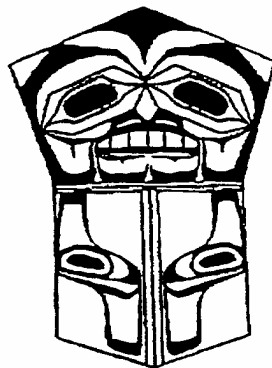


**PACIFIC REGION**

**HEILTSUK TRIBAL  
COUNCIL / FISHERIES  
AND OCEANS CANADA**

**INTERTIDAL CLAM  
JOINT  
MANAGEMENT PLAN**

**NOVEMBER 14, 2010 TO  
MARCH 31, 2011**



*This Joint Intertidal Clam Management Plan is intended for general purposes only. Where there is a discrepancy between the Plan and the regulations, the regulations are the final authority. A description of Areas and Subareas referenced in this Plan can be found in the Pacific Fishery Management Area Regulations*



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## 1. CONTACTS

Observe, Record and Report (Enforcement Line) (800) 465-4336  
Fisheries Information and Shellfish Contamination Closure Update (24 Hours) (866) 431-3474  
or (for Greater Vancouver) (604) 666-2828  
Invertebrate Internet Page [http://www.pac.dfo-mpo.gc.ca/ops/fm/shellfish/default\\_e.htm](http://www.pac.dfo-mpo.gc.ca/ops/fm/shellfish/default_e.htm)

### **Fisheries and Oceans Canada**

#### Fisheries Management

A/Regional Shellfish Coordinator Todd Johansson (604) 666-7998

North Coast Shellfish Management Biologist Sandra Davies (250) 627-3007  
Fisheries and Oceans Fax: (250) 627-3427  
417-2<sup>nd</sup> Avenue West  
Prince Rupert, BC V8J 1G8 (250) 6

Resource Manager - Central Coast Kristen Smith (250) 799-5620

#### Science Branch

Pacific Biological Station Graham Gillespie (250) 756-7215  
Hammond Bay Road  
Nanaimo, BC V9T 6N7

#### Conservation and Protection

Bella Bella Field Office Heather Bettger (250) 957-2523  
PO Box 38 Fax: (250) 957-2767  
Bella Bella, BC V0T 1Z0

Bella Coola Field Office (250) 799-5345  
PO Box 130  
Bella Coola, BC V0T 1C0

### **Heiltsuk Tribal Council**

Heiltsuk Fisheries Program Mike Reid (250) 957-2303  
PO Box 880 Fax: (250) 957-2858  
Waglisla, BC V0T 1Z0

### **Canadian Food Inspection Agency**

Fish Inspection Directorate  
Inspection Specialist Andre Youssef (604) 666-3737  
Molluscan Shellfish Program Specialist Hanna Boehmer (604) 666-3598  
# 400-4321 Still Creek Dr. Fax: (604) 666-1963  
Burnaby, BC V5C 6S7

## **Environment Canada**

Growing Water Quality Classification and Surveys      Albert Leung      (604) 903-4425  
Fax: (604) 903-4423

## **BC Ministry of Environment**

Oceans and Marine Fisheries Branch      Dennis Chalmers      (250) 387-0389

## **2. GOALS AND OBJECTIVES**

- 2.1. To ensure conservation and protection of invertebrate stocks and their habitat through the application of scientific management principles applied in a risk averse and precautionary manner based on the best scientific advice available.
- 2.2. To meet the federal Crown's obligations regarding First Nations fisheries for food, social and ceremonial purposes.
- 2.3. To develop sustainable fisheries through partnership and co-management arrangements with client groups and stakeholders to share in decision making, responsibilities, costs, and benefits.
- 2.4. To develop fishing plans and co-operative research programs which will contribute to improving the knowledge base and understanding of the resource.
- 2.5. To consider the goals of stakeholders with respect to social, cultural and economic value of the fishery.
- 2.6. To consider health and safety in the development and implementation of Integrated Fisheries Management Plans, fishery openings and closures.

## **3. HISTORY OF THE FISHERY**

Commercial clam fishing began in BC before 1900. Initially, the intertidal clam fishery focused largely on butter clams which were harvested for canning at various processing facilities along the coast. A major portion of this fishery occurred in the North Coast areas where butter clams were abundant.

In response to changing market demands, steamer clams (predominately manila clams) have largely replaced butter clams in the fishery as they are more acceptable on the market as fresh product. Further, manila and littleneck clams retain paralytic shellfish toxins (PSP) for a much shorter period than butter clams, adding to their appeal as a fresh product. From 1963, the North and Central Coast butter clam fisheries declined and most manila and littleneck clam harvests occurred in the south. With this decline, biotoxin monitoring and water quality assessment programs were discontinued in the North and Central Coasts, resulting in a closure of the fishery in all areas which continues to the present date. The closure is to ensure public health and safety in the absence of monitoring programs as chronic high levels of PSP occur in clams in many North Coast locations. The exceptions to the closure are areas along the North Coast of Graham Island where a small fishery for razor clams occurs, and select areas where biotoxin monitoring and water

quality assessments have been re-established, such as the areas where the Heiltsuk clam fishery occurs.

