

## APPENDIX 6: GEODUCK AND HORSE CLAM COMMERCIAL HARVEST PLAN

### TABLE OF CONTENTS

1.	MANAGEMENT HIGHLIGHTS AND CHANGES FOR 2022/23 .....	3
2.	LICENSING .....	4
	2.1. National Online Licensing System (NOLS) Client Support - Licensing Services ...	4
	2.2. Licence Category .....	4
	2.3. Licence Fees .....	4
	2.4. Licence Application and Issuance .....	5
	2.5. Licence Documents .....	5
	2.6. Designation of Harvesters to Fish a Communal Commercial Licence.....	5
	2.7. Supplemental Harvest Opportunities .....	5
	2.8. Fisher Identification Number (FIN).....	6
	2.9. Quota block limits.....	6
	2.10. Area Management.....	6
	2.11. Vessel Replacement.....	6
	2.12. Licences to Collect Geoduck Samples in a Biotoxin Closed Area.....	7
	2.13. Collection of Geoduck for Broodstock.....	7
	2.14. Vessels Using a Packer .....	7
3.	CANADIAN SHELLFISH SANITATION PROGRAM (CSSP).....	8
	3.1. General Information on Closures under the CSSP .....	8
	3.2. Requirements for Legal Sourcing and Harvest of Bivalve Shellfish.....	9
	3.3. Human Waste Containment Regulations.....	10
	3.4. Harvesting Bivalves in the Vicinity of Wastewater Treatment Plants .....	10
4.	CLOSURES .....	11
	4.1. Harvesting on Aquaculture Tenures .....	11
	4.2. Seasonal Area Herring Closures for Commercial Geoduck and Horse Clam Fisheries .....	11
	4.3. Permanent Area Closures for Commercial Geoduck and Horse Clam Fisheries ...	12
5.	GEODUCK MANAGEMENT MEASURES .....	17
	5.1. Species .....	17
	5.2. Gear.....	17
	5.3. Total Allowable Catch .....	17
	5.4. Vessel Quotas .....	18
	5.5. Geoduck Experimental Enhancement.....	18
	5.6. Geoduck Aquaculture (Pre-seed Harvest) .....	19
	5.7. Fishing Areas and Openings .....	19
	5.8. Licence Amendment to Extend Season .....	20
	5.9. Bed by Bed Management.....	20
	5.10. Inside Waters .....	25
	5.11. West Coast of Vancouver Island .....	26
	5.12. North Coast.....	28
6.	HORSE CLAM MANAGEMENT MEASURES .....	31
	6.1. Species .....	31
	6.2. Gear.....	31

6.3.	Fishing Season .....	31
6.4.	Harvest Log Information .....	31
6.5.	Inside Waters .....	32
6.6.	West Coast of Vancouver Island .....	32
6.7.	North Coast .....	33
7.	<b>CONTROL AND MONITORING OF COMMERCIAL FISHING ACTIVITIES .....</b>	<b>33</b>
7.1.	Notification Procedure .....	34
7.2.	Catch Validation .....	34
7.3.	Catch and Fishing Data.....	37
8.	<b>GENERAL INFORMATION.....</b>	<b>40</b>
8.1.	Sales of Geoduck and Horse Clam .....	40

## 1. MANAGEMENT HIGHLIGHTS AND CHANGES FOR 2022/23

- **Licence Year:** The 2022/23 fishery will run from May 1, 2022 to April 15, 2023. As a result of the Covid pandemic the 2020/21 season was delayed and was shifted to have a 12 month fishery. To shift the fishery back to an April 1 start, this season will be shortened by two weeks and the following season will be shortened by two weeks.
- **Total Allowable Catch (TAC) (changed):** The coast-wide Geoduck TAC is 2,811,000 lbs. (1,275 tonnes). 6,000 lbs. of the TAC is allocated for biological samples; additional small harvests are authorized for biotoxin monitoring and broodstock collection. The commercial TAC of 2,805,000 lbs. provides for 550 quota blocks of 5,100 lbs. This is a decrease of 55,000 lbs or 100 lbs off each quota block. The quota decrease is due to the implementation of a number of large closures in Gwaii Haanas as well as impacts from Sea otters. Both factors have reduced the overall harvestable biomass. In addition, there may be a limited supplemental harvest opportunity of Geoduck on areas tenured for aquaculture conducted through amended licence conditions. (See Section 5)
- **Areas to be fished Annually (unchanged):** The WCVI remains an annual fishery. Geoduck Management Areas (GMAs) 16D01, 17B03, 8A and 19C from the inside fishery will continue to be fished annually.
- **Quota Blocks Transferability:** The Department approved a pilot in 2012, to allow quota transfers between vessels. This program continued indeterminately as of the 2017/18 season. Transfers will be allowed permanently and temporarily in blocks of quota which equal 1/550 or approx 0.182% of the Coastwide Commercial TAC. (See Section 5.4)
- **Transfer of Quota between Regions (unchanged):** To account for unforeseen circumstances, a maximum of 5 quota blocks (25,500 lbs.) may be transferred between quota regions. The TAC for the region/area will not exceed the maximum harvest option for the regions or any area within the region. (See Section 5.9.4)
- **Implementation of Upper Stock Reference USR (NEW):** To comply with DFO's "Fishery Decision-Making Framework Incorporating the Precautionary Approach", the USR for the Geoduck stock will be defined as the total coastwide current biomass being equal to 50% of total coastwide unfished biomass. (see Section 5.9)
- **Bed-by-Bed Management:** All areas will continue to be managed using bed-by-bed quotas. On-Ground Monitors (OGM) will be present on the North Coast and West Coast of Vancouver Island (WCVI) and will, with the full support of the Department, request that harvesters move when bed quotas are achieved. Non-compliance with the OGMs' request will result in a fishery closure pending resolution of the problem. Bed quotas for the Inside Waters of Vancouver Island (Gulf) are monitored by the service provider and Dockside Observers; an OGM is not required for fishing in the Inside Waters. The "fallback" quota protocol implemented in 2008 remains in effect. (See Section 5.9)
- **Horse Clams:** A limited directed fishery for Horse Clams will be allowed annually on Comox Bar (GMA 14B03) for 20,500 pounds. Divers are requested to provide comment on other Horse Clam populations on Harvest Logs. Reporting by species is requested. (See Section 6)
- **Season Extensions:** Ongoing high biotoxin levels and/or poor weather has made it difficult in some seasons for vessels to complete their Individual Vessel Quota (IVQ) by the end of the

season. At the request of the Underwater Harvesters Association (UHA), the Department may allow an extension for 15 days into the next season under some basic conditions. (See Section 5.8)

## 2. LICENSING

### 2.1. National Online Licensing System (NOLS) Client Support - Licensing Services

All fish harvesters/licence holders/vessel owners are required to use the National Online Licensing System (NOLS) to view, pay for and print their commercial fishing licences, licence conditions and/or receipts. NOLS website: <http://www.dfo-mpo.gc.ca/fm-gp/sdc-cps/licence-permis-eng.htm>

Training materials, including step-by-step guides and a detailed user training manual, are available online (<http://www.dfo-mpo.gc.ca/FM-GP/SDC-CPS/licence-permis-eng.htm>) to guide users of the system in completing their licensing transactions. The Department also provides client support and assistance on how to use the system via email at [fishing-peche@dfo-mpo.gc.ca](mailto:fishing-peche@dfo-mpo.gc.ca) or by calling toll-free at 1-877-535-7307 (7:00AM to 8:00PM Eastern, Monday to Friday).

Information on the National Online system may be found on the DFO internet site at: <http://www.dfo-mpo.gc.ca/fm-gp/sdc-cps/licence-permis-eng.htm>

Please visit the Pacific Region Licensing website and subscribe to fishery notices for updates on the National Online Licensing System and licensing services: <http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/index-eng.html>

For more information on how to register and use the system, visit the Department's website at the website address above, or contact our client support.

#### Licence Renewal

In order to retain the privilege to be issued a commercial licence in the future, it is critical that you renew your licence and pay the applicable licence renewal fees through the online system on an annual basis, whether fishing takes place or not. Should the licence not be renewed by the licence expiry date of the next calendar year, the licence eligibility will cease to exist and DFO will be unable to consider any licence issuance requests in the future.

### 2.2. Licence Category

A category G or FG licence is required to commercially harvest Geoduck and Horse Clam by dive.

### 2.3. Licence Fees

Currently the annual licence application fee for G licences is calculated as follows:

- The **product** of \$252 multiplied by the number of tonnes of Geoduck authorised to be taken under the licence.
- That **product**, minus 40 percent of that **product**, or \$1,000, whichever is less.

Licence fees to participate in supplemental harvest opportunities (eg. pre-seed harvest prior to licencing of an aquaculture tenure) will be calculated using the formula noted above.

In accordance with the Service Fees Act, annual licence renewal fees will be adjusted by the annual rate of inflation determined by the Consumer Price Index (CPI) published by Statistics Canada.

The commercial (Category G) licence renewal fee may be found on the following link:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/renewalfees-fraisrenouvellement-eng.html>

There is no annual licence fee for communal commercial licences (FG).

#### **2.4. Licence Application and Issuance**

Licence renewal and payment of fees are mandatory, on an annual basis, prior to the expiry date in order to maintain eligibility in the future. Licence eligibility will cease if not renewed annually.

Upon the Department receiving the required payment, and the appropriate information (e.g. designated vessel) and any required documentation, the licence will be issued and notification will be sent via email to advise licence holders/vessel owners that a change has been made to their online account. The licence documents, licence conditions and receipts will be available to be printed at that time.

Prior to licence issuance, licence eligibility holder(s) must:

- Ensure any Ministerial conditions placed on the licence eligibility are met.
- Ensure any conditions of the previous year's licence such as completion and submission of logbooks are met and accepted.

#### **2.5. Licence Documents**

Geoduck licence documents are valid from the date of issue until April 30 of the following calendar year.

Replacements for lost or destroyed licence documents may be obtained by reprinting the licence document through the NOLS.

#### **2.6. Designation of Harvesters to Fish a Communal Commercial Licence**

Under the *Aboriginal Communal Fishing Licence Regulations*, every person working on a vessel that is fishing under authority of a communal commercial licence must be designated by the First Nation that holds the licence. The designation must be made in writing and include the person's name and reference the communal commercial licence.

First Nation licence holders interested in obtaining an example template to use to designate their fish harvesters may contact a DFO resource manager or Pacific Fishery Licencing Unit (PFLU) office (see Contacts in Appendix 15).

#### **2.7. Supplemental Harvest Opportunities**

Issuance of the current season Geoduck licence must be completed, as noted above, prior to requesting any supplemental harvest amendment. Eligible vessels (see Section 5.6) may submit a 'Request for Amendment – Geoduck Supplemental Harvest' and obtain amended licence conditions to participate.

## **2.8. Fisher Identification Number (FIN)**

A unique FIN is assigned to each vessel owner and holders of commercial licence eligibilities, or Fisher Registration Cards (FRC) in the Pacific Region. This allows for quick and accurate identification. (The FIN is printed on the FRC and both party and vessel based licences.)

Licence holders may be asked to provide their FIN when applying for a licence, or for dockside monitoring, or for enforcement purposes.

For further information, please contact a PFLU or a resource manager (see Contacts, Appendix 15).

## **2.9. Quota block limits**

A vessel may hold a maximum of 50 quota blocks (9.1% of the Coastwide commercial TAC). These may all be for the same region or may be for a combination of regions.

## **2.10. Area Management**

The coast is divided into three regions, the North Coast, WCVI, and Inside Waters (Gulf). Historically licences have been designated a region (North Coast, WCVI or Inside Waters). Since 2012 each quota block has been designated to a region and a licence is able to fish in multiple regions relative to its quota blocks.

The coast-wide distribution of the 550 quota blocks will be as follows:

- Inside Waters (Gulf), portions of Areas 12 through 19, and 29: 65 quota blocks or 11.8% of the Coastwide commercial TAC
- WCVI, portions of Areas 20, 23, 24, 25, 26, and 27, and related offshore areas: 74 quota blocks or 13.5% of the Coastwide commercial TAC.
- North Coast, portions of Areas 1 through 10, and related offshore areas: 411 quota blocks or 74.7% of the Coastwide commercial TAC.

## **2.11. Vessel Replacement**

Geoduck vessel applications are accepted at any time. The owner of a Geoduck licensed vessel may make an application to replace the current vessel with the following rules:

- Geoduck and Horse Clam licence eligibilities do not become married to other vessel-based licence eligibilities and may be separated.
- Geoduck and Horse Clam licence eligibilities may be placed either permanently or temporarily (where applicable) on any Canadian commercially registered fishing vessel that does not exceed the overall length (OAL) of the vessel that held the licence eligibility as of 1989 plus 50%. This is subject to Departmental policies governing the placement of other vessel-based licence eligibilities also held on the vessel being replaced. The receiving vessel may exceed the OVL as long as the vessel holds another vessel based licence eligibility and remains eligible for that licence while the Geoduck licence is on the vessel. Where the receiving vessel holds a schedule II licence eligibility, the Schedule II eligibility must be relinquished.
- Where a Schedule II licence eligibility is relinquished, in conjunction with a Geoduck licence eligibility vessel replacement, and the overall length of the receiving vessel is

greater than the OVL of the Geoduck licence eligibility, then the OVL of the Geoduck licence eligibility will be amended to the OAL of the receiving vessel. The OVL amendment shall not exceed the Maximum Vessel Length (MVL) of the Geoduck licence eligibility.

