[Date]

U.S. Army Corps of Engineers

Regulatory Project Manager

Attention: [Project Manager Name]

[Sent via email]: [Project Manager Email]

Re: Project Name – Include the NWS Corps Tracking Number

Dear [Ms/Mr Project Manager Last Name]:

[Company] submitted an application to the U.S. Army Corps of Engineers (Corps) to continue Manila clam (*Venerupis philippinarum*) cultivation under Corps Reference No. [Add Number] on [Add County] County tax parcel number [Add parcel number]. This proposal includes the placement of a thin layer of washed gravel mixed with shell fragments directly to the substrate (i.e., frosting). Up to [Add amount] cubic yards per acre of gravel and/or shell fragments could be applied to the tidelands every [add timing]. The proposal is designed to avoid and minimize potential adverse impacts to the environment by complying with all terms, conditions, and conservation measures associated with the programmatic consultation for shellfish farming activities in Washington State inland marine waters between the Corps (2015), the National Marine Fisheries Service (NMFS 2016), and U.S. Fish and Wildlife Service (USFWS 2016).

This letter is provided on behalf of [Company] in support of the permit application. This analysis provides supplemental information addressing alternatives pursuant to 40 C.F.R. § 230.10(a), which states “no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.”

Analytical Approach

The information provided in this review follows the U.S. Environmental Protection Agency’s (EPA’s) official guidance (EPA 2021), titled: *Memorandum: Appropriate Level of Analysis Required for Evaluating Compliance with the CWA Section 404(b)(1) Guidelines Alternatives Requirements* (“the Guidelines”). The Guidelines articulate the following, overarching principle: “The amount of information needed to make such a determination [that a project complies with 40 C.F.R. § 230.10(a)] and the level of scrutiny required by the Guidelines is commensurate with the severity of the environmental impact (as determined by the functions of the aquatic resource and the nature of the proposed activity) and the scope/cost of the project.” The Guidelines direct the Corps and EPA field offices to consider the following factors when reviewing projects that have the potential for minor effects on the aquatic environment:

* These projects by their nature should not cause or contribute to significant degradation individually or cumulatively. Therefore, it generally should not be necessary to conduct or require detailed analyses.
* The Guidelines do not require an elaborate search for practicable alternatives if it is reasonably anticipated that there are only minor differences between the environmental impacts of the proposal and potentially practicable alternatives. It often makes sense to examine first whether potential alternatives would result in no identifiable or discernible difference in impact on the aquatic ecosystem. Those alternatives that do not, may be eliminated from the analysis. By initially focusing the alternatives analysis on the question of impacts on the aquatic ecosystem, it may be possible to limit (or in some instances eliminate altogether) the number of alternatives that have to be evaluated for practicability.
* When it is determined that there is no identifiable or discernible difference in adverse impact on the environment between the proposal and all other practicable alternatives, then the proposal is considered as satisfying the requirements of Section 230.10(a).
* Even where a practicable alternative exists that would have less adverse impact on the aquatic ecosystem, the Guidelines allow it to be rejected if it would have “other significant adverse environmental consequences.” 40 C.F.R. § 230.10(a).
* In cases of negligible or trivial impacts (e.g., small discharges to construct individual driveways), it may be possible to conclude that no alternative location could result in less adverse impact on the aquatic environment. In such cases, it may not be necessary to conduct an offsite alternatives analysis but instead require only any practicable onsite minimization.

The Guidelines emphasize that this analytical approach is appropriate for proposals with minor impacts, while projects with substantial impacts should be more thoroughly evaluated through the standard permit evaluation process to determine compliance with all provisions of the Guidelines. The Guidelines are applicable here, as the subject proposal has at most minor, temporary adverse impacts to the aquatic environment. As discussed in the permit application, the proposal will comply with all terms, conditions, and conservation measures associated with the programmatic consultation. The proposed activities have been thoroughly analyzed in the programmatic consultation documents, which concludes the proposal (along with other similar proposals in the area) will have negligible to minor, but not substantial, adverse impacts.

Alternatives Analysis

The following information provides the following information: (1) project need, (2) basic project purpose, (3) overall project purpose, and (4) project criteria for the alternatives analysis.

Project Need

The need for this project is to produce clams for human consumption. Shellfish provide a highly nutritious form of protein, and there is a strong demand for cultured clams, as evidenced by the current and continued demand for clams from this specific project area. This is an existing farm site with a proven history of successfully producing clams. This area also produces natural sets of Pacific oysters that are harvested by hand and sold commercially.

Basic Project Purpose

The basic purpose of this project is to cultivate clams for human consumption.

Overall Project Purpose

The overall purpose of this project is to continue cultivating clams in areas with suitable environmental attributes.

Project Criteria

**(a) Location.** This project is for the ongoing cultivation of clams and harvest of natural sets of oysters on [add acres] of tidelands in [Bay/Estuary, State]. These tidelands have successfully supported shellfish aquaculture operations since [date/century].

**(b) Tidal range.** Clam cultivation requires a specific tidal elevation where clams receive sufficient nutrients to develop and mature. The proposed culture area is at approximately [add tidal height] feet mean lower low water, which has proven to be a successful range for this ongoing farm activity.

**(c) Water quality.** Shellfish farms must be located in areas with very high water quality to maintain the quality of shellfish and avoid harmful inputs that can impact the survival, health, and quality of the shellfish. The proposed project location has high quality water appropriate for clam cultivation and is classified as Approved by the Washington State Department of Health ([cite to DOH website]).

