Rhode Island Shellfisherman's Association P.O.Box 1802 East Greenwich, RI 02818-1802

June 14, 2025

Sam Bell, Project Manager US Army Corps of Engineers New England District 696 Virginia Road Concord, MA 01742-2751

Re: Providence River Dredge Material Management Plan and Environmental Assessment 2025

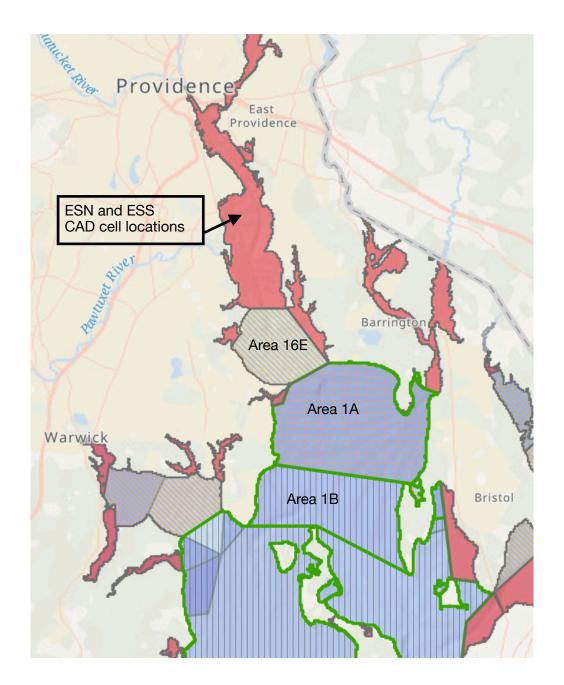
Dear Mr. Bell,

The Rhode Island Shellfisherman's Association (RISA) is responding to the US Army Corps (Corps) Public Notice dated May 15, 2025 regarding the Providence River and Harbor Federal Navigation Project (Providence River FNP) Dredge Material Management Plan (DMMP) and Environmental Assessment (EA). The Corps is proposing to conduct maintenance dredging of the Providence River FNP and to construct two confined aquatic disposal (CAD) cells in the Edgewood Shoals located immediately south of the Port Edgewood Basin and Fields Point in Providence. The project will include access channels between the CAD cells and the existing Providence River channel and will be conducted in two cycles. Cycle 1 will commence in 2026 with construction of the Edgewood Shoals North (ESN) CAD cell, access channel and maintenance dredging of the Providence River FNP beginning in 2027. Cycle 2 will commence in 2047 to include construction of the Edgewood Shoals South (ESS) CAD cell and access channel with further maintenance dredging of the Providence River FNP. Both of the Edgewood Shoals CAD cells are approximately 50 acres in size, and each associated access channel will be approximately 13 acres in size.

Shellfish Resources

The Bay Quahog (*Mercenaria mercenaria*) is found throughout the Providence River and Narragansett Bay as documented through RIDEM Division of Marine Fisheries (DMF) shellfish dredge surveys and annual commercial shellfish harvest landings data. Commercial quahog harvesting primarily occurs within the upper Bay, designated as RIDEM shellfish growing areas 1A and 1B, and the lower Providence River identified as RIDEM shellfish growing area 16E. See Figure 1, below. In 2021 a new 1900-acre shellfish management area, designated as Area 16E, was opened for the harvest of shellfish after being closed the preceding 80 years due to bacterial contamination from combined sewer overflows (CSOs) associated with wastewater treatment facilities that discharge into the Providence River. Shellfish harvesting is currently prohibited north of Area 16E defined by a line from Gaspee Point in Warwick to Bullocks Point in East Providence due to water quality impairment for bacteria.

Figure 1. Shellfish harvesting restrictions in upper Narragansett Bay and the Providence River. Red shaded areas are presently closed to the harvest of shellfish for direct human consumption. Map source RIDEM.