- Where the receiving vessel does not already hold a vessel based licence eligibility, the Schedule II privileges associated with the Geoduck and Horse Clam eligibility must be relinquished.
- Applications to place a Geoduck licence on a vessel that holds one or more Geoduck licences where Schedule II privileges have been relinquished must be reviewed by a Lead Agent and the resource manager on an individual basis.
- Owners of vessels that currently hold both a Geoduck and Horse Clam and a Schedule II licence eligibility may apply to place the Schedule II licence eligibility on a vessel that does not exceed the OAL of the original (1989) Geoduck and Horse Clam licensed vessel. Such applications should be made within a reasonable time frame. Where this occurs, the OVL of the remaining Geoduck licence eligibility will be amended to the OAL of the vessel that holds the eligibility and the MVL will be adjusted accordingly. This is consistent with the commitment made by the Department in the Geoduck Fishery - 1989 Enterprise Allocation document.
- For further information on the revised vessel replacement rules, please contact a PFLU or any of the Geoduck and Horse Clam resource managers (see Contacts, Appendix 15).

## **2.12. Licences to Collect Geoduck Samples in a Biotxin Closed Area**

Under the *Management of Contaminated Fisheries Regulations*, a licence is required for sampling of Geoduck from a PSP closed area. For further information, contact the Canadian Food Inspection Agency (CFIA) Shellfish Operations Specialist in Burnaby at (604) 666-3737, Archipelago Marine Research or a resource manager (see Contacts, Appendix 15).

The collection of Geoduck for biotoxin monitoring samples is conducted by contractors to CFIA and authorized through scientific licence. The UHA, working under the authority of the CFIA's scientific licence, collect Geoduck samples for the purposes of opening areas for harvest.

## **2.13. Collection of Geoduck for Broodstock**

The collection of broodstock for aquaculture purposes is facilitated through an access licence and an introductions and transfers licence from the Introductions and Transfers Committee. Requests for access are reviewed according to the *Access to Wild Aquatic Resources for Aquaculture Purposes Policy*. Under this policy, it is estimated that up to 0.1% of the commercial total allowable catch, could be allocated for aquaculture purposes such as broodstock collection. Only licenced hatcheries are eligible to apply for broodstock access licences. See Appendix 5.

## **2.14. Vessels Using a Packer**

There are specific licence conditions for packer vessels to transport Geoducks. All vessels with a valid vessel-based licence or a transporting licence (Category D) licence are issued licence conditions to transport Geoducks and are subject to those conditions. For additional information regarding these conditions, contact the PFLU.

### **3. CANADIAN SHELLFISH SANITATION PROGRAM (CSSP)**

#### **3.1. General Information on Closures under the CSSP**

Closures may be implemented on short notice in the event of changes to contamination status, including sanitary and biotoxin events. Licence holders, vessel masters, and harvesters are reminded that:

- It remains the responsibility of the licence holders and harvesters to ensure that an area is not closed for harvest due to sanitary or biotoxin contamination. Fishing in a closed area is an offence under the *Fisheries Act*. Consumption of product harvested from within a closed area poses a serious health risk.
- Prior to commencement of each day's fishing, the licence holder must take care to confirm that an area is open for harvesting either through the DFO website at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/index-eng.html> or the toll-free information line at 1-866-431-3474, or by contacting a local DFO office directly. Contact information is available in Appendix 15.

##### **3.1.1. Sanitary Contamination Closures**

Shellfish may not be harvested from closed contaminated areas except by special permit licence under the *Management of Contaminated Fisheries Regulations (MCFR)*. Currently there is not an approved depuration process for Geoduck. There are both seasonal and permanent sanitary contamination closures. Descriptions and maps of contaminated closures may be found at the following DFO website: [www.pac.dfo-mpo.gc.ca/fm-gp/contamination/biotox/index-eng.html](http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/biotox/index-eng.html)

A copy of this list may also be obtained from the resource managers (see Contacts, Appendix 15). Sanitary closures are amended annually in May and November, and may also be amended in-season. Consequently, harvesters are advised to check the internet, prior to harvesting in an area, to ensure that they have the most recent contamination closure information.

Permanent bivalve harvesting closures are in place for Canadian fisheries waters of the Pacific Ocean within:

- a.) 300 m radius around industrial, municipal and sewage treatment plant outfall discharges;
- b.) 125 m radius of any marina, ferry wharf, any floating living accommodation facility (other than a floating living accommodation described in subsection (3)) or finfish net pen described in subsection (4);
- c.) 25 m radius of any floating living accommodation facility located within a shellfish aquaculture tenure where a zero-discharge waste management plan is a condition of the Provincial aquaculture licence and is approved by the Regional Interdepartmental Committee.
- d.) Zero (0) metres of any finfish net pen within an aquaculture tenure where an Integrated Multi-trophic Aquaculture Management Plan approved by the Regional Interdepartmental Committee is in operation.



### **3.1.2. Biotxin Contamination Closures**

Shellfish may not be harvested from closed areas except by special permit licence issued under the *Management of Contaminated Fisheries Regulations*. Shellfish may not be harvested for consumption from any area closed due to biotoxin contamination. Descriptions of biotoxin closures may be found at the following DFO internet site: <http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/index-eng.html>

Areas will be opened and fished according to protocols required by the Biotxin Monitoring Program, approved by the Canadian Food Inspection Agency (CFIA).

Three consecutive samples containing acceptable levels of biotoxin must be received in order to lift a harvest restriction in an area. CFIA will make recommendation to lift the biotoxin (Paralytic Shellfish Poison (PSP)/red tide, Domoic Acid Poisoning) (ASP) or Diarrhetic Shellfish Poisoning (DSP) prohibition and a harvest site can then be considered by DFO for Aboriginal, commercial or recreational harvesting. The resource manager will prepare the documentation necessary for an area opening for approval by the Regional Director General. For further details on the CSSP, see the internet at:

<https://www.inspection.gc.ca/food/food-specific-requirements-and-guidance/fish/canadian-shellfish-sanitation-program/eng/1527251566006/1527251566942?chap=0>

### **3.2. Requirements for Legal Sourcing and Harvest of Bivalve Shellfish**

The safety of consumers is a top priority for the Government of Canada. The reputation of Canada's food supply is a responsibility shared by all parties, including industry and federal and provincial governments.

As partners for delivery of the Canadian Shellfish Sanitation Program (CSSP), Fisheries and Oceans Canada (DFO) and the Canadian Food Inspection Agency (CFIA) collaborate to prevent illegal harvesting and selling of bivalve shellfish, including suspected laundering of illegal products through legitimate aquaculture businesses. DFO also remains committed to meeting conservation objectives for bivalves as well as supporting priority for Food, Social and Ceremonial fisheries. Any harvest occurring in conflict with established management measures and controls has the potential of negatively impacting the conservation of bivalve populations.

DFO will investigate reports of illegal harvesting violations and will take appropriate enforcement actions, including prosecution. Furthermore, DFO may consider more restrictive management approaches if needed to protect public health. Commercial growers and harvesters are reminded that they are required, by law, to follow specific record-keeping and tagging requirements. Records of shellfish movement through the growing cycle and to the point of distribution provide evidence to support public health, regulatory decisions and closure recommendations.

Commercial harvesters and aquaculture operators are required to:

- Understand and abide by the conditions of licence;
- Keep complete, clear and legible records and be able to produce them to a DFO fishery officer when requested;
- Ensure bivalve product destined for market sale is appropriately tagged with complete and accurate harvest information and is processed by an operator licenced by the Canadian Food Inspection Agency to process shellfish;

- Harvest only from open and approved areas and check our website before heading out for the latest information ([www.dfo-mpo.gc.ca/CheckBeforeYouHarvest](http://www.dfo-mpo.gc.ca/CheckBeforeYouHarvest)).

If you are aware of illegal bivalve harvest activities and/or are aware of violations, please call the DFO Observe, Record and Report (ORR) phone line at 1-800-465-4336.

More information on the policies and criteria for harvesting shellfish can be found in the CSSP manual. See also Fishery Notice FN1142 (2019): [https://notices.dfo-mpo.gc.ca/fns-sap/index-eng.cfm?pg=view\\_notice&DOC\\_ID=227228&ID=all](https://notices.dfo-mpo.gc.ca/fns-sap/index-eng.cfm?pg=view_notice&DOC_ID=227228&ID=all)

### **3.3. Human Waste Containment Regulations**

Disposal of human waste into waters where shellfish are harvested or adjacent to shellfish harvest areas creates unnecessary and potentially serious health risks for shellfish consumers. In accordance with the CSSP and Transport Canada Regulations, raw sewage (Human wastes, sewage or refuse) shall not be discharged from vessels while in or adjacent to shellfish areas. Vessels operating at a distance which does not allow for timely access to on-shore washroom facilities are expected to have a designated human waste receptacle on board. Receptacles could include a portable toilet, a fixed toilet, or other containment device as appropriate. Such devices must be made of impervious, cleanable materials and have a tight-fitting lid. (Refer to Transport Canada's Regulations for Vessel Pollution and Dangerous Chemicals Regulations under the Canada Shipping Act):

- a.) Portable toilets or other designated human waste receptacles shall be used only for the purpose intended, and shall be so secured and located as to prevent contamination of the shellfish area or any harvested shellfish on board by spillage or leakage.
- b.) The contents of toilets or other designated human waste receptacles shall be emptied only into an approved sewage disposal system.
- c.) Every person onboard a shellfish harvest vessel must wash and sanitize their hands after using or cleaning a waste receptacle, or after using an onshore washroom facility.

Information on human waste containment receptacle requirements can be found at the following CFIA internet site: <https://www.inspection.gc.ca/preventive-controls/fish/cssp/questions-and-answers/eng/1563470479199/1563470589053>

### **3.4. Harvesting Bivalves in the Vicinity of Wastewater Treatment Plants**

Concerns have been raised regarding bivalve shellfish harvested in the vicinity of wastewater treatment plants. Increased controls were implemented in 2009 to prevent shellfish harvest in areas where a trigger event at a wastewater treatment plant may potentially cause contamination.

Conditional Management Plans are being developed at some of the priority wastewater treatment plants to manage harvest activities in the vicinity of the wastewater treatment plants.

DFO will be consulting with shellfish harvesters in areas where Conditional Management Plans must be developed.

For further information, contact Elysha Gordon at (250) 756-7192.

## **4. CLOSURES**

Closures to the fishery may be in place for a variety of reasons, including but not limited to: Aboriginal and recreational access, parks, marine reserves, research, navigation, or sanitary and marine biotoxin contamination.

### **4.1. Harvesting on Aquaculture Tenures**

Licensed aquaculture facilities are considered private property. Under the *Fisheries Act*, fishing within an aquaculture facility already under federal licence (*Pacific Aquaculture Regulations* aquaculture licence) is prohibited unless otherwise permitted by the occupant holding the licence. The Department recommends that harvesters familiarize themselves with the location of aquaculture tenures in fishing areas and that permission be sought from the aquaculturist for access. All tenures must be clearly marked. Subtidal Geoduck tenures require marking on the sea floor, normally consisting of sinking ground line and concrete blocks.

### **4.2. Seasonal Area Herring Closures for Commercial Geoduck and Horse Clam Fisheries**

The following are seasonal closures to protect Herring spawn and Herring spawning grounds. Any area with observed Herring spawn may be closed as required. Fish harvesters will be notified of closures by the service provider or fishery notices. For further information call a resource manager (see Contacts, Appendix 15).

#### **4.2.1. South Coast**

Open times in the fishery will be scheduled to prevent conflict with Herring fisheries and Herring spawning activity in the South Coast.

- Area 12: portions normally close March 1 to April 30
- Area 13: portions normally close February 15 to April 15
- Area 14: portions normally close February 15 to April 15
- Area 15: portions normally close February 15 to April 15
- Area 16: typically no closures
- Area 17: portions normally close March 1 to April 30
- Area 18: portions normally close March 1 to April 30
- Area 19: portions normally close March 1 to April 30
- Area 29: typically no closures
- Area 23: portions normally close February 24 to April 15
- Area 24: portions normally close February 24 to April 15
- Area 25: portions normally close February 24 to April 15
- Area 26: portions close as required February 24 to April 15
- Area 27: portions normally close February 24 to April 15

#### **4.2.2. North Coast**

Open times in the fishery will be scheduled to prevent conflict with Herring fisheries and Herring spawning activity in the North Coast. Fish harvesters will be notified of closures by the North Coast OGM, service provider or Geoduck resource manager.

