Shoreline Substantial Development Permit and Conditional Use Permit Application Addendum Taylor Shellfish – Oakland Bay Floating Oyster Farm

I. Overview

This memorandum supplements the Shoreline Substantial Development and Conditional Use Permit (SHR2023-00003) application materials (including the JARPA application, SEPA Checklist, Habitat Management Plan (Confluence Environmental Co., Sep. 2022), and Conditional Use Permit narrative), submitted by Taylor Shellfish to install and operate a floating oyster bag cultivation system in Oakland Bay ("Proposal"). The purpose of this memorandum is to provide information and analysis demonstrating the Proposal satisfies permit issuance criteria.

II. Project Description

Proposal

The Proposal is for the installation and operation of a floating oyster bag cultivation system on two subtidal parcels (32015-22-22222 and 32016-22-22222) owned by the Washington Department of Natural Resources ("DNR") in Oakland Bay. The full lease boundary is identified under WADNR lease # 20-104436. At full installation, an estimated 9.1 acres of surface water within a 50-acre area (the "Site") will be used for the Proposal.

The Proposal's oyster bags will be stocked with seed oysters to increase capacity and relieve pressure on the nearby Oakland Bay Floating Upweller System ("FLUPSY"). Seed oysters planted in the Proposal's bags will be secured from Taylor Shellfish's Oakland Bay FLUPSY or from the company's onshore nursery facility. Some of the Proposal's oysters may be transferred to other Taylor Shellfish farm locations for further grow-out until they are ready for harvest, and some of the Proposal's oysters may remain in the oyster bags at the Site until they are harvested and delivered to market.

The Proposal's system will include a series of bags used to cultivate oysters. Bags are made from ultraviolet (UV)-resistant, high-density polyethylene (HDPE) mesh and measure a maximum of 48 inches by 48 inches. Oyster bags will be arranged in a set of double-rows, and each row of bags will be secured by a headline that runs for approximately 2,000 feet. There will be approximately 20 feet of space in between each double-row of bags to allow for access to the floating bags. Each bag will contain a floating device to ensure the bags remain on the water's surface, and an additional float will be located at the end of each double-row of bags. Each endline float will be secured to an anchor, and an additional anchor may be used near the center of each double-row. There will be a total of 30 double-rows, and a total of 60-90 anchors.

The Proposal's gear will be installed utilizing vessels, with minimum substrate disturbance. Boat-based workers will perform operations and maintenance. Regular maintenance activities will include removal of fouling organisms from bags and lines, and minor repair work. Operation activities will include seeding of immature oysters, sorting and grading of growing oysters, redistribution of oysters to achieve desired density, and harvest of market-size oysters.

Oysters are harvested when they reach market size, or they may be transferred from the Proposal and planted in other farm locations managed by Taylor Shellfish for final grow-out. A vessel or work platform equipped with a hoist system works along the lines, and the bags are processed on a work vessel or platform. Lines are loaded directly into a harvest container in the water. A harvest container may also be placed underneath lines to capture any fall-off as lines are loaded onto a work platform. Harvested shellfish are then loaded onto a work platform or vessel where they are cleaned and sorted. Alternatively, an entire group of bags may be harvested by releasing the anchor lines, securing the longlines to the back of the vessel, and towing the entire group to a dock. At the dock, bags are emptied onto a vessel deck or work platform and the shellfish are sorted and transported to a processing facility from the dock. Shellfish that are not yet market size may be put back into bags and returned to the bay to grow out to full size.

As discussed in detail in the Proposal's application materials, Taylor Shellfish will comply with practices and conditions designed by expert resource agencies to avoid and minimize potential adverse impacts to sensitive species and habitat, and it will follow best management practices to further avoid and minimize potential impacts to the natural and built environment. See e.g., Habitat Management Plan §§ 4.1.4, 8.6

Site Location and Conditions

The Site is located within the Port District in Oakland Bay. The Site was formerly leased and utilized for log storage, and it is currently used for incidental marine navigation and occasional tribal fishing. The Proposal's oyster cultivation system will be located at least 1,000 feet from the shoreline and outside of normal navigation channels,

An eelgrass survey of the project area was completed in August 2019. The substrate beneath the Site is generally muddy/silt with no observable sign of submerged aquatic vegetation (SAV), including eelgrass.

III. The Proposal Satisfies Shoreline Substantial Development Permit Review Standards

The Proposal satisfies all criteria for Substantial Development Permit issuance, as set forth in MCC 17.50.400(c)(3)(A)(ii).

- 1. The Proposal is consistent with the policies and regulations of the Mason County Shoreline Master Program and applicable policies enumerated in Chapter 90.58 RCW in regard to shorelines of the state and of statewide significance.
 - a. Policies of the Mason County SMP

The Mason County Shoreline Master Program ("SMP") is codified in MCC chapter 17.50. MCC 17.50.070 repeats the general use preferences of the SMA, RCW 90.58.020, which are addressed above. Aquaculture-specific policies are located at MCC 17.50.210(a). As set forth directly below, the Proposal advances these policies (policy language is provided in italics, and discussion follows in normal font).