Manila clams, which now comprise the majority of clam landings in the BC fishery, were unintentionally introduced into BC with imported Japanese oyster seed in the early 1930s. Their distribution spread rapidly in the Strait of Georgia and along the West Coast of Vancouver Island and found quick acceptance in commercial and recreational fisheries. Manila clam distribution is limited to areas of suitable habitat and temperature regimes. In the Central Coast limited stocks occur in select areas such as where the Heiltsuk fishery occurs. This area is near the northern limit of distribution of manila clams along the BC coast.

The Heiltsuk Tribal Council first requested that a manila clam fishery be considered in their territorial area in 1988. For Fisheries and Oceans Canada (DFO) to consider this, a proposal for biotoxin monitoring and to water quality assessments to classify growing water areas was developed by the Heiltsuk Tribal Council. In 1993, an agreement was reached with the Heiltsuk Tribal Council that established a three-year pilot fishery under a joint management plan. The clam agreement was a sub-agreement to the Heiltsuk's main DFO Agreement under the Aboriginal Fisheries Strategy. The clam agreement laid out the licensing, harvest allocation, size and quota restrictions, area restrictions, enforcement, and monitoring protocols and catch validation requirements for the fishery. The agreement limited the number of participants to 75 with 50 designated for Manila harvesting only and 25 for littleneck harvesting.

Unlike the clam fishery in South Coast areas, which is managed by time and area closures and minimum size limits, the management approach for the Heiltsuk clam fishery is to set an annual total allowable catch (TAC) and a minimum size limit. The initial TAC was based on surveys undertaken in these areas in 1990 and 1992 (Bourne and Cawdell, 1992, Bourne et al. 1994) and was set to ensure sustainable harvests due to concerns regarding recruitment and distribution of Manila clams in North Coast areas.

In order to manage the fishery under a TAC, a dockside validation program for the Heiltsuk clam fishery was started in the 2000/2001 fishery and will continue this season. This program requires that all clams harvested must be weighed and validated by a DFO certified observer with a certified scale.

Landings from the Heiltsuk clam fishery have been reported for each year since 1993. Annual landings have varied from a low of 25.4 tonnes in 1997/98 to a high of 114.1 tonnes in 1994/95 and annual landed values have varied between \$111,000 (1997/98) and \$385,000 (2001/2002).

#### **4. STOCK STATUS**

In 1993 the annual TAC for manila, littleneck, and butter clams was set at 113 tonnes (250,000 lbs.) for each species. Butter clams are of significant importance to the Heiltsuk First Nation for food, but there was limited market appeal for this species. As such, butter clams were removed from the commercial fishing plan in 1999. Littleneck clams, for which there was little interest in harvesting, were also removed from the commercial fishing plan in 1999. Based on assessment work and a review of the fishery through Pacific Science Advice Research Committee (PSARC)

(Gillespie et al. 1999), the TAC for 1999 and 2000 was set at 68 tonnes (150,000 lbs.) for Manila clams only.

A working paper, which reviewed the Area 7 manila clam fishery was presented and accepted during the June 2001 PSARC Shellfish Sub-committee meeting (Gillespie et al. 2001). The working paper recommended that index beaches be established in all areas in which harvesting takes place and that harvest threshold levels, based on biomass estimates from the index beaches, be set for each Subarea to minimise the risk of local stock depletions. Based on the recommendations of the working paper, Subarea thresholds are now based on estimated changes in biomass on index beaches. Survey results from July 2010 showed that a TAC of 62,555 kg (137,933 lbs) is available for the 2010/2011 fishery. Thresholds are set for Subareas: 7-9, 7-12, 7-15, 7-17, 7-21, 7-22, 7-23, and 7-24. Subareas that lack data to set thresholds have been assigned a conservative threshold of 1,000 kg (2,205 lbs) to allow for some harvest and identify and find beaches to be used as index beaches in future years.

Native littleneck clams were added to the commercial fishing plan in the 2002/2003 season and again this season as a result of renewed interest by the harvesters. Specific littleneck licences will be designated this season in an attempt to harvest the littleneck TAC. These licences will be for the harvesting of littleneck clams only and will be issued only if there is interest expressed. A TAC of 11,338 kg (25,000 lbs) has been set for littlenecks with a harvest threshold set for Subarea 8-4; the remainder of the TAC will be divided among the other open areas. It is hoped that the diggers will be able to find and identify beaches this season that will be added to the annual survey to better determine Littleneck distribution and abundance.

