

23.100.03 Aquaculture

Aquaculture in shoreline areas shall be subject to the policies and regulations of this Section and Chapter 9.

Nothing in these policies or regulations may be construed as to impinge on tribal treaty rights exercised within Usual and Accustomed Areas. See also policy SMP 23.100.03.A.8 and regulation SMP 23.100.03.B.1.u.

23.100.03.A Aquaculture – Policies

1. Aquaculture is a water-dependent use and, when consistent with control of pollution and avoidance of adverse impacts to the environment and preservation of habitat for resident native species, is a preferred use of the shoreline (WAC 173-26-241(3)(b)).
2. Potential locations for aquaculture activities are relatively restricted because of specific requirements related to water quality, temperature, oxygen content, currents, adjacent land use, wind protection, commercial navigation, and salinity. The technology associated with some forms of aquaculture is still experimental and in formative states. Therefore, some latitude should be given when implementing the regulations of this section, provided that potential impacts on existing uses and shoreline ecological functions and processes should be given due consideration.
3. Preference should be given to those forms of aquaculture that involve lesser environmental and visual impacts and lesser impacts to native plant and animal species. In general, projects that require no structures, submerged structures or intertidal structures are preferred over those that involve substantial floating structures. Projects that involve little or no substrate modification are preferred over those that involve substantial modification. Projects that involve little or no supplemental food sources, pesticides, herbicides or antibiotic application are preferred over those that involve such practices.
4. Community restoration projects associated with aquaculture should be reviewed and permitted in a timely manner.
5. Aquaculture activities should be designed, located and operated in a manner that supports long term beneficial use of the shoreline and protects and maintains shoreline ecological functions and processes. Aquaculture should not be permitted where it would result in a net loss of shoreline ecological functions; adversely affect the quality or extent of habitat for native species including eelgrass, kelp, and other macroalgae; adversely impact other habitat conservation areas; or interfere with navigation or other water-dependent uses.
6. Aquaculture that involves significant risk of cumulative adverse effects on water quality, sediment quality, benthic and pelagic organisms, and/or wild fish populations through potential contribution of antibiotic resistant bacteria, or escapement of non-native species, or other adverse effects on ESA-listed species should not be permitted.
7. The County should actively seek substantive comment on any shoreline permit application for aquaculture from all appropriate Federal, State and local agencies; the

Lummi Nation, Nooksack Tribe, and other affected tribes; and the general public regarding potential adverse impacts. Comments of nearby residents or property owners directly affected by a proposal should be considered and evaluated, especially in regard to use compatibility and aesthetics.

8. The rights of treaty tribes to aquatic resources within their usual and accustomed areas should be addressed through the permit review process. Direct coordination between the applicant/proponent and the tribe should be encouraged.
9. Consideration should be given to both the potential beneficial impacts and potential adverse impacts that aquaculture development might have on the physical environment; on other existing and approved land and water uses, including navigation; and on the aesthetic qualities of a project area.
10. Legally established aquaculture enterprises, including authorized experimental projects, should be protected from incompatible uses that may seek to locate nearby. Use or developments that have a high probability of damaging or destroying an existing aquaculture operation may be denied.
11. Experimental aquaculture projects in water bodies should be limited in scale and should be approved for a limited period of time. Experimental aquaculture means an aquaculture activity that uses methods or technologies that are unprecedented or unproven in the State of Washington.

23.100.03.B Aquaculture Regulations

23.100.03.B.1 Site Design and Operation

- a. Aquaculture activities proposed within shorelines of statewide significance shall be subject to, first, the policies contained in Chapter 4, Shorelines of Statewide Significance, and, second, the policies and regulations contained in this section.
- b. Aquaculture that involves little or no substrate modification shall be given preference over those that involve substantial modification. The applicant/proponent shall demonstrate that the degree of proposed substrate modification is the minimum necessary for feasible aquaculture operations at the site.
- c. The installation of submerged structures, intertidal structures, and floating structures shall be allowed only when the applicant/proponent demonstrates that no alternative method of operation is feasible.
- d. 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 existing kelp beds or other macroalgae, eelgrass beds or habitat conservation areas.
- e. Aquaculture activities, which would have a significant adverse impact on natural, dynamic shoreline processes or which would result in a net loss of shoreline ecological functions, shall be prohibited.