**(d) Size, access, and proximity.** [Company] owns multiple parcels in [location], including the parcel associated with this proposal. [Company] currently cultivates clams on [add County] County tax parcel number [add parcel]. [Company] also cultivates clams and oysters associated with the following Corps Project numbers and [add County] County tax parcel numbers:

* List – as necessary

[Company] has submitted separate applications to continue clam and oyster cultivation activities on the parcels identified above. In addition, [Company] uses the [add location] to transport shellfish that are harvested from their tidelands. For transportation, logistical, and efficiency purposes, [Company] requires that its shellfish beds be in general proximity to this access point.

**(e) Consistent cultivation.** [Company] has been relied upon for consistent, high quality, commercial volumes of clams and oysters for decades. While not all areas of the clam bed must be enhanced with gravel and/or shell every [timeframe], [Company] requires the ability to apply gravel and/or shell on an as-needed basis (e.g., when due to environmental conditions the substrate becomes too soft) to ensure clams can be consistently cultivated.

Description of Alternatives

The following information provides an analysis of three types of alternatives: (1) no action alternative, (2) off-site alternatives, and (3) on-site alternatives.

No Action Alternative

Under this alternative, clams would not be cultivated. This alternative would not satisfy the project need and purpose.

Off-Site Alternatives

The proposed project includes tidelands located [add location in the estuary]. Locating the clam farm within this area is required for transportation, logistical, diversity of operations, and efficiency purposes. Within this area, there are four other like-sized parcels at similar tidal elevations, [add County] County parcels [add 4 parcel numbers]. These parcels, as well as all other like sized parcels in the vicinity, are owned and managed by other growers for the purpose of shellfish cultivation or are state owned aquatic lands (Washington State Department of Natural Resources) that are too soft for cultivation due to burrowing shrimp populations. These 4 identified tidelands could not be reasonably obtained, utilized, expanded, or managed to fulfill the project purpose. Therefore, these parcels are not available to [Company].

**Alternative text for other areas:** These parcels, as well as all other like-sized parcels in the vicinity, are owned and managed by tribes for shellfish harvest, other growers for the purpose of shellfish cultivation, or are state-owned aquatic lands (Washington State Department of Natural Resources) that are too soft for cultivation due to the type of substrate present. Due to the soft sediment that is characteristic of the end of [estuary], the intertidal areas would require significant alteration to successfully farm shellfish. Farm areas equal in size to the existing proposed project areas for Manila clams ([add acres]) would require the installation of dikes and up to 8 inches of gravel fill. These 4 identified tidelands could not be reasonably obtained, utilized, expanded, or managed to fulfill the project purpose. Therefore, these parcels are not available to [Company].

Even if alternative, off-site properties that met all project criteria were available, it is reasonably anticipated that there would be no reduced impacts if the project were to be sited at such off-site locations. This project is for the continuation of clam cultivation on tidelands that have historically, and are currently, used for shellfish cultivation. Siting a shellfish farm at an alternative, off-site location that is not currently under cultivation would not result in reduced impacts. Further, the proposal will follow all terms, conditions, and conservation measures of the programmatic consultation. As such, it will have negligible to minor environmental impacts.

For these reasons, there is no practicable off-site alternative location, and any such locations (were they to exist) would not have an identifiable or discernible difference in adverse impact on the environment compared to the proposal.

On-Site Alternatives

**On-Site Alternative 1 ([Company]** **proposal).** [Company]’s proposal is described in the introduction and the application materials submitted to the Corps. The applicant’s proposal meets all the criteria discussed above.

**On-Site Alternative 2 (no gravel and/or shell placement).** One potential on-site alternative would be to cultivate clams without periodically placing gravel and/or shell for substrate enhancement. This alternative would not satisfy criterion (e) related to consistent cultivation. While not all areas of the clam bed must be enhanced with gravel and/or shell every [add timing], [Company] requires the ability to apply gravel and/or shell on an as-needed basis (e.g., when due to environmental conditions the substrate becomes too soft) to ensure clams will survive and can be consistently harvested and sold.

**On-Site Alternative 3 (no nets).** A second potential alternative would be to not use area nets for predator protection. Area nets are currently used at the farm to protect clam crops from predators. Area nets are installed by hand and secured to the substrate with rebar. Nets are monitored and maintained during the grow-out period and are removed to facilitate harvest. Net installation, maintenance, and removal occurs by manual methods only; no machinery is used. Without nets, clam crops are expected to experience substantial mortalities, thereby preventing successful, consistent cultivation as required by criterion (e).

Conclusion

For the reasons set forth above, the proposed project represents the least environmentally damaging practicable alternative available to [Company] capable of achieving the proposal’s purpose. Please contact me if you have additional comments or questions.

Respectfully yours,

[Add signature and printed name]

References

Corps (US Army Corps of Engineers). 2015. Programmatic Biological Assessment, Shellfish Activities in Washington State Inland Marine Waters, U.S. Army Corps of Engineers Regulatory Program.

NMFS (National Marine Fisheries Service). 2016. ESA Section 7 Formal Biological Programmatic Opinion and EFH Consultation for Shellfish Aquaculture Activities in Washington State, NMFS Reference Number WCR-2014-1502.

USFWS (US Fish and Wildlife Service). 2016. Biological Opinion, Programmatic Consultation for Shellfish Activities in Washington State Inland Marine Waters, Reference Number 01EWFW00- 2016-F-0121.

DOH (Washington State Department of Health). [year]. Commercial shellfish map viewer. DOH, Office of Environmental Health and Safety, Olympia, Washington. Available at: <https://fortress.wa.gov/doh/oswpviewer/index.html> (accessed on [date]).

EPA (US Environmental Protection Agency). [year]. Memorandum: Appropriate level of analysis required for evaluating compliance with the CWA Section 404(b)(1) guidelines alternatives requirements [online document]. EPA, Washington, DC. Available at: https://www.epa.gov/cwa-404/memorandum-appropriate-level-analysis-required-evaluating-compliance-cwa-section-404b1 (accessed on [date])