a non-federal representative such as NJDOT to conduct the EFH consultation, it is important to note that the FHWA remains ultimately responsible for compliance with sections 305(b)(2) and 305(b)(4)(B) of the MSA.

The project area has been designated as EFH for a variety of federally managed species including winter flounder (*Pseudopleuronectes americanus*), windowpane flounder (*Scophthalmus aquosus*), summer flounder (*Paralichthys dentatus*), black sea bass (*Centropristis striata*), scup (*Stenotomus chrysops*), bluefish (*Pomatomus saltatrix*), Atlantic butterflyfish (*Peprilus triacanthus*), Atlantic herring (*Clupea harengus*), several species of skates, highly migratory species such as sandbar shark (*Carcharhinus plumbeus*) and skipjack tuna (*Katsuwonus pelamis*), and others. Additional NOAA trust resources present in the project area that we work to support under the FWCA include blue crab (*Callinectes sapidus*), horseshoe crab (*Limulus polyphemus*), striped bass (*Morone saxatilis*), Atlantic menhaden (*Brevoortia tyrannus*), American eel (*Anguilla rostrata*). This also includes several species of shellfish (i.e., hard clams (*Mercenaria mercenaria*) and soft clams (*Mya arenaria*)), which have designated beds in the Glimmer Glass north of Structure W-8, as identified by historic NJ Department of Environmental Protection (NJDEP) shellfish mapping. Project waterways also serve as a migratory corridor for anadromous fishes such as river herring (alewife *Alosa pseudoharengus*

and blueback herring *A. aestivalis*, collectively) to their spawning grounds in Stockton Lake. Anadromous fishes such as these serve as prey for federally managed species. As a result, adverse effects to their migration and spawning can be considered an adverse effect on EFH.

We appreciate that the project will adhere to the Minimum Conservation Measures, as outlined in Section 6.0 of the programmatic. We also note that FHWA and the NJDOT will adhere to the conservation recommendations (CRs) described in Appendix B of the programmatic for the five stressor types associated with bridge replacement activities. This includes time-of-year restrictions for in-water work from January 1 to June 30 for winter flounder and diadromous fish, and the avoidance of installation of measures that may substantially disrupt fish movements between September 1 to November 30. FHWA and NJDOT will also include applicable Best Management Practices (BMPs), as outlined in [NOAA Fisheries/FHWA Best Management Practices Manual for Transportation Activities in the Greater Atlantic Region](#), within final design plans, details, and construction specifications. We also appreciate that the FHWA and NJDOT intend to restore areas temporarily impacted by construction activities and will provide compensatory mitigation for the unavoidable permanent loss of all aquatic habitats due to fill and shading. Please be advised that temporary impacts exceeding one year may also require mitigation. We will continue to work with you on the development of the compensatory mitigation, monitoring and adaptive management plan.

However, we are concerned that the EFH assessment noted that the NJDOT standard specifications require coal tar epoxy coatings to provide the necessary service life on the marine substructures. The proposed use of coal tar epoxy coatings on marine substructures poses toxicity risks from Polycyclic Aromatic Hydrocarbon (PAH) leaching. These chemicals can become available to marine organisms through uptake by wetland vegetation, adsorption by adjacent sediments, or directly through the water column. These compounds bioaccumulate in the aquatic food web and may cause hepatic lesions, egg mortality, and fin erosion in benthic fish. We recommend that all structures should be constructed with alternative materials, such as plastic, natural cedar or other untreated wood, or pressure-treated wood, coated offsite with an impact resistant, biologically inert substance to minimize leachate into aquatic areas, especially those currently supporting notable shellfish communities.

Essential Fish Habitat Conservation Recommendations

Pursuant to Section 305(b)(4)(A) of the MSA, we recommend that you adopt the following EFH conservation recommendations to minimize or offset adverse impacts on EFH:

1. Continue to avoid in-water work between January 1 through June 30 of any work year to protect winter flounder early life stages, as well as spring anadromous fish migrations. Work conducted inside fully sealed, dewatered cofferdams is exempt from this seasonal restriction.
2. Continue to avoid in-water noise generating activities and physical structures (e.g. cofferdams) that may isolate, block, or obstruct more than 50% of the natural cross-sectional channel width at any time between September 1 and November 30 of any year to maintain a contiguous, unobstructed passage corridor for out-migrating juvenile diadromous fish.

3. Develop a compensatory mitigation plan to offset permanent project impacts, including temporary fills in place for greater than twelve months. The plan should be reviewed and approved by us and accepted by the USACE at least 60 days prior to initiating construction and should include the following elements:
 - a. Details of mitigation credit purchases, if pursued.
 - b. Permittee-responsible mitigation (PRM) projects should have defined ecological goals and performance measures with an associated monitoring plan to describe the extent to which these goals are met over at least a five-year period.
 - c. For any PRM, develop a long-term maintenance and adaptive management plan that define thresholds for corrective actions necessary to maintain the intended functions.
 - d. Provide us with annual monitoring reports detailing project success and any adaptive management actions.
4. Avoid creosote, coal tar epoxy, or other hydrocarbon-based coatings on any in-water structures or overwater structures. Non-toxic alternatives, such as 100% solid epoxies, polyolefin wraps, or inert moisture-cure urethanes, should be specified in final design plans and contract specifications to prevent chemical leaching.
5. Reinitiate consultation with us following additional field investigations planned during the final design phase should you anticipate additional habitat impacts.

Please note that Section 305(b)(4)(B) of the MSA requires you to provide us with a detailed written response to these EFH conservation recommendations, including a description of measures adopted by you for avoiding, mitigating, or offsetting the impact of the project on EFH. In the case of a response that is inconsistent with our recommendations, Section 305(b)(4)(B) of the MSA also indicates that you must explain your reasons for not following the recommendations. Included in such reasoning would be the scientific justification for any disagreements with us over the anticipated effects of the proposed action and measures needed to avoid, minimize, mitigate, or offset such effects pursuant to 50 CFR 600.920(k). This response must be provided within 30 days after receiving our EFH CRs and at least 10 days prior to final approval of this action.

Please also note that further EFH consultation must be reinitiated pursuant to 50 CFR 600.920(j) if new information becomes available, or if the project is revised in such a manner that affects the basis for the above determination.

Endangered Species Act

Federally listed species may be present in the project area and consultation pursuant to Section 7 of the Endangered Species Act (ESA) of 1973 may be necessary. We understand that you have coordinated with our Protected Resources Division and ESA consultation has been completed. Should you have any questions about ESA Section 7, please contact Bill Barnhill at 978-282-8460 or by email (William.Barnhill@noaa.gov).

Conclusion

We look forward to your response to our EFH recommendations on this project. As always, we are available to coordinate with your staff so that this project can move forward efficiently and expeditiously as possible while still meeting our joint responsibilities to protect and conserve

aquatic resources. If you have any questions or need additional information, please contact Jessie Murray in our Highlands, NJ field office at 732-872-3116 or Jessie.Murray@noaa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Louis A. Chiarella".

Louis A. Chiarella
Assistant Regional Administrator
for Habitat and Ecosystem Services

cc:

GARFO HESD – K. Greene
GARFO PRD – B. Barnhill
NOAA OPR – D. Youngkin
NJDOT – R. Dekovitch, J. Mikusa, L. Thivierge
USACE – J. Pritts, T. Schaible
NJDEP – G. Nickerson, K. Davis
USFWS – R. Conover, M. Ciappi
EPA Region II – M. Finocchiaro
USCG – D. Leoce
NEFMC – C. O'Keefe
MAFMC – C. Moore
ASMFC – R. Beal