The construction of the two Edgewood Shoals CAD cells and dredging access channels, along with most of the maintenance dredging in the Providence River FNP, will be conducted in waters that are presently closed for the harvest of shellfish due to water quality impairment from bacteria. Nevertheless, there are <u>very significant</u> quahog resources in these closed waters of the Providence River, and in fact, some of the very highest abundance of quahogs anywhere in the Bay as assessed by the RIDEM DMF quahog dredge surveys. As part of the Corps March 2023 Fisherman Outreach efforts, RIDEM DMF provided quahog dredge survey results showing very

high densities of 32.7 to 53.8 quahogs per square meter in the area of the proposed CAD cells. See Figure 4 of the March 2023 Facts and Figures from Fishermans Outreach within the Corps Environmental Assessment (EA) for the Providence River FNP. The DMF conducted additional quahog dredge surveys in 2024 and found similar high densities of quahogs throughout the Edgewood Shoals area and the Port Edgewood Basin (PEB). Moreover, the 2025 Providence River EA states "Quahog resources are abundant throughout the area proposed for the construction of the CAD cells, the access channel, and the area of PEB that will be filled with dredged material." See EA at 156.

Impacts to Shellfish Resources from Dredging Activity

First and foremost, the proposed construction of the two Edgewood Shoals CAD cells (approximately 50 acres each) and the access channels (approximately 13 acres each) between the CAD cells and the Providence River FNP will result in 63 acres of quahog resource and habitat destruction during each dredging cycle (Cycle 1 ESN in 2027 and Cycle 2 ESS in 2047). The 2025 Providence River EA states "Based on the expected concentrations of suspended sediment plumes around dredging operations, the primary concern to quahogs in the upper Providence River would be operational induced mortalities as a result of sediment resuspension and a diminished brood stock." See EA at 155. Assuming a 31.5 quahog per square meter density (based on the DMF 2024 quahog dredge survey) and a 254,952 square meter impact area (one CAD cell and access channel area combined) conservatively results in over 8 million quahogs within the dredge impacted areas. It is imperative that these quahog resources be removed prior to any dredging activity. These resources are critical to the future of the shellfish industry. The first preference is to relocate a majority of this impacted resource to DEM-designated shellfish management areas down bay and made available for harvesting in the winter months or as may be needed following catastrophic rainfall closures of shellfishing beds. The relocation of quahogs to shellfish management areas will be predicated on acceptable shellfish testing results for human consumption. Should testing results be negative, then the impacted quahog resource should be relocated to other areas within the Providence River outside of the proposed dredge areas, including CAD cells, access channels or the FNP, so that the resource continues as brood stock to provide quahog larvae to down bay waters open to shellfish harvesting.

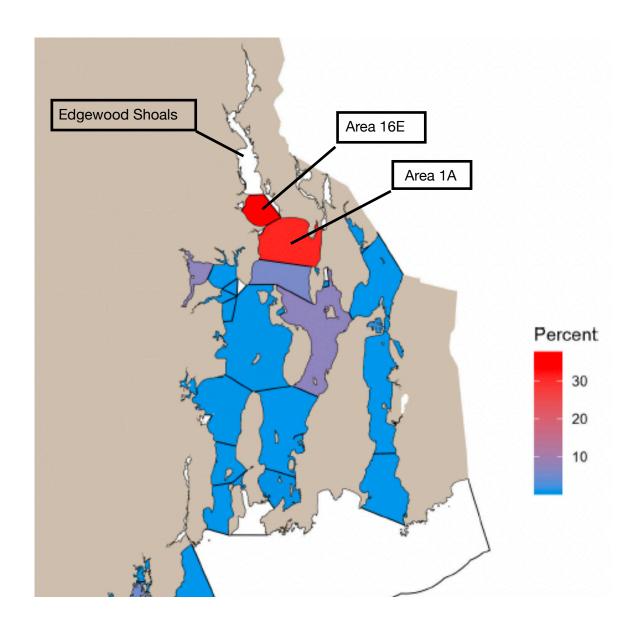
RISA is also concerned about potential contamination from dredging activity impacts to down Bay areas currently open to shellfish harvesting, particularly Area 16E of the lower Providence River and Area 1A of the upper Bay as shown in Figure 1, above. There is no record of shellfish harvesting areas closed during the 2005 Providence River FNP dredging operation and the CAD cell construction within the Providence River Harbor. However, since that time Area 16E was opened to shellfish harvesting in 2021 and is located within 2.5 miles of the proposed ESN CAD cell. Area 16E is critically important to the shellfish industry, as this management area accounted for 38% of the 2024 total commercial quahog landings, more than any other area in Rhode Island, despite this area only being open for 16 harvest days last year. In addition, Area 1A accounted for 31% of statewide landings last year. See Figure 2, below and RIDEM 2024 Rhode Island Annual Fisheries Report (https://dem.ecms.ri.gov/sites/g/files/xkgbur861/files/2024-06/
Annual Fisheries Report 2023.pdf. These two areas combined accounted for 70% of all commercial quahog landings in the state last year. Thus, any cessation or disruption of harvesting in