(1) Aquaculture is of statewide interest. Aquaculture is dependent on the use of the water area and, when consistent with control of pollution and prevention of damage to the environment, is a preferred use of the water area. Properly managed, it can result in long-term over short-term benefit and can protect the resources and ecology of the shoreline.

This policy reinforces that the Proposal is a preferred use of statewide interest that can provide long-term benefits and protect the resources and ecology of the shoreline. As demonstrated in the Proposal's application materials, this Project is sited in an appropriate location, uses approved methods and materials, and will follow measures to avoid and minimize potential adverse impacts. *See e.g.*, JARPA; Habitat Management Plan §§ 4.1.4, 8.0-8.6.

(2) Potential locations for aquaculture practices are relatively restricted due to specific biophysical requirements such as water quality, temperature, substrate, dissolved oxygen, and salinity. Priority should be given to aquaculture uses in areas having a high potential for such uses.

Taylor Shellfish has carefully reviewed the Site and based on the company's extensive experience has determined that it contains appropriate conditions for successfully cultivating oysters.

(3) The county should strengthen and diversify the local economy by encouraging aquaculture uses. Aquaculture operations should be protected against encroachment from incompatible, competing uses.

Taylor Shellfish is headquartered in Mason County and employs hundreds of residents within the County and neighboring areas. Taylor Shellfish anticipates that this farm will employ 5-7 individuals, further strengthening and diversifying the local economy.

(4) Flexibility to experiment with new aquaculture techniques should be allowed.

Acknowledged. This farm will use proven techniques that effectively raise oysters and avoid adverse impacts.

(5) The county should minimize redundancy of aquaculture permit application requirements required by this program and other county, state and federal standards.

Taylor Shellfish appreciates this policy. As noted in the Proposal's application materials, Taylor Shellfish will use methods and materials described in the programmatic Endangered Species Act/Essential Fish Habitat consultation for shellfish activities in Washington State inland marine waters ("Programmatic Consultation") completed in 2016 between the U.S. Army Corps of Engineers, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service. The Programmatic Consultation contains a thorough description and analysis of oyster aquaculture activities and their potential impacts on listed species, critical habitat, and essential fish habitat. Taylor Shellfish will comply with all the Programmatic Consultation's terms, conditions, and

conservation measures. Taylor Shellfish incorporates the Programmatic Consultation documents by reference in its application materials.

(6) The county should support community restoration projects associated with aquaculture when they are consistent with this program.

Not applicable.

(7) Shoreline and upland development in productive aquaculture areas or those areas with a high potential for aquaculture uses should be reviewed for detrimental impacts on aquaculture.

Taylor Shellfish appreciates this policy. No such development is proposed as part of the Proposal.

(8) Maximum effort to protect water quality should be made in areas with high potential for aquaculture and current aquaculture areas that have been identified as sensitive areas.

Taylor Shellfish appreciates this policy. As oysters are filter feeders, the Proposal has the potential to remove excess nutrients from the water column, which will be permanently removed upon harvest through bioextraction.

(9) The county should consider local ecological conditions and provide limits and conditions to assure appropriate compatible types of aquaculture for the local conditions as necessary to assure no net loss of ecological functions. Aquaculture should not be permitted in areas where it would result in a net loss of ecological functions or adversely impact eelgrass and macro-algae. Aquacultural facilities should be designed and located so as not to spread disease to native aquatic life, or establish new nonnative species which cause significant ecological impacts. Unavoidable impacts to ecological functions shall be mitigated.

The Proposal will advance this policy. Taylor Shellfish will comply with Programmatic Consultation conservation measures, and employ additional management measures to avoid and minimize impacts to sensitive species and habitat. See e.g., Habitat Management Plan §§ 4.1.4, 6.0-6.5, 7.0-7.3, 8.0-8.6. The Proposal is sited outside of sensitive habitats such as eelgrass beds and surf smelt and sand lance spawning areas, and the company will conduct surveys to ensure no herring spawn is present when conducting work activities that could disturb spawn.

Taylor Shellfish will comply with all regulatory requirements governing the cultivation and transport of species so as not to spread disease to native aquatic life. The Proposal will cultivate established species of oysters, including Pacific and Kumamoto oysters, which have been cultivated within Mason County for decades.

(10) Recognition should be given to the possible impacts that aquacultural activities might have on the aesthetic quality of the shoreline area.

This Proposal has been sited and designed to minimize potential aesthetic impacts. The Proposal is located over 1,000 feet from the shoreline. The Proposal's anchors will be located underwater

and will not be visible. The Proposal's floats and bags will be partially submerged and protrude a minimum amount above the water surface. The gear will use neutral colors to blend into the environment, and Taylor Shellfish will regularly monitor the gear to ensure it is properly secured and maintained. Limited navigation markers will be utilized in compliance with USCG requirements to ensure the farm is visible to other uses within Oakland Bay.

(11) Structures or activities associated with aquaculture should be located landward of shoreline buffers unless clearly shoreline dependent.

Oyster aquaculture is water-dependent, and all structures associated with the Proposal are shoreline dependent. Taylor Shellfish will access the farm site by boat and no farm activities will occur in the upper portion of tidelands or on uplands.

(12) Aquacultural activities should be operated in a manner that allows navigational access to shoreline owners and commercial traffic.