A stock assessment program has been developed jointly by the Heiltsuk Fisheries Program and DFO Stock Assessment Division. The program requires assessment surveys of index beaches in the main Subareas fished. Survey protocols and reporting requirements are outlined in “A Manual for Intertidal Clam Surveys” (Gillespie and Kronlund 1999). The purpose of these surveys is to monitor stock abundance and population characteristics, primarily age structure, growth and recruitment. Survey analyses and reports will be completed by the Heiltsuk Fisheries Program, and submitted to DFO Stock Assessment for review and consideration in the development of the next season’s management plan.

## **5. MANAGEMENT ISSUES**

As a result of some diggers harvesting clams from closed areas during the 2001/2002 fishery and contaminated product being found by Canadian Food Inspection Agency (CFIA) inspectors, the Heiltsuk Fisheries Program made recommended changes for 2002/2003 to more effectively monitor and enforce the fishery. These changes were endorsed by DFO Resource Management and will continue to be included in this year’s fishery. Most of the changes were to the Heiltsuk internal clam policy that the diggers must adhere to or risk licence suspension/termination by the Heiltsuk Band. The opening of no more than two Subareas at a time to harvesting will continue for this season; the goal of this is to increase the efficiency of enforcement personnel (DFO and Heiltsuk) and improve catch information. The opening of Subareas is to be decided jointly by the North Coast Shellfish Manager and the Heiltsuk Fisheries Program Manager or alternate.

Portions of two Subareas were added to the areas open to harvesting in 2003/2004; these include 8-4, above (north of) the Koeye River and 7-9, below (South of) Moss Pass. These areas were included in the fishery after discussions with the Kitasoo/XaiXais and Wui'kinuxv First Nations. Both of these areas have been surveyed during the annual survey since 2003. These areas will open again this year.

At the request of the diggers and co-management office Subarea 7-14 was added to the clam survey in 2005. This Subarea includes several good clam beaches that had not been utilized in the fishery but are immediately adjacent to two open Subareas. Environment Canada classified the area "open" during the 2007/2008 season. Clams were harvested for the first time in March 2008. This area will now be part of the regular fishery with thresholds being set on survey results and harvest levels.

## **6. ENFORCEMENT PLAN**

DFO has the responsibility to enforce the *Fisheries Act* and associated regulations, to address conservation, health and safety issues and to maintain proper management and control of the various fisheries.

Users of the resource have a responsibility to report violations. Any suspected or actual fisheries, wildlife or pollution violations can be quickly and discretely reported to the appropriate Enforcement Officer by using the toll free Observe, Record and Report hotline. This toll free number is available 24 hours a day. Confidentiality is assured.

### ***OBSERVE, RECORD AND REPORT - 1-800-465-4DFO (1-800-465-4336)***

Enforcement enquiries can also be directed to the local field offices during regular office hours.

The Fisheries Agreement signed by DFO and the Heiltsuk Tribal Council has in place an enforcement protocol. The Heiltsuk provide First Nations guardians to ensure that the clam fishery is carried out according to the joint management plan. The guardians monitor the harvesting of manila clams by the participants both at the harvest locations as well as dockside.

Enforcement of the fishery is also carried out by the Fishery Officers stationed in Bella Bella. DFO Officers conduct independent and joint patrols with the Heiltsuk guardians on the grounds and at offloads.

The main enforcement concerns in this fishery are: pre-digging and stockpiling before the fishery, harvesting in closed areas, and harvesting in contaminated areas.

## **7. COMMERCIAL HARVEST PLAN**

### **7.1. Management Changes for 2010 – 2011**

- 7.1.1. The management plan encompasses the period of November 14, 2010 to March 31, 2011 (see section 7.2). Anticipated opening is November 15, 2010.
- 7.1.2. The TAC for manila clams has increased slightly from 2009-10 and areas without data have been assigned a threshold of 1,000 kg. The littleneck TAC remains the same. Subarea thresholds have been adjusted (see section 7.5.3).
- 7.1.3. Harvesters are to meet enhanced CSSP (Canadian Shellfish Sanitation Program) requirements regarding human waste containment on board shellfish harvesting vessels as put in place by CFIA. For more information see [www.inspection.gc.ca/english/fssa/fispoi/commun/20080215e.shtml](http://www.inspection.gc.ca/english/fssa/fispoi/commun/20080215e.shtml).

### **7.2. Open Times**

This management plan covers the period from November 14, 2010 to March 31, 2011, for the commercial harvest of manila and littleneck clams. The opening shall commence at 00:01 hours on a date agreed upon by DFO and the Heiltsuk Tribal Council in the areas set out in this management plan. Proposed openings may vary subject to contamination, conservation, or other reasons in accordance with applicable fisheries regulations. Fishers are reminded to check with the Heiltsuk Fisheries Program and/or the local DFO office to confirm opening times.

