



## CODE CONSISTENCY ANALYSIS

**To:** Greg Goforth and Nancy Hopkins, King County Permitting Division  
**cc:** Mike Spranger, SPARO Aquatics

**From:** Chris Cziesla and Kelly McDonald

*Chris Cziesla Kelly McDonald*

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**Re:** Code Consistency Analysis for SPARO Aquatics (PREA21-0237)

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### 1.0 BACKGROUND

SPARO Aquatics proposes to operate a floating kelp and shellfish farm in South Puget Sound on the southwest corner of Vashon Island in Colvos Passage. The proposed project would occur over a 10-acre area leased from the Department of Natural Resources.

This document supports compliance of the proposed project with King County Code (KCC) and the review criteria required for conditional use permits (WAC 173-27-160). Per KCC 21A.25.160, a shoreline conditional use permit is required to place buoys within an aquatic area adjacent to the Conservancy Shoreline Environment Designation (SED).

### 2.0 DISCUSSION

The following King County Code (KCC) references and excerpts are relevant to the assessment of the allowance of the proposed project within King County. Subsequent bullets provide support for how the proposed project complies with the excerpted code.

#### **KCC 21A.25.080 Sequence of mitigation measures – priority.**

“A. Mitigation measures shall be applied in the following sequence of steps listed in order of priority, with subsection A.1. of this section being top priority:

1. Avoiding the impact altogether by not taking a certain action or parts of an action;
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;” (refer to code for additional sequencing)

- Avoidance and minimization measures are described in the attached Impact Analysis Report (Confluence 2022). Impacts are largely avoided and minimized to ensure no net loss of shoreline ecological function.

**KCC 21A.25.100 Shoreline use.**

- The proposed project is an allowed use within the Aquatic SED and adjacent to the Conservancy SED as “aquaculture, not otherwise listed”, pursuant to KCC 21A.25.110.

**KCC 21A.25.110 Aquaculture.**

“A. Unless the applicant demonstrates that the substrate modification will result in an increase in native habitat diversity, aquaculture that involves little or no substrate modification shall be given preference over aquaculture that involves substantial substrate modification, and the degree of proposed substrate modification shall be limited to the maximum extent practical.”

- Floating aquaculture substantially limits the required substrate modification, relative to the active culture area. For the proposed 10-acre site, less than 0.1% of the total area would be subject to substrate modification associated with the anchors.

“B. The installation of submerged structures, intertidal structures and floating structures shall be limited to the maximum extent practical.”

- The proposed aquaculture methods maximize the amount of production per acre by allowing for seaweed and shellfish cultivation in the same area. By employing these methods, installation of floating structures is limited to the maximum extent practicable.

“C. Aquaculture proposals that involve substantial substrate modification or sedimentation through dredging, trenching, digging, mechanical clam harvesting or other similar mechanisms, shall not be permitted in areas where the proposal would adversely impact critical saltwater habitats.”

- The proposed project would have limited impact to critical saltwater habitats. Identified macroalgae ranges from 10-60% cover within shallower depths of the proposed site and becomes sparse to non-existent at deeper depths. Anchor placement would be completed so as to minimize impacts to the maximum extent practicable.

“D. Aquaculture activities that after implementation of mitigation measures would have a significant adverse impact on natural, dynamic shoreline processes or that would result in a net loss of shoreline ecological functions shall be prohibited.”

- The proposed project would have limited impacts on natural processes and may even provide a benefit to ecological function. Refer to the Biological Evaluation (Spranger 2022) and Impact Analysis Report (Confluence 2022) for additional details.

“E. Aquaculture should not be located in areas that will result in significant conflicts with navigation or other water-dependent uses.”

- The location of the proposed project is not a significant navigation area.

“F. Aquaculture facilities shall be designed, located and managed to prevent the spread of diseases to native aquatic life or the spread of new nonnative species.”

- The proposed cultivated species are native or consistently cultured in Puget Sound. No spread of diseases or nonnative species is expected.

“J. Aquaculture developments approved on an experimental basis shall not exceed five acres in area, except land-based projects and anchorage for floating systems, and three years in duration. The department may issue a new permit to continue an experimental project as many times as it determines is necessary and appropriate.”