This Proposal will be located 1,000 feet away from the shoreline and outside of commercial navigation channels. There is no commercial traffic over the Site with which Proposal could potentially interfere. The Proposal will not impede navigational access to shoreline owners or commercial traffic.

(13) Floating aquaculture should be reviewed for conflicts with other water dependent uses in areas that are utilized for moorage, recreational boating, sport fishing, commercial fishing or commercial navigation. Such surface installation shall incorporate features to reduce use conflicts.

The Site of the Proposal is located in an area that has formerly been utilized for log storage without any history of conflicts with other water-dependent uses. The Site is located outside of navigation channels, and it is not significantly used for navigation, recreation, or sport or commercial fishing. Taylor Shellfish has coordinated with the Squaxin Island Tribe to ensure it will not adversely impact the Tribe's fishing rights; Taylor has agreed to remove or relocate the Proposal's gear for a few weeks upon the Tribe's request to provide unimpeded fishing access.

Only 9.1 acres of the 50-acre Site will be occupied by the oyster cultivation gear. Limiting recreational access to the 50-acre Site will not significantly impact the public's ability to recreate within Oakland Bay, as the Site occupies a small portion of the Bay, and there are unimpeded opportunities to conduct recreational activities on all sides of the Proposal. The Proposal's gear will be held in place to prevent it from drifting outside of the designated Site, and the gear will be regularly monitored and maintained. Marker buoys will be installed to identify the project location and reduce potential recreational impacts. *See* SEPA Checklist.

b. The Proposal is consistent with the regulations of the Mason County SMP.

As set forth directly below, the Project is consistent with the regulations in the Mason County SMP governing aquaculture, MCC 17.50.210(b) (regulation language is provided in italics, and compliance discussion follows in normal font).

- (1) General Aquaculture Regulations.
- (A) Shoreline developments adjacent to areas suitable for aquaculture shall practice strict pollution control procedures. As required by MCC 8.52.170(g), design and siting of all new construction and major new development shall not adversely impact water quality.

Noted. No such development is proposed as part of this Proposal.

(B) Proposed residential subdivisions and other land uses and developments which may impact aquaculture operations shall provide facilities to prevent any adverse water quality impacts to such operations. As required by MCC 8.52.170(g), all projects shall meet or exceed any storm water design requirements to avoid any risk of decertification of shellfish beds.

Noted. No such development is proposed as part of this Proposal.

(C) Site preparation and construction in the vicinity of aquaculture operations shall not result in off-site erosion, siltation, or other reductions in water quality. Land uses on erosion hazard areas shall meet the requirements of MCC 8.52.160.

Noted. No such preparation and construction is proposed as part of this Proposal.

(D) Existing aquaculture activities include areas that are actively cultivated and/or dormant . . .

Not applicable to the Proposal.

(E) Consistent with mitigation sequencing, aquacultural uses and developments may be required to provide mitigation where necessary to offset significant adverse impacts to normal public use of surface waters.

The Proposal will not create any significant adverse impacts to normal public use of surface waters and thus no mitigation beyond those measures incorporated into the Proposal's design is necessary. *See* response to aquaculture policy #13 above.

(F) Aquaculture development shall not cause extensive erosion or accretion along adjacent shorelines.

The Proposal will not cause extensive erosion or accretion. The Site is dominated by fine/clay/mud substrate. The shallow environment in Oakland Bay is subject to ongoing erosion, transport, and deposition of sediments. While the floating culture gear may cause short-term impacts to the substrate, it is a limited effect over a short period of time. See Habitat Management Plan, § 6.2.3

(G) Aquaculture structures and activities that are not shoreline dependent or do not have a functional relationship to the water shall be located landward of shoreline buffers required by this program to minimize the detrimental impact to the shoreline.

All structures and activities associated with the Proposal are water-dependent.

(H) Proposed aquaculture processing plants shall provide adequate buffers to screen potential impacts of operations (e.g., visual, odor, and noise impacts) from adjacent residential uses.

No new processing plants are included with the Proposal. Taylor's existing processing plant at company headquarters will be used for processing products harvested from the Proposal.

(I) Aquaculture activities shall, to the greatest extent feasible with regard to the economic viability of the operation and protection of the environment be located, designed and operated so that native plant and animal populations, their respective habitats and the local ecological balance are maintained.

This Proposal is consistent with this regulation, as it is located outside of sensitive habitats (e.g., eelgrass beds and surf smelt and sand lance spawning areas) and will utilize appropriate gear and farming techniques, as well as best management practices. *See* Habitat Management Plan §§ 4.1.4, 6.0-6.5. It will also fully comply with the Programmatic Consultation's terms, conditions, and conservation measures. As such, the Proposal will effectively avoid and minimize potential impacts to native plant and animal populations, their respective habitats, and local ecological processes, and it will result in no net loss of ecological functions. *Id.* §§ 8.0-8.6

(i) New or expanded aquaculture shall be located, designed and maintained to assure no net loss of ecological functions, as demonstrated in a habitat management plan or equivalent report (e.g. biological assessment or biological evaluation).