### **7.3. Open Areas**

Only those portions of fisheries management Areas 7 and 8 listed in Section 7.5.2 will be open to commercial clam harvesting pending acceptable PSP levels and only to authorised harvesters.

No more than two Subareas will be open to harvesting at one time. The opening of Subareas will be decided jointly by the North Coast Shellfish Manager and the Heiltsuk Fisheries Program Manager or alternate.

### **7.4. Closures**

Intertidal clam fisheries are limited by programs for monitoring PSP, sanitary growing water surveys, and DFO capability to enforce closures. These requirements are defined under the Canadian Sanitary Shellfish Program (CSSP) which has been put in place to ensure public health and safety.

#### **7.4.1. Paralytic Shellfish Poison (PSP) or Domoic Acid (ASP)**

Due to a risk of PSP, the entire North Coast, Statistical Areas 1 to 10 inclusive, is closed for the harvest of intertidal clams except for razor clams in Subarea 1-5, and Manila and Littleneck clams in limited Subareas of Pacific Fishery Management Area 7. The North Coast closure is due to the high risk of shellfish biotoxins (PSP and ASP), and the absence of biotoxin monitoring in North Coast areas to ensure public health and safety.

**Harvesters must “check before they harvest” to ensure that an area is not closed for PSP (red tide).**

**For information on the location of current marine biotoxin closures either:**

- **call the toll free number 1-866-431-3474**
- **check the Shellfish Contamination Closures page on the Department website at:**  
[www.pac.dfo-mpo.gc.ca/ops/fm/shellfish/biotoxins/closures/default\\_e.htm](http://www.pac.dfo-mpo.gc.ca/ops/fm/shellfish/biotoxins/closures/default_e.htm)
- **check with the nearest DFO office**

#### 7.4.2. Sewage Contaminated Closures

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, finfish net pen, and, subject to subsection (c), any floating living accommodation facility; and
- c) 25 m 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.

Other permanent and seasonal contamination closures are listed below. Fishers need to be aware that contaminated area closures may be amended in season. For information on the location of current sanitary shellfish closures please check with the nearest DFO office or refer to the Shellfish Contamination Closures page on the DFO Internet site at:

[www.pac.dfo-mpo.gc.ca/ops/fm/shellfish/biotoxins/closures/default\\_e.htm](http://www.pac.dfo-mpo.gc.ca/ops/fm/shellfish/biotoxins/closures/default_e.htm)

7.4.2.1. Closure 7.2: Subarea 7-17 Bella Bella: The waters and foreshore of Bella Bella, lying south of a line drawn from the western headland of Cavin Cove to the northern tip of Spirit Island thence to Robins Point, and north of a line drawn from the northern headland of McLoughlin Bay due east to the shore of Denny Island.

7.4.2.2. Closure 7.6: Subarea 7-13 Spiller Channel: The waters and foreshore of Spiller Channel, at the southeast end of Don Peninsula, lying inside a line drawn from a point on land at 52°17.50' north latitude and 128°15.60' west longitude, thence north-easterly to a point on the opposite shore at 52°17.60' north latitude and 128°15.49' west longitude.

7.4.2.3. Closure 7.8: Subarea 7-25 Cultus Sound: The waters and foreshore of Cultus Sound, at the west end of Hunter Island, lying inside a line drawn from a

point on land at 51°53.84' north latitude and 128°12.50' west longitude, thence north-westerly to the north end of the unnamed island at 51°53.89' north latitude and 128°12.60' west longitude, thence westerly to a point on the opposite shore at 51°53.89' north latitude and 128°12.90' west longitude.

7.4.2.4. Closure 7.9: Subarea 7-27 Spider Island (Queen's Sound): The waters and foreshore of the unnamed bay at the south end of Spider Island, on the east side of Queens Sound, lying inside a line drawn from a point on land at 51°50.20' north latitude and 128°15.10' west longitude, thence north-westerly to a point on the opposite shore at 51°50.35' north latitude and 128°15.20' west longitude.

7.4.2.5. Closure 7.12: Subarea 7-15 Return Channel: The waters and foreshore of Return Channel lying inside a line drawn from the headland west of McArthur Point, Yeo Island at 52°18.00' north latitude and 128°06.95' west longitude, thence south-west to the south end of the foreshore at 52°17.80' north latitude and 128°07.10' west longitude.

7.4.2.6. Closure 7.13: Subarea 7-13 Yeo Cove (Yeo Island): The waters and foreshore of Yeo Cove lying inside a line drawn from Dove Point on the northern headland of the Cove thence south to the westernmost point of land on the southern headland.

