

1 **ORDINANCE 2016-06**

2 **Exhibit 3**

3  
4 **5.2 Aquaculture**

5 **5.2.1 Applicability**

6 These provisions apply to the commercial cultivation and harvesting of fish, shellfish or other aquatic  
7 animals or plants, and also to non-commercial harvesting of fish and shellfish for human consumption,  
8 or cultivation for restoration purposes. Aquaculture is dependent on the use of the water, and when  
9 consistent with control of pollution and prevention of damage to the environment, is a preferred use of  
10 the water area. Aquaculture activities may be subject to the regulations found in Section 6.4, Dredging  
11 and Dredge Material Disposal, depending on site-specific circumstances. Aquaculture activities will be  
12 reviewed under the no net loss provisions of Section 4.1.2, Environmental Impacts, and may also be  
13 reviewed under Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.5, Critical  
14 Areas; Section 4.1.6, Water Quality and Stormwater Management; and Appendix B, when applicable.  
15 Other portions of this Program may also apply.

16 **5.2.2 Policies**

- 17 1. Identify and encourage aquaculture activities which create ecosystem improvements and result  
18 in no net loss of ecological functions.
- 19 2. Allow experimental forms of aquaculture involving the use of new species, new growing  
20 methods, or new harvesting techniques, when they are consistent with applicable state and  
21 federal regulations and this Program. Experimental aquaculture projects should be limited in  
22 scale and should be approved for a limited period of time. When feasible, limit or restrict new  
23 development and uses in areas that affect existing experimental aquaculture.
- 24 3. Do not permit aquaculture in areas where it would result in a net loss of ecological functions,  
25 adversely impact eelgrass or macroalgae, or significantly conflict with navigation and other  
26 water dependent uses.
- 27 4. Locate new commercial aquaculture to avoid conflicts with public use and access of the  
28 shoreline and waters of City-owned tidelands and shorelines designated for public use (e.g.;  
29 Island Conservancy shoreline designation).
- 30 5. Design and locate aquaculture facilities to not spread disease to native aquatic life, establish  
31 new non-native species which cause significant ecological impacts, or significantly impact the  
32 aesthetic qualities of the shoreline.
- 33 6. Mitigate impacts to ecological functions according to WAC 173-26-201(2)(e) and Section 4.1.2,  
34 Environmental Impacts.
- 35 7. Give preference to those forms of aquaculture that have less environmental and/or visual  
36 impacts. Preference is given to those projects that require fewer submerged or intertidal  
37 structures, fewer land-based facilities, limited substrate modification, and that don't rely on  
38 artificial feeding.
- 39 8. Ensure aquaculture does not cause cumulative impacts.

- 1 9. Before permitting commercial aquaculture, the City should first reserve appropriate areas for  
2 protecting and restoring ecological functions to the greatest extent feasible while planning for  
3 and fostering reasonable and appropriate water-dependent uses (RCW 90.58.020, WAC 173-26-  
4 201(2)(d), WAC 173-26-251(2)).
- 5 10. Consider local ecological conditions and provide limits and conditions to assure appropriate  
6 compatible types of aquaculture for the local conditions as necessary to assure no net loss of  
7 ecological functions (WAC 173-26-241(3)(b)).
- 8 11. Until the City’s scheduled periodic review of this Program under RCW 90.58.080, limit where  
9 commercial aquaculture may occur based on local conditions and ecological considerations,  
10 estimated future demand for shoreline space, potential use conflicts, current shoreline use  
11 patterns and projected trends. During the periodic review, the City will make amendments  
12 deemed necessary to reflect changing local circumstances, new information or improved data,  
13 relevant environmental and ecological conditions and any applicable guidelines issued by the  
14 Department of Ecology.

15 **5.2.3 Regulations – Prohibited**

16  
17 The following is prohibited:

- 18 1. Aquaculture in the Natural, Island Conservancy, and Priority Aquatic designations, except as  
19 provided in Section 5.2.4 (1), below.
- 20 2. Aquaculture uses and/or operations on City-owned public tidelands.
- 21 3. New commercial net pen aquaculture.
- 22 4. Aquaculture that uses or releases herbicides, pesticides, antibiotics, fertilizers, parasites,  
23 pharmaceuticals, genetically modified organisms, feed or other materials known to be  
24 potentially harmful into surrounding waters is prohibited, unless:
- 25 a. When conducted for native population recovery in accordance with government/Tribal  
26 approved plan and all state and federal regulations; or
- 27 b. If approved by all appropriate state and federal agencies and proof thereof is submitted to  
28 the City and if all regulations of SMP 4.16, Water Quality and Stormwater Management,  
29 are met.
- 30 5. Mechanical and/or hydraulic harvesting or other activities that involve substrate modification  
31 shall be prohibited in existing kelp beds, or in beds of native eel grass (*Zostera marina*) and  
32 mixed beds of native and non-native eelgrass.
- 33 6. Use of non-biodegradable plastics commencing two years after the effective date of Ordinance  
34 2016-06.
- 35 7. Operating motorized vehicles, such as trucks, tractors and forklifts, on the shoreline and below  
36 the ordinary high water mark.