A professional environmental consulting firm, Confluence Environmental Co., prepared a Habitat Management Plan (September 2022) for the Proposal. Taylor Shellfish submitted the Habitat Management Plan to the County in support of its permit applications. The Habitat Management Plan confirms that, as proposed and conditioned, the Proposal is located, designed, and maintained to assure no net loss of ecological functions. *See* Habitat Management Plan §§ 8.0-8.6.

(ii) Aquaculture use and development shall minimize shading and other adverse impacts to macro-algae and eelgrass beds. If eelgrass or macro-algae is known or suspected, an aquatic vegetation survey is required. Unavoidable impacts shall be addressed in a habitat management plan or equivalent report (e.g. biological assessment or biological evaluation) that presents an acceptable mitigation plan. Note: regulatory protections do not apply to eelgrass or macro-algae that colonize a shellfish farm.

There is no eelgrass or attached macro-algae at the Site, and the Proposal would have an overall neutral or positive effect on submerged aquatic vegetation. *See* Habitat Manage Plan § 8.5.

(iii) Floating aquaculture uses and developments that require attaching structures to the bed or bottomlands shall use anchors, such as helical anchors, or other methods that minimize disturbance to substrate. Potential adverse impacts shall be mitigated.

The Proposal will utilize concrete wedge anchors. See JARPA § 8.c. These anchors will be installed by cranes and hydraulic machinery from a vessel with minimum substrate disturbance. The Proposal's gear is expected to have only limited and temporarily short impacts to sediments. See Habitat Management Plan §4.1.2, 6.2.3

(iv) Disease and pest control may be authorized, provided methods are allowed by federal and state regulations and follow best management practices. To the maximum extent practicable, aquaculture use and development shall employ the least harmful best management practices to control birds and mammals.

The Proposal will use passive predator protection by using bags to contain cultivated oysters and exclude predators. Use of predator protection gear will be in full compliance with the Programmatic Consultation.

(*J*) To the maximum extent practicable, floating aquaculture structures shall not substantially detract from the aesthetic qualities of the surrounding area, provided methods are allowed by federal and state regulations and follow best management practices.

For the reasons discussed in response to policy #10 above, the Proposal will not substantially detract from the aesthetic qualifies of the surrounding area. The Proposal will fully comply with best management practice and methods approved under the Programmatic Consultation. See Habitat Management Plan § 4.1.4.

(K) Aquacultural structures shall be placed in such a manner, and be suitably sized and marked, so as to minimize interference with navigation.

The Proposal will minimize interference with navigation. The Site is located outside of navigation channels, the Proposal occupies a minor portion of Oakland Bay, and unimpeded navigation is provided in all areas adjacent to the Site. The Proposal will be marked with navigation markers to ensure other users are aware of and can easily avoid the oyster cultivation system.

(L) Aquaculture development shall be designed and constructed with best management practices to minimize visual impacts and shall be maintained in a neat and orderly manner. Aquaculture facilities, except navigation aids, shall use colors and materials that blend into the surrounding environment where practicable.

This regulation implements policy #10 above, which discussion is incorporated by reference. Taylor Shellfish uses best management practices to minimize potential visual impacts. Oyster cultivation equipment will be composed of durable materials to withstand environmental conditions and have neutral colors to minimize visual impacts. Taylor Shellfish will secure gear to reduce the potential for escapement and monitor the farm regularly to ensure gear is maintained in a neat and orderly fashion.

(M) Proposed aquacultural developments shall make adequate provisions to control nuisance factors such as excessive noise and odor and excessive lighting. Permits shall include allowance for work at night or on weekends but may require limits and conditions to reduce impacts, such as noise and lighting, to adjacent existing uses.

The Proposal is carefully designed to avoid and minimize potential nuisance factors such as excessive noise and odor. The Project will comply with all applicable federal, state, and local regulations, including County Code Titles 6 (Sanitary Code) and 9 (Peace Morals and Safety). Noise will be limited to short-term engine noise from slow-moving work boats during construction and operations. Vessel noise will be similar to recreational boating activities. All vessel activity will be restricted to daylight hours. Lighting will be limited to navigation lights per U.S. Coast Guard requirements. See SEPA Checklist §§ 7.b, 11. Accordingly, no additional limits and conditions are required to reduce impacts.

(N) Aquacultural discards shall be disposed of in a manner that will not degrade associated uplands, wetlands, shorelines, or aquatic environments. Discards shall not be disposed of in a manner which results in offensive odors or increases the vector population. All waste-materials and discards shall be disposed of in strict compliance with all applicable governmental waste disposal standards, including, but not limited to, the Federal Clean Water Act, Section 401, and the Washington State Water Pollution Control Act (RCW 90.48).

The Proposal will not involve the discharge of substances or materials into surface waters. Taylor Shellfish reuses, repurposes, recycles, and discards (in order of priority) shellfish culture gear. Company practices minimize odors and any other environmental or aesthetic impacts, and they are consistent with the citations listed above as well as practices and regulations referenced in the County Code.

(O) Equipment, structures and materials shall not be abandoned in the shoreline or wetland area.

Taylor Shellfish will comply with this regulation, including the following relevant measures from the Programmatic Consultation (e.g., conservation measures #11 regarding storage of unsecured gear and #22 regarding beach patrols). All equipment not secured to the beach will be removed from the farm site at the end of each work day.