7.4.2.7. Closure 7.15: Subarea 7-15 Southeast Chatfield Island (Troop Passage): The waters and foreshore at the head of the small unnamed cove on the southeastern side of Chatfield Island, inside a line drawn from the rock outcrop at 52°13.87' north latitude and 128°05.90' west longitude, thence east to the headland on the eastern side of the cove entrance at 52°13.95' north latitude and 128°05.74' west longitude.

7.4.2.8. Closure 7.16: Subarea 7-25 Goose Group: The waters and foreshore lying inside a line drawn from the south-western most point of Goose Island to the northern most tip of Duck Island, thence along the eastern foreshore to the southernmost point of the Island, thence south-easterly to the westernmost point on Gosling Island and continuing north along the western foreshore to the northernmost tip of Gosling Island, thence north-westerly to the 51°55.98' north latitude and 128°26.72' west longitude on Goose Island.

7.4.2.9. Closure 7.4: Subarea 7-09 Berry Inlet: The waters and intertidal foreshore of Berry Inlet, at the south end of Don Peninsula, lying inside a line drawn from the headland on the western shore at the entrance to the inlet at 52° 16.15' north latitude and 128° 19.50' west longitude, thence to the northernmost point of the unnamed island immediately north of Evening Island, to a point on the eastern shore at 52° 16.15' north latitude and 128° 19.10' west longitude.

7.4.2.10. Closure 8.1: Subarea 8-4 Codville Lagoon: The waters and intertidal foreshore north of a line drawn from the western shore in Codville Lagoon at 52° 03.86' north latitude and 127°52.05' west longitude, thence true east to the northernmost point of Codville Island, thence true east to 52° 03.86' north latitude and 127° 50.88' west longitude

7.4.2.11. Closure 7.19: Subarea 7-17 The waters and intertidal foreshore of the unnamed lagoon in Gunboat Passage at the southend of Cunningham Island, lying inside a line drawn from 52° 10.49' north latitude and 127° 58.90' west longitude, east to a point at 52° 10.47' north latitude and 127° 58.79' west longitude.

7.4.2.12. Closure 7.22: Subarea 7-17 Fancy Cove: The waters and intertidal foreshore of the middle arm of Fancy Cove, on the north eastern end of Hunter Island, lying inside a line drawn from 52° 3.66' north latitude and 128° 0.84' west longitude, east to a point at 52° 3.71' north latitude and 128° 0.67' west longitude.

7.4.2.13. Closure 7.27: Subarea 7-9 Morris Bay: The waters and intertidal foreshore of an unnamed Bay at the east end of Suzette Bay, on the west end of Dowager Island, lying inside a line drawn from 52° 24.73' north latitude and 128° 25.66' west longitude, north east to a point at 52° 25.06' north latitude and 128° 25.12' west longitude.

7.4.2.14. Closure 7A: Subarea 7-32 Dyer Cove (St. John Harbour): The waters and foreshore of Dyer Cove, in St. John Harbour, bounded between a line drawn from the first outcrop at 52°11.08' north latitude and 128°28.30' west longitude to 52°11.19' north latitude and 128°27.85' west longitude and a line drawn at the narrow entrance to the inner harbour. May 31 to September 30.

7.4.2.15. Closure 7.B: Subarea 7-15 Wigham Cove (Yeo Island): The waters and foreshore of Wigham Cove, Yeo Island, inside a line drawn from the headland at the eastern end of the cove entrance at 52°16.64' north latitude and 128°10.40' west longitude, thence west to the opposite shore at 52°16.64' north latitude and 128°10.51' west longitude. May 31 to September 30.

#### 7.4.3. Biotoxin/Water Quality Monitoring

7.4.3.1. Biotoxin Monitoring: Harvest areas may be closed due to increased levels of PSP or to a reduced PSP and ASP sampling program. The Fish Inspection Directorate of the CFIA has established a partnering program with the Heiltsuk Tribal Council and DFO's Aboriginal Fisheries Strategy (AFS) program, to conduct biotoxin monitoring in the Central Coast. The Heiltsuk Fisheries Program collects and submits mussel samples to CFIA on a regular basis from which area specific PSP levels are determined. The sampling frequency is set through this partnering program and funding is provided through the AFS program.

7.4.3.2. Water Quality Assessment: Environment Canada conducts water quality surveys to assess the sanitary conditions in shellfish growing waters. These surveys are a requirement under the Canadian Shellfish Sanitation Program to establish and/or maintain approved growing area classification. To maintain this program, or to expand the program into new areas, Environment Canada may seek cost sharing arrangements with stakeholders. In the Central Coast, Environment Canada in collaboration with the Heiltsuk obtains and collects water samples and utilizes Environment Canada certified laboratories for this survey. Based on Environment Canada's requirements, the Heiltsuk Fisheries Program has collected additional water samples over the past three years to maintain the

number of beaches they harvest (i.e. re-evaluate closed productive areas), and to potentially expand the fishery to other beaches. A limited amount of funding is provided through DFO's AFS program within DFO.

