



**FINAL**  
**Tsawwassen First Nation**  
**Post-Season Fisheries**  
**Report, 2016**

*Prepared by:*

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JULY 2017



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**ACRONYMS**

*The following acronyms are used in the TFN Annual Fishery reports:*

BC	British Columbia
CCTAC	Canadian Commercial Total Allowable Catch
CPE	catch-per-effort
CTAC	Canadian Total Allowable Catch
CWT	coded wire tag
DFO	Fisheries and Oceans Canada
EO	Economic Opportunity
FOG	Fisheries Operational Guidelines
FSC	Food, Social, and Ceremonial
HD	Harvest Document(s)
IFMP	Integrated Fisheries Management Plan
JFC	Joint Fisheries Committee
JTC	Joint Technical Committee
LP	limited participation
TAC	Total Allowable Catch
TAFP	Tsawwassen Annual Fishing Plan
TCC	Terminal Commercial Catch
TFA	Tsawwassen Final Agreement
TFN	Tsawwassen First Nation
THA	Tsawwassen Harvest Agreement
TNRD	Tsawwassen Natural Resource Department
TOTC	Treaty Obligation Tracking Centre



## 1 INTRODUCTION

### 1.1 Tsawwassen Final Agreement

Tsawwassen First Nation has the right to harvest for domestic purposes:

- a) Fish and aquatic plants in the Tsawwassen Fishing Area; and
- b) Intertidal bivalves in the Tsawwassen Intertidal Bivalve Fishing Area,

as outlined in the Tsawwassen Final Agreement (TFA; TFA 2007; Chapter 9). Starting on the Treaty Effective Date (3 April 2009), all Tsawwassen fisheries must be conducted in a manner that is consistent with the Tsawwassen Final Agreement, Tsawwassen Harvest Agreement (THA; THA 2006), Harvest Documents (HDs), Tsawwassen Fisheries Operational Guidelines (FOG; FOG 2009) document, Tsawwassen law, and applicable federal and provincial government laws. As indicated in the TFA, Tsawwassen fisheries must be conducted within the Tsawwassen Fishing Area or Tsawwassen Intertidal Bivalve Fishing Area (see Figure 1.1 and Figure 1.3) unless otherwise permitted in HDs or licences issued by Fisheries and Oceans Canada (DFO). Figure 1.2 identifies the boundaries of the Gulf Islands National Park Reserve territory of which some of the territory lies within Tsawwassen's Intertidal Bivalve Fishing Area (Figure 1.1).

### 1.2 Joint Fisheries Committee

On the Treaty Effective Date, a Joint Fisheries Committee (JFC) was formed to facilitate the planning and management of the Tsawwassen First Nation (TFN) fishing rights consistent with the content of the TFA (Chapter 9). The JFC consists of one representative from Canada, the Province, and Tsawwassen First Nation; although, additional individuals may participate in meetings to assist the designated representatives. The JFC will meet a minimum of twice yearly: first, to review the Tsawwassen Annual Fishing Plan (TAFP) and, second, to conduct a post-season review of TFN's fisheries. The JFC will also discuss other relevant matters associated with the implementation of the TFA Fisheries Chapter. For a more detailed list of functions and responsibilities of the JFC, refer to the TFA (Chapter 9) or section 8 and Appendix C of the FOG document.

A further extension of the JFC is the Joint Technical Committee (JTC) which is formed and directed by the JFC. The JTC is responsible for technical fisheries issues as set out by the JFC. The JTC operates on a consensus basis, thus, if a matter cannot be resolved it is deferred to the JFC. For more detailed list of functions and responsibilities for the JTC, refer to the FOG document.

Tsawwassen First Nation has produced comprehensive post-season fisheries reports summarizing the details of the 2009–2015 Food, Social, and Ceremonial (FSC) and THA fisheries (Blakley et al. 2010–2016). The JTC and JFC have reviewed these reports and they are now publicly circulated.

### 1.3 Domestic Fisheries Allocations

Tsawwassen Domestic Allocations for Fish and Aquatic Plants are calculated using formulas described in the TFA (Appendix J-2). Information used to calculate the Tsawwassen FSC allocation for Sockeye salmon (*Oncorhynchus nerka*) is based on the Canadian Total Allowable Catch (CTAC). For example:

$$\text{TFN FSC Sockeye salmon allocation} = 1\% \times \text{CTAC for CTAC} < 500,000$$

Data collected throughout the fishing season may cause changes to the CTAC; thereby modifying the TFN allocation for Sockeye salmon. Any changes that may affect the FSC allocations are to be

communicated to all parties involved through the JFC. Modifications to FSC allocations may occur pre-, in-, and final in-season for an individual species.

#### 1.4 Tsawwassen Harvest Agreement and Commercial Allocation

The Tsawwassen Harvest Agreement came into effect on 3 April 2009 for the purposes of increasing the commercial fishing capacity of the TFN (TFA 2007; Chapter 9). Tsawwassen commercial allocation for salmon is described in Clause 11 of the THA. Each year, DFO will issue HDs for the Tsawwassen commercial allocation of Sockeye, Chum (*O. keta*), and Pink salmon (*O. gorbuscha*; odd years only). Tsawwassen's commercial allocations vary with the size of the Canadian Commercial Total Allowable Catch (CCTAC) for Sockeye and Pink salmon and the Terminal Commercial Catch (TCC) for Chum salmon.

In addition, the THA allows for the commercial harvesting of crab in Management Areas I and J (see Figure 1.4). Tsawwassen First Nation may not relinquish more than five commercial crab licences on an annual basis. Crab fishers must comply with the regulations and requirements set out in the THA and any licence issued by DFO.

## 2 FISHERIES MANAGEMENT

### 2.1 Fisheries Operational Guidelines

As indicated in the TFA, "the Tsawwassen Fisheries Operational Guidelines set out the operational principles, procedures, and guidelines to assist the Parties (TFN, Canada, and British Columbia) in implementing the Fisheries chapter of the TFA." The FOG document (FOG 2013) describes current fisheries management goals and procedures for harvestable fish stocks that reside or migrate through the Tsawwassen Fishing Area. The goals and procedures outlined in the FOG document are essential for ensuring the TFA is being implemented properly. In addition, it should be acknowledged that these goals and procedures will evolve over time, and it will be the role of the JFC to review the FOG document as needed on an annual basis to incorporate any new information (e.g., updates on escapement targets, new fisheries management policies, stock trends) that may apply to TFN fisheries management. The 2009 FOG document was revised and revisions were approved on 24 September 2013. The 2013 FOG document is accessible via the Treaty Obligation Tracking Centre (TOTC) website.<sup>1</sup>

### 2.2 Tsawwassen Annual Fishing Plan

Every year, TFN develops a Tsawwassen Annual Fishing Plan that may be submitted for comment and feedback to the JTC before it is submitted to the JFC where it is reviewed to assist in the planning for Tsawwassen's fisheries and the issuance of HD. In 2016, the effective date of the TAFP was 1 April 2016 and carries through to 31 March 2017. Tsawwassen's Annual Fishing Plan provides the JTC and the JFC with proposed harvest plans and harvest expectations for each species (i.e., salmon, crab, bivalves, groundfish, and aquatic plants) based on pre-season forecasts. The TAFP also notifies the JTC and JFC of TFN's harvest levels, preferred harvest times, and fishing areas and methods for each species or species-group. Conservation measures for each species are also highlighted in the TAFP. Due to timing of the pre-season run size forecasts Eulachon (*Thaleichthys pacificus*) and Chinook salmon (*O. tshawytscha*), were prepared in a separate document. Refer to Appendix A for the 2016 TAFPs.

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<sup>1</sup> <http://wss.marr.gov.bc.ca/PWA/TOTC/default.aspx> (access and login required).

### 2.3 Harvest Documents

Fisheries and Oceans Canada is responsible for issuing HD for all TFN fisheries for salmon, groundfish, intertidal bivalves, crab, and other marine fish species. The Parks Canada Agency is responsible for issuing HD for TFN bivalve fisheries occurring within national park intertidal areas. The BC Ministry of Agriculture is responsible for issuing HD for aquatic plants and the BC Ministry of Forest, Lands and Natural Resource Operations is responsible for issuing HD for, provincially managed species, where applicable. Tsawwassen HD will be consistent with what is outlined in the TFA and FOG document. Tsawwassen First Nation is obligated to inform TFN fishers prior to a fishery opening of their fishing rights and any provisions outlined in the HD. Appendix B provides examples of HD issued to TFN in 2016 for the various species and fisheries (i.e., Sockeye salmon FSC, Crab FSC, Eulachon Ceremonial, Chum salmon THA, Groundfish FSC, and Aquatic plants FSC). For further clarification of HD, refer to the TFA and FOG documents.

### 2.4 Catch Monitoring Procedures

As outlined in Appendix D of the FOG document: “the overall goal of the catch monitoring program is to ensure accurate information is gathered to aid all Parties in the management of the fishery and implementation of the TFA.”

In order to accurately estimate FSC salmon harvest for TFN, the following data must be collected:

1. Tsawwassen First Nation FSC salmon fishers are required to report their harvest and fishing effort information after a day’s fishing to the Tsawwassen Natural Resource Department (TNRD). Reporting of catch and effort can be provided via phone or on-site interview conducted by a staff member of the TNRD staff (interviewers). Interviews will record catch (kept and released), effort (hours fished), and gear type (number and type of nets used) information on the “TFN Salmon Fisheries Interview Dataform” (see Appendix C). An attempt is made to contact active fishers via the phone after a FSC opening period (one or more consecutive days of fishing) to confirm complete catch and effort data.
2. Each TFN harvester will be required to maintain a daily fishing log using the “TFN Salmon Fisheries Log Dataform” (see Appendix C). It is mandatory for TFN fishers to submit salmon fishing logs after each FSC fishery, preferably at the landing site, to allow verification of the hailed catch. However, validation can also occur on-the-water or at a fishers’ residence. In previous years, catch calendars were also available to record the days when fishing occurred for each species of salmon; however, 2013–2016 catch calendars were not produced due to budget constraints.
3. Tsawwassen Natural Resource Department staff will conduct random inspections of TFN FSC fishing vessels, during a fishery, to validate salmon catch. Counting a vessel’s catch or validation will either occur during an on-water interview or at landing site. The JTC proposed validation coverage be 20% or more for each fishery.
4. Within 24 hours of the close of a fishery, TNRD will provide a preliminary report to DFO that includes the number of vessels participating, the type of gear used, fishing effort (in hours), and the catch by species. Preliminary catch reports will be finalized within 48 hours of the close of a fishery.