these two shellfish management areas as a result of dredging activity in the Edgewood Shoals will be extremely detrimental and have dire consequential impacts on the shellfish industry. Not only would there be a loss of harvest days and income to shellfishermen, but also a loss to the local and state economy. In addition, the shellfish industry could suffer long-term marketing difficulties associated with negative public perception of Rhode Island quahogs and the closing of harvest areas due to impaired water quality through the release of contaminants from dredging activities.

The 2025 Providence River EA states "In general, the main environmental impact of dredging is a temporary increase in the concentrations of suspended solids, nutrients, and contaminants in the water column, which, in turn, affects aquatic resources." See EA at 143. In review of the EA, Appendix F - Subsurface Scanning, Sediment Analysis, and Suitability Determinations, the Corps most recent testing show that the primary contaminants within the sediments to be dredged are heavy metals, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and pesticides. See Appendix F at 3. Additionally, the proposed project has been assessed by the Corps to have a moderate to high risk to biological resources. Moderate risk is defined as "Contamination sources exist within the vicinity of the project with the potential to produce chemical concentrations that may cause adverse biological effects." And, High risk is defined as "Known sources of contamination within the project area and historical data exists that has previously failed biological testing." Id. at 4.

The Corps follows contaminants of concern (COCs) screening values for marine and estuarine sediments established by National Oceanic and Atmospheric Administration (NOAA), effects-range low (ERL) and effects-range median (ERM). These guidelines identify contaminant levels that indicate when the potential for toxic effects are unlikely (ERL), and when an increased probability of toxic effects is evident (ERM). Id. at 6. As stated in the appendix "Concentrations of COCs within the existing channel inside the CAD cell footprint (C1, B, and C3) were elevated in the surficial two feet with multiple exceedances of the ERL as well as several metals, total PCBs, and total chlordanes detected at concentrations greater than the ERM." Id. The Corps conducted 28day bioaccumulation tests with Bent-nosed clams (Macoma nasuta) to evaluate potential effects to human health using composite sediment samples from the project area. Tissue sample results were then analyzed for toxicological significance from exposure to the dredge sediment, including an evaluation of non-carcinogenic risk, carcinogenic risk, and any observed exceedances of Food and Drug Administration (FDA) thresholds to determine potential adverse impacts to human health from the consumption of shellfish exposed to project sediments. Id at 10. Modeling based on the tissue contaminant loads measured in the clams exposed to the surficial two feet of sediments in the existing access channel (Composite 2) found that the calculated risk was above the EPA Hazard Quotient for non-carcinogenic risk. Id. However, "contaminants levels measured in tissue samples from Composite 2 were all less than established FDA action levels." Id. At 11.

Figure 2. Percent of 2024 commercial quahog landings by tagging area. Source RIDEM 2024 Rhode Island Annual Fisheries Report.



Further, the Corps determined that based on its analysis "there is an unacceptable risk to the receptors identified in the conceptual site model (CSM) through exposure to surficial sediments in the existing channel (Composite 2). However, there is no unacceptable risk to the receptors identified in the CSM from the bioaccumulation of contaminants through exposure to the dredged material from the surficial interval throughout the remainder of the proposed project area or from any project area sediments at depth." Id.