## 7.5. Management Measures for the Commercial Fishery

### 7.5.1. Size Limit

No person shall harvest Manila clams or littleneck clams that measure less than **38 mm** in a straight line through the greatest breadth of the shell. All harvesters must have some form of an accurate measuring device to ensure that all clams harvested are not less than 38 mm.

### 7.5.2. Area Quotas

The TAC for Manila clams is set at 137,933 pounds (62,555 kgs.) with the following harvest threshold levels by Subarea.

<b>Subarea</b>	<b>2010/2011 Threshold (pounds)</b>
7-09 portion of south of Moss Pass	10,293
7-12	15,880
7-13	2,205
7-14	2,205
7-15	13,415
7-17	19,298
7-18	2,205
7-19	2,205
7-20	2,205
7-21	47,915
7-22 and 7-23	4,705
7-24	8,787
7-25	2,205
7-27	2,205
7-28	2,205
7-32	2,205
8-04 portion north of the Koeye River	0

The Littleneck clams TAC is set at 25,000 pounds (11,338 kgs.) with the following harvest thresholds by Subarea.

<b>Subarea</b>	<b>2009/2010 Threshold (pounds)</b>
7-09 portion of south of Moss Pass only	N/A
7-12	N/A

7-13	N/A
7-14	N/A
7-15	N/A
7-17	N/A
7-21	N/A
7-22 and 7-23	N/A
7-24	N/A
7-25	N/A
8-04	5,000
portion north of the Koeye River only	

Subareas will close for all harvesting (including littlenecks), when the threshold level for Manila clams has been reached, unless there is no Manila threshold, in which case, the Subarea will close when the littleneck threshold has been attained. The fishery will close when the TAC for Manila clams is attained.

## 7.6. Licensing

### 7.6.1. Species

Manila clams and native littleneck clams.

### 7.6.2. Gear

Hand picking or hand digging.

### 7.6.3. Licence Issue

The fishery is conducted in accordance with the Department's Policy for the Management of First Nations Fishing and is authorized under a licence issued under the *Aboriginal Communal Fishing Licences Regulations*. This licence ("**First Nations Communal Fishing Licence for the Heiltsuk Tribal Council for Clam Harvesting, CC-CL08-042-Heiltsuk**"), is issued to the Heiltsuk Tribal Council and, subject to the *Fisheries Act* and regulations there under, confers the authority to fish under the conditions as outlined in this licence. The Heiltsuk Tribal Council will designate up to a maximum of 60 people who are authorized to harvest clams under the authority of this licence.

All persons commercially harvesting intertidal clams are required to have proof of designation from the Heiltsuk Tribal Council and photo identification. The licensee (the Heiltsuk Tribal Council) will supply a list of participants to the Fishery Officer in Bella Bella (fax: 250-927-2767), and to the Fishery Manager in Port Hardy (fax: 250-949-6755), 24 hours prior to fishing. Any changes to the participants will be submitted to the fishery officer and the fishery manager 24 hours in advance of the change being in effect.

Proof of designation and photo ID must be carried at all times by the participants named in the communal licence when harvesting clams, and must be produced upon demand by a Fishery Officer or Heiltsuk guardian.

## 7.7. Control and Monitoring of Commercial Fishing Activities

DFO in conjunction with the Heiltsuk Fisheries Program will monitor the fishery throughout the season. The Heiltsuk Fisheries Program will monitor the quota and provide a weekly summary as to remaining quota to the Fishery Manager in Prince Rupert.

### 7.7.1. Dockside Validation

As per the Aboriginal Communal Licence Regulations, Section 5(1) (e) and the Fishery (General) Regulations, Section 22(n), all clams harvested must be weighed and validated by a DFO certified observer with a government certified scale and the weight entered onto the validation sheet. The validation sheet is to be sent to DFO at completion of the offloading by the observer. A copy of the validation sheet is to be retained by the Heiltsuk Fisheries Program, and a copy **must accompany the shipped product**. Completed sheets are to be faxed and mailed to the DFO Fishery Manager at the following address:

Sandra Davies  
Resource Management Biologist  
417-2<sup>nd</sup> Avenue West.  
Prince Rupert, BC V8J 1G8  
Tel: (250) 627-3007  
Fax: (250) 627-3427

The list of participants will be faxed to the service bureau responsible for validation prior to the offloading occurring. The Heiltsuk Fisheries Program will be responsible for ensuring that the service bureau and the validator are DFO certified.