(P) Precautionary measures shall be taken to minimize the risk of oil or other toxic materials from entering the water or shoreline area.

Vessels will be inspected daily for leaks and not utilized if leaks are detected. No refueling, lubrication, or storage of chemicals will occur at the Site. A spill kit and notification procedures are kept on-board vessels. Marine pollution insurance is carried, and Taylor Shellfish will comply with all Programmatic Consultation measures that address this concern (e.g., #5 regarding unsuitable material; #13 and #14 regarding land vehicle washing, storage, fueling, and maintenance; #15 regarding boat fueling; #16 regarding vehicle inspections and record keeping; and, #17 regarding toxic compounds).

(Q) Gravel enhancement projects necessary to maintain existing shellfish beds are allowed. New projects that are not maintenance of existing beds and involve greater than one thousand cubic yards of material may be considered as a conditional use.

Gravel enhancement is not included with the Proposal.

(R) To minimize redundancy between federal, state and local aquaculture requirements, the county should use permit applications that mirror federal or state permit applications, and accept documentation that has been submitted to other permitting agencies wherever possible.

Noted. The Proposal is consistent with and covered by the Programmatic Consultation, which is incorporated by reference with these application materials.

(S) A written statement of exemption is required for new aquaculture activities that do not constitute substantial development or otherwise require a shoreline permit . . .

Not applicable.

(2) Finfish Net Pen Regulations . . .

Not applicable.

(3) Commercial Geoduck Aquaculture.

Not applicable.

- c. The Proposal is consistent with the policies in Chapter 90.58 in regard to shorelines of the state and of statewide significance.
 - i. Policies for shorelines of the state.

RCW 90.58.020 states, in relevant part, as follows:

It is the policy of the state to provide for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses . . .

In the implementation of this policy the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally. To this end uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shoreline. Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single-family residences and their appurtenant structures, ports, shoreline recreational uses including but not limited to parks, marinas, piers, and other improvements facilitating public access to shorelines of the state,

industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state.

Oyster aquaculture, as a water-dependent activity, is a preferred use under the Shoreline Management Act ("SMA"). This is reinforced by Department of Ecology ("Ecology") implementing guidelines, which state aquaculture "is of statewide interest. Properly managed, it can result in long-term over short-term benefit and can protect the resources and ecology of the shoreline. Aquaculture is dependent on the use of the water area and, when consistent with control of pollution and prevention of damage to the environment, is a preferred use of the water area." WAC 173-26-241(3)(b)(i)(A).

The Proposal is a preferred use under the SMA as it is water-dependent. For reasons set forth in the Project's application materials, it will also implement effective measures to avoid and minimize potential adverse impacts, and it will provide beneficial impacts including improvements to water quality, providing habitat to marine organisms, and increased prey resources. *See e.g.*, Habitat Management Plan §§ 6.1.4, 8.4, 8.6. Accordingly, the Proposal will control pollution and prevent damage to the natural environment, and it is consistent with the policies of the SMA.

ii. Policies for shorelines of statewide significance.

As the Site is in a subtidal area, it is within a shoreline of statewide significance. MCC 17.50.020. RCW 90.58.020 states as follows with respect to such shorelines:

The legislature declares that the interest of all of the people shall be paramount in the management of shorelines of statewide significance. The department, in adopting guidelines for shorelines of statewide significance, and local government, in developing master programs for shorelines of statewide significance, shall give preference to uses in the following order of preference which:

- (1) Recognize and protect the statewide interest over local interest;
- (2) Preserve the natural character of the shoreline;
- (3) Result in long term over short term benefit;
- (4) Protect the resources and ecology of the shoreline;
- (5) Increase public access to publicly owned areas of the shorelines;
- (6) Increase recreational opportunities for the public in the shoreline;
- (7) Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.

The use preferences articulated in numbers (1) through (7) do not apply directly to specific project proposals but rather guide Ecology's development of guidelines to implement the SMA and local governments in developing SMPs. RCW 90.58.020. Ecology's SMA guidelines and the Mason County SMP identify aquaculture as a preferred, water-dependent use that is in the broader statewide interest, can result in long-term benefits, and is capable of protecting the

resources and ecology of the shoreline. WAC 173-26-241(3)(b)(i)(A); MCC 17.50.210(a). Additionally, the Mason County SMP articulates the following three use preferences for shorelines of statewide significance:

- (1) The public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally. To this end, uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shorelines.
- (2) Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single family residences and their appurtenant structures, ports, shoreline recreational uses, including, but not limited to, parks, marinas, piers, and other improvements facilitating public access to shorelines of the state, industrial and commercial development which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of people to enjoy the shorelines of the state.
- (3) Permitted uses in the shorelines of the state shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline area and any interference with the public's use of the water (RCW 90.58.020).

The Proposal is consistent with these use preferences for shorelines of statewide significance because it is (1) unique to or dependent upon use of the state's shorelines; (2) a commercial activity that is particularly dependent on the use of state shorelines; and (3) for reasons discussed elsewhere in this memorandum and extensively analyzed in the Habitat Management Plan, is designed and will be conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline area and any interference with the public's use of the water.

For the above reasons, the Proposal is consistent with the policies in Chapter 90.58 in regard to shorelines of the state and of statewide significance.