- f. Aquaculture practices shall be designed to minimize use of artificial substances and shall use chemical compounds that are least persistent and have the least impact on plants and animals.
- g. Commercial salmon net pen facilities shall not be located in Whatcom County waters, except for limited non-profit penned cultivation of wild salmon stocks during a limited portion of their lifecycle to enhance restoration of native stocks when such activities involve minimal supplemental feeding and no use of chemicals or antibiotics.
- h. Aquaculture uses and facilities shall be located at least 600 feet from any National Wildlife Refuge lands; except that:
 - (1) Projects involving substantial substrate modification and/or fish net pens, if authorized, shall be located 1,500 feet or more from such areas.
 - (2) Lesser distances may be authorized by permit if it is demonstrated by the applicant/proponent that the wildlife resource will be protected and if the change is supported by the WDFW, the Lummi Nation and/or Nooksack Tribe.
 - (3) Greater distances may be required if supported by the reviewing resource agencies and/or where there is sound evidence demonstrating that a greater distance is required.
- i. If uncertainty exists regarding potential impacts of a proposed aquaculture activity, and for all experimental aquaculture activities, baseline and periodic operational monitoring by a County-approved consultant (unless otherwise provided for) may be required, at the applicant's/proponent's expense, and shall continue until adequate information is available to determine the success of the project and/or the magnitude of any probable significant adverse environmental impacts. Permits for such activities shall include specific performance measures and provisions for adjustment or termination of the project at any time if monitoring indicates significant, adverse environmental impacts that cannot be adequately mitigated.
- j. Aquaculture developments approved on an experimental basis shall not exceed 5 acres in area (except land based projects and anchorage for floating systems) and three (3) years in duration; provided that, the County may issue a new permit to continue an experimental project as many times as is deemed necessary and appropriate.
- k. The County shall reserve the right to require aquaculture operations to carry liability insurance in an amount commensurate with the risk of injury or damage to any person or property as a result of the project. Insurance requirements shall not be required to duplicate requirements of other agencies.
- l. Where aquaculture activities are authorized to use public facilities, such as boat launches or docks, the County shall reserve the right to require the applicant/proponent to pay a portion of the cost of maintenance and any required improvements commensurate with the use of such facilities.
- m. New aquatic species that are not previously cultivated in Washington State shall not be introduced into Whatcom County saltwaters or freshwaters without prior written approval of the Director of the Washington State Department of Fish and Wildlife and the Director of the Washington Department of Health. In saltwaters, the County shall not issue

permits for projects that include the introduction of such organisms until it has also received written comment from the Marine Resources Committee, the Lummi Nation and the Nooksack Tribe, provided that such comment is received in a timely manner. This regulation does not apply to Pacific, Olympia, Kumomoto, Belon or Virginica oysters; Manila, Butter, or Littleneck clams; or Geoduck clams.

- n. Unless otherwise provided in the shoreline permit issued by the County, repeated introduction of an approved organism in the same location shall require approval by the County only at the time the initial aquaculture use permit is issued. Introduction, for purposes of this section, shall mean the placing of any aquatic organism in any area within the waters of Whatcom County regardless of whether it is a native or resident organism within the county and regardless of whether it is being transferred from within or without the waters of Whatcom County.
- o. For aquaculture projects using over-water structures, storage of necessary tools and apparatus waterward of the ordinary high water mark shall be limited to containers of not more than 3 feet in height, as measured from the surface of the raft or dock; provided that, in locations where the visual impact of the proposed aquaculture structures will be minimal, the County may authorize storage containers of greater height. In such cases, the burden of proof shall be on the applicant/proponent. Materials, which are not necessary for the immediate and regular operation of the facility, shall not be stored waterward of the ordinary high water mark.
- p. No processing of any aquaculture product, except for the sorting or culling of the cultured organism and the washing or removal of surface materials or organisms after harvest, shall occur in or over the water unless specifically approved by permit. All other processing and processing facilities shall be located on land and shall be subject to the policies and regulations of SMP 23.100.07, Industrial and Port Development, in addition to the policies and regulations in this section.
- q. Aquaculture wastes shall be disposed of in a manner that will ensure 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). No garbage, wastes or debris shall be allowed to accumulate at the site of any aquaculture operation.
- r. Predator control shall not involve the killing or harassment of birds or mammals. Approved controls include, but are not limited to, double netting for seals, overhead netting for birds, and 3-foot high fencing or netting for otters. The use of other non-lethal, non-abusive predator control measures shall be contingent upon receipt of written approval from the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service, as required.
- s. Fish net pens and rafts shall meet the following criteria in addition to the other applicable regulations of this section:
 - (1) Fish net pens shall meet, at a minimum, State approved administrative guidelines for the management of net pen cultures. In the event there is a conflict in requirements, the more restrictive requirement shall prevail.
 - (2) Fish net pens shall not occupy more than 2 surface acres of water area, excluding booming and anchoring requirements. Anchors that minimize disturbance to

substrate, such as helical anchors, shall be employed. Such operations shall not use chemicals or antibiotics.