In order to accurately estimate the crab and non-salmon FSC harvest for TFN, the following data must be collected:

1. Similar to the FSC salmon data collection requirements, TFN fishers are required to report any retention of FSC crab or non-salmon species. Catch and fishing effort can be reported directly to TNRD or by on-site interview conducted by a TNRD staff member. Interviewers will record catch and effort information for crab fishing on the “TFN Crab Fishing Interview Dataform” and other non-salmon species on the “TFN Other Fisheries Interview Dataform” (see Appendix C).
2. Tsawwassen First Nation fishers will be required to maintain daily fishing logs for crab fishing efforts using the “TFN Crab Fisheries Log Dataform” and all fishing efforts directed at other fish species should be recorded on the “TFN Other Fisheries Log Dataform” (see Appendix C). Tsawwassen Natural Resource Department staff will compare the logs to the on-water interviews for an accurate account of total catch and effort.
3. Food, Social, and Ceremonial fishing targeting crab and other non-salmon species will be validated similar to the salmon fisheries. To achieve the 20% validation coverage goal, validation will occur after a completed fishing trip, either at the landing site, on-the-water, or at the TNRD office when crabs are dropped off for distribution. Validation ensures accuracy of the information recorded on the daily fishing logs.
4. Within 72 hours of the end of each month, TNRD staff will provide a catch and effort report for FSC crab and other non-salmon species. Tsawwassen Natural Resource Department staff will follow-up with any fishers that did not comply with the reporting requirements.

See Appendix D of the FOG document for further detailed information on TFN catch monitoring procedures.

### 3 SALMON FSC FISHERIES

#### 3.1 Allocations

Table 3.1 summarizes TFN’s FSC salmon fishery allocations for 2016 based on pre-, in-, and final in-season estimates. Tsawwassen First Nation’s FSC salmon allocations for Chinook, Sockeye, Pink, Coho (*O. kisutch*), and Chum salmon were 625, 15,226, 2,500, 500, and 2,576, respectively. The Chinook, Chum, and Coho salmon remained constant throughout the 2016 fishing season. Even year return of Fraser Pink salmon are typically too small to warrant any directed harvest of these stocks; therefore, there was no FSC allocation for Pink salmon in 2016.

The allocation for Sockeye salmon is determined using an abundance-based formula that is driven by the CTAC. As indicated in the FOG document, when the CTAC is greater than or equal to 3 million Sockeye salmon, TFN’s FSC allocation is fixed at 15,226 Sockeye salmon. In 2016, the pre-season FSC Sockeye salmon allocation was determined to be 6,802 as set out in the TFA (Appendix J-2) and the FOG document (section 9.3.1; Table 9.1). However, in-season, the CTAC estimate changed considerably, reducing the final Sockeye salmon allocation to 1,079 (Appendix D).

For a comparison of TFN’s 2016 salmon harvest to final in-season allocations, refer to section 3.5 (Overages and Underages).

#### 3.2 Fishery Openings and Target Species

Table 3.2 summarizes TFN’s FSC and THA (commercial) salmon fishery openings for 2016, listed by week-ending date. The FSC directed Chinook salmon fisheries began the week ending 15 May and

continued through to the week ending 24 July (Table 3.2). Of the 10 directed FSC openings for Chinook salmon, two were limited participation (LP) fisheries (HD-LP-414 with a maximum of 10 Chinook salmon and HD-LP-416 with a maximum of 25 Chinook salmon). There were two FSC directed Chinook openings (HD-439, and HD-440) which included incidental harvest of Sockeye salmon. There were also three FSC salmon openings directed at Sockeye salmon with the incidental catch of Chinook salmon permitted (week endings 31 July and 7 August). Food, Social, and Ceremonial fisheries directed at Chum salmon with incidental harvest of Chinook and Coho salmon began 9 October and ended 23 October.

Table 3.2 also includes a list of the THA salmon fishery openings. Further details on the THA salmon openings will be discussed in section 4.2.

### 3.3 Catch and Effort

Catch and effort for each salmon species was estimated from on-water and shore-based interviews by simply summing the catch and effort for all interviews. All fishers were contacted via phone after a FSC opening to confirm complete catch and effort data. This also allowed technicians to log catch and effort from fishers that were not encountered on the water. In addition, records were kept to indicate those interviews for which the catch was verified by the interviewer.

The total reported FSC harvest and effort of each salmon species is shown in Table 3.3. The overall FSC harvest of Sockeye salmon was estimated at 2,978; of this catch 57% (1,696) was harvested by the week ending 31 July. Total FSC Chinook salmon harvest was reported at 86 with the peak (20 Chinook salmon) occurring during the week ending 7 August. The total Chum salmon harvest in the FSC fisheries was 2,495 and occurred just over two weeks (8–21 October). The first FSC Chum salmon openings recorded 75% of the harvest (1,860; Table 3.3). The last Chum salmon fishery was a LP fishery (HD-LP-421) which was limited to three vessels.

There were no directed TFN FSC fishery openings for Coho salmon or Steelhead (*Oncorhynchus mykiss*). However, 64 wild (unmarked) Coho salmon were kept because they were caught incidentally during the FSC Chum salmon fisheries (Table 3.3). Under the 2016 Tsawwassen FSC salmon HDs, both “hatchery-marked” and wild (un-marked) Coho salmon were allowed to be retained. There were no Pink salmon or Steelhead kept for food fish during any of the TFN FSC fishery openings (Table 3.3).

Table 3.3 shows fishing effort (defined as the number of hours that nets were in the water fishing) by week. Total fishing effort for the FSC salmon fishery openings was reported as 619 hours. The highest fishing effort (186 hours) was recorded the week ending 7 August during the last FSC Sockeye salmon opening (HD-448).

Table 3.4 summarizes Tsawwassen’s FSC salmon catch and effort for interviews only. To further clarify, Table 3.4 has been categorized by “interview” data versus “validated” interview data. “Validated” interview data includes those interviews where every fish was individually “counted” either on the water or at the landing site. In some cases, this included watching a fisher remove the fish from the entire set. Similarly, “interview” data includes those interviews conducted on the water; however, it was not possible to count every fish (some partially counted) because the fisher’s net was currently fishing or the catch had been processed and stored in the hull. An interview would be classified as a “hail” if it was not conducted on the water or landing site (i.e., via phone) and the fish were not observed at all. The JTC proposed that at least 20% of the salmon catch be “validated” or “counted” through interview process. Overall, the “validated” interviews represented 45% of the total fishing effort for salmon (Table 3.4). The percentages of validated interviews were broken down by species: the 20% goal was achieved for Chinook, Sockeye, Coho, and Chum salmon, 52%, 72%, 31%, and 25%,

respectively (Table 3.4). There was no recorded harvest of Steelhead or Pink salmon so no validation percentage could be calculated.

Table 3.4 also compares the catch-per-effort (CPE) by species for interview data versus non-interviewed data. The average CPE for Chinook salmon was slightly higher for the interview data (0.15 Chinook/h) than the non-interviewed data (0.13 Chinook/h). Similarly, the average Sockeye salmon CPE from interviewed fishers (7.35 Sockeye/h) was higher than that for non-interviewed fishers (2.10 Sockeye/h). The survey results for FSC Chum salmon fisheries were also similar to those of Sockeye and Chinook salmon. The average Chum salmon CPE for the interviewed fishers during the October Chum salmon fisheries (21.47 Chum/h, n = 619) was slightly lower than that for non-interviewed fishers (24.85 Chum/h). Sample sizes for Pink and Coho salmon and Steelhead CPE were too small to make any meaningful comparisons between the interview and non-interview data.

### 3.4 Released Catch

Table 3.5 summarizes the fish released from nets during the Tsawwassen FSC salmon fisheries in 2016. Total release catch for sturgeon, Steelhead, Pink, Coho, Sockeye, Chinook, and Chum salmon were 18, 0, 0, 0, 0, 2, and 0, respectively. Over 72% (13) of the sturgeon releases were caught between the week endings 15 May–12 June during the directed Chinook salmon FSC fisheries.

Table 3.6 further details Tsawwassen FSC releases of sturgeon by fishing location. There was a total of 18 sturgeon released from May to June, with the highest number (7) of sturgeon caught during the week ending 12 June in the Steveston-Pattullo location (T3; Statistical Area 29-14).

### 3.5 Overages and Underages

It is expected that the number of salmon harvested in TFN fisheries will not precisely match the TFN allocations for each species each year. Therefore, the TFA (TFA 2007; Appendix J) outlines the calculation process if there is a difference between what was caught and what was allocated (termed “overages” and “underages”), by species.

An overage occurs when Tsawwassen harvest exceeds the defined Tsawwassen allocation whereas; an underage occurs when Tsawwassen harvests less than the defined Tsawwassen allocation. Underages can occur because another group harvested more, or because there was uncertainty in the management process for that species (e.g., late season increases in the Total Allowable Catch (TAC) or uncertainty regarding the amount of fishing time required to harvest the allocation). The amount of the overage or underage will be documented in a multi-year accounting process summarized in a table in this post-season report.

Table 3.7 summarizes the Tsawwassen FSC salmon catch, allocation, balance (overages and underages), and carry forward amounts for each salmon species. Tsawwassen harvested less than the defined allocation by 3,449, 436, and 81 for Sockeye, Coho, and Chum salmon, respectively. By 7 August, all directed FSC Sockeye fisheries were halted because Tsawwassen had exceeded their revised allocation. No carry forward is proposed for Sockeye salmon species because, by 10 August, the CTAC Sockeye salmon estimate changed, reducing the final Sockeye salmon allocation to 1,079. For Coho salmon, there is no carry forward proposed since Tsawwassen fishing efforts were less than that required to harvest the TFN allocations for this species.

In 2015, TFN harvested 78 more FSC Chum salmon than their defined allocation of 2,576 fish (Table 3.7). The 2015 overage of 78 Chum salmon was paid back in 2016 with 81 less Chum salmon harvested from TFN’s full allocation of 2,576 (Table 3.7).

For FSC Chinook salmon, TFN harvested 539 less fish than their defined allocation of 625 (Table 3.7). Tsawwassen First Nation sent a letter to DFO on 6 January (Appendix E) and requested a Chinook salmon underage of 539 for 2016. Fisheries and Oceans Canada sent a response letter to TFN on 22 March (Appendix E). Fisheries and Oceans Canada disagreed with TFN's underage request. Further discussion occurred at the 29 May 2017 JFC meeting held via conference call. JFC members concluded the requested Chinook salmon underage not be applied to future Chinook allocations. JFC also discussed using selective gear (i.e., 8 inch gill net) to target Chinook salmon during times when there are co-migrating Sockeye salmon stocks.