- 1 8. New commercial aquaculture in or on known forage fish spawning sites and/or essential fish  
2 habitat.

3 **5.2.4 Regulations – General**

- 4 1. Aquaculture may be allowed as follows:

- 5 a. Commercial aquaculture, including geoduck, as a conditional use in the Shoreline Residential  
6 Conservancy, Shoreline Residential, Urban and adjacent Aquatic designations.
- 7 b. Commercial aquaculture, excluding geoduck, as a conditional use in the Natural, Island  
8 Conservancy and adjacent Aquatic designations if using non-reproducing or native species or  
9 as part of an approved shoreline restoration project or native species recovery project.
- 10 c. Non-commercial aquaculture is a permitted use in the Shoreline Residential Conservancy,  
11 Shoreline Residential, Urban and adjacent Aquatic designations. It is a permitted use in the  
12 Natural, Island Conservancy, Priority Aquatic A and Priority Aquatic B designations if using  
13 non-reproducing or native species or as part of an approved shoreline restoration project or  
14 native species recovery project.
- 15 d. Non-commercial aquaculture is limited to a cultivation area of no greater than 200 square  
16 feet.

- 17 2. Non-commercial aquaculture is allowed pursuant to Section 5.2.4.1.c, provided it meets the  
18 substantive requirements of this Program and the SMA, and the following can be met:

- 19 a. It complies with all state and federal regulations, including transfer and harvest permits  
20 required by WDFW;
- 21 b. The cultivation and harvesting is limited to non-reproducing species of shellfish  
22 acquired from a licensed source consistent with state law;
- 23 c. The operation may utilize bottom culture or off-bottom culture bags if in accordance  
24 with best management practices;
- 25 d. The operation does not significantly alter the tidal bed;
- 26 e. All materials shall be marked with owners' contact information to provide  
27 identification after storm disturbance;
- 28 f. Any use or activity meets the no net loss standard of Section 4.1.2.4. and
- 29 g. The total disturbance area is limited to an area of 200 square feet.

- 30 3. Aquaculture shall not cause:

- 31 a. A net loss of ecological functions or processes;
- 32 b. Adverse impacts to critical saltwater habitat as defined in WAC 173-26-221(2)(c)(iii),  
33 including all kelp beds, eelgrass beds, spawning and holding areas for forage fish, such as  
34 herring, smelt and sand lance; subsistence, commercial and recreational shellfish beds;  
35 mudflats, intertidal habitats with vascular plants, and areas with which priority species  
36 have a primary association;
- 37 c. Conflicts with navigation, public access, and other water-dependent uses;
- 38 d. The spread of disease to native aquatic life;