### 7.7.2. Catch Reporting

The Heiltsuk Fisheries Program must submit daily records of catch and effort by beach to DFO (similar to the example in appendix 1). Records are to be sent to the following people weekly during the fishery:

Graham Gillespie  
Stock Assessment Division  
Pacific Biological Station  
Nanaimo, BC V9T 6N7  
Tel: (250) 756-7215  
Fax: (250) 756-7138

Sandra Davies  
Resource Management Biologist  
417-2<sup>nd</sup> Avenue West  
Prince Rupert, BC V8J 1G8  
Tel: (250) 627-3007  
Fax: (250) 627-3427

**Confidentiality of harvest data, including fishing location data supplied through latitude/longitude co-ordinates or chart records.**

Upon receipt by DFO of harvest log data and/or fishing location information, supplied by the fisher in accordance with Conditions of Licence, section 20(1)(b) of *the Access to Information Act*, prevents the department from disclosing to a third party records containing financial, commercial, scientific or technical confidential information. Further, section 20(1)(c) of the Act prevents the department 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 fisher.

7.7.3. Fish Slip Requirements

It is a condition of this plan that an accurate written report shall be furnished on a fish slip of all shellfish caught under the authority of this licence. A report must be made even if the shellfish landed are used for bait, personal consumption, or otherwise disposed. The communal licence number and participant's name must be recorded on all fish slips.

The written report shall be posted not later than seven days after the offloading and sent to:

Fisheries and Oceans Canada  
Catch Statistics Unit  
200 - 401 Burrard Street  
Vancouver, B.C., V6C 3S4  
Tel: (604) 666-3784

7.7.4. Tagging of Clam Product Containers or Sacks

All sacks or containers of clams must have attached to the sack or container, a visible tag, which identifies:

- a) the name of the clam digger;
- b) the clam harvesting licence number;
- c) the beach location, statistical Area and Subarea;
- d) the date of harvest; and
- e) the type or species harvested (i.e. Manila clams or littleneck clams).

This tag must be attached to the sack or container at the time of harvest and prior to the sack or container leaving the harvest site, or beach, from which the clams have been harvested.

**It is unacceptable to report a generalised location of harvest on the tag, such as Central Coast, Seaforth Channel, Lama Pass, etc. The location of harvest as indicated on the tag must be specific (i.e. Beach 3, Rainbow Island, Subarea 7-17).**

## 7.8. Fisher Responsibility

### 7.8.1. Sewage, Garbage and Debris Control

Most harvesters keep beaches clean and free from garbage and other pollution. DFO asks that the participants take care and remove all garbage from the harvest site. Violators are subject to prosecution under the *Provincial Litter Act*. Harvesters are encouraged to maintain garbage cans on vessels and to refrain from anchoring vessels for lengthy periods near clam beds in order to prevent sewage contamination of shellfish on these beaches. Clam diggers are also requested to refrain from using the beaches for personal waste, again due to contamination problems.

### 7.8.2. Harvest Operations

Harvesters should refrain from harvesting clams on beaches where high numbers of undersized clams are found. The minimum size limit has been set so that clams will spawn once or twice before reaching legal size. Harvesters are requested to rebury all undersized clams. Harvesters are also required to avoid leaving holes in the beach from digging activities.

### 7.8.3. Sales of Commercially Harvested Clams

Under the *BC Fish Inspection Act*, Section 12 (1.1), “No person shall sell or attempt to sell any harvested bivalve molluscs unless the molluscs were, before sale or attempted sale, processed in an establishment that at the time of processing held a valid certificate of registration issued by the CFIA”.

Clam harvesters may sell their clams only to a duly licensed fish buyer.

Harvesters must ensure their product is verified in order to meet food inspection requirements. Processors can advise on specific verification procedures.

### 7.8.4. Regulatory Compliance

Clam harvesters are reminded that as a Condition of Licence they must comply with the following:

- a) Harvest only in open areas. Check with the DFO Fishery Manager, the local DFO office or with the Heiltsuk Fisheries Program to confirm area openings. Check with a federally registered shellfish processing plant prior to harvesting in order to ensure verification procedures are in place. Processors are required to have a verification program in place in order to comply with Canadian Food Inspection regulations.
- b) All harvested clams must be processed by a federally registered processing plant.
- c) It is illegal to harvest clams in areas that are closed for reasons of contamination (i.e. sewage), toxicity (i.e. PSP) or conservation.

#### 7.8.5. Heiltsuk Tribal Council Commercial Clam Policy

Clam harvesters are reminded to consult the Heiltsuk Tribal Council Commercial Clam Policy for regulations and guidelines administered and implemented by the Heiltsuk Fisheries Program.