### 3.6 Recommendations

The following are recommendations for the 2017 FSC fishing season:

- Prior to the weekly planning calls for Fraser salmon fisheries, TFN and DFO representatives should continue to meet, via phone or otherwise to discuss:
  - Potential conservation issues;
  - Remaining allocation balances of all salmon species;
  - Potential projected TFN fishing effort;
  - Catch monitoring and enforcement strategies that will aid in formulating options for TFN fisheries with the ultimate goal of reaching the salmon allocations as set out in the TFN Final Agreement.
- Continue to improve the completeness of catch reporting by filing reports to DFO within 24 to 48 hours, as outlined in the HD and the TFN FOG.
- Continue to improve the landing validation program. Technicians should differentiate on their datasheets and the database if a harvest was counted, estimated, hailed, or not observed. Maintain the 20% sampling goal for all salmon fisheries. In 2016, all salmon FSC fisheries recorded over a 20% validation rate.
- Continue to improve coded wire tag (CWT) sampling protocol for Chinook and Coho salmon. No adipose-clipped Chinook or Coho salmon were recorded as harvested in 2016.
- Fisheries and Oceans Canada should provide TFN with weekly updates to the TFN FSC allocations for Sockeye salmon at least two days before a potential TFN fishery where FSC Sockeye salmon could be harvested (i.e., by 6 PM on Wednesday for TFN fisheries that typically start at 6 PM on Friday).

## 4 SALMON THA FISHERIES

### 4.1 Allocations

In 2016, Tsawwassen First Nation was authorized to sell 10,780 Chum salmon during the commercial THA fisheries (Table 4.1). Like the FSC fisheries, the THA fisheries are subject to conservation needs and to agreed-upon monitoring, enforcement, and management regimes. There were no THA HDs issued to TFN for Sockeye or Pink salmon, in 2016.

## 4.2 Fishery Openings and Target Species

Tsawwassen First Nation was involved in two-twelve hour THA fisheries under one licence (HD-466) during the week ending 30 October (Table 3.2). These fisheries were directed at Chum salmon; however, incidental harvest of hatchery-marked Coho salmon were also permitted. All efforts and attempts were made to return all non-target species, including “wild” Coho salmon, Steelhead, and sturgeon, to the water alive and unharmed. The main gear type for the Chum salmon THA fisheries were drift nets.

Total Chum salmon harvested during the THA fisheries was 13,672 (Table 4.1). Tsawwassen First Nation harvested more than the defined allocation by 2,892 Chum salmon. The TFN Chum salmon catch in excess of their Harvest Agreement Chum salmon allocation does not affect any future TFN Economic Opportunity (EO) allocations for Chum salmon because there are no overage/underage provisions in the Harvest Agreement or in the Tsawwassen Final Agreement for TFN Harvest Agreement allocations. DFO accounted for this additional harvest by TFN by allocating a portion of the uncaught commercial TAC for Fraser Chum salmon to the TFN EO Chum salmon fishery.

Approximately 90% (12,356) of the total harvest was sold to packers and the remaining 10% (1,316) of the Chum salmon were taken home (kept) by the individual TFN fishers (Table 4.1).

Catch from all of these THA fisheries were estimated using a Mandatory Landing Program in which fishers’ catch were enumerated at landing sites throughout the fishing area.

## 4.3 Released Catch

Table 4.1 summarizes the number of fish reported as released from the THA fisheries. There were only two species recorded as released: 6 Coho salmon and 2 Chinook salmon (Table 4.1). All efforts and attempts were made to return all non-target species to the water alive and unharmed.

## 4.4 Recommendations

The following are recommendations for the 2017 THA fisheries:

- Prior to the start of the THA fisheries, DFO and TNRD staff should stress the importance of fishers recording all of the bycatch and released catch.

# 5 CRAB FISHERIES

## 5.1 FSC Openings, Catch, and Effort

There were four HDs issued for TFN FSC crab harvest which spanned the time period from 1 January to 31 December 2016, targeting Dungeness (*Metacarcinus magister*)<sup>2</sup>, Graceful (*M. gracilis*)<sup>3</sup>, and Red rock crab (*Cancer productus*) species (Table 5.1). However, TFN fishers only kept Dungeness crab, which were all harvested using traps. No crabs were harvested by TFN members using hand picking, dip net, or ring net methods in 2016.

Table 5.2 summarizes the FSC crab catch and effort by licence. Overall, there were a total of 79,059 Dungeness crab kept, 62,540 Dungeness crab released, and 26 Red rock crabs released under the four HDs. Approximately 58% (46,241) of the total Dungeness crab were harvested under the HD-403 licence

<sup>2</sup> *Metacarcinus magister*, formally *Cancer magister*, is accepted as the current taxonomic name for Dungeness Crab (Davie 2015b; Schram and Ng 2012).

<sup>3</sup> *Metacarcinus gracilis*, formally *Cancer gracilis*, is accepted as the current taxonomic name for Graceful Crab (Davie 2015a).



from April to June. HD-403 (April to June) also recorded the highest amount of fishing effort 58,205 trap-days. In contrast, fishers active during the October to December period (HD-455) harvested 5,826 Dungeness crab and reported 45,407 trap-days of fishing effort.

For another perspective, Table 5.3 breaks down the total Dungeness and Red rock crab harvest, releases and effort by month rather than licence. The month of May recorded the highest Dungeness crab harvest (21,546) and fishing effort (11,948 trap-days), whereas, December had the lowest recorded harvest (1,188). January and July were the only months where Red rock crabs (26) were harvested and subsequently released. Inclement weather probably played a factor for the low harvest in October through December. Soft-shell crab would account for a high portion of the releases in March–June. Most of the releases in other months were crabs smaller than the minimum size limit or females.

The crab sampling plan outlines a sampling validation goal of 20% similar to salmon. In addition to comparing the Dungeness crab harvest by month, Table 5.3 summarizes the validation rate by month and fishery. An overall, validation rate of 27% was achieved for Dungeness crab.

Table 5.4 summarizes by month, the number of crab surveys conducted from January to December 2016. On average, the TFN Fisheries Department staff completed 160 vehicular surveys from January to December. Generally, TNRD staff conducted 1–3 crab patrols per day depending on the timing. The vehicular surveys involved driving along the Tsawwassen shoreline and confirming, by using binoculars, if crabbers were fishing. In addition, during the peak months of crab fishing (February to November, 23 on-water crab surveys were conducted).

In 2010, TFN Fisheries Department constructed a live tank which can hold crab until they are distributed to TFN members. In 2016, the live tank continued to be operational allowing for distribution of crab throughout the year. The live tank enabled TFN to hold more crab for longer, well in advance of larger events, such as Aboriginal Day or Elder Gatherings. Effective May 2013, the TFN Crab Distribution Policy was approved. This policy is intended to provide a framework for the distribution of FSC crab to eligible TFN members.

## 5.2 Commercial Openings, Catch, and Effort

In 2016, there were commercial crab openings in the Fraser River areas (Statistical Areas 28 and 29). The first opening occurred in Area I from 15 June to 30 November and the second opening occurred in Area J from 15 July to 30 November (Figure 1.4). The commercial crab openings ran concurrently with the FSC crab fisheries openings, which potentially limits the FSC TFN crab harvest because of the proximity of the commercial harvest and additional impact to the crab stocks. There are TFN FSC crab fishers who also commercially harvest crab. These fishers are required to report their catch directly to DFO managers on a monthly basis.

## 5.3 Recommendations

The following are recommendations for the 2017 FSC crab fishing season:

- Stress the importance to the FSC crab operators about limiting crab fishing to daylight hours only.
- Stress the importance to the FSC crab operators about marking crab traps. This may deter theft of traps since unmarked traps are deemed to be illegal gear and may be removed by people who find them.
- Stress the importance to the FSC crab operators of limiting their crab fishing efforts during the soft-shell period from April to mid-June (May to mid-July in Boundary Bay).

- Continue to document the distribution of the crabs for TFN members or other First Nation communities. Fisher distribution forms should be filled in monthly along with the logs and returned to the TNRD office.
- Continue to improve the completeness and timeliness of catch reporting to DFO.
- Continue to conduct on-water and vehicular surveys at regular interval during the FSC crab fishery to verify catch and effort reports.
- Continue to target 20% sampling validation goal similar to salmon as outlined in the crab sampling plan.
- An enforcement committee has been established to facilitate efforts to improve compliance with harvesting requirements for FSC crab fisheries as set out in the HD for these fisheries. The TFN Enforcement Committee should continue to meet regularly in 2017 and forward any pertinent issues to the JTC.
- The TFN Natural Resource Committee would like to review any final study outcomes from projects that occur in the TFA (i.e., Burns et al. [2017] and Area I commercial soft-shell study).

## 6 OTHER FISHERIES

### 6.1 Eulachon

The Integrated Fisheries Management Plan (IFMP) for Eulachon indicates: “Due to conservation concerns, only very limited Fraser ceremonial fisheries for Eulachon will be considered in 2016.” The 2016 pre-season Eulachon allocation target for Tsawwassen First Nation was approximately 288 lb. Five Eulachon ceremonial HDs were issued (week endings: 28 March, 3 April, 10 April, 17 April, and 24 April) and all were 6 hours or less in duration (Table 6.1). Table 6.2 indicates a total of 161 lb of Eulachon were harvested during the five ceremonial openings in March and April. The total combined fishing effort spanning the 5 Eulachon openings was just over 5.5 hours. Sixty-four chubs, 6 juvenile salmonids, 1 trout parr, 19 Bullhead sculpins (*Leptocottus armatus*), 27 whitefish, and 20 herring were also caught and released as bycatch during the Eulachon fisheries (Table 6.2).

### 6.2 Recommendations

The following are recommendations for the 2017 FSC Eulachon fishing season:

- Due to the lack of stock assessment information for Eulachon, TFN is interested in either initiating or participating in an on-going study for Eulachon.
- TFN staff would like to stress the importance of the Eulachon fishery as the current allocation does not meet TFN’s FSC needs.

### 6.3 Intertidal Bivalves

Intertidal bivalves may be harvested for FSC purposes in the Intertidal Bivalve Fishing Area by any designated TFN fishermen at the times and locations defined in the Tsawwassen HD. Additionally, where the Tsawwassen Intertidal Bivalve Fishing Area overlaps with a National Park Reserve, TFN fishermen are subject to terms and conditions developed following consultation with Parks Canada. While the JTC is continuing to work on an Intertidal Bivalve HD, no HD was requested in 2016 by TFN; therefore, no harvest of bivalves took place. Tsawwassen First Nation is continuing their consultations with, the Hul’qumi’num Treaty Group and other First Nations to discuss terms and conditions governing

the harvest of intertidal bivalves where the Tsawwassen Intertidal Bivalve Fishing Area overlaps the traditional territories for other First Nations.

#### 6.4 Shrimp and Prawns

Shrimp and prawns may be harvested for FSC purposes by TFN fishermen as outlined in a Tsawwassen HD. There was no recorded harvest of shrimp or prawns by TFN fishers in 2016 because no HD was requested.