2. The Proposal is consistent with regulations adopted by the department of ecology pursuant to the Act, including Chapter 173-27 WAC.

The Proposal is consistent with the regulations adopted by Ecology pursuant to the SMA, including Chapter 173-27 WAC. MCC 17.50.400(c)(3)(ii)b. As discussed above, Ecology's regulations specific to aquaculture identify this as a preferred, water-dependent use that is of statewide interest and, when properly managed, can result in long-term benefits and protect the resources and ecology of the shoreline. WAC 173-26-241(3)(b). For the reasons set forth in this memorandum and the Habitat Management Plan, the Proposal is designed and will be managed

to follow effective conditions and best management practices, thereby avoiding and minimize potential negative environmental impacts.

Ecology's SMA regulations at Chapter 173-27 WAC provide the following SDP review criteria:

- (1) A substantial development permit shall be granted only when the development proposed is consistent with:
- (a) The policies and procedures of the act;
- (b) The provisions of this regulation; and
- (c) The applicable master program adopted or approved for the area. Provided, that where no master program has been approved for an area, the development shall be reviewed for consistency with the provisions of chapter 173-26 WAC, and to the extent feasible, any draft or approved master program which can be reasonably ascertained as representing the policy of the local government.
- (2) Local government may attach conditions to the approval of permits as necessary to assure consistency of the project with the act and the local master program.

WAC 173-27-150.

The Proposal satisfies these review criteria. As set forth in detail in this memorandum, the Proposal is consistent with the policies of SMA and the Mason County SMP, and Taylor Shellfish is obtaining permits for the Proposal in compliance with the procedures of the SMA.

IV. The Proposal Satisfies Conditional Use Permit Review Standards

The Proposal also satisfies all criteria for Conditional Use Permit issuance, as set forth in MCC 17.50.400(c)(3)(B)(ii).

1. The Proposal is consistent with the policies of RCW 90.58 and the policies of the master program.

As set forth above, the Proposal is consistent with the policies of RCW 90.58 and the Mason County SMP.

2. That the proposed use will not interfere with the normal public use of the shoreline.

The Proposal will not interfere with the normal public use of the shoreline. The Site occupies a minor portion of Oakland Bay and is located outside of navigational channels. Additionally, the Site is over 1,000 feet from the nearest shoreline, allowing for unimpeded navigation and recreational use on all sides of the Proposal. The Proposal is in the location of an area used for log storage, and it is not currently characterized by high levels of public use.

3. That the proposed use of the site and design of the project will be compatible with other permitted uses within the area and with uses planned for the area under the comprehensive plan and shoreline master program.

The Proposal is a preferred, water-dependent use that is located in an area with suitable conditions for oyster aquaculture. The Site is within the Aquatic shoreline environment, and the closest upland designation is Conservancy. Floating aquaculture is an allowed use within every shoreline environment. MCC Table 17.50.090-A.

The Site is located outside of sensitive habitat such as eelgrass beds and surf smelt or sand lance spawning areas, and it will comply with all conservation measures of the Programmatic Consultation. The Project will use aquaculture techniques and best management practices that have proven effective at cultivating oysters while minimizing potential impacts to neighboring use and development. And, as discussed above, it will not interfere with the normal public use of the shoreline. Accordingly, the Project will be compatible with other permitted uses within the area and advance local, state, and federal laws and policies supporting aquaculture.

4. That the proposed use will cause no unreasonable adverse effects to the shoreline environment in which it is to be located.

For reasons discussed above and in the Proposal's related application materials, the Proposal will cause no unreasonable adverse effects to the shoreline environment. This is further evidenced by evaluating the Proposal in relation to the SMP's aquaculture regulations, MCC 17.50.210(b), as set forth above.

5. That the public interest suffers no substantial detrimental effect.

This Project is in the public interest. As discussed above, the project is a preferred, water-dependent use under the SMA. RCW 90.58.020. And Ecology's implementing guidelines recognize aquaculture is in the statewide interest and has the potential to result in long-term over short-term benefit and protect the resources and ecology of the shoreline. WAC 173-26-241(3)(b)(i)(A). Further, WAC 173-26-176 sets forth the policy goals of the SMA, the first of which is to use the shorelines for economically productive uses that are particularly dependent on shoreline location or use.

The permit and enforcement regulations for the SMA define the public interest by reference to effects on public property, health, safety, and general welfare resulting from a use or development. WAC 173-27-030(14). The Project advances these interests:

Public property: The Project is located on property that has historically been leased from the state to private interests. DNR manages state-owned aquatic lands to provide a balance of public benefits for all citizens of the state, and DNR considers the natural values and best use of aquatic lands before authorizing uses on them. Accordingly, aquatic lands leased from the state are provide benefits to the public from the use these state-owned lands.

Public health: As filter feeders, shellfish play an important role in improving and maintaining water quality and sequestering carbon and nutrients, with numerous attendant human and marine benefits.

Public safety: Shellfish aquaculture contributes to a secure source of healthfully produced food and increases food security.