#### **4.3. Permanent Area Closures for Commercial Geoduck and Horse Clam Fisheries**

All harvesting of Geoducks and Horse Clams shall be conducted from bottom deeper than 10 feet below chart datum (i.e. deeper than 10 feet at the lowest tides). No harvesting of Geoduck and Horse Clams shall take place in eelgrass beds.

No person shall fish for, take, catch, or have in possession Geoduck and Horse Clams from the following areas.

##### **4.3.1. Area 2**

4.3.1.1. Kwoon Cove to Gowgaia Bay: Those waters of Subareas 2-38 to 2-41 and 142-1 inside a line commencing at a point on land on T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°23.311'N and 131°35.794'W northwesterly to a point on land on GuuGaalas Gwaay (south Gowdas Islands) at 52°23.340'N and 131°35.859'W, thence northerly following the shoreline of GuuGaalas Gwaay (south Gowdas Islands) to 52°23.489'N and 131°36.092'W, thence southwesterly to a point in water at 52°19.074'N and 131°43.794'W, thence northwesterly to a point in water at 52°38.115'N and 132°09.939'W, thence southeasterly to a point on land on T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°38.177'N and 131°56.374'W, and thence southerly following the western shoreline of T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) to the beginning point. [Kun Skuujii sda GawGaay.ya (Kwoon Cove to Gowgaia Bay)]

4.3.1.2. Wailing Island: Those waters of Subareas 2-31 and 142-1 inside a line commencing at a point on the western shoreline of T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°07.210'N and 131°15.838'W easterly following the shoreline to 52°07.440'N and 131°14.307'W, thence southeasterly to a point on the northern shoreline of K'il (Flatrock Island) at 52°06.468'N and 131°10.300'W, thence easterly following the shoreline to 52°06.388'N and 131°10.079'W, thence southeasterly to the westernmost point of Sii.niihl Gwaay.yaay (Gordon Islands) at 52°06.018'N and 131°09.391'W, thence southerly following the shoreline of Sii.niihl Gwaay.yaay (Gordon Islands) to 52°05.884'N and 131°09.283'W, thence southeasterly to 52°05.806'N and 131°09.208'W, thence easterly following the shoreline of Sii.niihl Gwaay.yaay (Gordon Islands) to 52°05.787'N and 131°09.097'W, thence northeasterly to the shoreline of Sii.niihl Gwaay.yaay (Gordon Islands) at 52°05.788'N and 131°08.938'W, thence easterly following the shoreline and thence crossing the channel to 52°05.778'N and 131°08.861'W, thence southeasterly following the shoreline to 52°05.741'N and 131°08.788'W, thence following the shoreline of Sii.niihl Gwaay.yaay (Gordon Islands) to 52°05.708'N and 131°08.697'W, thence easterly across the channel to 52°05.709'N and 131°08.673'W, thence southerly following the shoreline of Sii.niihl Gwaay.yaay (Gordon Islands) to 52°05.468'N and 131°08.425'W, thence southeasterly to a point on the western shoreline of Gangxid Gwaay.yaay (Kunghit Island) at 52°04.414'N and 131°07.720'W, thence northerly and southerly following the shoreline of Gangxid Gwaay.yaay (Kunghit Island) to 52°04.366'N and 131° 07.720'W, thence southwesterly to a point in water at 52°03.175'N and 131°14.399'W, thence northwesterly to a point in water at

52°05.826'N and 131°17.913'W, and thence northeasterly back to the beginning point. [SGwaay (Wailing Island)]

4.3.1.3. South Kunghit Island: Those waters of Subareas 2-19, 102-3, 130-3 and 142-1 inside a line commencing at a point on the western shoreline of Gangxid Tllgaay (South Kunghit Island) at 51°57.689'N and 131°03.375'W easterly following the southern shoreline of Gangxid Tllgaay (South Kunghit Island) to 52°00.343'N and 130°59.788'W, thence southeasterly to a point in water at 51°50.163'N and 130°53.208'W, thence southwesterly to a point in water at 51°47.954'N and 130°53.612'W, thence northwesterly to a point in water at 51°54.940'N and 131°07.779'W, and thence northeasterly to the beginning point. [Gangxid Tllgaay (South Kunghit Island)]

4.3.1.4. Lyman Point to Receiver Point: Those waters of Subareas 102-2 and 102-3 inside a line commencing at a point on land of Kildaga T'awts'iiGaay (unnamed islet) at 52°04.541'N and 130°56.293'W following the shoreline of the islet to 52°04.591'N and 130°56.348'W, thence northwesterly to the eastern shoreline of Gangxid Gwaay.yaay (Kunghit Island) at 52°04.652'N and 130°56.414'W, thence northerly following the eastern shoreline of Gangxid Gwaay.yaay (Kunghit Island) to 52°05.734'N and 130°56.365'W, thence northeasterly to a point in water at 52°10.222'N and 130°49.514'W, thence southwesterly to a point in water at 52°02.635'N and 130°50.918'W, thence northwesterly back to the beginning point. [Gangxid Xyuu Kun sda Kan 'Láas Kun (Lyman Point to Receiver Point)]

4.3.1.5. Benjamin Point: Those waters of Subareas 2-17, 2-18 and 102-2 inside a line commencing at a point on the eastern shoreline of T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°10.262'N and 131°01.993'W northerly following the eastern shoreline to 52°13.232'N and 131°00.777'W, thence northeasterly to a point in water at 52°17.735'N and 130°55.064'W, thence southeasterly to a point in water at 52°12.476'N and 130°49.103'W, and thence southwesterly back to the beginning point. [Kayjuu Kun (Benjamin Point)]

4.3.1.6. Head of Flamingo Inlet: Those waters of Subarea 2-37 north of a line drawn from a point on T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°14.455'N and 131°22.232'W southeasterly across St'aa K'ii GawGa (Flamingo Inlet) to a point on land on the opposite shore at 52°14.228'N and 131°21.503'W. [St'aa K'ii GawGa (Flamingo Inlet) – Head]

4.3.1.7. Head of Louscoone Inlet: Those waters of Subarea 2-34 north of a line drawn from a point on land on T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°11.841'N and 131°15.670'W northeasterly across the inlet to a point on the opposite shoreline of GawGajaang (Louscoone Inlet) at 52°12.245'N and 131°14.568'W. [GawGajaang (Louscoone Inlet) – Head]

4.3.1.8. Head of Rose Inlet: Those waters of Subarea 2-18 north of a line drawn from the western shoreline of K'insiGid (Rose Inlet) on T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°11.327'N and 131°08.370'W northeasterly across the inlet to a point on the opposite shore at 52°11.328'N and 131°07.115'W. [K'insiGid (Rose Inlet) – Head]

4.3.1.9. Head of Huston Inlet: Those waters of Subarea 2-15 south of a line drawn from a point on the western shoreline of GawGan (Huston Inlet) at 52°15.732'N and 131°15.643'W northeasterly across the inlet to a point on the opposite shore at 52°16.111'N and 131°14.231'W. [GawGan (Huston Inlet) – Head]

4.3.1.10. Skincuttle Inlet to Burnaby Island: Those waters of Subareas 2-13 to 2-16 and 102-2 inside a line commencing at a point on the eastern shoreline of SGwaay Kun Gwaay.yaay (Burnaby Island) at 52°26.521'N and 131°14.153'W southeasterly to a point in water at 52°25.979'N and

131°04.470'W, thence southeasterly to a point in water at 52°22.829'N and 131°00.867'W, thence southwesterly to a point on the eastern shoreline of T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°18.124'N and 131°18.347'W, thence northerly following the eastern shoreline of T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) to 52°23.055'N and 131°23.441'W, thence northeasterly to the western shoreline of Gwaay GudgiiGaagid (Kat Island) at 52°23.082'N and 131°22.916'W, thence easterly following the southern shoreline of Gwaay GudgiiGaagid (Kat Island) to 52°23.147'N and 131°22.260'W, thence northeasterly to the western shoreline of SGwaay Kun Gwaay.yaay (Burnaby Island) at 52°23.276'N and 131°21.333'W, thence southerly following the western shoreline of SGwaay Kun Gwaay.yaay (Burnaby Island) to 52°20.949'N and 131°15.569'W, thence northeasterly to the easternmost point of SGwaay Kun Gwaay.yaay (Burnaby Island) at 52°22.315'N and 131°14.689'W, thence following the western shoreline of SGwaay Kun Gwaay.yaay (Burnaby Island) to 52°22.377'N and 131°14.683'W, thence northwesterly to a point on the eastern shoreline of SGwaay Kun Gwaay.yaay (Burnaby Island) at 52°24.494'N and 131°15.832'W, and thence following the eastern shoreline to the beginning point. [Suu Kaahlil sda SGwaay Kun Gwaay.yaay (Skincuttle Inlet to Burnaby Island)]

4.3.1.11. Poole Inlet: Those waters of Subarea 2-14 south of a line drawn from a point on the shoreline of SGwaay Kun Gwaay.yaay (Burnaby Island) in Gid Gwaa GyaaGa GawGa (Poole Inlet) at 52°22.764'N and 131°18.249'W southeasterly across the inlet to a point on the opposite shore at 52°22.505'N and 131°17.665'W. [Gid Gwaa GyaaGa GawGa (Poole Inlet)]

4.3.1.12. Mathieson Inlet to Huxley Island: Those waters of Subareas 2-12 and 2-13 inside a line commencing on the eastern shoreline of T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°30.038'N and 131°28.071'W southeasterly to a point on land on Gwaay Guusdagang (All Alone Stone Island) at 52°29.081'N and 131°24.042'W, thence southeasterly to a point on the northern shoreline of Gaaduu Gwaay (Huxley Island) at 52°28.066'N and 131°21.772'W, thence southerly following the western shoreline of Gaaduu Gwaay (Huxley Island) to 52°25.934'N and 131°21.927'W, thence southwesterly to the northern shoreline of GaysiiGas K'iidsii Gwaay (Section Island) at 52°25.435'N and 131°22.425'W, thence westerly following the northern shoreline of GaysiiGas K'iidsii Gwaay (Section Island) to 52°25.460'N and 131°22.513'W, thence northwesterly to a point on the eastern shoreline of T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°26.039'N and 131°25.343'W, thence northerly following the eastern shoreline of T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) to 52°28.460'N and 131°27.972'W, and thence northerly to the beginning point. [Kuuniisii Xaw GawGa sda Gaaduu Gwaay (Matheson Inlet to Huxley Island)]

4.3.1.13. Juan Perez Sound to Lyell Island: Those waters of Subareas 2-11 and 102-2 inside a line commencing on the eastern shoreline of Tllga Kun Gwaay.yaay (Lyell Island) at 52°42.074'N and 131°26.535'W southeasterly to a point in water at 52°41.070'N and 131°14.485'W, thence southeasterly to a point in water at 52°38.677'N and 131°12.957'W, thence southwesterly to 52°35.106'N and 131°22.254'W, thence following the northern shoreline of Xiina Gwaay.yaay (Ramsay Island) to 52°34.964'N and 131°22.963'W, thence southwesterly following the shoreline to 52°34.116'N and 131°25.603'W, thence southwesterly following the shoreline to 52°33.844'N and 131°26.324'W, thence southwesterly to a point on Gandaawuu.ngaay Gwaay.yaay (Marco Island) at 52°31.498'N and 131°30.354'W, thence northwesterly to a point on Gandaawuu.ngaay Gwaayts'idaay (Hoskins Islets) at 52°32.405'N and 131°32.946'W, thence following the northern shoreline of Gandaawuu.ngaay Gwaayts'idaay (Hoskins Islets) to 52°32.435'N and 131°33.055'W, thence southwesterly to a point on the eastern shoreline of T'aaxwii XaaydaGa

Gwaay.yaay iinaGwaay (Moresby Island) at 52°32.211'N and 131°34.475'W, thence easterly following the eastern shoreline to 52°32.956'N and 131°37.729'W, thence northeasterly to a point on the shoreline of Kings'ii Gwaay.yaay (Bischof Islands) at 52°34.143'N and 131°33.379'W, thence easterly following the southeastern shoreline of Kings'ii Gwaay.yaay (Bischof Islands) to 52°34.340'N and 131°33.098'W, thence northeasterly to a point on an islet at 52°34.530'N and 131°32.890'W, thence northeasterly to a point on the southern shoreline of Tllga Kun Gwaay.yaay (Lyell Island) at 52°35.767'N and 131°32.891'W, and thence easterly and northerly following the shoreline of Tllga Kun Gwaay.yaay (Lyell Island) to the beginning point. [Gandaawuu.ngaay Xyangs sda Tllga Kun Gwaay.yaay (Juan Perez Sound to Lyell Island)]