- 1 e. Establishing new non-native species that cause significant ecological impacts;
- 2 f. Significant impacts to shoreline aesthetic qualities; and/or
- 3 g. Modifications of the substrate.
- 4 4. When a shoreline conditional use permit is issued for a new aquaculture use or development, that
- 5 permit shall apply to the initial siting, construction, and/or planting or stocking of the facility or
- 6 farm, and shall be valid for the period specified in the permit.
- 7 5. Permit revisions shall proceed in accordance with WAC 173-27-100. A new permit is required
- 8 when any of the following occurs:
  - 9 i. The physical extent of the use or development or associated overwater coverage is
  - 10 expanded by more than ten percent compared to the permitted use or development. If
  - 11 the amount of expansion or change in overwater coverage exceeds ten percent, the
  - 12 revision or sum of the revision and any previously approved revisions shall require
  - 13 the applicant apply for a new permit;
  - 14 ii. The applicant proposes to cultivate a species not included in the original permit; or
  - 15 iii. New chemicals not previously approved as part of the existing permit are proposed
  - 16 for use.
- 17 6. When determined necessary for compliance with this Program and the SMA, the Administrator
- 18 may apply conditions of approval to any shoreline permit. The following is a non-inclusive list
- 19 of potential conditions that may apply to certain aquaculture uses or facilities:
  - 20 a. All permitted aquaculture operations shall be reviewed by the City after the first 12-
  - 21 month period of operation, and no less than biennially thereafter, to confirm compliance
  - 22 with the terms and conditions of the permit. The City may rescind the permit pursuant to
  - 23 RCW 90.58.140(8) if it is determined by the Administrator that aquaculture operations
  - 24 are not consistent with the terms and conditions of the permit and/or the aquaculture
  - 25 operations are not within the original scope and intent of the original permit.
  - 26 b. Beaches in the vicinity of permitted shellfish operations shall be patrolled monthly by
  - 27 crews who will retrieve aquaculture debris (e.g.; predator nets, tubes, tube caps, stakes)
  - 28 that escape from the project area. Crews are not required to patrol privately owned
  - 29 tidelands where it can be demonstrated that a request to patrol has been made by the
  - 30 operator and owners have refused to authorize such activity. Within the project vicinity,
  - 31 locations shall be identified where debris tends to accumulate due to wave, current, or
  - 32 wind action, and after weather events these locations shall be patrolled by crews who will
  - 33 remove and dispose appropriately of aquaculture debris. Operators shall maintain a
  - 34 record with the following information and the record shall be made available upon
  - 35 request: date of patrol, location of areas patrolled, description of the type and amount of
  - 36 retrieved debris, and other pertinent information.
  - 37 c. Where any proposed structure has the potential to constitute a hazard to the public, the
  - 38 City may require the posting of a bond commensurate with the cost of removal or repair.
  - 39 Following notice to the owner, the City may abate an existing abandoned or unsafe
  - 40 aquaculture structure if the owner fails to respond within 30 days. The City may also
  - 41 impose a lien on the related shoreline property or other assets in an amount equal to the
  - 42 cost of the abatement. Bonding requirements shall not duplicate requirements of other
  - 43 agencies. The owner of the structure shall post a single bond with the government agency
  - 44 of the owner's choosing.

- 1 d. Materials that are not necessary for the immediate and regular operation of the facility  
2 shall not be stored waterward of the ordinary high water mark.
  - 3 e. All tubes, mesh bags, and area nets used in shellfish operations on the tidelands below the  
4 ordinary high water mark shall be clearly, indelibly and permanently marked to identify  
5 the permittee name and contact information. On the nets, identification markers will be  
6 placed with a minimum of one identification marker for each 50 feet of net.
  - 7 f. All floating and submerged aquaculture structures and facilities in navigable waters shall  
8 comply with all applicable state and federal requirements.
  - 9 g. The operators of aquaculture developments shall control odor.
  - 10 h. Aquaculture operations must comply with noise regulations in BIMC 16.16 and avoid or  
11 minimize noise impacts to the extent possible.
  - 12 i. Overhead wiring or plumbing is not permitted on overwater structures.
  - 13 j. Bulk storage for gasoline, oil and other petroleum products for any use or purpose on  
14 piers and docks is prohibited. Bulk storage means non-portable storage in fixed tanks.  
15
- 16 7. In addition to the minimum application requirements in BIMC 2.16.165, applications for  
17 commercial aquaculture operations shall include the submittal requirements provided in the  
18 City’s Administrative Manual. Some of these submittal requirements may be waived by the  
19 Administrator based on site-specific environmental and ecological conditions.
- 20 8. The rights of treaty tribes to aquatic resources within their usual and accustomed areas shall  
21 be addressed through direct coordination between the applicant/proponent and the affected  
22 tribe(s). The City will notify affected tribes of new shoreline permit applications utilizing the  
23 applicable notification process in BIMC 2.16.165.

#### 24 5.2.5 Regulations –Location and Design Standards

- 25 1. Location standards for commercial aquaculture operations include:
- 26 a. The total area of all newly permitted commercial aquaculture operations on Bainbridge  
27 Island shall not exceed 5 acres. Acreage shall include the area of cultivation and harvest on  
28 the tidelands.
  - 29 b. Aquaculture use and development located on parcels abutting or nearby City-owned  
30 tidelands shall be located so as to not restrict pedestrian access or circulation along public  
31 beaches.
  - 32 c. Shellfish aquaculture use and development shall not interfere with navigation, or access to  
33 adjacent waterfront properties, or public recreation areas. Mitigation shall be provided to  
34 offset such impacts where there is a high probability that adverse impact would occur. This  
35 provision shall not be interpreted to mean that an operator is required to provide access  
36 across owned or leased tidelands at low tide for adjacent upland property owners.
  - 37 d. Aquaculture use and development shall be located in areas where biophysical conditions,  
38 such as tidal currents, water temperature and depth are suitable for the form of aquaculture  
39 proposed. Individual aquaculture uses and developments shall be separated by sufficient  
40 distance to ensure that significant adverse cumulative effects do not occur.
  - 41 e. Floating and submerged aquaculture structures shall be located to avoid interference with  
42 navigation and the normal public use of the surface waters. Floating structures shall remain  
43 shoreward of principal navigation channels. Other restrictions on the scale of aquaculture  
44 activities to protect navigational access may be necessary based on the size and shape of the  
45 affected water body.
  - 46 f. Property Line Setbacks. The perimeter of an aquaculture operation shall be set back a  
47 minimum of ten feet (10’) from side property lines. Aquaculture operations that include