#### 6.5 Rockfish, Lingcod, Halibut, Dogfish, and Sole (Groundfish)

Rockfish, lingcod, halibut, dogfish, and sole may be harvested for FSC purposes by TFN fishermen as defined in a Tsawwassen HD. There were three HDs issued for groundfish in 2016 (HD-404, HD-433, and HD-456) starting 1 April 2016 using longline gear (Table 6.2). The groundfish fishery was limited to the harvest of halibut and an incidental harvest of sablefish, dogfish, lingcod, flatfish, and rockfish.

Table 6.2 indicates a total of 177 dogfish and 2 Sixgill sharks (*Hexanchus griseus*) were harvested during July and August (HD-433). The total combined fishing effort was 28 hours. Fifty dogfish, 31 Sixgill sharks, and 1 skate were also caught and released as bycatch during the groundfish fishery (Table 6.2).

Tsawwassen First Nation fishers did not participate in fisheries permitted under HD-404 or HD-456 due to fisher availability.

#### 6.6 Marine Aquatic Plants

The harvest of aquatic plants (including attached and detached kelps and seaweeds) within the Province of British Columbia is managed by the Seafood Safety and Quality Unit of the BC Ministry of Agriculture. An Aquatic Marine Plant HD was issued to TFN in 2016 (Tsawwassen-01) for the period 1 April 2016 to 31 March 2017. Harvest of marine aquatic plants was limited to the Tsawwassen Fishing Area. For the full list of aquatic marine plants harvestable for domestic purposes, see the Aquatic Marine Plant HD (Appendix B). As outlined in the Aquatic Marine Plant HD, TFN harvesters are required to identify harvested plants by group and record harvest on the TFN Aquatic Plant harvest log (Appendix C). Tsawwassen First Nation fishers did not participate in this fishery (zero effort and harvest were recorded).

### 7 MULTI-YEAR SUMMARY

#### 7.1 FSC Salmon Harvest and Allocations

Table 7.1 summarizes the FSC salmon harvest, maximum allocations, and the final allocation balances for each year since 2009. Tsawwassen First Nation's allocation as outlined in the TFA differs from the maximum allocation as defined in Table 7.1 as the maximum TFN harvest for a particular salmon species in a given year including overages or underages.

Over this eight year period, the total FSC harvest for Chinook salmon ranged from 86 to 995 (2016 and 2009, respectively). Tsawwassen First Nation's FSC Chinook salmon "maximum" allocation remained constant at 625, except in 2009 when DFO approved a "special circumstances" and increased the allocation to 900 fish. There were 95 Chinook salmon harvested above the permitted allocation for 2009. However, this was balanced off by the substantial underage in 2010, with no carry forward permitted in 2010 and 2011. Fisheries and Oceans Canada approved a portion of the total TFN Chinook salmon allocation not harvested in 2012 (125) as an underage to be carried forward due to DFO management uncertainty (Blakley et al. 2013; section 3.5). The majority of the carry-over was used in 2013 with a balance of 21 Chinook salmon to be included in the 2014 "maximum allocation" (Blakley

et al. 2014; Table 7.1). Of the 646 Chinook salmon allocated to Tsawwassen in 2014, only 392 were harvested. As well in 2014, TFN harvested 919 more Chum salmon than their defined allocation (2,576; Table 7.1). After detailed JTC and JFC discussions related to the issue of the TFN 2014 Chinook and Chum salmon fishery outcomes, DFO agreed with the proposal made by TFN to zero out the 2014 post-season TFN balances for both Chinook and Chum salmon (Blakley et al. 2015; section 3.5). In 2015, the only post-season balance that carried forward is the Chum salmon overage of 78 fish (Blakley et al. 2016; Table 7.1). The approved 2015 overage of 78 Chum salmon was paid back in 2016 with 81 less fish harvested from TFN's full allocation of 2,576.

For FSC Chinook salmon, TFN harvested 539 less fish than their defined allocation of 625 (Table 3.7, Table 7.1). Tsawwassen First Nation sent a letter to DFO on 6 January (Appendix E) and requested a Chinook salmon underage of 539 for 2016. Fisheries and Oceans Canada sent a response letter to TFN on 22 March (Appendix E). Fisheries and Oceans Canada disagreed with TFN's underage request. Further discussion occurred at the 29 May 2017 JFC meeting held via conference call. JFC members concluded the requested Chinook salmon underage not be applied to future Chinook salmon allocations. JFC also discussed using selective gear (i.e., 8 inch gill net) to target Chinook salmon during times when there are co-migrating Sockeye salmon stocks.

Since 2009, the total FSC harvest for Sockeye salmon ranged from 1,132 to 15,226 (2009 and 2010, respectively; Table 7.1). The Sockeye salmon FSC allocation varies depending on run size, averaging 7,353 over the last eight years. Other salmon in the FSC fisheries harvested from 2009 to 2016 ranged from 2 to 84 (Pink salmon), 3 to 220 (Coho salmon), and 1,320 to 3,495 (Chum salmon). The allocations for Pink, Coho, and Chum salmon remained constant over the eight-year period, except on even year returns of Fraser Pink salmon when the run size is typically too small to warrant any directed harvest of these stocks.

## **7.2 FSC Crab Harvest**

The total average FSC Dungeness crab harvest over the seven year period (2009–2016) was 38,815 and ranged from 20,327 in 2011 to 79,059 in 2016 (Table 7.2). The increase in crab catch over the years is due an increase in the number of active crab fishers from 6 to 19. The number of Dungeness crab released due to size, sex, or soft-shell has increased since 2009, averaging approximately 25,000 crabs per year. In addition, Red rock crabs have also been harvested for FSC purposes, but have subsequently been released; except in 2010, when two Red rock crabs were recorded as kept.

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**TABLES**





Table 3.1 Tsawwassen FSC salmon fishery allocations (in pieces), 2016.

Season	Chinook	Sockeye <sup>1,2</sup>	Pink	Coho	Chum
Pre-season	625	6,802	N/A	500	2,576
In-season	625	6,427	N/A	500	2,576
Final in-season	625	1,079	N/A	500	2,576

<sup>1</sup> See Appendix D for Fraser River Status Reports.

<sup>2</sup> The final in-season based on update e-mail from DFO sent 10 August 2016.

Table 3.2. Tsawwassen FSC and THA salmon fishery openings by date, gear type, and target species, 2016.

Weekend date	Licence #	Fishery type	Target species	Opening	Closing	Gear type(s)
				Date and time	Date and time	
15-May-16	LFA-16-HD-413	FSC - Communal	Chinook salmon	14-May 08:00	14-May 20:00	Drift net, set net
29-May-16	LFA-16-HD-418	FSC - Communal	Chinook salmon	28-May 09:00	28-May 21:00	Drift net, set net
05-Jun-16	LFA-16-HD-421	FSC - Communal	Chinook salmon	04-Jun 12:00	05-Jun 12:00	Drift net, set net
12-Jun-16	LFA-16-HD-424	FSC - Communal	Chinook salmon	11-Jun 12:00	12-Jun 12:00	Drift net, set net
19-Jun-16	LFA-16-LP-HD-414	FSC - Communal	Chinook salmon (limit of 10)	15-Jun 12:00	16-Jun 12:00	Drift net
19-Jun-16	LFA-16-HD-426	FSC - Communal	Chinook salmon	18-Jun 08:00	19-Jun 20:00	Drift net, set net
26-Jun-16	LFA-16-HD-429	FSC - Communal	Chinook salmon	23-Jun 16:00	25-Jun 16:00	Drift net, set net
10-Jul-16	LFA-16-HD-439	FSC - Communal	Chinook salmon with incidental harvest of Sockeye	09-Jul 09:00	10-Jul 21:00	Drift net, set net
17-Jul-16	LFA-16-HD-440	FSC - Communal	Chinook salmon with incidental harvest of Sockeye	16-Jul 08:00	17-Jul 20:00	Drift net, set net
24-Jul-16	LFA-16-LP-HD-416	FSC - Communal	Chinook salmon (limit of 25)	23-Jul 12:00	24-Jul 12:00	Drift net
31-Jul-16	LFA-16-HD-442	FSC - Communal	Sockeye salmon with incidental harvest of Chinook salmon	27-Jul 07:30	27-Jul 15:30	Drift net, set net
31-Jul-16	LFA-16-HD-444	FSC - Communal	Sockeye salmon with incidental harvest of Chinook salmon	30-Jul 12:00	31-Jul 06:00	Drift net, set net
07-Aug-16	LFA-16-HD-448	FSC - Communal	Sockeye salmon with incidental harvest of Chinook salmon	06-Aug 12:00	07-Aug 12:00	Drift net, set net
09-Oct-16	LFA-16-HD-458	FSC - Communal	Chum salmon with incidental harvest of Coho and Chinook salmon	08-Oct 08:00	10-Oct 20:00	Drift net, set net
16-Oct-16	LFA-16-HD-458	FSC - Communal	Chum salmon with incidental harvest of Coho and Chinook salmon	08-Oct 08:00	10-Oct 20:00	Drift net, set net
23-Oct-16	LFA-16-LP-HD-421	FSC - Communal	Chum salmon with incidental harvest of Coho and Chinook salmon	21-Oct 08:00	21-Oct 20:00	Drift net
30-Oct-16	LFA-16-HD-466	Tsawwassen Harvest Agreement	Chum salmon with incidental harvest of hatchery-marked Coho salmon	26-Oct 08:00	26-Oct 20:00	Drift net, set net
30-Oct-16	LFA-16-HD-466	Tsawwassen Harvest Agreement	Chum salmon with incidental harvest of hatchery-marked Coho salmon	29-Oct 08:00	29-Oct 20:00	Drift net, set net

Table 3.3. Summary of Tsawwassen FSC salmon catch and effort, 2016.

Weekend date	Licence #	Vessel (h)	Tsawwassen catch (kept)						Chum
			Adipose-clipped			Adipose-clipped			
			Chinook	Chinook	Sockeye	Pink Coho	Coho		
15-May-16	LFA-16-HD-413	5.0	0	0	0	0	0	0	0
29-May-16	LFA-16-HD-418	6.3	3	0	0	0	0	0	0
05-Jun-16	LFA-16-HD-421	8.6	1	0	0	0	0	0	0
12-Jun-16	LFA-16-HD-424	6.5	8	0	0	0	0	0	0
19-Jun-16	LFA-16-LP-HD-414	4.0	0	0	0	0	0	0	0
19-Jun-16	LFA-16-HD-426	10.8	5	0	0	0	0	0	0
26-Jun-16	LFA-16-HD-429	14.4	9	0	0	0	0	0	0
10-Jul-16	LFA-16-HD-439	1.0	3	0	0	0	0	0	0
17-Jul-16	LFA-16-HD-440	13.0	2	0	1	0	0	0	0
24-Jul-16	LFA-16-LP-HD-416	4.5	1	0	0	0	0	0	0
31-Jul-16	LFA-16-HD-442	64.3	2	0	451	0	0	0	0
31-Jul-16	LFA-16-HD-444	101.8	19	0	1,244	0	0	0	0
07-Aug-16	LFA-16-HD-448	186.3	20	0	1,282	0	0	0	0
09-Oct-16	LFA-16-HD-458	116.9	11	0	0	0	45	0	1,860
16-Oct-16	LFA-16-HD-458	49.0	2	0	0	0	0	0	10
23-Oct-16	LFA-16-LP-HD-421	26.5	0	0	0	0	19	0	625
<b>Totals</b>		<b>618.8</b>	<b>86</b>	<b>0</b>	<b>2,978</b>	<b>0</b>	<b>64</b>	<b>0</b>	<b>2,495</b>

Table 3.4. Summary of Tsawwassen FSC salmon catch and effort (vessel-hours) for interviews only and comparison of catch-per-effort estimates for fishers interviewed while fishing (interviewed) and those reporting after the fishery (non-interviewed).