4.3.1.14. Darwin Sound: Those waters of Subarea 2-10 inside a line commencing at a point on land on Shuttle Island at 52°40.053'N and 131°42.328'W northeasterly to a point on the western shoreline of Tllga Kun Gwaay.yaay (Lyell Island) at 52°40.466'N and 131°41.105'W, thence southerly following the western shoreline of Tllga Kun Gwaay.yaay (Lyell Island) to 52°37.301'N and 131°38.800'W, thence northwesterly to a point on land of Gwaay DaaGaaw (Shuttle Island) at 52°38.522'N and 131°41.409'W, and thence following the eastern shoreline of Shuttle Island to the beginning point. [Didxwahxyang (Darwin Sound)]

4.3.1.15. Klue Passage to Lost Islands: Those waters of Subareas of 2-7 and 2-8 inside a line commencing on a point of the eastern shoreline of T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°48.606'N and 131°39.403'W northeasterly to a point in water at 52°49.405'N and 131° 29.042'W, thence southeasterly to a point in water at 52°48.148'N and 131°28.849'W, thence southwesterly to a point in water at 52°44.898'N and 131°34.035'W, thence northwesterly to 52°45.113'N and 131°34.125'W, thence following the northern shoreline of K'ang.Guu Gwaay.yaay (Kunga Island) to 52°45.220'N and 131°35.574'W, thence southwesterly to a point on T'aanuu Gwaay (Tanu Island) at 52°45.002'N and 131°36.770'W, thence northerly following the eastern shoreline of T'aanuu Gwaay (Tanu Island) to 52°46.725'N and 131°38.878'W, thence northwesterly across to a point on T'aaxwii XaaydaGa Gwaay.yaay iinaGwaay (Moresby Island) at 52°47.837'N and 131°39.371'W, and thence northerly following the eastern shoreline to the beginning point. [T'aanuu K'aadxwah Xyangs sda Gwaay Xaa'ans (Klue Passage to Lost Islands)]

#### **4.3.2. Area 13**

4.3.2.1. Discovery Passage: Subareas 13-3, 13-4 and 13-5 and a portion of Subarea 13-6. Those waters of Discovery Passage bounded on the north by a straight line drawn true west from North Bluff on Quadra Island, across Seymour Narrows to fishing boundary sign on Vancouver Island, and on the south by a line from the Cape Mudge light true west to Vancouver Island. (Marine Reserve and Research Closure)

4.3.2.2. S.W. Marina Island. A portion of Subarea 13-15 east of a line located at 125 degrees 03.900 minutes west longitude to the line located at 125 degrees 03.400 minutes west longitude and north of a line located at 50 degrees 2.850 minutes north latitude to the line located at 50 degrees 03.300 minutes north latitude (Research Closure).

#### **4.3.3. Area 13, 14, 15**

4.3.3.1. Mitlenatch Island: All waters within 1.0 nautical miles of Mitlenatch Island in Subareas, 13-1, 15-3, 14-13, and 15-2. (Park)

#### **4.3.4. Area 17**

4.3.4.1. Hammond Bay: Subarea 17-21 inside a line from Neck Point to Lagoon Head. (Research Closure)

4.3.4.2. Gabriola Site: A portion of Subarea 17-16, including Percy Anchorage and False Narrows, bounded inside a line from a marker near the entrance to Descanso Bay to Duke Point, thence to Purvis Point, along the northern shore of Mudge Island to the most southeasterly point on Mudge Island, thence north-easterly to a marker on Gabriola Island, thence in a westerly direction along the south shore of Gabriola Island to the point of commencement. (Research Closure)

#### **4.3.5. Area 23**

4.3.5.1. Pacific Rim National Park, Broken Group Islands: Those waters of the Broken Group Islands in Barkley Sound within park boundaries as shown, since 1989, on Canadian Hydrographic Service Chart 3671. (Park)

4.3.5.2. Bamfield Marine Station Research Area Closure: Those waters of Subareas 23-4, 23-5, 23-6 and 23-7 bounded by a line commencing at the light at Whittlestone Point and running directly to the southern tip of Haines Island; from the northwestern tip of Haines Island to the southern tip of Seppings Island; from the northwestern tip of Seppings Island to Kirby Point on Diana Island; from Kirby Point directly to the northwest tip of Fry Island; from the northwestern tip of Fry Island to the nearest adjacent point on Tzartus Island; from Foucault Bluff on Tzartus Island to the northwest tip of Nanat Island; from the eastern tip of Nanat Island to the nearest adjacent point on Vancouver Island, and thence along the coastline of Vancouver Island to the point of commencement. (Research Area)

#### **4.3.6. Area 24**

4.3.6.1. Portions of Subareas 24-6 and 24-7: The east coast of Dunlap Island, from the most northerly point of Dunlap Island to Robert Point on Meares Island, then following the Meares Island shore southerly to a point true east of the most southerly point of Dunlap Island, then a straight line to the most southerly point of Dunlap Island. (Research Closure)

4.3.6.2. Ritchie Bay: A portion of Subarea 24-7 from Robert Point on Meares Island, thence following the shore easterly to the most northern headland of Ritchie Bay, thence in a straight line to Robert Point. (Research Closure)

4.3.6.3. Ahous Bay Whale Sanctuary: A portion of Subarea 24-6, inside of a straight line from Ahous Point on Vargas Island, thence northerly to a point at 126 degrees 01.849 minutes west longitude, 49 degrees 11.137 minutes north latitude, thence due east to Vargas Island.

4.3.6.4. Pacific Rim National Park, Grice Bay and McBey Islets: The waters of Tofino Inlet within Pacific Rim National Park including McBey Islets and Dinner Island in Tsapee Narrows, Browning Passage in Subarea 24-9 and Grice Bay west and south of Indian Island in Subarea 24-11. (Park)

#### **4.3.7. Area 26**

4.3.7.1. Checleset Bay Fishery Closure Area- Ecological Reserve: Those portions of Areas 26 and 126 enclosed by a line drawn from a point on the Brooks Peninsula (at 127 degrees 49.58 minutes west longitude., 50 degrees 05.18 minutes north latitude), thence due south to the 50 degrees parallel, thence due east to Alert Point on Lookout Island, thence northeasterly to a point on



Vancouver Island near McLean Island (at 127 degrees 25.03 minutes west longitude, 50 degrees 02.1 minutes north latitude), thence northwesterly along the shore of Vancouver Island to Malksope Point (at 127 degrees 28.95 minutes west longitude, 50 degrees 05.53 minutes north latitude), thence due west to a point midchannel on the southeast end of Gay Passage (at 127 degrees 30.1 minutes west longitude, 50 degrees 05.53 minutes north latitude), thence midchannel through Gay Passage to a point midchannel on the northwest end of Gay Passage (at 127 degrees 31.8 minutes west longitude, 50 degrees 06.7 minutes north latitude.), thence northwesterly to the shore of Vancouver Island, just west of Theodore Point (at 127 degrees 32.8 west longitude, 50 degrees 07.7 minutes north latitude), thence westerly along the Vancouver Island shore to an unnamed point on the east side of Nasparti Inlet (at 127 degrees 38.6 minutes west longitude, 50 degrees 08.75 minutes north latitude), thence westerly across Nasparti Inlet to an unnamed point on Vancouver Island (at 127 degrees 39.9 minutes west longitude, 50 degrees 08.7 minutes north latitude), thence along the Vancouver Island shore to the point of commencement.) (Provincial Ecological Reserve - sea otters and habitat)

#### **4.3.8. Area 28**

4.3.8.1. Porteau Cove: That portion of Subarea 28-4, east of a line drawn from a white fishing boundary sign located on the south shore of Porteau Cove to a white fishing boundary sign located on the north shore of Porteau Cove. (Marine Reserve)

4.3.8.2. Whytecliff Park: That portion of Subarea 28-2 bounded by a line commencing from the most southerly point of Whytecliff Park; thence in a straight line to a point located 100 metres east of the most southeasterly point of Whyte It.; thence following the southern shoreline of Whyte It. at a distance of 100 metres to a point lying 100 metres from the most southwesterly point of Whyte It.; thence in a straight line to a point lying 100 metres west of White Cliff Point; thence following the shoreline at a distance of 100 metres in a northerly direction to a point 100 metres north of Lookout Point; thence following the shoreline at a distance of 100 metres in an easterly direction to a point 100 metres perpendicular to the most northerly point of Whytecliff Park; thence to the most northerly point of Whytecliff Park on the mainland. (Marine Reserve)

4.3.8.3. Point Atkinson Reef: That portion of Subarea 28-6 bounded by a line commencing at the southwest entrance to Starboat Cove thence seaward in a southwest direction for 85 metres, thence westerly following the shoreline for 100 metres, thence in a north east direction to a point on land. (Marine Reserve)

## **5. GEODUCK MANAGEMENT MEASURES**

### **5.1. Species**

Geoduck (*Panopea generosa*)

### **5.2. Gear**

Hand-held, manually operated water nozzles guided and controlled from underwater by a diver. Each water nozzle shall have a maximum inside diameter of 5/8 inch (1.59 cm).

### **5.3. Total Allowable Catch**

Total allowable catch (TAC) is determined by multiplying available biomass estimates by the appropriate harvest rate, see section 5.9. Available biomass does not include areas in closures for

Parks, marine reserves, sanitary contamination, research etc. As well it does not include areas that have been tenured for aquaculture. For the 2022/23 season the overall TAC has been dropped as a result of a decrease in available biomass due to closures put in place within Gwaii Haanas National Park Reserve as well as impacts of Sea Otter predation in future rotations.

#### **5.4. Vessel Quotas**

The Department approved, in 2012, quota block transfers between vessels. Transfers were allowed permanently, as well as temporarily, in blocks of quota which equal 1/550 of the coast-wide commercial TAC. The merits and feasibility of the quota transfers were reviewed through 2015. A third party review of the program was completed and the Department surveyed all licence holders in 2015 and an internal economic review was completed in 2016. All respondents were in favor of continuing the program as a permanent part of the Geoduck fishery. Future changes to the program may be considered but the quota transfer system will continue as an indeterminate program.

The quota per vessel will be determined by the number of quota blocks multiplied by 1/550 of the Coast wide commercial TAC which is 2,805,000 lb. For 2022/23 each quota block equals 5,100 lb.

##### **5.4.1. Transferring Quota Blocks**

The following guidelines for the permanent or temporary transfer of Geoduck quota blocks will be in effect.

- Upon application, licence holders will be permitted to make temporary and permanent transfers of Geoduck quota blocks. Applications are to be submitted through NOLS. For more information contact the UHA or a resource manager, see contacts Appendix 10.
- The current licence must be issued for both vessels prior to any quota block transfer.
- Request for permanent transfer must be received between the start of the fishery March 1, to December 15, of the same season in order to be processed prior to the end of the fishing season. Temporary transfers can be applied for at any time during the season.
- Quota that has already been caught or deemed “fished” cannot be transferred.
- The minimum quantity of quota that can be transferred is one quota block. A quota block is defined as 1/550 or approx 0.182% of the Annual Coastwide commercial TAC.
- In order to transfer quota the vessel providing the quota must either a) be not actively fishing or b) have a minimum of one quota block in addition to the quota block(s) being transferred.
- Temporary transfers are only valid for the current fishing season.

Link to the Temporary Transfer Application:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/forms/2017/realloc-temp-geoduck-panope-eng.html>

Link to the Permanent Transfer Application:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/forms/2017/realloc-perm-geoduck-panope-eng.html>

#### **5.5. Geoduck Experimental Enhancement**

In the mid 1990’s, the industry began experimenting with enhancement projects, planting hatchery produced seed at sites that had been depleted by heavy fishing pressure in the early years of the

commercial fishery. The interest supported both research and development of culture techniques and provided potential mitigation for the loss of productive beds to the fishery through allocation to aquaculture, sanitary closures, etc.

The Province of BC agreed to hold approximately 296 hectares (ha) at 18 sites as map reserves until 2015 for that work to continue. DFO approved 13 of those sites (104 ha).

In 2015, BC did not renew the map reserve status on these sites and seeding is no longer permitted for the purpose of enhancement.

However, sites that were previously seeded for the purpose of enhancement will be available for harvest opportunities from the Inside Waters (Gulf) for this season. This harvest opportunity is included in the allocated quota for the Inside Waters and will be available for G or FG licensed vessels with quota blocks allocated to the Inside Waters. Any Horse Clams within the enhancement sites will be harvested at the same time as the Geoducks.

Quota had been allocated to enhancement sites in 2018/19, however no harvest occurred on these sites. The enhancement sites were not scheduled to be harvested in 2019/20 or 2020/2021. For the 2021/22 season 1,000 lbs has been allocated to be harvested off enhancement sites. For 2022/23 season no quota has been allocated from enhancement sites.

## **5.6. Geoduck Aquaculture (Pre-seed Harvest)**

There may be supplemental harvest opportunities under the DFO Policy for Access to Wild Aquatic Resources as it Applies to Aquaculture (2004). See Appendix 5.

## **5.7. Fishing Areas and Openings**

### **5.7.1. Growing Water Surveys (Environment and Climate Change Canada)**

Growing water surveys and classification are in place for the planned commercial fishing areas; see the internet for more information:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/biotox/index-eng.html>

Closures may be implemented on short notice in the event of changes to contamination status and/or following the Spring (April) and Fall (October) Pacific Region Interdepartmental Shellfish Classification (PRISC) meetings. Harvesters should always check before leaving for the fishing grounds.