- (3) Aquaculture proposals that include net pens or rafts shall not be located closer than 1 nautical mile to any other aquaculture facility that includes net pens or rafts; provided that, a lesser distance may be authorized if the applicant/proponent can demonstrate that the proposal will be consistent with the environmental and aesthetic policies and objectives of this Program. If a lesser distance is requested, the burden of proof shall be on the applicant/proponent to demonstrate that the cumulative impacts of existing and proposed operations would not be contrary to the policies and regulations of this Program.
 - (4) Net cleaning activities shall be conducted on a frequent enough basis so as not to violate state water quality standards. When feasible, the cleaning of nets and other apparatus shall be accomplished by air drying, spray washing, or hand washing.
 - (5) In the event of a significant fish kill at the site of a net pen facility, the fin fish aquaculture operator shall submit a timely report to the Whatcom County Environmental Health Division and the Whatcom County Planning and Development Services Department stating the cause of death and shall detail remedial action(s) to be implemented to prevent reoccurrence.
- t. All floating and submerged aquaculture structures and facilities in navigable waters shall be marked in accordance with U.S. Coast Guard requirements.
 - u. The rights of treaty tribes to aquatic resources within their usual and accustomed areas shall be addressed through direct coordination between the applicant/proponent and the affected tribe(s) through the permit review process.
 - v. Aquaculture structures and equipment shall be of sound construction and shall be so maintained. Abandoned or unsafe structures and/or equipment shall be removed or repaired promptly by the owner. Where any structure might constitute a potential hazard to the public in the future, the County shall require the posting of a bond commensurate with the cost of removal or repair. The County may abate an abandoned or unsafe structure, following notice to the owner, if the owner fails to respond in thirty (30) days and may impose a lien on the related shoreline property or other assets in an amount equal to the cost of the abatement. Bonding requirements shall not duplicate requirements of other agencies.

23.100.03.B.2 Application Requirements

- a. Applications for aquaculture use or development shall include in their applications all information necessary to conduct a thorough evaluation of the proposed aquaculture activity, including but not limited to the following:
 - (1) A site plan map including:
 - (a) The perimeter of the proposed aquaculture operations area.
 - (b) Existing bathymetry depths based on Mean Lower Low Water (MLLW datum).

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- (c) Adjacent upland use, vegetation, presence of structures, docks, bulkheads and other modifications. If there are shore stabilization structures, provide the beach elevation at the toe of the structure and the top of the structure (MLLW datum).
 - (d) Areas where specific substrate modification will take place or structures will be constructed or installed.
 - (e) Access provisions for barges or track equipment.
 - (f) Location of storage or processing structures or facilities.
- (2) A baseline description of existing conditions, including best available information on:
- (a) Water quality
 - (b) Tidal variations
 - (c) Prevailing storm wind conditions
 - (d) Current flows
 - (e) Flushing rates
 - (f) Littoral drift
 - (g) Areas of differing substrate composition.
 - (h) Areas of aquatic, intertidal, and upland vegetation complexes.
 - (i) Existing shoreline or water uses and structures.
 - (j) Aquatic and benthic organisms.
 - (k) A vegetation habitat survey must be conducted. The WDFW must be contacted prior to the survey to ensure it is conducted according to the most current WDFW eelgrass/macroalgae survey guidelines.
 - (l) Assessment of aquatic species, including forage fish, and spawning and other lifecycle use of, or adjacent to, the site.

Further baseline studies including surveys and sampling may be required depending upon the adequacy of available information, existing conditions, and the nature of the proposal.

- (3) A detailed description of the project proposal including:
- (a) Species to be reared.
 - (b) Substrate modification or vegetation removal.