Weekend date <sup>1</sup>	Licence #	Vessel (h)	Tsawwassen catch (kept)							
			Adipose-clipped				Adipose-clipped			
			Chinook	Chinook	Sockeye	Pink	Coho	Coho	Chum	Steelhead
15-May-16	LFA-16-HD-413	0.5	0	0	0	0	0	0	0	0
29-May-16	LFA-16-HD-418	2.0	2	0	0	0	0	0	0	0
05-Jun-16	LFA-16-HD-421	7.6	1	0	0	0	0	0	0	0
12-Jun-16	LFA-16-HD-424	3.0	5	0	0	0	0	0	0	0
19-Jun-16	LFA-16-LP-HD-414	-	-	-	-	-	-	-	-	-
19-Jun-16	LFA-16-HD-426	4.3	2	0	0	0	0	0	0	0
26-Jun-16	LFA-16-HD-429	4.9	7	0	0	0	0	0	0	0
10-Jul-16	LFA-16-HD-439	-	-	-	-	-	-	-	-	-
17-Jul-16	LFA-16-HD-440	6.3	1	0	1	0	0	0	0	0
24-Jul-16	LFA-16-LP-HD-416	1.0	1	0	0	0	0	0	0	0
31-Jul-16	LFA-16-HD-442	61.3	2	0	436	0	0	0	0	0
31-Jul-16	LFA-16-HD-444	95.3	19	0	1,209	0	0	0	0	0
07-Aug-16	LFA-16-HD-448	104.7	5	0	704	0	0	0	0	0
09-Oct-16	LFA-16-HD-458	26.8	2	0	0	0	19	0	519	0
16-Oct-16	LFA-16-HD-458	-	-	-	-	-	-	-	-	-
23-Oct-16	LFA-16-LP-HD-421	2.0	0	0	0	0	1	0	100	0
Total (interviews)		320	47	0	2,350	0	20	0	619	0
Total (non-interviews)		299	39	0	628	0	44	0	1,876	0
Grand total		619	86	0	2,978	0	64	0	2,495	0
Total catch interviewed		52%	55%	0%	79%	N/A	31%	0%	25%	N/A
Total catch counted <sup>2</sup>		281	45	0	2,130	0	20	0	619	0
% of catch counted <sup>2</sup>		45%	52%	0%	72%	N/A	31%	0%	25%	N/A
<b>Catch-per-effort (CPE) for all interview data</b>										
Interview data only			0.15	0.00	7.35	0.00	0.06	0.00	21.47	0.00
Non-interview data only			0.13	0.00	2.10	0.00	0.15	0.00	24.85	0.00
<b>Catch-per-effort (CPE) for validated interview data</b>										
Validated data only			0.16	0.00	7.58	0.00	0.07	0.00	21.49	0.00

<sup>1</sup> Chum salmon CPE calculated using October fisheries only.

<sup>2</sup> Interviews where every fish was counted.

Table 3.5. Tsawwassen bycatch from the FSC salmon fisheries, 2016.

Weekend date	Licence #	Vessel (h)	Released <sup>1</sup>							
			Sturgeon	Steelhead	Pink	Coho	Sockeye	Chinook	Chum	
15-May-16	LFA-16-HD-413	5.0	3	0	0	0	0	0	0	0
29-May-16	LFA-16-HD-418	6.3	1	0	0	0	0	0	0	0
05-Jun-16	LFA-16-HD-421	8.6	2	0	0	0	0	0	0	0
12-Jun-16	LFA-16-HD-424	6.5	7	0	0	0	0	0	0	0
19-Jun-16	LFA-16-LP-HD-414	4.0	3	0	0	0	0	0	0	0
19-Jun-16	LFA-16-HD-426	10.8	1	0	0	0	0	0	0	0
26-Jun-16	LFA-16-HD-429	14.4	1	0	0	0	0	0	0	0
10-Jul-16	LFA-16-HD-439	1.0	0	0	0	0	0	0	0	0
17-Jul-16	LFA-16-HD-440	13.0	0	0	0	0	0	0	0	0
24-Jul-16	LFA-16-LP-HD-416	4.5	0	0	0	0	0	0	0	0
31-Jul-16	LFA-16-HD-442	64.3	0	0	0	0	0	0	0	0
31-Jul-16	LFA-16-HD-444	101.8	0	0	0	0	0	0	2	0
07-Aug-16	LFA-16-HD-448	186.3	0	0	0	0	0	0	0	0
09-Oct-16	LFA-16-HD-458	116.9	0	0	0	0	0	0	0	0
16-Oct-16	LFA-16-HD-458	49.0	0	0	0	0	0	0	0	0
23-Oct-16	LFA-16-LP-HD-421	26.5	0	0	0	0	0	0	0	0
<b>Totals</b>		<b>618.8</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>

<sup>1</sup> All fish were released alive.

Table 3.6. Tsawwassen FSC releases of sturgeon (bycatch) by date and location, 2016.

Weekend date	Locations <sup>1</sup>					Totals
	T1	T2	T3	T4	T5	
15-May-16	-	-	3	-	-	3
29-May-16	-	-	1	-	-	1
05-Jun-16	-	-	2	-	-	2
12-Jun-16	-	-	7	1	-	8
19-Jun-16	-	-	3	-	-	3
26-Jun-16	-	-	-	1	-	1
10-Jul-16	-	-	-	-	-	0
17-Jul-16	-	-	-	-	-	0
24-Jul-16	-	-	-	-	-	0
31-Jul-16	-	-	-	-	-	0
07-Aug-16	-	-	-	-	-	0
09-Oct-16	-	-	-	-	-	0
16-Oct-16	-	-	-	-	-	0
23-Oct-16	-	-	-	-	-	0
<b>Totals<sup>2</sup></b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>2</b>	<b>0</b>	<b>18</b>

<sup>1</sup> T1 = Roberts Bank (29-6, 29-7), T2 = Sandheads (29-9, 29-10), T3 = Canoe Pass to Deas (29-14), T4 = Steveston-Pattullo (29-13), T5 = Pattullo-Port Mann (29-17), T6 = North Arm (29-12).

<sup>2</sup> All sturgeon were released alive.

Table 3.7. Tsawwassen FSC salmon overages and underages based on 2016 allocation.

	Chinook	Sockeye <sup>1</sup>	Pink	Coho <sup>2</sup>	Chum <sup>3</sup>
Annual allocations	625	6,427	N/A	500	2,576
Previous carry forward	-	-	-	-	-78
<b>Total allocation:</b>	625	6,427	N/A	500	2,498
Total catch	86	2,978	0	64	2,495
Fish provided to TFN	-	-	-	-	-
<b>Total catch:</b>	86	2,978	0	64	2,495
<b>Balance:</b>	539	3,449	0	436	3
<b>Carry forward:</b>	-	-	-	-	-

<sup>1</sup> Sockeye salmon allocation in this table reflects the inseason CTAC estimate prior to the last Sockeye salmon fishery. On 10 August, a revised allocation of 1,079 was calculated based on updated CTAC estimates; however TFN had already exceeded this catch allocation a revised allocation of 1,079 was calculated based on updated CTAC estimates; however TFN had already exceeded this catch allocation so fishing was halted and subsequently there is no carry forward.

<sup>2</sup> Underage not carried forward due to limited Tsawwassen harvesting effort.

<sup>3</sup> The approved 2015 overage of 78 Chum salmon was paid back in 2016 with 81 less Chum harvested from TFN's full allocation.

Table 4.1. Tsawwassen catch summary for THA salmon fisheries, 2016.

Weekend date	Licence #	Effort (h)	Kept							Sold				Total retained				Released						
			Chinook	Adipose-clipped Chinook	Sockeye	Pink	Adipose-clipped Coho <sup>1</sup>	Chum	Sockeye	Chinook	Chum	Pink	Sockeye	Chinook	Adipose-clipped Coho <sup>1</sup>	Chum	Pink	Sturgeon	Steelhead	Chinook	Sockeye	Pink	Coho	Chum
30-Oct-16	LFA-16-HD-466	217.9	0	0	0	0	17	1,316	0	0	12,356	0	0	0	17	13,672	0	0	0	2	0	0	6	0
<b>Totals</b>		<b>217.9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>1,316</b>	<b>0</b>	<b>0</b>	<b>12,356</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>13,672</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>
<b>Total TFN in-season allocation</b>															<b>10,780</b>									
<b>Total TFN harvest</b>															<b>13,672</b>									
<b>Remaining after TFN harvest</b>															<b>-2,892</b>									
<b>Allocation transferred upstream</b>															<b>0</b>									
<b>Remaining after transfer</b>															<b>0</b>									

<sup>1</sup> Four of the Coho salmon recorded as kept were identified as "unknown".



Table 5.1. Tsawwassen FSC crab fishery openings by target species, date, and gear type, 2016.

Licence #	Fishery type	Target species <sup>1</sup>	Opening	Closing	Gear type(s)
			Date and time	Date and time	
LFA-16-HD-402	FSC - Communal	Crab	01-Jan 00:01	31-Mar 23:59	Handpicking, dip net, ring net, traps
LFA-16-HD-403	FSC - Communal	Crab	01-Apr 00:01	30-Jun 23:59	Handpicking, dip net, ring net, traps
LFA-16-HD-434	FSC - Communal	Crab	01-Jul 00:01	30-Sep 23:59	Handpicking, dip net, ring net, traps
LFA-16-HD-455	FSC - Communal	Crab	01-Oct 00:01	31-Dec 23:59	Handpicking, dip net, ring net, traps

<sup>1</sup> Crab species include Dungeness, Graceful, and Red rock crabs.

Table 5.2. Tsawwassen FSC Dungeness and Red rock crab catch and effort by licence, 2016.