- 1 multiple parcels require property line setbacks only at the outer edge of the operation and  
2 not from internal property lines.
- 3 g. Native aquatic vegetation attached to or rooted in substrate, including native and mixed beds  
4 of eelgrass, require a minimum buffer of 25 feet. This buffer must be maintained between  
5 the aquatic vegetation and outside edge of an aquaculture activity or structure.
- 6 h. The City may require a larger buffer based on consultation during permit review with  
7 Ecology, Department of Natural Resources and the U.S. Army Corps of Engineers to  
8 determine appropriate buffers based on the most current and applicable science and  
9 proximity of bed to the project, current and tidal flow direction, anticipated turbidity and  
10 anticipated frequency and intensity of operation. The City may require a larger buffer in and  
11 areas adjacent to existing eelgrass beds that are suitable for reintroduction or natural  
12 colonization of native eelgrass beds as identified in the City's SMP Restoration Plan. These  
13 restoration areas include: Milwaukee Dock Eelgrass Project, Port Madison Shoreline  
14 Restoration Project, Rolling Bay Walk Acquisition and Demolition and West Bainbridge  
15 Shoreline Protection Project. Buffers will be determined based on site-specific conditions  
16 and survey data submitted with the permit application.
- 17 i. Mixed beds of native and non-native eelgrass shall be protected as critical saltwater habitat  
18 in order to protect native eelgrass and the species that depend upon both types of eelgrass.  
19 This regulation does not preclude hand removal of non-native eelgrass pursuant to WAC 16-  
20 750-015.
- 21 2. The following shall be limited to the minimum size or number necessary for approved  
22 aquaculture development, uses, and activities:
- 23 a. Submerged or intertidal structures.
- 24 b. Land-based facilities.
- 25 c. Structures which modify substrate.
- 26 3. Floating/hanging aquaculture facilities and associated equipment, except navigation aids, shall  
27 be located at least 1,500 feet off shore outside major navigation channels and use colors and  
28 materials that blend into the surrounding environment in order to minimize visual impacts.  
29 Floating/hanging aquaculture facilities require a visual impact analysis consisting of  
30 information comparable to that found in the Department of Ecology's Aquaculture Siting Study  
31 (1986), as updated. Such analysis may be prepared by the applicant without professional  
32 assistance, provided that it includes an adequate assessment of impacts, as determined by the  
33 Administrator.
- 34 4. Any items stored upon overwater aquaculture facilities such as materials, garbage, tools, or  
35 apparatus, shall be sited and maintained to minimize visual impacts. Storage of necessary tools  
36 and apparatus waterward of the OHWM shall be limited to containers of not more than three (3)  
37 feet in height, as measured from the surface of the raft or dock unless shoreline conditions serve  
38 to minimize visual impacts as demonstrated through a visual impacts study. Materials which are  
39 not necessary for the immediate and regular operation of the facility shall not be stored  
40 waterward of the OHWM. Impacts of overwater structures (e.g.; shading) shall be evaluated  
41 based on the maximum surface coverage including any items stored upon such structures.
- 42 5. Netting and fencing shall be the minimum necessary to deter targeted predators and shall not  
43 exceed six (6) feet in height, as measured from water surface.