### **5.7.2. Biotxin Monitoring (Canadian Food Inspection Agency)**

Geoduck Management Areas (GMAs) will be opened and fished according to protocols required by the Biotxin Monitoring Program, approved by the CFIA. For further detail on the CSSP, see the internet at:

<https://inspection.gc.ca/preventive-controls/fish/cssp/eng/1563470078092/1563470123546>

### **5.7.3. Open Times (Fisheries & Oceans Canada)**

A GMA is a defined portion of Pacific fisheries waters. Areas and Subareas, as described in the *Pacific Fishery Management Area Regulations*, are referenced in describing GMAs. Each GMA has a name (i.e. QCF06 Poole Inlet), and may be assigned a quota.

- GMAs will be opened as biotoxin monitoring permits. Subsequent openings, as requested by the UHA, will be conducted as biotoxin monitoring permits. (See Section 4 Closures)
- The UHA, on behalf of owners of Geoduck licensed vessels, will request area openings in consultation with DFO. The Department requires a minimum of 48 hours' notice from the association (exclusive of weekends and holidays) to open a new GMA. Decisions to open and/or move the fishery will be relayed to the fishing grounds by the service provider (the OGM in some areas).
- Vessel masters must hail to the service provider prior to commencing fishing (see Section 7.1). Vessel masters are responsible for checking an area is open prior to commencing fishing.
- Any alteration to the prescribed fishing plan will be discussed through the Area Committee and the UHA. Any deviations from the fishing plan, not so discussed, will result in closure of the fishing area and/or the fishery until the matter is resolved.

## **5.8. Licence Amendment to Extend Season**

Persistent high PSP levels and/or poor weather has made it difficult, in some seasons, for vessels to complete their quota by the end of the season. At the request of the UHA, the Department may allow an extension for 15 days into the next season understanding that:

- Owners of Geoduck licensed vessels with quota remaining must apply through NOLS for amended conditions that will permit harvesting into the next season. Allow ten business days.
- The UHA will ensure that all PSP testing and required monitoring is in place for the duration of the extension.
- The extra costs of monitoring the extension will be funded through regular UHA programs.
- All conditions of licence for the boats remaining fishing will be met.
- The subsequent licence area fishery will be delayed for all licence holders until the OGM is in place and/or the areas are opened.
- The subsequent fishery may open earlier than the end of the 15 day extension if the previous fishery has been completed.

Owners of Geoduck licensed vessels who have quota remaining in the current season's fishery will be diligent in continuing to fish as soon as weather and/or biotoxin levels permit.

## **5.9. Bed by Bed Management**

### **5.9.1. Allocation of Bed Quotas**

The estimates of bed area, Geoduck densities (used in current biomass calculations), harvest records, and harvest options available are discussed pre-season with each Area Committee. If bed-quota advice from the Area Committees falls within the range of options provided by DFO Science, the committee-recommended quota is assigned.

In some cases, the quota assigned may not be as high as recommended by the Area Committees. These beds may be recorded and considered for future survey or assessment.

Biomass estimates, Appendix 2, are calculated on a by-Geoduck-bed basis using one of three methods, depending on the information available for each bed. If a bed was surveyed then biomass is estimated from survey density for the specific bed. For un-surveyed beds, biomass is estimated

using density surveys and Density Categories (DC) from harvesters' advice and comments when comments are available, or using Regional Densities (RD) from surveys when density comments are not available (Bureau et al. 2012). Bed quotas are assigned through one of following methods.

#### 5.9.1.1. Surveyed Beds

Where survey density information is available, an estimate of current biomass ( $B_{\text{current}}$ ) is used to establish a harvest option. DFO Science provides a range of biomass estimates and a range of harvest options based on a fixed harvest rate (Section 5.9.2). The lower 95% confidence interval and mean harvest options are calculated. Recommendations for quotas from the Area Committees are considered up to a maximum of the mean harvest option on surveyed beds.

#### 5.9.1.2. Unsurveyed Beds

For un-surveyed beds, estimates of current biomass are extrapolated from the Regional Density or from bed DC where available. The bed may be harvested to a maximum of the average of the lower 95% confidence interval and the mean harvest option. Fish harvesters may advise that a bed does not exist, the bed area or density is overestimated, or recommend lower/zero quotas based on quality or other factors.

#### 5.9.1.3. Actions under the Precautionary Approach

Harvest Control Rules (HCR) compliant with the Precautionary Approach (PA) (See IFMP Section 2.1.7) have been developed for the Geoduck Fishery.

The Geoduck Stock Assessment Framework (Bureau et al. 2012) describes the Limit Reference Point currently in use for the B.C. Geoduck fishery. Currently, the Limit Reference Point is used as a management measure consisting of closing harvest on a bed if the current biomass on the bed falls below 40% of estimated unfished biomass. The stock index for each Geoduck bed (defined as the ratio of current biomass over unfished biomass) is estimated yearly when bed biomass estimates are updated. Bed for which the stock index falls below 0.4 are closed to harvest until they are surveyed and assessed as having recovered above the Limit Reference Point. Details of methods used to estimate unfished biomass were provided in Bureau (2017). Exceptions have been made for a two GMAs on the WCVI since 2009, and for a few GMAs in the Central Coast where sea otter predation is documented.

The Upper Stock Reference (USR) is the point at which harvest rates would be decreased to ensure the Limit Reference Point is not reached on a coastwide basis. The USR for the Geoduck stock will be defined as the total coastwide current biomass being equal to 50% of total coastwide unfished biomass.

### 5.9.2. Harvest Rate

Zhang and Hand (2006, 2007) modelled the impact of a range of harvest rates on Geoduck population levels for various regions of the BC coast. Regional harvest rates, projected to have a 90% probability of keeping the stock at or above 50% virgin biomass over a 50 year time horizon, were recommended to be applied to estimates of current biomass. The annual exploitation rates, by region, are: 1.6% for Haida Gwaii, 1.8% for Prince Rupert, Central Coast and Inside Waters and 1.2% for WCVI.

### 5.9.3. Fishing Assigned Bed Quotas

The service provider, through the OGM on the North Coast and the West Coast, will notify the Geoduck vessel crews of the allocated quota in each Geoduck bed to be fished. In the absence of detailed bed maps, harvesters must obtain the bed number and the allocated bed quota from the OGM or service provider. Harvesters are expected to harvest up to the allocated bed quotas and to follow the harvest instructions of the OGM or service provider. **It is recognized that some beds will have small quotas to be taken and additional effort will be required to harvest these small bed quotas.**

For the Inside Waters, where there is no OGM, the service provider will distribute dive harvest charts, and Geoduck bed maps are available for fish harvesters to determine the bed numbers and bed quotas and to record their daily harvest locations. The Department requests that harvesters attempt to distribute their effort and harvest throughout the entire GMA and throughout beds as it is drawn on the map to determine whether the bed boundaries are drawn correctly. Little information is gained when fish harvesters harvest all of the catch from one position. The service provider will distribute regular updates on fishing activity and remaining bed quotas to the fish harvesters.

### 5.9.4. Changing Assigned Quotas In-season

Changes to assigned quotas may occur in-season following consultation with the resource manager. A decision to harvest more than the assigned quota will be based on advice from the OGM, the Area Committees, and DFO Science.

#### 5.9.4.1. Fallback Beds

For a variety of reasons (impact by Sea Otters, remote location, quality, exposure, etc.), the advice from the Area Committees may be to set the quota below the options available from DFO Science (following the management decision rules outlined above), or to zero.

‘Fallback’ is the amount of quota available for harvest over the allocated quota (to a maximum of the mean harvest option). For example if science advised the maximum harvest option on a bed was 1,000 lbs. but only 700 lbs. was allocated there would be 300 lbs. of fallback available. The overall seasons harvest will not exceed the allocated commercial TAC.

Following consultation in-season with the resource manager, and if conditions are appropriate, the bed may be fished within the options originally provided by DFO Science, again described as ‘Fallback’.

- Fallback quota **may** be available up to the mean option for surveyed beds and the average of the lower 95% confidence interval and the mean option for unsurveyed beds.
- Fallback quota **must** be fished from a new location within the bed. A new harvest site within the bed is defined as one outside the radius of a hose length away from any known (current season) fishing locations. An average hose-length is defined as 250 feet. Harvest at any new site will be restricted to 20 cages for Inside Waters, 30 cages for WCVI, and 40 cages for North Coast. The harvest of fallback quota will not be permitted from any recent (current season) harvest sites.
- Prior to fishing any fallback from beds with allocated quota it is requested that all beds with allocated quota within the open GMA are fished or attempted to be fished to the allocated

quota first. Beds with no allocated quota, and not closed for any reason, i.e. in a closure, below limit reference point etc., can be fished at any time following the rules above.

#### 5.9.4.2. Unfishable Quotas

It may be difficult or impossible to achieve the quota at some beds for a variety of reasons (e.g., weather and sea states, Geoduck may not be showing, bed biomass may have been overestimated, sea otters). It is requested that fish harvesters attempt to fish the bed on different occasions or try different portions of the bed as indicated. If it is not possible to harvest the quota from a given bed, the OGM or service provider will consult with divers and resource managers and document the reasons. There are several options to resolve the situation which are, in order of preference:

- a.) Fish another bed in the same GMA that is deemed to have fallback quota available. Fish the beds to which a fallback quota was applied (see above).
- b.) Scout for new beds in the same GMA, same subarea. Finding new beds may offset the losses that result from reduced bed areas, densities, and resulting biomass estimates. Whenever possible, scout for new beds within the same GMA. To distribute effort on a new bed, the following protocol is applied:
  - i.) Inside Waters: 1,000 lb. or 20 cages per hose length limit; an average hose-length is defined as 250 feet. The diver (boat) will move outside the radius of his hose length after the harvesting limit is reached.
  - ii.) West Coast: 1,500 lb. or 30 cages per hose length limit; an average hose-length is defined as 250 feet. The OGM will direct the diver (boat) to move outside the radius of his hose length after the harvesting limit is reached.
  - iii.) North Coast: 2,000 lb. or 40 cages per hose length limit; an average hose-length is defined as 250 feet. The OGM will direct the diver (boat) to move outside the radius of his hose length after the harvesting limit is reached.
- c.) Move the unharvested quota to another GMA that is deemed to have harvestable quota available. Fish the other GMA to a higher quota, using fallback options.
- d.) If none of the above options is reasonable, the fish harvesters may not be able to achieve the GMA quota, area quota and ultimately the IVQ.
- e.) If there are disputes, the area will be closed, and only reopened after successful resolution of the issue.

#### 5.9.4.3. Disruptions Due to Unforeseen Issues (PSP, Sanitary Closures, Other).

The Department may, at its discretion and upon request from the UHA, transfer quotas in-season between GMAs not included in this IFMP to mitigate access problems and/or harvest delays resulting from unforeseen circumstances, for example extended PSP closures, inseason sanitary closures or other reasons. The Department may also, at its discretion and upon request from the UHA, transfer quotas in-season between quota regions for the same reasons. Quota transfers will take place within the annual harvest rate for a region/area and will not exceed the recommended harvest option for the area to which the quota will be transferred. Considering quota transfers between regions, the maximum allowable transfer is five (5) quota blocks or 26,000 lbs. In-season quota adjustments will not result in an increase in the annual commercial TAC.

Industry is advised that quota adjustments and in-season transfers to address the unforeseen circumstance must be made through written request by the UHA to the lead manager for the fishery (see Contacts, Appendix 15).

The Department will deal with the impact on implementation of the fishing plan by implementing the following protocols:

- Fishing the open areas at a higher rate and implementing a “payback” system over the next several years. In this scenario, the annual harvest rate will be violated in some areas in the short term, but in the subsequent rotation, this additional harvest is “paid back” by foregoing the harvest or a portion of harvest assigned to that year. This is, in effect, a temporary longer-term rotation and the annual harvest rate is adhered to over the rotational cycles.
- Fishing areas in other rotations and implementing a “payback” system over the next several years. In this scenario, product is “borrowed” from areas not included in the current rotation, and paid back in the appropriate year. This strategy entails a trade of quota between rotational harvest areas. Biotoxin Monitoring Programs must be in place prior to implementing the change to the management plan.

#### **5.9.5. Role of the On-Grounds Monitors (OGM)**

The OGM (see section 7) has the responsibility to request that vessels move when a bed quota has been achieved:

- in order to assess and harvest all Geoduck beds with allocated quota;
- to fish in all documented beds with allocated quota - large and small, shallow and deep, regardless of the market quality of the clams;
- to fish in and record comment from all of the documented bed area.

All vessels are expected to participate in the harvest of the marginal, less popular and/or less productive beds. Vessels are expected to comply with the OGM’s request. The Department will close an area if there are problems with compliance.