Licence #	Date	Dungeness crab		Red rock crab		Effort (h)	Trap-days
		Number kept	Number released	Number kept	Number released		
LFA-16-HD-402	01 Jan - 31 Mar	8,651	16,043	0	8	21,807	38,748
LFA-16-HD-403	01 Apr - 30 Jun	46,241	29,319	0	0	30,787	58,205
LFA-16-HD-434	01 Jul - 30 Sep	18,341	12,058	0	18	27,985	50,667
LFA-16-HD-455	01 Oct - 31 Dec	5,826	5,120	0	0	23,801	45,407
<b>Totals</b>		<b>79,059</b>	<b>62,540</b>	<b>0</b>	<b>26</b>	<b>104,380</b>	<b>193,026</b>

Table 5.3. Tsawwassen FSC Dungeness and Red rock crab catch and effort by month, 2016.

Licence #	Month	Dungeness crab		Red rock crab		Effort (h)	Trap-days	Validated Dungeness crab	
		Kept	Released	Kept	Released			Kept <sup>1</sup>	% counted
LFA-16-HD-402	January	1,595	3,309	0	8	6,962	13,790	0	0
	February	2,515	3,829	0	0	5,544	10,527	1,332	53
	March	4,541	8,905	0	0	9,301	14,430	999	22
LFA-16-HD-403	April	8,676	8,949	0	0	8,825	15,591	2,258	26
	May	21,546	10,679	0	0	11,948	23,233	8,182	38
	June	16,019	9,691	0	0	10,014	19,381	3,032	19
LFA-16-HD-434	July	8,039	6,311	0	18	10,097	18,678	2,546	32
	August	4,826	2,818	0	0	10,920	18,990	97	2
	September	5,476	2,929	0	0	6,968	12,999	1,666	30
LFA-16-HD-455	October	2,502	1,369	0	0	8,100	14,205	741	30
	November	2,136	2,208	0	0	8,618	17,870	250	12
	December	1,188	1,543	0	0	7,083	13,332	0	0
<b>Totals</b>		<b>79,059</b>	<b>62,540</b>	<b>0</b>	<b>26</b>	<b>104,380</b>	<b>193,026</b>	<b>21,103</b>	<b>27</b>

<sup>1</sup> The total number of validated crab kept were counted 100%.

Table 5.4. Summary of crab patrol surveys conducted in 2016.

Month	Survey type (# of days/month)	
	Vehicular	On-water (boat)
January	13	0
February	14	1
March	21	1
April	14	3
May	14	3
June	18	3
July	6	7
August	8	2
September	13	1
October	13	0
November	17	2
December	9	0
<b>Totals</b>	<b>160</b>	<b>23</b>

Table 6.1. Tsawwassen FSC Eulachon fishery openings by target species, date, and gear type, 2016.

Weekend date	Licence #	Fishery type	Target species	Daily opening	Daily closing	Gear type(s)
				Date and time	Date and time	
28-Mar-16	LFA-16-HD-LP-400	FSC - Communal	Eulachon	27-Mar 14:00	28-Mar 20:00	Drift net
03-Apr-16	LFA-16-HD-LP-401	FSC - Communal	Eulachon	31-Mar 08:00	01-Apr 14:00	Drift net
10-Apr-16	LFA-16-HD-LP-402	FSC - Communal	Eulachon	07-Apr 14:00	08-Apr 20:00	Drift net
17-Apr-16	LFA-16-HD-LP-406	FSC - Communal	Eulachon	16-Apr 22:30	17-Apr 16:30	Drift net
24-Apr-16	LFA-16-HD-LP-408	FSC - Communal	Eulachon	23-Apr 14:00	24-Apr 20:00	Drift net

Table 6.2. Tsawwassen First Nation catch summary for ceremonial Eulachon fisheries, 2016.

Weekend date	Licence #	Effort (h)	Released <sup>2</sup>							
			Pounds <sup>1</sup>	Sturgeon	Chubs	Suckers	Flounder	Eulachon	Other <sup>3</sup>	
28-Mar-16	LFA-16-HD-LP-400									
					Inclement weather					
03-Apr-16	LFA-16-HD-LP-401	2.50	48.1	0	32	0	0	0	0	0
10-Apr-16	LFA-16-HD-LP-402	1.00	11.5	0	3	0	0	0	0	4
17-Apr-16	LFA-16-HD-LP-406	1.00	100.0	0	27	0	0	0	0	68
24-Apr-16	LFA-16-HD-LP-408	1.00	1.0	0	2	0	0	0	0	1
Totals		5.50	160.6	0	64	0	0	0	0	73

<sup>1</sup> Catch monitors weighed Eulachon on board vessel (6 pieces = 1 pound).

<sup>2</sup> All released fish species reported in pieces.

<sup>3</sup> "Other" fish released for HD-LP-402 = juvenile salmonids; "Other" fish released for HD-LP-406 = 18 Bullhead sculpins; 2 Coho smolts, 27 whitefish, 20 herring, 1 trout parr; "Other" fish released for HD-LP-408 = 1 Bullhead sculpin.

Table 6.3. Tsawwassen FSC groundfish fishery openings by target species, date, and gear type, 2016.

Licence #	Fishery type	Target species <sup>1</sup>	Opening	Closing	Gear type(s)
			Date and time	Date and time	
LFA-16-HD-404	FSC - Communal	Halibut	01-Apr 00:01	30-Jun 23:59	Longline
LFA-16-HD-433	FSC - Communal	Halibut	01-Jul 00:01	30-Sep 23:59	Longline
LFA-16-HD-456	FSC - Communal	Halibut	01-Oct 00:01	31-Dec 23:59	Longline

<sup>1</sup> Includes incidental catches of sablefish, dogfish, lingcod, flatfish, and rockfish.

Table 6.4. Tsawwassen First Nation catch summary for FSC groundfish fisheries, 2016.

Licence #	Date	Vessel (h)	Count of vessels	Tsawwassen catch (kept)							Released				
				Halibut	Dogfish	Lingcod	Flounder	Sturgeon	Sablefish	Shark <sup>2</sup>	Sturgeon	Dogfish	Shark <sup>2</sup>	Skate	
HD-404	01 April-30 June														
HD-433	01 July-30 September <sup>1</sup>	28.0	2	0	177	0	0	0	0	0	2	0	50	31	1
HD-456	01 October-31 December														
<b>Totals</b>		<b>28.0</b>	<b>2</b>	<b>0</b>	<b>177</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>50</b>	<b>31</b>	<b>1</b>

<sup>1</sup> No effort or catch was recorded for the month of September.

<sup>2</sup> Shark = Sixgill shark.

Table 7.1. Comparison of annual FSC salmon catch and allocation from 2009 to 2016.

Year <sup>1</sup>		Chinook <sup>4,5,6</sup>	Sockeye	Pink	Coho	Chum
<b>2009</b>	Total catch	995	1,132	72	57	1,320
	Maximum allocation <sup>2</sup>	900	1,132	2,500	500	2,576
	Final allocation balance	-95	0	0	0	0
<b>2010</b>	Total catch	338	15,226	2	3	2,019
	Maximum allocation	530	15,226	N/A	500	2,576
	Final allocation balance	0	0	0	0	0
<b>2011</b>	Total catch	583	9,995	84	43	2,414
	Maximum allocation	625	10,894	2,500	500	2,576
	Final allocation balance	0	0	0	0	0
<b>2012</b>	Total catch	440	6,649	2	22	2,577
	Maximum allocation	625	7,047	N/A	500	2,576
	Final allocation balance <sup>3</sup>	125	0	0	0	-1
<b>2013</b>	Total catch	729	5,120	74	220	2,574
	Maximum allocation	750	5,120	2,500	500	2,576
	Final allocation balance	21	0	0	0	0
<b>2014</b>	Total catch	392	14,878	3	159	3,495
	Maximum allocation	646	15,226	N/A	500	2,576
	Final allocation balance <sup>7</sup>	0	0	0	0	0
<b>2015</b>	Total catch	598	2,851	20	11	2,654
	Maximum allocation	625	2,920	2,500	500	2,576
	Final allocation balance <sup>8</sup>	0	0	0	0	-78
<b>2016</b>	Total catch	86	2,978	0	64	2,495
	Maximum allocation <sup>9</sup>	625	6,427	N/A	500	2,498
	Final allocation balance <sup>10</sup>	0	0	0	0	0

<sup>1</sup> Majority of underages not carried forward due to limited Tsawwassen harvesting effort.

<sup>2</sup> Maximum allocation is defined as the maximum TFN harvest for a particular salmon species in a given year including underages and overages.

<sup>3</sup> DFO approved a "special circumstance" increase in the TFN Chinook salmon allocation to 900 fish for 2009.

<sup>4</sup> Twenty percent of total allocation carried forward due to management uncertainty.

<sup>5</sup> In 2013, maximum allocation includes 125 carryover from 2012.

<sup>6</sup> In 2014, maximum allocation includes 21 carryover from 2012.

<sup>7</sup> The remaining Chinook salmon allocation from 2012 (21) plus 233 balance from 2014 was used to offset the 2014 Chum salmon overage of 919 and set the final balance for Chinook and Chum salmon to zero.

<sup>8</sup> Seventy-eight Chum salmon overage.

<sup>9</sup> Sockeye salmon allocation in this table reflects the inseason CTAC estimate prior to the last Sockeye salmon fishery. On 10 August, a revised allocation of 1,079 was calculated based on updated CTAC estimates; however TFN had already exceeded this catch allocation so fishing was halted and subsequently there is no carry forward.

<sup>10</sup> The 2015 overage of 78 Chum salmon was paid back in 2016 with 81 less Chum harvested from TFN's full allocation of 2,576.



Table 7.2. Comparison of annual FSC Dungeness and Red rock crab catch from 2009 to 2016.