General welfare: General welfare includes economic, environmental, social and educational components. Shellfish aquaculture has strong historical and cultural roots in Washington State. This activity is an important economic engine in shoreline communities and contributes economically via job creation, tax contributions, and, as an export item, brings new money into local rural communities. Given its dependence on water quality and the natural marine food web, it has a unique position in environmental stewardship and public education about our marine waterways.

Numerous additional federal and state laws and policies reinforce that shellfish aquaculture is in the broad public interest, including:

- The National Aquaculture Act of 1980. This Act declares it is "in the national interest, and it is the national policy, to encourage the development of aquaculture in the United States," recognizing aquaculture "has the potential for reducing the United States trade deficit in fisheries products, for augmenting existing commercial and recreational fisheries and for producing other renewable resources, thereby assisting the United States in meeting its future food needs and contributing to the solution of world resource problems." 26 U.S.C. § 2801(c).
- NOAA's 2011 Marine Aquaculture Policy.¹ "This policy reaffirms that aquaculture is an important component of NOAA's efforts to maintain healthy and productive marine and coastal ecosystems, protect special marine areas, rebuild overfished wild stocks, restore populations of endangered species, restore and conserve marine and coastal habitat, balance competing uses of the marine environment, create employment and business opportunities in coastal communities, and enable the production of safe and sustainable seafood."
- NOAA's 2011 National Shellfish Initiative.² The National Shellfish Initiative's goal is to increase shellfish aquaculture for commercial and restoration purposes, thereby stimulating coastal economies and improving ecosystem health. This initiative recognizes shellfish aquaculture provides a broad suite of benefits by improving water quality, conserving habitat, stabilizing coastlines, restoring depleted species, and creating jobs. Key strategies of the National Shellfish Initiative include enhancing shellfish restoration and farming, and streamlining permitting.
- Bush and Callow Acts of 1895. The Legislature passed the Bush and Callow Acts in 1895 to stimulate shellfish farming in Washington State, in recognition of the State's excellent potential for shellfish farming and its importance to local economies. The Bush and Callow Acts were re-codified in 2002 legislation at RCW 79.135.010. The legislative findings for the recodification reinforce that shellfish farming continues to be of the

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¹ Available at: https://media.fisheries.noaa.gov/2021-01/2011-noaa-marine-aquaculture-policy.pdf?VersionId=null

² Information about the National Shellfish Initiative is available at:

https://www.fisheries.noaa.gov/national/aquaculture/national-shellfish-initiative

utmost importance to the State: "The legislature declares that shellfish farming provides a consistent source of quality food, offers opportunities of new jobs, increases farm income stability, and improves balance of trade. The legislature also finds that many areas of the state of Washington are scientifically and biologically suitable for shellfish farming, and therefore the legislature has encouraged and promoted shellfish farming activities, programs, and development with the same status as other agricultural activities, programs, and development within the state." ESHB 2819 (2002 c 123 § 1).

- Washington State Shellfish Initiative.³ Former Governor Christine Gregoire launched the Washington Shellfish Initiative in 2011 to specifically encourage shellfish farming in the state. This initiative recognizes shellfish aquaculture is critically important to the state's ecology, economy, and culture. Shellfish help filter and improve the quality of marine waters and are an important part of the solution to restore and preserve the health of endangered waters. Accordingly, this initiative lists several programs to restore and expand shellfish resources throughout the state, including improved guidance for local SMPs "to protect against habitat impacts and planning to minimize conflicts with adjoining shoreline owners and other marine water users." Following up on these initial efforts, Governor Jay Inslee launched Phase II of the Washington Shellfish Initiative earlier this year "to promote critical clean-water commerce, elevate the role that shellfish play in keeping our marine waters healthy and create family wage jobs."
- Aquaculture Marketing Act. This act declares "that aquatic farming provides a consistent source of quality food, offers opportunities of new jobs, increased farm income stability, and improves balance of trade . . . It is therefore the policy of this state to encourage the development and expansion of aquaculture within the state." RCW 15.85.010.
- Puget Sound Partnership, Shellfish Beds Implementation Strategy.⁴ The Puget Sound Partnership is the state agency leading the region's collective effort to restore and protect Puget Sound, and it works with several other agencies and stakeholders in this endeavor. The Partnership has developed strategic initiatives and implementation strategies to direct the agency's action where it can address the most significant problems. One of the strategic initiatives is focused on shellfish, and this initiative recognizes the importance of shellfish beds to the State's environment, economy, and culture.

In short, at every level of government shellfish aquaculture is recognized as an activity that advances the broader public interest. The Proposal advances these broader public interest and incorporates appropriate measures to avoid and minimize potential adverse impacts.

⁴ Information about the shellfish strategic initiative and implementation strategy is available at: https://pugetsoundestuary.wa.gov/shellfish-strategic-initiative/

³ Information about the Washington Shellfish Initiative is available at: https://www.governor.wa.gov/issues/issues/energy-environment/shellfish

Cumulative Impacts

Review Standard

MCC 17.50.400(c)(3)(B)(v) states: "In the granting of all conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if conditional use permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses should remain consistent with the policies of the master program and should not produce substantial adverse effects to the shoreline environment."

Analysis

The Proposal will not result in unacceptable adverse cumulative impacts. If CUPs were granted for other developments in the area where similar circumstances exist, the total of conditional uses would remain consistent with the policies of the master program and not produce substantial adverse effects to the shoreline environment. Numerous lines of reasoning support this conclusion.