#### **5.9.6. Bed Questionnaires**

To improve the data used in the population assessment and modelling process, and to provide quotas that are more reflective of Area Committee advice, the Department is continuing to request the voluntary submission of information on Geoduck beds. A Validation & Harvest Logbook has been created to include the key questions from the Bed Questionnaire used prior to 2008. Vessel Masters and divers can complete the Harvest Log dive information and Bed Questionnaire information all on one page. See Appendix 7.

Geoduck Bed Questionnaires are used in all areas of the coast to collect and improve bed information that is used to calculate bed quotas. Divers should complete the questions along with their dive harvest information, and submit them to the OGM or Observer (Dockside Validator). The OGM does not alter the information provided on the beds; however data, such as the GMA, the bed number and the coordinates of the fishing location, must be checked for accuracy for the information to be useful. The combined log and questionnaire is forwarded to the service provider for data entry.

If there are large variations between the information supplied on the Bed Questionnaire portion of the logbook and Stock Assessment’s information, the beds in question will be prioritized for an assessment (biomass) survey in future years.



## 5.10. Inside Waters

### 5.10.1. Designated Landing Ports

Harvesters must land their catch at one of the following designated landing ports: Campbell River, Heriot Bay, Lund, Westview, Cowichan Bay, Sidney, Port Hardy, Port McNeill, Comox, Deep Bay, French Creek, Nanaimo or Ladysmith. Madeira Park and Halfmoon Bay may be used as a landing port if prior arrangements have been made with the service provider to ensure that an Observer and scale are available.

### 5.10.2. Inside Waters Openings and Quotas

The 2022/23 Geoduck quota for the Inside Waters is 331,500 lb. (and an additional 1,000 lb. for biological samples). This has been subdivided and assigned to the GMAs shown in Table 1. A total of sixty-five (65) quota blocks has been assigned to these areas. **Harvest in eelgrass beds is not permitted.** Harvest at depths less than 10 feet below chart datum is not permitted.

To ensure the orderly progression and appropriate harvests on all beds, harvesters and licence holders are advised that DFO may require GMA's to be completed prior to opening any other GMA's.

**Table 1: Geoduck Management Areas and Quotas - Inside Waters**

GMA	Name	Description	2022/23 Quota (lb) <sup>1</sup>
12A01	Northern Island	Subarea 12-11 and a portion of Subarea 12-16	35,555
12A02	Walker Group	Subareas 12-10 and 12-13	0
12B01a	East side Vansittart Island	Portion of Subarea 12-12	4,500
12B01b	West side Vansittart Island	Portion of Subarea 12-12	6,000
12B02	Northern Goletas Channel	Subarea 12-15	34,446
12B03a	Southern Goletas Channel	Portion of Subarea 12-16	37,900
14B01*	Comox Bar	Portions of Subareas 14-7, 14-9 and 14-10	105,578
14C01*	Comox Can Buoy to North Baynes Sound	Portion of Subarea 14-11	1,000
14C02*	North Baynes Sound	Subarea 14-15	3,600
14C03*	South Baynes Sound	Portion of Subarea 14-8	0
17A01**	Icarus Point/Lantzville Shore	Subarea 17-18	8,550
17A02**	Nanoose Bay to Blunden Point	Subarea 17-19	5,000
17A03**	Nanoose Bay	Subarea 17-20	0
17B01	North Gabriola Island to Neck Point	Subareas 17-10, 17-12, 17-13, 17-14, 17-15 and a portion of Subarea 17-16	38,850
17B02**	Pylades Channel	Portion of Subareas 17-4 and 17-16, Subarea 17-17	750

17B03**	Boat Harbour to Chemainus	Portions of Subareas 17-4, 17-5 and 17-6	5,600
17B04**	Southern portion of Area 17	Subareas 17-1, 17-2, 17-3, portions of Subareas 17-4, 17-5 and 17-6, and Subarea 17-8 and 17-9	3,471
16D01	Thormanby Island	Portions of Subareas 16-1 and 16-2	17,500
18A	Boatswain Bank	Portion of Subarea 18-7	6,500
19C	Sydney and Cordova Channel	Subareas 19-3, 19-4, 19-5, 19-6	6,700
29	Outside Valdes Island	Portion of Subarea 29-5	13,000
	Enhancement Sites		0
<b>Subtotal (lb.)</b>			<b>331,500</b>
<b>Biological Samples (lb.)</b>			<b>1,000</b>
<b>Total Allowable Catch (lb.)</b>			<b>332,500</b>

<sup>1</sup> GMA's with '0' quota allocated may be fished under the fallback protocol (see 5.9.4.1)

\* GMAs closed between February 15 and April 15 for seasonal Herring closure.

\*\* GMA closed between March 1 and April 30 for seasonal Herring closure.

- Other GMAs may close if Herring spawn is observed in the area. See section 4.2.

See Section 4 for Closures within these areas, Appendix 9 for complete GMA descriptions and Appendix 11 for maps.

## 5.11. West Coast of Vancouver Island

### 5.11.1. Designated Landing Ports

Harvesters must land their catch at one of the following designated ports: Sooke, Port Alberni, Ucluelet, Tofino, Zeballos, Fair Harbour, Gold River or Tahsis.

### 5.11.2. West Coast Openings and Quotas

The 2022/23 Geoduck quota for the WCVI is 377,400 pounds (and an additional 1,000 pounds for biological samples). This has been subdivided and assigned to the GMAs shown in Table 2 below. A total of seventy-four (74) quota blocks has been designated to these areas. **Harvest in eelgrass beds is not permitted.** Harvest at depths less than 10 feet below chart datum is not permitted.

West Coast openings will occur under the following schedule, as determined through consultation with the UHA:

- Specific GMAs (highlighted with <sup>2</sup>) must be fished between November 15 and March 31.
- As soon as Area 23 biotoxin sampling permits, this area will open and the quota completed before moving.

**Table 2: Geoduck Management Areas and Quotas - West Coast Vancouver Island**

GMA	Name	Description	2022/23 Quota (lb.) <sup>1</sup>
20A	Sooke	Subareas 20-4, 20-5 and 20-6	0
23A01	Maggie River	Portions of Subareas 23-10 and 23-11	17,608

23A02	Macoah Pass	Portions of Subareas 23-10 and 23-11	2,587
23B	Toquart Bay & Pipestem Inlet	Portion of Subarea 23-10	0
23C	Mayne Bay, Stopper, Bryant & Curwen Islands	Subarea 23-9 and a portion of Subarea 23-10	4,009
23D01	Pinkerton Islands	Portion of Subarea 23-8	1,236
23D02	Canoe Island to Useless Inlet	Portions of Subareas 23-4, 23-6, 23-7 and 23-8	12,619
23E01	Trevor Channel to Alberni Inlet	Subarea 23-3 and a portion of Subarea 23-4	0
23E02	Chain Group	Portion of Subarea 23-4, Subarea 23-5 and portions of Subareas 23-6 and 23-7	7,007
24A02a	Yarksis	Portion of Subarea 24-8	26,402
24A02b	East Side Father Charles Channel	Portion of Subarea 24-8	1,500
24A03	Tonquin/Wickaninnish	Portion of Subarea 24-8	0
24A04	Epper/Dunlap	Portions of Subareas 24-6 and 24-7	41,283
24A05	Lemmens Inlet	Subarea 24-9	5,000
24A06a	Yellow Bank	Portion of Subarea 24-7	38,749
24A06b	East Maurus Channel	Portion of Subarea 24-6	7,000
24A06c	Elbow Bank North	Portion of Subarea 24-6	14,000
24A06d	Elbow Bank South	Portion of Subarea 24-6	14,200
24B01a	Bartlett Island	Portion of Subarea 24-6	89,000
24B01b	Blunden Island	Portion of Subarea 24-6	10,488
24B02a	Coomes Bank	Portion of Subarea 24-6	0
24B02b	Calmus Pass	Portion of Subarea 24-6	4,000
24B03*	Millar Channel <sup>2</sup>	Portions of Subareas 24-4 and 24-6	56,500
24B04*	Russell Channel <sup>2</sup>	Portion of Subarea 24-6	0
24C01	Sydney Inlet	Subarea 24-2	4,262
24C02	Exposed	Subarea 24-1, a portion of Subarea 24-8, Subarea 124-3	0
24D01a	Fortune Channel	Subareas 24-10 and 24-12	0
24D01b	Shelter Inlet	Subareas 24-3, a portion of Subarea 24-4, Subareas 24-13 and 24-14	3,767
24D01c	McKay Island	Portion of Subarea 24-4, Subarea 24-5	1,183
24D02	Indian Island	Portion of Subarea 24-11	0
25A	Esperanza	Subareas 25-9, 25-10, 25-11, 25-12 and a portion of Subarea 25-13	0

25B	Nuchatlitz	Portion of Subarea 25-13, Subarea 25-14	
25C	Rosa Harbour	Portion of Subarea 25-13	
25D	Nootka	Subareas 25-3 to 25-8, Subarea 25-15	0
26A	North Inlets	Portions of Subareas 26-7, 26-8, 26-9 and 26-10	0
26B	Mission Group	Portions of Subareas 26-1, 26-6 and 26-7	15,000
26C	Central Kyuquot Inlets	Portions of Subareas 26-1, 26-2 and 26-6	0
26D01	SW Union Island	Portions of Subareas 26-1, 26-2 and 26-6	0
26D02	Amai & Cachalot Inlets	Portions of Subareas 26-2 and 26-3	0
26D03	North of Rugged Point	Portions of Subareas 26-1 and 26-2	0
26D04	South of Rugged Point	Portion of Subarea 26-1	0
26F	Inlets - exploratory	Portion of Subarea 26-2, and Subareas 26-4 and 26-5	0
<b>Subtotal (lb.)</b>			<b>377,400</b>
<b>Biological Samples (lb.)</b>			<b>1,000</b>
<b>Total Allowable Catch (lb.)</b>			<b>378,400</b>

<sup>1</sup> GMA's with '0' quota allocated may be fished under the fallback protocol (see 5.9.4.1)

<sup>2</sup> Indicates these GMA's must be fished between November 15 and March 31 unless there is a required seasonal closure for Herring.

\* GMAs closed between February 24 and April 15 for seasonal Herring closure.

- Other GMAs may close if Herring spawn is observed in the area. See section 4.2.

See Section 4 for Closures within these areas, Appendix 9 for complete GMA descriptions and Appendix 12 for maps.

The OGM (see Section 7) will request that fish harvesters move from a Geoduck bed or GMA when the quota has been reached on that bed or in that GMA. Details of Sea Otter raft locations and predation should be documented on the Bed Questionnaire section of the logbook and by the OGM.

## 5.12. North Coast

### 5.12.1. Designated Landing Ports

Harvesters must land their catch at one of the following designated ports: Bella Bella, Queen Charlotte City, Masset, Sandspit, Prince Rupert, Port Edward or Port Hardy.

### 5.12.2. North Coast Openings and Quotas

The 2022/23 Geoduck quota, for the North Coast area is 2,096,000 pounds (and an additional 4,000 pounds for biological samples). This has been subdivided and assigned to the GMAs shown in Table 3 below. A total of four hundred and eleven (411) quota blocks has been designated to these areas. Areas will be opened upon request as biotoxin sampling permits. **Harvest in eelgrass beds is not permitted.** Harvest at depths less than 10 feet below chart datum is not permitted.

To ensure the orderly progression and appropriate harvests on all beds, harvesters and licence holders are advised that DFO may require GMA's to be completed prior to opening any other GMA's.