- (c) Planting, harvest and processing location, method and timing, including work proposal and construction techniques proposed (list all hand tools, machinery used (such as track hoes, trucks or barges), type of work, frequency, and duration.
- (4) Anticipated use of any feed, pesticides, herbicides, antibiotics, vaccines, growth stimulants, antifouling agents, or other chemicals, and an assessment of predicted impacts. No such materials shall be used until approval is obtained from all appropriate State and Federal agencies, including but not limited to the U.S. Food and Drug Administration, and the Washington State Departments of Ecology, Fish and Wildlife, and Agriculture, as required, and proof thereof is submitted to the County. Compounds with the least persistence shall be used. An annual report of antibiotic use shall be submitted to the Whatcom County Environmental Health Division. The report shall indicate the type and amount of antibiotics used during the previous calendar year. Actual usage data for all chemicals and antibiotics shall be maintained for review by County inspectors at all times.
- (5) Number of employees/workers necessary for the project, including average and peak employment.
- (6) Methods of waste disposal and predator control.
- (7) Methods to address pollutant loading, including biological oxygen demand (BOD).
- (8) Assessment of potential impacts on shoreline ecological functions and processes addressing the baseline conditions identified, including but not limited to indirect and cumulative effects.
- (9) For floating culture facilities or other structures, the County may require a visual impact analysis. (See the Department of Ecology's "Aquaculture Siting Study" 1986 for general approach.) Depending on the size and complexity of the proposal, such analysis may be prepared by the applicant/proponent, without professional assistance, provided that it includes an adequate assessment of impacts.
- (10) Information demonstrating that the site has natural potential for the type(s) of aquaculture proposed, due to necessary substrate or other conditions, as well as water quality suitable for the type(s) of aquaculture proposed.
- (11) Information demonstrating that the proposed aquaculture activities will not result in a net loss of shoreline ecological functions or processes or adversely affect habitat conservation areas as defined by WCC 16.16.
- (12) Information demonstrating that the proposed aquaculture activities will not substantially and materially conflict with areas devoted to established uses of the aquatic environment. Such uses include but are not limited to navigation, moorage, sport or commercial fishing, log rafting, underwater utilities, and scientific research. Existing public opportunities for gathering wild stock aquatic resources on public lands shall be addressed in any application for aquaculture on public tidelands or bedlands. Compensation for loss of public access to public aquatic resources may be required.
- (13) Other pertinent information deemed necessary by the Administrator.

- b. Applications for aquaculture activities must demonstrate that the proposed activity will be compatible with surrounding existing and planned uses.
- (1) Aquaculture activities shall comply with all applicable noise, air, and water quality standards. All projects shall be designed, operated and maintained to minimize odor and noise.
 - (2) Aquaculture activities shall be restricted to reasonable hours and/or days of operation when necessary to minimize substantial, adverse impacts from noise, light, and/or glare on nearby residents, other sensitive uses or critical habitat.
 - (3) Aquaculture facilities shall not introduce incompatible visual elements or substantially degrade the aesthetic qualities of the shoreline. Aquaculture structures and equipment, except navigation aids, shall be designed, operated and maintained to blend into their surroundings through the use of appropriate colors and materials.

23.100.03.C Aquaculture – Shoreline Area Regulations

1. Urban: Aquaculture activities are permitted subject to policies and regulations of this Program.
2. Urban Resort: Aquaculture activities are permitted subject to policies and regulations of this Program. Proposals containing net pen facilities shall be located no closer than 1,500 feet from the OHWM of this environment, unless a specific lesser distance is determined to be appropriate based upon a visual impact analysis. Other types of floating culture facilities may be located within 1,500 feet of the OHWM but in such cases a visual analysis shall be mandatory.
3. Urban Conservancy: Aquaculture activities are permitted subject to policies and regulations of this Program.
4. Shoreline Residential: Aquaculture activities are permitted subject to policies and regulations of this Program. Proposals containing net pen facilities shall be located no closer than 1,500 feet from the OHWM of this environment, unless a specific lesser distance is determined to be appropriate based upon a visual impact analysis. Other types of floating culture facilities may be located within 1,500 feet of the OHWM but in such cases a visual analysis shall be mandatory.
5. Rural: Aquaculture activities are permitted subject to policies and regulations of this Program. Proposals containing net pen facilities shall be located no closer than 1,500 feet from the OHWM of this environment, unless a specific lesser distance is determined to be appropriate based upon a visual impact analysis.
6. Resource: Aquaculture activities are permitted subject to policies and regulations of this Program.
7. Conservancy: Aquaculture activities are permitted subject to policies and regulations of this Program.

8. Natural: Aquaculture activities that do not require structures, facilities or mechanized harvest practices and that will not result in the alteration of natural systems or features are permitted subject to policies and regulations of this Program.
9. Aquatic: Aquaculture activities are permitted, subject to the use and development regulations of the abutting upland shoreline area designation.