Year	Dungeness crab		Red rock crab	
	Kept	Released	Kept	Released
<b>2009</b>	24,712	13,760	0	0
<b>2010</b>	21,558	11,775	2	23
<b>2011</b>	20,327	12,170	0	8
<b>2012</b>	24,441	14,350	0	2
<b>2013</b>	42,439	25,531	0	4
<b>2014</b>	41,563	19,829	0	5
<b>2015</b>	56,423	45,721	0	35
<b>2016</b>	79,059	62,540	0	26



**FIGURES**



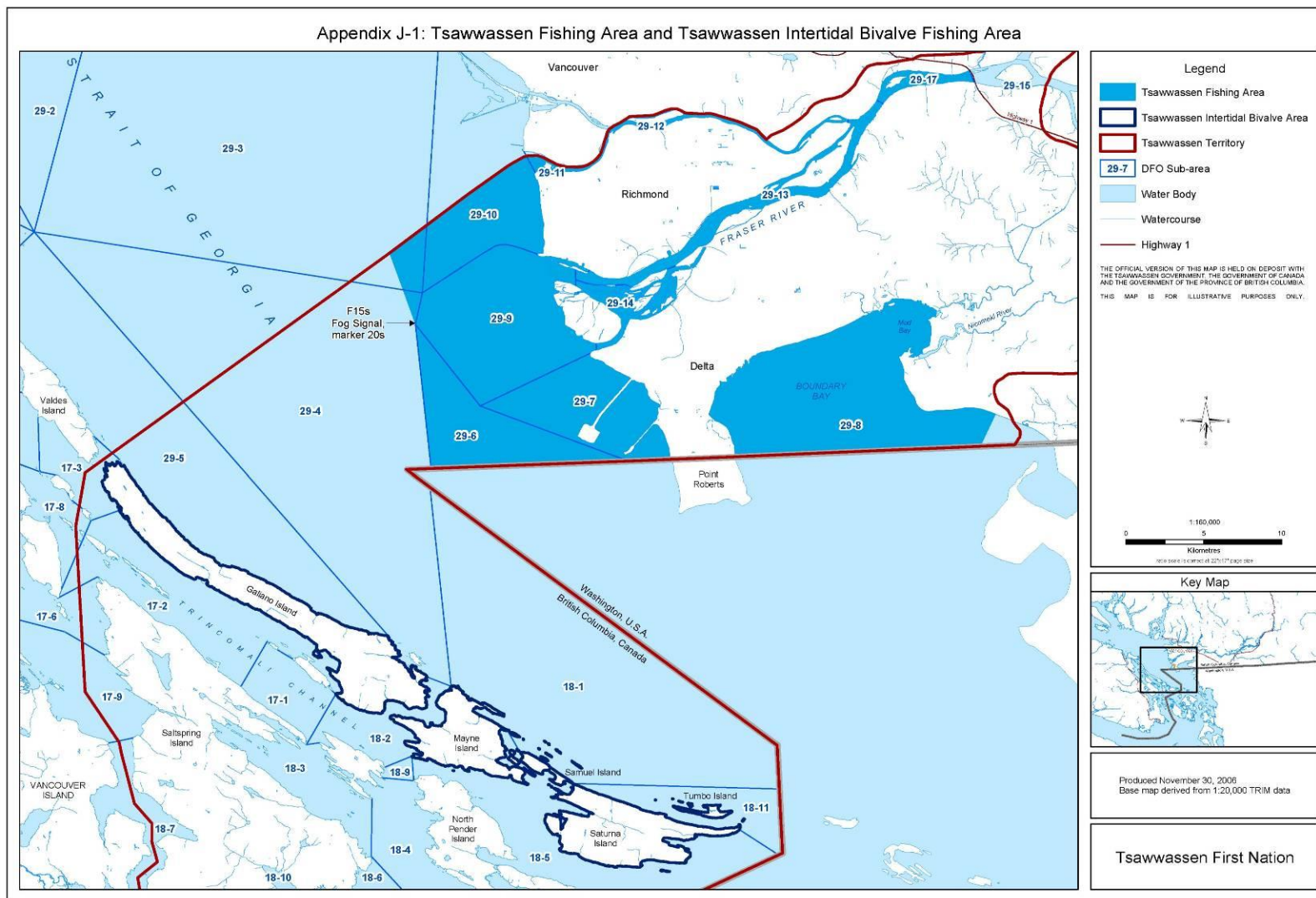


Figure 1.1. Tsawwassen Fishing Area and Tsawwassen Intertidal Bivalve Fishing Area.

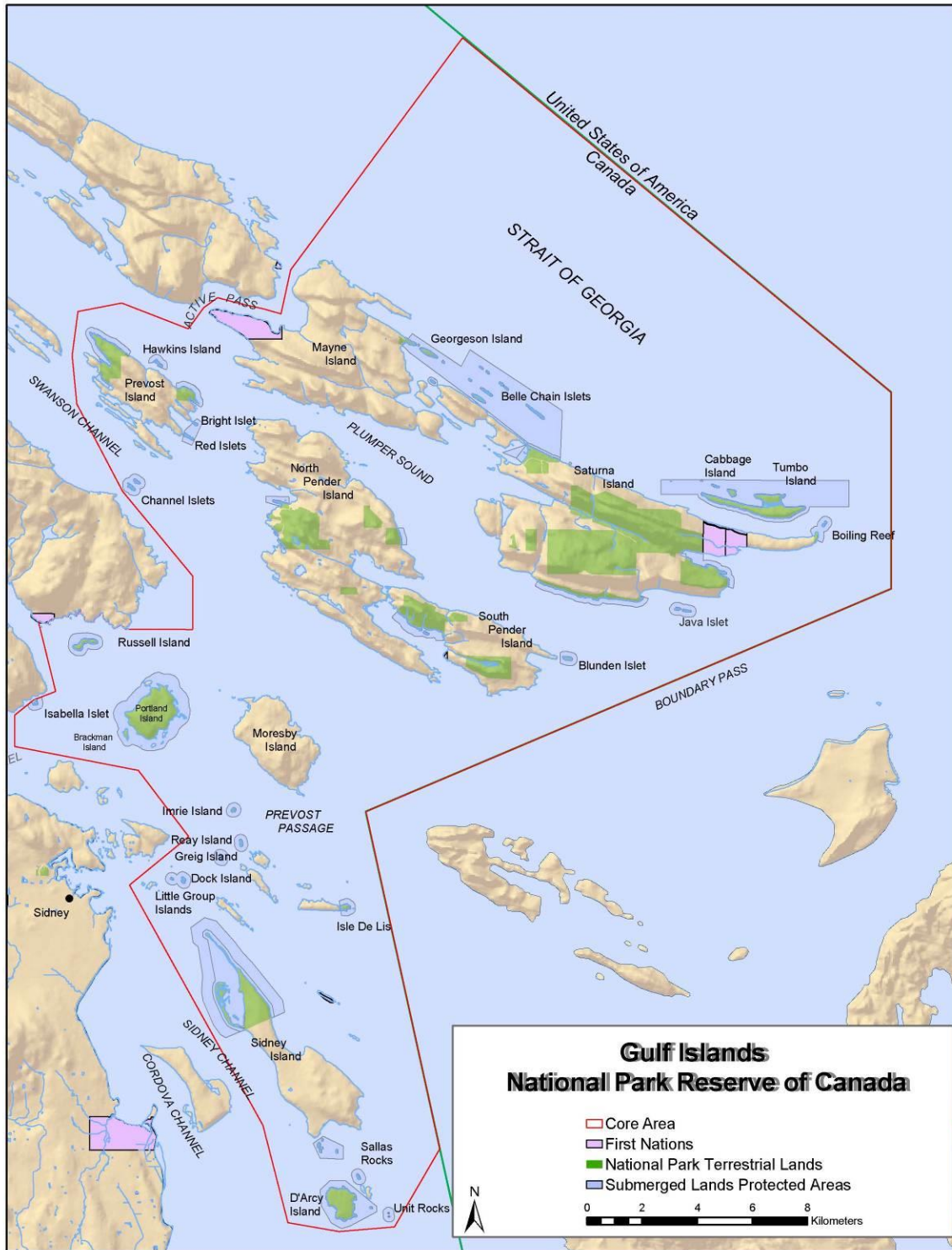
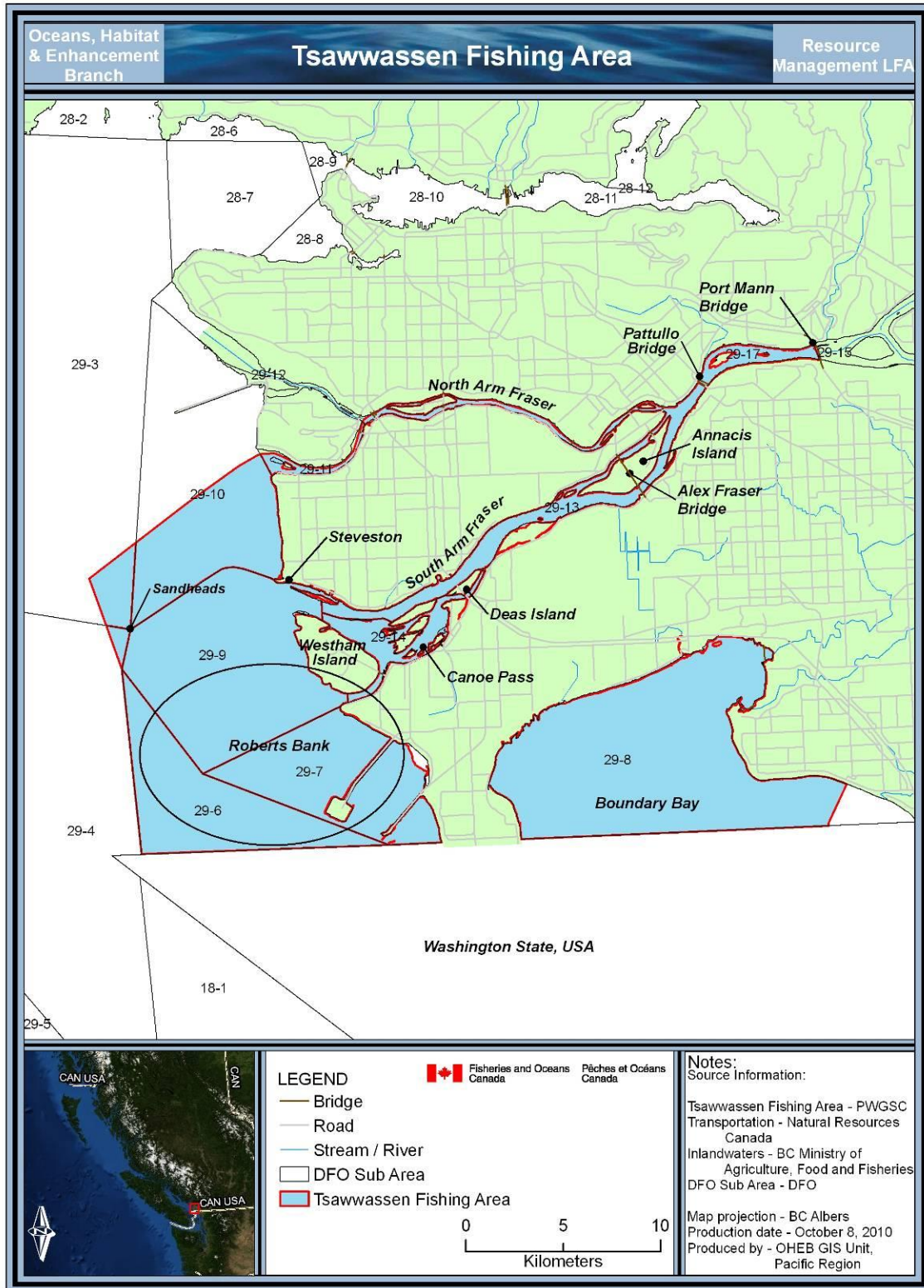


Figure 1.2. Identification of Gulf Islands National Park Reserve of Canada.