**Table 3: Geoduck Management Areas and Quotas – North Coast**

**North Coast Quota**

<b>GMA</b>	<b>Name</b>	<b>Description</b>	<b>Quota (lb.)</b>
CCA01	McMullin Group	Portion of Subarea 7-18	5,295
CCA02	Stryker Island	Portion of Subareas 7-18 and 7-23	24,359
CCA03	Tribal Group	Portion of Subarea 7-18	48,797
CCA04	Admiral Group	Portion of Subarea 7-18	12,060
CCA05	Prince Group	Portion of Subarea 7-25	15,235
CCA06a	Latta Island	Portion of Subarea 7-25	28,930
CCA06b	Hunter Channel	Portion of Subareas 7-17, 7-18, 7-25	5,535
CCA07a	McNaughton Group North	Portion of Subarea 7-25	15,793
CCA07b	McNaughton Group - Kinsmen	Portion of Subarea 7-25	20,481
CCA07c	McNaughton Group South	Portion of Subarea 7-25	14,155
CCA07ex	Superstition Point Experimental Area	Portion of Subarea 7-25	0
CCA08	Simmonds Group	Portion of Subarea 7-25	22,950
CCA09	Goose Island North	Portion of Subarea 7-25	0
CCA10	Goose Island South	Portion of Subarea 7-25	0
CCA11	Spider Island	Portion of Subarea 7-27	37,842
CCA12a	Typhoon Island	Portion of Subarea 7-27	0
CCA12b	South Edna Island	Portion of Subarea 7-27	0
CCA12c	Triquet Island	Portion of Subarea 7-27	0
CCA13	Spider Anchorage (Ronald)	Portion of Subarea 7-27	24,957
CCA14	Serpent Group	Portion of Subarea 7-27	11,257
CCA15a	Kittyhawk Group North	Portion of Subarea 7-28	41,096
CCA15b	Kittyhawk Group South	Portion of Subareas 7-27, 7-28	27,803
CCB01	Mathieson Channel	Portion of Subarea 7-9	36,538
CCB02	Moss Passage	Portion of Subarea 7-3, Subarea 7-4, a portion of Subarea 7-9	68,498
CCB03	Ivory Island	Portion of Subarea 7-9	31,584
CCB04	Berry Inlet	Subarea 7-8, a portion of Subarea 7-12	45,363
CCB05a	Seaforth Channel West	Portion of Subarea 7-12 and portion of 7-21	57,263
CCB05b	Seaforth Channel East	Portion of Subareas 7-12, 7-17, Subarea 7-22, a portion of Subarea 7-23	24,898
CCB06	St. John Harbour	Portion of Subarea 7-32	1,448

CCB07	Cape Mark (Bowling Alley)	Portion of Subarea 7-32	8,648
CCB08	Godfrey Rock	Portion of Subareas 7-1, 7-32	7,411
CCB09	Princess Alice Island	Subarea 7-20	0
CCB10	Thompson Bay	Portion of Subarea 7-21	0
CCB11	Houghton Islands	Subarea 7-19	9,385
CCB12	Joassa Channel/Raymond Passage	Portion of Subarea 7-23, Subarea 7-24	23,514
CCC01	Nalau Passage	Portion of Subarea 8-2, Subarea 8-4	67,687
CCC02	Stirling Island West	Subarea 7-26, a portion of Subarea 7-27	24,174
CCC03	Choked Passage	Portion of Subareas 8-1, 8-2	88,696
CCC04	South Hakai Passage	Portion of Subarea 8-2, Subarea 8-3,	35,756
CCC05	Fitz Hugh Sound	Subarea 8-16, Subarea 9-12	6,780
CCC06	Rivers Inlet	Portion of Subarea 9-1, Subareas 9-2, 9-3, 9-4, 9-11	18,404
CCC07	Calvert Island North	Portion of Subarea 9-1	3,470
CCC08	Calvert Island South (Grief Bay)	Portion of Subarea 9-1, Subareas 10-1, 10-2	9,938
CCC09	Smith Inlet North	Portion of Subareas 10-3, 10-4	7,704
CCC10	Smith Inlet South	Portion of Subareas 10-3, 10-4	11,553
CCD01a	Rennison Island	Portion of Subarea 6-11 , Portion of 6-10	24,493
CCD01b	West Laredo Channel (north of Baker Point)	Portion of Subarea 6-11,	31,622
CCD01c	West Laredo Channel (south of Baker Point)	Portion of Subarea 6-14	43,755
CCD02	East Laredo Channel	Portion of Subarea 6-14	26,665
CCD03	Laredo Inlet	Portion of Subareas 6-16, 6-19	123,768
CCD04	Kitasu Bay	Subarea 6-18	119,904
CCD05	Larkin Point	Portion of Subarea 6-16	18,158
CCD06	Laredo Channel	Subarea 6-15, a portion of Subarea 6-16	19,150
CCD07	East Aristazabal Island South	Portion of Subareas 6-13, 6-17	74,006
CCD08	Rudolf Bay	Portion of Subarea 6-17	3,434
CCD09a	West Higgins Passage (a)	Portion of Subareas 6-16, 6-17	7,411
CCD09b	West Higgins Passage (b)	Portion of Subareas 6-16, 6-17	30,950
CCD10	SW Price Island (Day Point)	Portion of Subareas 7-1, 7-2, 7-31	26,140
CCD11	West Price Island	Portion of Subarea 7-31	25,006
CCD12	Milbanke Sound South	Portion of Subarea 7-3	10,941
CCD13	Milbanke Sound North (East Higgins)	Portion of Subarea 7-3	38,194
PRA09a	Clifford Bay South (a)	Portion of 6-13	45,649

PRA09b	Clifford Bay South (b)	Portion of 6-13	46,418
PRA10	Arriaga Islands	Portion of 6-13	77,977
PRA11	Weeteam Bay West	Portion of Subarea 6-13	17,244
PRA12	Weeteam Bay Mid	Portion of Subarea 6-13	13,183
PRA14	Moore Islands	Portion of 106	86,067
PRD01	Freeman Pass	Subarea 5-12	51,000
PRD02	Shakes Islands	Portion of Subarea 5-10	40,000
PRG01	Conel Island	Portion of Subarea 4-1	87,210
PRG02b	Baron Island North	Portion of Subarea 4-1	62,497
<b>Subtotal (lb.)</b>			<b>2,096,100</b>
<b>Biological Samples (lb.)</b>			<b>4,000</b>
<b>Total Allocated Quota (lb.)</b>			<b>2,100,100</b>

<sup>1</sup> GMA's with '0' quota allocated may be fished under the fallback protocol (see 5.9.4.1)

- GMAs may close if Herring spawn is observed in the area. See section 4.2.

See Section 4 for Closures within these areas, Appendix 9 for complete GMA descriptions and Appendix 13 for maps.

The OGM (see Section 7) will request that fish harvesters move from a Geoduck bed or GMA when the quota has been reached on that bed or in that GMA. Details of Sea Otter raft locations and predation should be documented on the Bed Questionnaire section of the logbook and by the OGM.

## **6. HORSE CLAM MANAGEMENT MEASURES**

### **6.1. Species**

Horse Clam (*Tresus capax* and *T. nuttallii*)

### **6.2. Gear**

Hand-held, manually operated water nozzles guided and controlled from underwater by a diver. Each water nozzle shall have a maximum inside diameter of 5/8 inch (1.59 cm).

### **6.3. Fishing Season**

The harvest of horse clam is closed January 1 to December 31 by regulation and is opened concurrently with the Geoduck fishery. The open times and areas for horse clam will be the same as those for Geoduck. (See Section 4 Closures)

### **6.4. Harvest Log Information**

Divers are requested to provide comments on their harvest logs about Horse Clam populations. This information will be collated by Science and may be used to develop stock surveys and to provide advice on different harvesting opportunities.

The Department is requesting that Horse Clam landings be reported by species: *Tresus nuttallii* or *Tresus capax* by filling a separate harvest log page for each species (indicate species harvested on each page). This information will be used in combination with ongoing stock survey data to provide

direction on future fisheries. Descriptions of the two species are available upon request. Contact a resource manager.

### 6.5. Inside Waters

Horse Clam harvests will be permitted only in those areas opened for Geoduck. **Harvest in eelgrass beds is not permitted.** Harvest at depths less than 10 feet below chart datum is not permitted. Landings of Horse Clams may not exceed the following:

Area 12	1 tonne	2,205 lb.
Area 13	1 tonne	2,205 lb.
Area 14, other than 14B03 Comox Bar	1 tonne	2,205 lb.
Area 15	1 tonne	2,205 lb.
Area 16	1 tonne	2,205 lb.
Area 17	1 tonne	2,205 lb.
Area 18	1 tonne	2,205 lb.
Area 19	1 tonne	2,205 lb.
Area 29	1 tonne	2,205 lb.

The incidental harvest of Horse Clams while fishing for Geoduck is limited as described above and is to be recorded and will be tracked. Divers must ensure that any incidental harvest of Geoduck while harvesting Horse Clams is restricted to that allowed within IVQ or the quota overage allowance as described in Section 7.2.6. The survey-based commercial TAC for Inside Waters is:

Geoduck Management Area 14B03 Comox Bar	10 tonne	20,500 lb.
---	----------	------------

All Horse Clam landings must be validated, following the protocol in this IFMP. Designated landing ports are the same as for Geoduck.

### 6.6. West Coast of Vancouver Island

Horse Clam harvests will be permitted only in those areas opened for Geoduck. **Harvest in eelgrass beds is not permitted.** Harvest at depths less than 10 feet below chart datum is not permitted. Landings of Horse Clams may not exceed the following:

Area 20	1 tonne	2,205 lb.
Area 23	1 tonne	2,205 lb.
Area 24	5 tonne	11,025 lb.
Area 25	1 tonne	2,205 lb.
Area 26	1 tonne	2,205 lb.
Area 27	0.5 tonne	1,100 lb.

The incidental harvest of Horse Clam while fishing for Geoduck is limited as described above, and is to be recorded as part of the IVQ.

All Horse Clam landings must be validated, following the protocol in this IFMP. Designated landing ports are the same as for Geoduck.



## 6.7. North Coast

The Horse Clam fishery will open concurrently with the Geoduck fishery. **Harvest in eelgrass beds is not permitted.** Harvest at depths less than 10 feet below chart datum is not permitted. The Department will monitor the fishery through the OGM, and may impose in-season closures if harvests occur in eelgrass beds or if harvest levels exceed acceptable levels.

All Horse Clam landings must be validated, following the protocol in this IFMP. Designated landing ports are the same as for Geoduck.

## 7. CONTROL AND MONITORING OF COMMERCIAL FISHING ACTIVITIES

Control and monitoring of the commercial fishery is achieved largely through the Catch Validation Program (Dockside Monitoring Program, DMP). Commercial fish harvesters, through the UHA, contract with a third party to validate all landings of Geoduck at the first point of landing. The individuals who carry out this duty are called dockside validators, and are designated Observers by DFO. The validated weights are used to track harvests to ensure that IVQs and bed quotas have not been exceeded. Geoduck which arrive at fish plants must be accompanied by a tag upon which is recorded the vessel name, vessel registration number (VRN), “G” or “FG” tab number, and the date and location of harvest.

Vessels are required to notify the service provider prior to engaging in fishing, and prior to landing clams. Each vessel must also carry and fill out a “Geoduck Validation & Harvest Logbook” with details of harvest activity.

The service provider contracts vessel-based OGMs, to provide the following services: co-ordinating sampling for the Marine Biotxin Monitoring Program, communicating with dockside Observers, writing Incident Reports, advising operators of open and closed times and fishing locations, monitoring effort, co-ordinating fishing activity to avoid excessive harvesting in specific Geoduck beds, observing product transfers to packer vessels, checking dive harvest information for completeness, recording information about the characteristics of Geoduck beds as relayed by divers, and recording other observations about the prosecution of the Geoduck and Horse Clam fishery and about Sea Otter impacts. The OGMs are present during every opening in the North Coast and for the majority of WCVI area openings. Starting in 2022/23 the WCVI OGM will focus their time for the busiest six month period.

The service provider, including the OGM, and the area resource managers, will work with the lead resource manager to ensure each Geoduck bed is fished to the recommended quota, and will direct the fleet as to fishing location and quantity. It is the OGM’s responsibility to monitor effort within both Geoduck beds and management areas on a daily basis, manage fishing activity to avoid excessive harvesting in specific Geoduck areas, and to report excess harvesting to the resource managers.

**The OGM has the responsibility to request that vessels move when a bed quota has been taken. Vessels are expected to comply with the OGM’s request. The Department will close an area immediately if there are problems with compliance.**

The Department has been notified by the UHA that the service provider contracted by the UHA for the purpose of notification, catch validation, fishery monitoring and catch reporting,

biological sampling, and data submission is Archipelago Marine Research Ltd of Victoria. The service provider can be reached at (250) 383-4535.

## **7.1. Notification Procedure**

The following are responsibilities of notification for the master of a “G” or “FG” licensed vessel, as detailed in the conditions of licence of the Geoduck and Horse Clam licence. Where feasible, at least 24 hours’ notice will be given.

### **7.1.1. Notification by a Harvest Vessel**

Prior to fishing Geoduck and Horse Clam, upon cancellation of a fishing trip, after fishing, and prior to delivering, the master of the vessel must notify the service provider of the following information:

- Vessel name and VRN.
- GMA in which fishing will take, or has taken, place.
- Date and time of arrival on, or departure from, the fishing grounds.
- Date and time of landing, landing port and location at the port.

Notification may be completed through the service provider (250) 383-4535, or through the service provider’s representatives (OGM or Dockside Observer). For telephone numbers of Observers, contact the service provider.

### **7.1.2. Notification by a Packer Vessel**

If Geoduck or Horse Clam have been transhipped to a packer vessel for delivery to a landing port, then the master of the packer vessel must notify an Observer with the same details as above.

## **7.2. Catch Validation**

### **7.2.1. Validation & Harvest Logbooks**

Prior to validation of shellfish no person shall; smash the shells or slit the membranes of the shellfish to drain the water, or dump, throw overboard or otherwise discard shellfish that have been harvested and retained in accordance with the *Fisheries Act* and the regulations made thereunder.

The vessel master must be in possession of a DFO approved Validation & Harvest Logbook assigned to the vessel’s Geoduck licence. The Validation & Harvest Logbook must be on board the licensed vessel while fishing for Geoduck or while Geoduck are on board.