1. Mason County Permitting Requirements Guard Against Adverse Cumulative Impacts.

The Mason County SMP contains permitting requirements and review standards that help ensure the total of CUPs issued for aquaculture remain consistent with the policies of the master program and not produce substantial adverse effects. As made clear by the analysis above, the SMP contains numerous policies and regulations for aquaculture. These policies and regulations require farms to be sited in appropriate areas, utilize best management practices, and incorporate avoidance and minimization measures to ensure any given aquaculture farm does not result in a net loss of ecological functions. MCC 17.50.210. CUPs will only be issued for farms that satisfy these requirements. Accordingly, the permitting process protects against the danger that many projects will have individually minor, yet cumulatively significant, adverse impacts to ecological functions.

2. Potential Areas for Aquaculture Are Relatively Limited.

Cumulative impact concerns are often at the forefront when approval of one project can form a precedent for approving similar such projects in the future. Here, issuance of a CUP for the Proposal does not raise such concerns. As just discussed, each project must undergo individual project review to demonstrate it is appropriately sited, designed, and conditioned to not result in a net loss of ecological functions. Thus, future applicants cannot simply rely on approvals for prior projects but must demonstrate their proposals satisfy all review standards. MCC 17.50.210.

Moreover, unlike some types of uses or developments that can be undertaken in nearly every location, "[p]otential locations for aquaculture are relatively restricted due to specific requirements for water quality, temperature, flows, oxygen content, adjacent land uses, wind protection, commercial navigation, and, in marine waters, salinity." WAC 173-26-

241(3)(b)(i)(B). The Proposal's Site contains suitable characteristics for oyster aquaculture, including being located within an area approved by the Washington Department of Health for shellfish harvest. See Habitat Management Plan § 5.1.

3. The Programmatic Consultation Contains a Robust Cumulative Impact Analysis Demonstrating New Farms Will Not Cause Substantial Adverse Impacts.

As discussed in the Proposal's Habitat Management Plan, the Programmatic Consultation contains a robust analysis of cumulative impacts, demonstrating the cumulative impacts of existing and project new shellfish farms in South Puget Sound will not cause substantial adverse impacts.

The Programmatic Consultation analyzes the cumulative impact of continuing as well as new commercial shellfish aquaculture activities throughout a 20-year (2016-2036) planning horizon. The anticipated 20-year timeframe of the PBA is tied to specific acreage limits. Acreage limits (current plus anticipated growth for 2016-2036) were developed for specific commercial shellfish activities in each of five regions in the state, including South Puget Sound (defined as the region running south from the south tip of Whidbey Island, excluding Hood Canal). The Corps projected aquaculture growth in each region based on input provided to the Corps by the aquaculture industry, the historical rate of permit applications, and the experience of Corps professional staff. The Corps projected that 448 new acres of aquaculture activities may occur during the 20-year planning period in South Puget Sound, with 62% of that acreage dedicated to oyster and clam aquaculture. This equates to 278 acres total over the 20-year planning period, or less than 14 acres per year on average in the entirety of South Puget Sound—a relatively modest amount of growth across this large region.

The Programmatic Consultation documents include several hundred pages of information and analysis, yet the bottom line is straightforward: given the terms, conditions, and conservation measures included in the consultation, continuing and new aquaculture activities over the next 20-years are not likely to result in jeopardy to species or result in destruction or adverse modification of critical habitat. As NMFS notes in its PBO: "There are no published data or any other indication that in the long-term, presence of shellfish culture has negatively influenced population viability of any species in Puget Sound ...". NMFS PBO, p. 91. NMFS's incidental take statement for the Programmatic Consultation summarizes the NMFS PBO as follows: "In the PBO, NMFS determined that the amount or extent of anticipated take, coupled with other effects of the proposed action, is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat." NMFS, Revised ITS and Biological Opinion Errata, September 30, 2016. Similarly the U.S. Fish and Wildlife Service concluded:

The Service does not anticipate that the proposed action will incidentally take marbled murrelets . . . In the accompanying Opinion, the Service determined that the level of anticipated take is not likely to result in jeopardy to the species (bull trout) or destruction or adverse modification of critical habitat (designated bull trout critical habitat)." (USFWS, PBO, pp 205-206)

Further, safeguards are built into the Programmatic Consultation process ensure that cumulative impacts remain minimal. For example, the Corps prepares an annual report and meets annually with the Services to review current status of acreage growth and resultant impacts to species and habitat, and to decide any adjustments needed to ensure continued compliance with the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act.

Notably, the cumulative impact analysis in the Programmatic Consultation includes all common forms of aquaculture in Washington State, including geoduck, oyster, manila clam, and mussel cultivation. Accordingly, it is analytically conservative (both in terms of activities as well as geography) for purposes of evaluating the cumulative impacts associated with requests for future floating oyster aquaculture proposals in Mason County.

For these reasons, if CUPs were granted for other floating oyster aquaculture projects in the area where similar circumstances exist, the total of conditional uses would remain consistent with the policies of the master program and not produce substantial adverse effects to the shoreline environment.