1 5.2.6 Regulations – Operational Standards

2 All commercial aquaculture operations shall comply with the following standards:

- 3 1. Aquaculture structures and equipment shall be of sound construction and shall be so maintained.  
4 Abandoned or unsafe structures and equipment shall be removed or repaired promptly by the  
5 owner.
- 6 2. Operational monitoring may be required if and to the extent that is necessary to determine,  
7 ensure, or confirm compliance with predicted or required performance, including periodic  
8 benthic analysis or noise pollution monitoring in accordance with BIMC Chapter 16.16. Such  
9 monitoring requirements shall be established as a condition of the permit and shall be conducted  
10 at the applicant’s (operator’s) expense.
- 11 3. Aquaculture operations that do not conform with this Program are considered discontinued if the  
12 use has ceased for twelve (12) consecutive months.
- 13 4. No processing of any aquaculture product, except for the sorting and culling of the cultured  
14 organism and the washing or removal of surface materials or organisms after harvest, shall occur  
15 in or over the water unless specifically approved by permit. All other processing and processing  
16 facilities shall be located on land and shall be governed by these provisions and the policies and  
17 regulations of other applicable sections of the Master Program, in particular, provisions  
18 addressing commercial and industrial uses.
- 19 5. Aquaculture wastes shall be disposed of in a manner that will ensure compliance with all  
20 applicable governmental waste disposal standards. No garbage, wastes, or debris shall be  
21 allowed to accumulate at the site of any aquaculture operation, except for in approved  
22 receptacles [BIMC Chapter 8.16].
- 23 6. Predator control shall not involve the killing or abusive harassment of birds or mammals.  
24 Approved controls include, but are not limited to, double netting for seals, overhead netting for  
25 birds, fencing or netting for otters. The use of other nonlethal, non-abusive predator control  
26 measures shall be contingent upon receipt of written approval from the National Marine  
27 Fisheries Service and/or the U.S. Fish and Wildlife Service, as required. Aquaculture use and  
28 development shall employ non-lethal, non-harmful measures to control birds and mammals.
- 29 7. All nets shall be maintained in accordance with all applicable state and federal requirements. If  
30 a state or federal permit is not required, cleaning of nets and other apparatus shall be  
31 accomplished by air drying, spray washing or hand washing, rather than chemical treatment and  
32 applications.
- 33 8. Predator exclusion devices shall:
  - 34 a. Be firmly attached or secured so as to not become dislodged or trap animals underneath.
  - 35 b. Blend with the natural environment
  - 36 c. Be routinely inspected and maintained
  - 37 d. Be removed as soon as they are no longer needed to perform protective functions
- 38 9. Aquaculture operations shall avoid adverse proximity impacts from light and glare and satisfy  
39 the applicable provisions of BIMC 18.15.040. Pursuant to BIMC 18.15.040.C, lighting shall be  
40 shielded to the maximum extent possible, and lumens shall be minimized to the maximum  
41 extent possible.

- 1 10. For shellfish aquaculture, property corner markers that are visible at low tide during planting and  
2 harvesting must be installed. Property corner markers shall not interfere with navigation at low  
3 tides.
- 4 11. The City shall determine appropriate identification/marketing of floating and submerged  
5 aquaculture structures and facilities in navigable waters to provide identification after storm  
6 disturbance.
- 7 12. On-site work is allowed during low tides, which may occur at night or on weekends. Measures  
8 to reduce impacts to adjacent existing uses, from such sources as noise from equipment and  
9 glare from lighting, shall be identified in an operational plan submitted with the permit  
10 application.

#### 11 5.2.7 Regulations – Upland Structures

- 12 1. When upland structures are allowed they must be the minimum necessary to meet the needs of  
13 the water-dependent use.
- 14 2. Upland nonwater-oriented aquaculture development, uses and activities shall be located upland  
15 of the water-dependent portions of the operation and set back from the OHWM a sufficient  
16 distance to avoid disturbance of the Shoreline Buffer or Shoreline Vegetation Management Area.  
17 (See and Section 4.0, General (Island-wide) Policies and Regulations; Section 4.1.3 Vegetation  
18 Management; and Tables 4-2 and 4-3, for dimensional standards.)
- 19 3. Upland structures shall be designed, constructed and maintained to include vegetative screening  
20 for parking, and upland storage areas and facilities consistent with landscaping standards for  
21 parking lots as prescribed in BIMC Section 18.15.010, Development Standards and Guidelines;  
22 Landscaping, Screening, and Tree Retention, Protection, and Replacement.
- 23 4. A temporary sanitation station may be allowed on fixed overwater pier structures when utilities  
24 are not available on the same parcel(s) as the aquaculture operation.

#### 25 5.2.8 Regulations – Specific – Commercial Geoduck Aquaculture

- 26 1. In addition to other provisions in Section 5.2, commercial geoduck aquaculture will be  
27 administered consistent with WAC 173-26-241(3)(b)(ii), (iii), and (iv). Where there is  
28 inconsistency between the provisions in 5.2.1, 5.2.2., 5.2.3, 5.2.4, 5.2.5, 5.2.6 or 5.2.7 and the  
29 geoduck provisions, the specific commercial geoduck provisions apply.
- 30 2. A conditional use permit (CUP) is required for all new commercial geoduck aquaculture and  
31 conversions from existing non-geoduck aquaculture to geoduck aquaculture. CUPs for new  
32 commercial geoduck and conversions will be administered consistent with WAC 173-26-  
33 241(3)(b)(ii), (iii), and (iv).