The Validation & Harvest Logbook and the Bed Questionnaire are combined into one form (see example of logbook in Appendix 7). The “Geoduck and Horse Clam Validation & Harvest Logbook” issued by the UHA is approved for both form and content by the Shellfish Data Unit. Logbooks are available by calling (250) 245-1037 or (250) 752-7205. Any alternatives to the Harvest Logbook must be approved by the Shellfish Data Unit prior to use.

At each landing and validation, the vessel master will provide the Observer with the completed harvest section of the Validation & Harvest Logbook.

The vessel master is responsible for providing specific fishing location information in the form of latitude and longitude of dive location in the Validation & Harvest Logbook. For the Inside Waters area only, fishing location information must also be provided on copies of maps that will be available from the Service Provider.

The Validation & Harvest Logbook assigned to each Geoduck licence on the fishing vessel shall remain aboard the vessel at all times during the harvest of Geoduck and Horse Clam.

The vessel master, on request of a fishery officer, fishery guardian, or Observer must produce the Validation & Harvest Logbook.

### **7.2.2. Standard Geoduck and Horse Clam Cages**

All Geoduck and Horse Clam shall be packed in cages with a maximum weight (while empty), of five pounds per cage. The cages and cage dividers shall be clean and fabricated from approved material. The weight of the cage and any dividers (or liners) must be deducted from validation weights.

### **7.2.3. Tagging of Geoduck and Horse Clam Cages**

All Geoduck and Horse Clam delivered to packers or to designated landing ports shall be in cages that are tagged. The tags must be waterproof on which the following information shall be written with water resistant ink (see Appendix 8):

- Vessel name and Vessel Registration Number (VRN)
- Geoduck licence number (G or FG Tab)
- Harvest date
- Geoduck Management Area (GMA), i.e. 24D01c
- Pacific Fishery Management Area and Subarea, i.e. 24-4
- Location of catch (bed code(s) where possible), i.e. 24-4-1(1)
- Common name of the product, i.e. “Geoduck Clam” or “Horse Clam”

To increase traceability of product, it is highly recommended that fish harvesters use bed code as an identifier for the harvested product. Examples of cage tags are given in Appendix 8. In addition, transcribing the Variation Order Number from the fishery notice that announces the opening onto the cage tag will provide harvesters and plant operators with additional verification that product is coming out of areas that have been opened by CFIA and DFO. **Contact the resource manager or Archipelago Marine Research for examples of how new cage tags may be printed.**

These tags are meant to accompany the product to the point of sale or consumption, both in Canada and abroad.

### **7.2.4. Landings of Geoduck and Horse Clam**

All Geoduck and Horse Clam or portions of Geoduck and Horse Clam removed from the substrate of the ocean floor must be retained and validated, upon landing, by an Observer.

At the point of off-loading, the catch must be weighed by a DFO certified Observer with a government certified scale. The net weight must be entered with a maximum deduction of five pounds per cage for cage weight. The weight of any cage dividers (or liners) must also be deducted. The Validation & Harvest Logbook must remain with the licensed vessel, with copies accompanying the product to its destination.

If the catch cannot be weighed, due to extenuating circumstances, either a coast-wide average net weight of 50 pounds per cage or a calculated vessel average cage weight, determined by a fishery manager, may be used and entered on the Validation & Harvest Logbook.

In exceptional circumstances, such as a vessel or packer sinking, the average cage weight will be assigned by the Observer or by a resource manager.

In the event that the plant weights are higher than dock weights, the greater of the two shall be used.

Prior to fishing, the vessel master must confirm the remaining vessel quota from the Validation & Harvest Logbook.

#### **7.2.5. Landing Catch Transhipped to a Packer Vessel**

When Geoduck and Horse Clam have been transhipped to a packer vessel for delivery to a landing port, the master of the packer vessel shall ensure the following requirements are met:

- All Geoduck and Horse Clam transhipped from the catcher vessel must be validated at landing by an Observer.
- All Geoduck and Horse Clam must be weighed, and this weight recorded in the Geoduck and Horse Clam Validation & Harvest Logbook at the time of transhipment.
- Prior to validation of shellfish no person shall, smash the shells or slit the membranes of the shellfish to drain the waters, or dump, throw overboard or otherwise discard shellfish that have been harvested and retained in accordance with the Fisheries Act and the regulations made thereunder.
- If the catch cannot be weighed, due to extenuating circumstances, a coast-wide average net weight of 50 pounds per cage may be used and entered on the Validation & Harvest Logbook.
- The packer vessel master shall provide the Observer with a hard copy of the Validation & Harvest Logbook prior to each validation.
- The packer vessel master shall provide to the Observer at the point of landing, access to the vessel's fish holds, freezers, and other fish storage areas at any time during the landing.

#### **7.2.6. Quota Transfer to Avoid Small Overages**

Quota overage allowances may be reviewed in-season.

Small quantities of Geoduck that exceed the licence's annual quota, to a maximum of 500 pounds, can be transferred to another Geoduck licence provided the conditions below are fulfilled. If all of these conditions are not met, Observers will not transfer the overage to another licence. **Harvest of Geoduck over the IVQ, after the transfers to avoid small overages, may be subject to prosecution and seizure of the overage.**

Transfers between licences at some time after the landing event may be performed solely at the discretion of the fishery manager and the service provider. Validation errors that may occur at the time of the overage transfer will be corrected.

##### **7.2.6.1. Conditions for Quota Transfer to Avoid Small Overages**

In the following explanation, the Geoduck licence which has exceeded its quota is called licence "A" and the licence to which quota is transferred is called licence "B."

- Transfer of quota to a second licence on the same vessel - If two or more licences designated to the same licence area are assigned to the same vessel then a quota overage from one licence may be transferred to the Geoduck licence that has quota remaining. An overage to

the last Geoduck licence quota on the same vessel may be transferred to another vessel's Geoduck licence in accordance with conditions below.

- Maximum allowable transfer of quotas between licences on different vessels - In the event of a quota overage on Geoduck licence "A," a maximum of 500 pounds of Geoduck may be transferred to another vessel's Geoduck licence (licence "B"). Both licences must have quota designated to the same area. Only one transfer of quota overage is allowed. The quota overage cannot be divided between a number of licences.
- Remaining quota on second licence - The amount transferred cannot exceed the remaining quota of Geoduck licence "B."

#### 7.2.6.2. Documentation

Both vessel masters must make their intentions to transfer or receive quota overage clear to the Observer. This is easily accomplished in situations where the vessel operators interact with the Observer at the point of landing.

In the event of a packer landing, instructions from the on-grounds monitor, a note signed by both vessel masters, or the transfer request form provided with the Validation & Harvest Logbook are required to advise the Observer that there is a mutual agreement to transfer. The master of the packer vessel should not be obligated to forward a verbal transfer request from the fishing vessel operators to the Observer as the message may be forgotten or misinterpreted.

If, on the last day of fishing, a vessel has an overage for which no transfer has been arranged, the service provider will attempt to facilitate a transfer at a later date.

#### 7.2.7. Lost, seized or destroyed product

Product lost, seized, destroyed, or wasted at sea will use the following protocol.

- The weight of product lost from the deck of the catcher vessel and/or packer vessel during transport will be applied to both the catcher vessel's individual vessel quota and the applicable area quota.
- The weight of product spoiled or wasted because of weather-related delays will also be applied to both the catcher vessel's individual vessel quota and the applicable area quota.
- The Department, in consultation with the service provider, will use the estimated packer or ground weight and appropriate water loss calculation for the harvest site to determine an estimated dock weight.

Situations requiring use of this protocol will be reviewed with the UHA and service provider.

### 7.3. Catch and Fishing Data

It is the responsibility of the vessel owner for the provision and maintenance of an accurate record, a "log" of daily harvest operations. This log must be completed and a copy submitted to the Shellfish Data Unit in both hard copy (paper) and electronic form in an approved format as defined by DFO Marine Ecosystem and Aquaculture Division. The Validation & Harvest Logbook supplied by the service provider under contract to the UHA is an approved format harvest log.

The following section describes the requirements for the harvest information section of the Validation & Harvest Logbook, (see Appendix 7 for an example of the log).

### 7.3.1. Harvest Information

The vessel master, prior to each landing and validation, must complete the harvest section (Section C) of the Validation & Harvest Logbook. The following detailed harvest information must be completed for each diver for each dive made during a fishing day:

- Dive number.
- Dive site reference.
- Area, Subarea, and bed code.
- Harvest date.
- Latitude and longitude of harvest location. More than one line in the harvest section of the Validation & Harvest Logbook may be used for this purpose.
- Diver name.
- Duration of dive.
- Minimum and maximum depth of dive.
- The number of pieces harvested for each dive
- The number of cages harvested for each dive.

A total piece count for each validation page must also be completed.

To improve the data used in the population assessment and modelling process, and to provide quotas that are more reflective of Area Committee advice, the Department is requesting the voluntary submission of information on Geoduck beds. The Validation & Harvest Logbook includes the key Bed Questionnaire questions (Section 5.9.6).

### 7.3.2. Fishing Location Information (Charts and GIS data)

#### 7.3.2.1. Inside Waters Management Area

The vessel master is responsible for reporting latitude and longitude position for each dive on the Validation & Harvest Log. In addition, the vessel master is responsible for the provision of a chart record of the locations fished. This harvest chart must be marked directly with the vessel name, the VRN, the licence number and validation ID numbers. Each harvest site must be clearly marked on the chart with a dive site reference (such as a letter designation) or dive numbers, validation ID numbers and dates that fishing activity occurred at each site. The chart provision may be provided electronically.

#### 7.3.2.2. WCVI Management Area

The vessel master is responsible for reporting latitude and longitude position for each dive on the Validation & Harvest Log.

#### 7.3.2.3. North Coast Management Area

The vessel master is responsible for reporting latitude and longitude position for each dive on the Validation & Harvest Log.

### 7.3.3. Validation & Harvest Logbooks

The original white page copy of the log, the fishing location information, and the electronic copy **must be forwarded within 28 days following the end of each month in which fishing occurred.** This information must be sent to:

Shellfish Data Unit  
Fisheries and Oceans Canada  
Pacific Biological Station  
3190 Hammond Bay Road  
Nanaimo, BC V9T 6N7  
Phone: (250) 756-7022 or (250) 756-7306

**Catch information must be recorded in the harvest log by midnight of the day of fishing.** The logbook must be at the harvest site. Logbooks must be produced for examination on demand of a fishery officer, guardian, or a fishery Observer designated under the *Fisheries Act*.

Fisheries and Oceans Canada wishes to remind commercial fish harvesters that Validation & Harvest Logbooks must be completed accurately during fishing operations and submitted to Fisheries and Oceans Canada in accordance with the timing set out in conditions of licence. Delay of completion or submission of logs is a violation of a condition of licence.

#### **7.3.4. Submission and Release of Validation & Harvest Log Data**

The vessel owner of record, as reported to the PFLU, is responsible to ensure that the vessel master has completed and submitted a copy of the harvest log data. The Department can only release harvest log data to the reported vessel owner, and only upon written request.

#### **7.3.5. Nil Report for Validation & Harvest Log**

In the event that a licence is issued but not fished, the vessel owner is responsible for submitting a Nil Report for the season. The Nil report must be submitted prior to the issuing of approval for licence renewal. One page from the Validation & Harvest Logbook identifying the vessel, licence tab number, and the year with “Nil” entered in the body of the log and signed by the vessel owner constitutes a Nil Report.

#### **7.3.6. Confidentiality of Harvest Data**

Harvest data, including fishing location data supplied through latitude and longitude co-ordinates or chart records, collected under the harvest logbooks for shellfish fisheries programs, are collected for use by DFO in the proper assessment, management, and control of the fisheries. Upon receipt by DFO of harvest log data and/or fishing location information, supplied by the fish harvesters in accordance with conditions of licence, Section 20(1) (b) of the *Access to Information Act* prevents DFO from disclosing to a third party, records containing financial, commercial, scientific or technical information that is confidential information. Further, Section 20(1) (c) of *the Act* prevents DFO from giving out information, the disclosure of which could reasonably be expected to result in material financial loss or could reasonably be expected to prejudice the competitive position of the licence eligibility holder.

#### **7.3.7. Fish Slip Requirements**

An accurate written report shall be furnished on a fish slip of all fish and shellfish caught and retained under the authority of this licence. A report shall be made even if the fish or shellfish are used for bait, personal consumption or disposed of otherwise. The report shall be mailed not later than seven days after the offloading and sent to:

Fisheries and Oceans Canada

Fisheries and Aquaculture Management Branch, FM Data Unit  
Suite 200-401 Burrard Street  
Vancouver B.C. V6C 3S4  
Phone (604) 666-2716 for more information.

## **8. GENERAL INFORMATION**

### **8.1. Sales of Geoduck and Horse Clam**

Geoduck and Horse Clams harvested under this licence shall be sold only to persons holding a Fish Receiver Licence issued pursuant to the *Fish and Seafood Licensing Regulation* (British Columbia). All Geoduck and Horse Clam harvested for the purpose of sale shall be processed through a federally registered plant.