- The proposed methods are based on methodology developed and used extensively on the east coast (pioneered by GreenWave). These methods have been utilized for several years in Puget Sound at Blue Dot Farm off Hood Head to farm seaweed at a commercial capacity. SPARO Aquatics has worked with Blue Dot Farm to understand their methods and will continue to rely on Blue Dot Farm’s expertise during implementation. The proposed project therefore does not constitute an experimental aquaculture method.

“T. All floating and submerged aquaculture structures and facilities in navigable waters shall be marked in accordance with United States Coast Guard requirements.”

- The floating aquaculture arrays will be marked around the edge of the area according to United States Coast Guard requirements.

“W. Aquaculture shall not be approved where it will adversely impact eelgrass and macroalgae.”

- The proposed project would have limited impact to critical saltwater habitats. Identified macroalgae ranges from 10-60% in cover at shallower depths of the proposed site and becomes sparse to non-existent at deeper depths. Anchor placement would be completed so as to minimize impacts to the maximum extent practicable.

**KCC 21A.25.160.B Shoreline modifications.**

- Buoys are considered a shoreline modification and are allowed in both the Aquatic and Conservancy SEDs with a shoreline conditional use permit. Although the identified project parcel spans both the Natural and Conservancy SEDs, the proposed project site has been limited to Aquatic areas adjacent to the Conservancy SED. Refer to the attached Impact Analysis Report (Confluence 2022) for an assessment of the nearshore environment and any potential impact of the facility, as required.
- Anchors are also considered a shoreline modification and are allowed in both the Aquatic and Conservancy SEDs with a shoreline conditional use permit. As noted above, the proposed project site is limited to Aquatic areas adjacent to the Conservancy SED.

**KCC 21A.25.180 Dock, pier, moorage pile or buoy, float or launching facility.**

“D. In the Conservancy environment, a dock, pier, moorage pile or buoy, float or launching facility for a commercial or manufacturing use must be located at least two hundred fifty feet from another dock or pier;”

- There are no other docks or piers within the vicinity of the proposed project. Therefore, no floats associated with the project will be within 250 feet of another dock or pier.

“I. Moorage buoys shall meet the following conditions: 1. Buoys shall not impede navigation; 2. The use of buoys for moorage of recreational and commercial vessels is preferred over pilings or float structures; 3. Buoys shall be located and managed in a manner that minimizes impacts to eelgrass and other aquatic vegetation; 4. Preference should be given mid-line float or all-rope line systems that have the least impact on marine vegetation; 5. New buoys that would result in a closure of local shellfish beds for future harvest shall be prohibited; and 6. No more than four buoys per acre are allowed;”

- All lines will have incorporated mid-line floats to minimize impact on marine vegetation.
- The code references moorage buoys and does not appear to apply to buoys not associated with moorage. While much of this guidance is appropriate for all structures and buoys, the proposed farm buoys should not be held to the standard of 4 buoys per acre. There does not appear to be a basis for applying that standard to this project given the way the buoys are integrated into lines making each line effectively a single buoy-

based system and since the lines are secured on both ends to avoid having a large scope that the buoys move within. Additionally, unlike mooring buoys, there would be no vessels or larger floating structures associated with the buoys, rendering the effective footprint (visual and surface area) much smaller than vessel moorage buoys. These differences are significant and should grant the current project relief from the standard of 4 buoys per acre and to be permitted as an aquaculture facility. The buoy systems will be fully evaluated for potential impacts, as required.

**KCC 21A.25.190 Excavation, dredging, dredge material disposal and filling.**

- The concrete anchors will be placed to secure the aquaculture array. Consistent with paragraph B.1 in KCC 21A.25.190, such placement is allowed “when necessary to support a water-dependent use”. As defined in KCC 21A.06.1385 and stated in WAC 173-26-241(3)(b), aquaculture is a water-dependent use and anchors are necessary for the proposed type of aquaculture. Therefore, the proposed anchors are allowable.

### **3.0 CONCLUSION**

Assessment of the relevant King County Code suggests that the proposed project is an allowable use in the specified location, contingent upon submittal and approval of a shoreline substantial development permit application and a shoreline conditional use permit application.