In short, it appears that there is an unacceptable risk to organisms and potentially human health from contaminated sediments located within the existing access channel of the PEB, as shown in Figure 3 of Appendix F, where the ESN CAD cell would be constructed. This is, however, a relatively small portion of the overall project area. Based on the results of biological testing and

subsequent risk modeling, in coordination with EPA Region 1 and RIDEM, it appears that there will not be a significant contamination risk to areas south of the proposed Edgewood Shoals CAD cells. Nevertheless, careful and persistent monitoring should be implemented throughout the dredging operations to prevent any closure of shellfish harvesting in Areas 16E and 1A.

Summary

The Rhode Island shellfish industry has already suffered a significant decline in commercial quahog landings of 56% between 2012 to 2022 (RIDEM DMF). The lower Providence River (Area 16E) currently provides 38% of annual quahog landings (2024) and the industry expects that the Providence River north of Area 16E will provide potentially new shellfish harvesting areas as water quality continues to improve with the ongoing construction of Phase 3 of the Narragansett Bay Commission's CSO tunnel project to address bacterial loadings. Furthermore, even if areas farther north, like Edgewood Shoals , are not able to be opened to shellfish harvesting for direct human consumption, these areas of the Providence River support a very significant quahog resource and habitat area that is extremely import to the continued viability of the commercial quahog industry in Rhode Island, both for enhanced brood stock and larvae production, and potential transplant stock to enhance shellfish management areas down Bay.

Given the documented quahog resources within the Edgewood Shoals project area, and the potential for water quality impacts from dredging activity that could potentially close shellfish harvesting in the lower Providence River, RISA respectfully requests the following considerations to secure the continued viability and future of the Rhode Island shellfish industry:

- 1. Require that all of the existing quahog resource (estimated at more than 8 million quahogs) located within the Cycle 1 Edgewood Shoals CAD cell and access channel is removed and relocated prior to any dredging activity. This will require a significant increase of the Corps currently proposed budget for shellfish relocation of \$63,000 in Q3 2026 as shown in Table 8-7. See Providence River EA at 186. For purposes of cost comparison, the RIDEM DMF conducted a quahog transplant on May 1, 2025 in which 60 commercial shellfishermen participated. Approximately 76,000 lbs of quahogs (estimated 608,000 count) were removed from East Greenwich Cove and transplanted into the Greenwich Bay shellfish management area. The total payment to participating shellfishermen was \$23,060. If a similar effort were conducted to relocate the more than 8 million quahogs within the Edgewood Shoals area, the estimated cost would be approximately \$305,000. RISA requests that it be included in any meetings or discussions concerning the relocation and transplant of quahogs from the Edgewood Shoals project area. RISA can provide experienced advice on quahog transplant methods.
- 2. Provided that biological testing determines that quahogs from the Edgewood Shoals project area can safely be relocated to other areas of the Bay (this includes toxicology and neoplasia testing), quahogs should be transplanted to RIDEM designated shellfish management areas. In the event that biological testing determines that quahogs cannot be relocated out of the Providence River, then all of the quahogs removed from the proposed project area should be relocated to suitable habitat areas elsewhere within the Providence River to ensure their continued viability as brood stock to support down river quahog populations.

3. Implement rigorous water quality monitoring and best management practices to reduce down-stream dispersal of sediment plumes and any potential contaminants of concern during the entirety of dredging operations. The goal of monitoring and adaptive project management is to avoid any cessation or disruption of shellfish harvest activity within Areas 16E and 1A.

The Rhode Island Shellfishermens Association appreciates the opportunity to provide comments to the Corps on the Providence River Dredge Material Management Plan and Environmental Assessment 2025. RISA is available and wants to be an active participant in any discussions and meetings between the Corps and RIDEM concerning the relocation of quahogs from within the Edgewood Shoals.

Sincerely,

Is Michael McGiveney

Michael McGiveney, President RI Shellfisherman's Association

cc: RISA Officers and Board members
RIDEM DMF
RICRMC