### 7.9. Product Handling and Transportation

To ensure product quality, care must be exercised to protect the bivalves from contamination and exposure to sun, weather, dust and other abuses. Clam harvesters are advised of the following:

- a) Do not litter at or near the harvest site.
- b) Do not bring pets to the harvest site. Defecation at a harvest site may render the beach contaminated.
- c) During summer months, harvested product must be kept cool in order to avoid or reduce contamination by the *Vibrio parahaemolyticus* bacteria.
- d) During transportation, store clams in a sanitary isolated area with drainage that is away from fuel and oil containers and bilge water.
- e) Do not rinse the shell stock at a dockside or any area other than at the harvest site.
- f) Do not sort the harvested product (i.e. separate clam by species), at any other location other than the harvest site or at a federally registered shellfish plant.
- g) It is permissible to rinse the shell stock at the harvest site only at the time of harvest. This is a recognized part of the harvesting practice to remove excess mud, sand etc.
- h) All processing must be carried out at a federally registered shellfish processing plant.
- i) Human wastes, sewage or refuse shall not be discharged from harvest vessels while in or adjacent to shellfish harvesting 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.

-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 harvest area or any harvested shellfish on board by spillage or leakage.

-The contents of toilets or other designated human waste receptacles shall be emptied only into an approved sewage disposal system, and portable toilets or other designated human waste receptacles shall be cleaned before being returned to the vessel. (Facilities used for cleaning food-processing equipment shall never be used for cleaning portable toilets or designated human waste receptacles.)

-All persons must clean their hands after using or cleaning the receptacles described above.

## 7.10. Wet Storage

### 7.10.1. Ministry of Agriculture and Lands

Improper storage of shellfish after harvest can expose shellfish to contamination. At present, wet storage of shellfish can only occur on tenures approved for this purpose by the Provincial Ministry of Agriculture and Lands (MAL) and CFIA.

Industry is advised that policy changes with respect to wet storage are being contemplated. For further information on wet storage procedures, please contact MAL at 2500 Cliffe Avenue, Courtenay, B.C. V9N 5M6. Phone: (250) 897-7540

### 7.10.2. Canadian Sanitary Shellfish Program and Canadian Food Inspection Agency

Wet storage of shellfish has been approved for this year by CFIA under the standards set out under the Canadian Shellfish Sanitary Program. The site is located on the west side of Ardmillan Bay, at the following latitudes and longitudes, 52°11.639' north latitude and 128° 07.758' west longitude; 52°11.316' north latitude and 128°07.609' west longitude; 52°11.643' north latitude and 128°07.464' west longitude; and 52°07.316' north latitude and 128°07.472' west longitude (Appendix 2). **This is the only site that has been approved for wet storage of product.** Please note that while the site has been approved by CFIA and growing water survey by Environment Canada has been done, the site maybe closed if unacceptable levels of contamination occur. Contact the Heiltsuk Fisheries Program for more information and regulation of the site.

## 8. JOINT TECHNICAL COMMITTEE

The Joint Technical Committee is comprised of DFO representatives and Heiltsuk Tribal Council representatives as set out in the Heiltsuk AFS Agreement.

## 9. REFERENCES

Bourne, N. and G. Cawdell. 1992. Intertidal clam survey of the north coast area of British Columbia – 1990. Can. Tech. Rep. Fish. Aquatic Sci. 1864: 151p.

Bourne, N.F., G.D. Heritage, and G. Cawdell. 1994. Intertidal clam surveys of British Columbia - 1991. Can. Tech. Rep. Fish. Aquat. Sci. 1972: 155p.

Gillespie, G.E. and A.R. Kronlund. 1999. A manual for intertidal clam surveys. Can. Manuscr. Rep. Fish. Aquat. Sci. 2270. 144p.

Gillespie, G.E., T.C. Norgard and F.E. Scurrah. 1999. Review of the Area 7 Manila Clam Fishery. Can. Stock Assess. Sect. Res. Doc. 99/197: 66p.

Gillespie, G.E., T.C. Norgard and F.E. Scurrah. 2001. Status of Manila Clam (*Venerupis philippinarum*) Stocks in Area 7, British Columbia, with a Proposal for Active Management of a Data-Limited Fishery. Can. Stock Assess. Sect. Res. Doc. 2001/089: 59p.

Several research documents are available at the PSARC Internet site:  
[www-sci.pac.dfo-mpo.gc.ca/sci/psarc/default\\_e.htm](http://www-sci.pac.dfo-mpo.gc.ca/sci/psarc/default_e.htm)

Stock Status Report for Manila clams in Area 7 (2001):  
[www.pac.dfo-mpo.gc.ca/sci/psarc/SSRs/Invert/c6-17.pdf](http://www.pac.dfo-mpo.gc.ca/sci/psarc/SSRs/Invert/c6-17.pdf)

## **10. ATTACHMENTS**

Appendix 1: Example of a Harvest Log

Appendix 2: Map and Location of Approved Wet Storage Site



Appendix 2: Map of Wet Storage Area (Ardmillan Bay)