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Figure 1.3. Tsawwassen Fishing Area (enlarged map with location names).

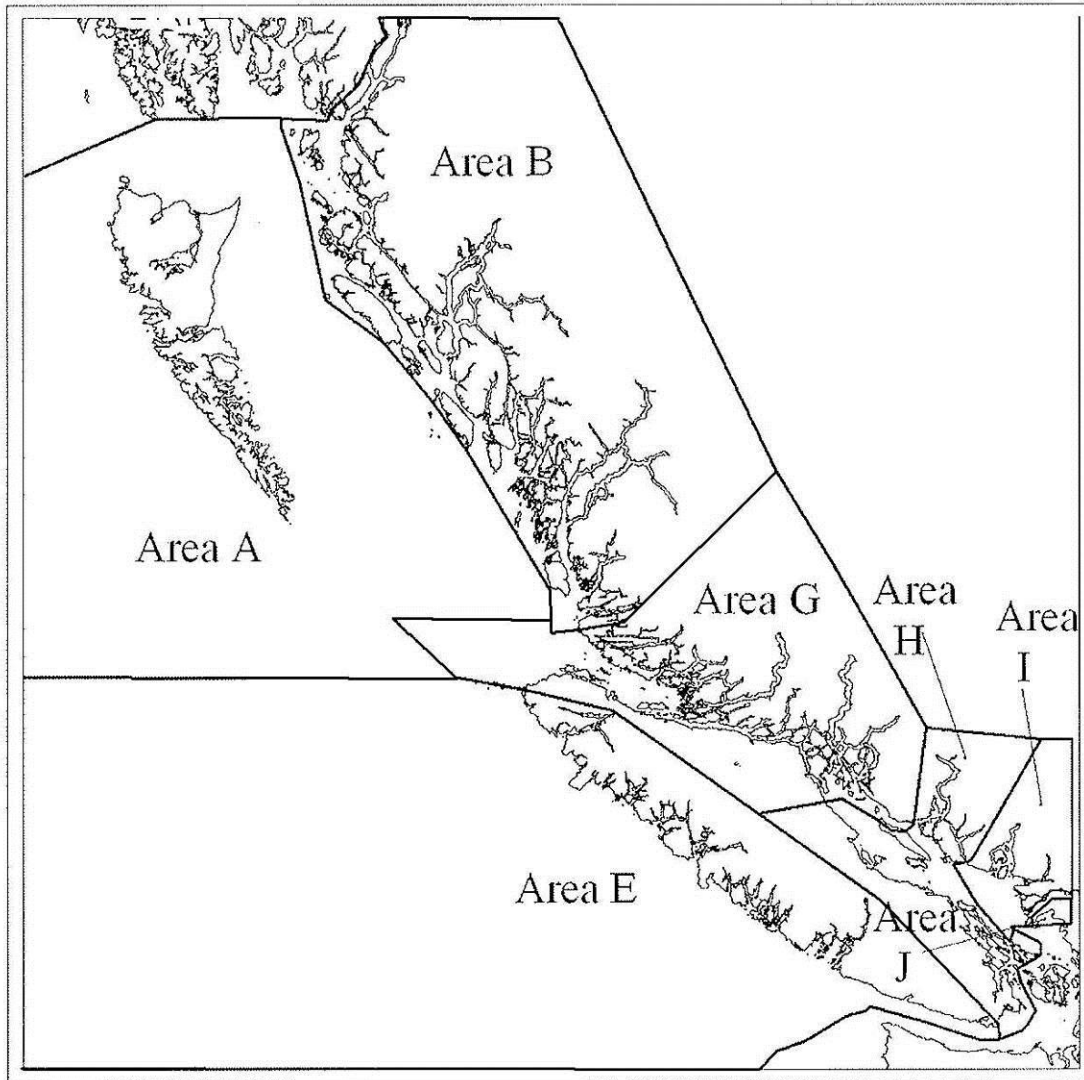


Figure 1.4. Map of Commercial Crab Management Areas.



**APPENDICES**



**APPENDIX A**  
**Tsawwassen Fishing Plans 2016**





## Fisheries Department FINAL

### TSAWWASSEN ANNUAL FISHING PLAN EULACHON AND CHINOOK – Final April 2016

This fishing plan has been prepared by Tsawwassen First Nation (TFN) for submission to the Joint Fisheries Committee to assist in the planning for Tsawwassen fisheries to be conducted after the Effective Date (between 1 April 2016 and 31 March 2017). A list of TFN's designated fishers and their designation numbers is provided to Fisheries and Oceans Canada annually.

The following sections provide the proposed harvest plans and harvest expectations for each salmon species, based on pre-season run size forecasts, to ensure that the Department of Fisheries and Oceans (DFO) is aware of potential TFN's harvest levels and preferred harvest times, areas, and methods for each species or species group. However, the Tsawwassen Annual Fishing Plan (TAFP) is subject to identified and documented conservation concerns.

#### General

Tsawwassen fisheries will be conducted in a manner consistent with the Tsawwassen First Nation Final Agreement, Tsawwassen First Nation Harvest Agreement, Harvest Documents, Tsawwassen Fisheries Operational Guidelines (FOG) document, Tsawwassen Law, Federal Laws and British Columbia Law. As indicated in the Tsawwassen Final Agreement, Tsawwassen fisheries will be conducted within the Tsawwassen Fishing Area (TFA) or Tsawwassen Intertidal Bivalve Fishing Area, unless otherwise permitted in Harvest Documents or licences issued by DFO. The specific catch monitoring requirements and plans for each species are defined in the Tsawwassen FOG document. The following species specific plans summarize the conservation issues and provide details on Tsawwassen proposed fishing times, gear and size restrictions for each species. Where conservation concerns have been identified licence conditions will identify those species that should be released alive and unharmed.

#### Eulachon

**Conservation:** The Draft IFMP for Eulachon indicates that: "Due to stock strength and conservation concerns, only very limited Fraser River FSC fisheries for Eulachon will be considered on a case by case basis by Lower Fraser DFO area office for 2016".

**Fishery:** A small amount of FSC harvest of Eulachon is proposed for 2016. Eulachon may be harvested for FSC purposes by specifically designated TFN fishers at the times and locations in a Tsawwassen Harvest Document. The Fraser River Eulachon IFMP for 1 April 2016 to 31 December 2016 limits the length of fishing time to 20 minute soak times to a maximum of 6 hours per day.

**Timing:** From March 15, 2016 through mid-May 2016, TFN's proposed Eulachon fishing should be permitted for time periods equivalent to that permitted for other First Nation's

fishing in the TFA and the weekly timing for these fisheries will be determined in consultations with DFO.

In addition, TFN proposes Eulachon fisheries for ceremonial purposes from March 1<sup>st</sup> 2017 through March 31<sup>st</sup> of 2017, or similar timing equivalent to that permitted for other First Nation's fishing in the TFA. The TFN 2017 Eulachon fishery will be covered by Fraser River Eulachon IFMP for 2017.

- Gear:** Each fisher may fish using one drift net up to a maximum soak time of 20 minutes. Drift nets shall be no more than 100 m in length and shall have a mesh size of no less than 25 mm and no greater than 50 mm.
- Size:** There are currently no size restrictions for FSC harvests of Eulachon.
- Expectation:** The expected harvest level for TFN in 2016 is 288 lb. TFN is willing to assist other Lower Fraser First Nations with their FSC Eulachon harvest.

### **Chinook Salmon**

**Conservation:** In 2010, the Nicola Tribal Association identified some serious conservation concerns for "early-timed" Chinook salmon and requested that all Fraser First Nations "hold off on any fishing" for these stocks. Most "early-timed" Chinook salmon stocks are Spring 4<sub>2</sub> and Spring 5<sub>2</sub> fish. These concerns are still relevant in 2016. In the 2016 Preliminary Salmon Outlook, Spring 4<sub>2</sub>, Summer 4<sub>1</sub>, Spring 5<sub>2</sub>, and Summer 5<sub>2</sub> Chinook salmon stocks have been classified as stocks of low abundance. The 2016-17 draft South Coast Salmon IFMP includes the management measures implemented in to conserve Fraser Spring 4<sub>2</sub> Chinook salmon returns. These management actions also provide some additional protection for the Fraser Spring 5<sub>2</sub> and Summer 5<sub>2</sub> Chinook salmon as their migration timing overlaps significantly. For Spring and Summer 5<sub>2</sub> Chinook salmon, the Department is currently planning to begin the season with Zone 1 management actions. Updates of the predicted return for informational purposes are tentatively planned mid-June.

**TFN Fishery:** Chinook salmon may be harvested for FSC purposes by any designated TFN fisher at the times and locations defined in a Tsawwassen Harvest Document. TFN fishers and the TFN Fisheries Department will endeavor to minimize the encounter rate and harvest for non-target species (i.e. species without directed fishing effort during the Chinook salmon fishing periods).

**Timing:** From April 1<sup>st</sup> through June 15<sup>th</sup> of 2016, TFN will put forward requests for limited ceremonial fisheries for planned community events (e.g. the TFN first fish ceremony, graduation ceremony, funerals, weddings, Longhouse ceremonies, and the TFN Anniversary of the Treaty Effective Date, etc.) during this period.

TFN is concerned with DFO's plans to permit Chinook salmon harvests in marine recreational fisheries off southern Vancouver Island prior to June 15<sup>th</sup>. There is evidence that these fisheries have captured some early-timed Fraser Chinook salmon stocks.

Similar to 2015 fishing season and under a "Zone 1" management regime for Spring and Summer 5<sub>2</sub> Chinook, TFN will conduct five-24 hour Chinook salmon fisheries starting the first weekend in May until mid-June. If a "Zone 1" management continues through to the end of June, TFN will conduct two-36 hour fisheries, from June 18-27<sup>th</sup>. These weekly fisheries will start on Friday or Saturday at a time that will be determined in

weekly consultations with DFO on the Wednesday prior. Under this management regime, after this June fishery, there would be no directed Chinook salmon fisheries until late July, based on anticipated conservation concerns for Early Stuart Sockeye salmon.

The pre-season Chinook fishery management tool will be used to evaluate the potential for increase in early Chinook salmon FSC opportunities, starting as early as April.

However, if DFO manages the Chinook salmon fishery under a Zone 2 management regime (based on their decision mid-June, TFN's proposed Chinook salmon fishing plan is a minimum of 36 hours per week from June 16<sup>th</sup> to July 2<sup>rd</sup> and a minimum of 48 hours per week from July 3<sup>th</sup> to July 23<sup>th</sup>. These weekly fisheries will start on Friday at a time that will be determined in weekly consultations with DFO on the Wednesday prior.

From July 20<sup>th</sup> through August 31<sup>st</sup> of 2016, TFN's proposed Chinook salmon fishing plan is a minimum 48 hours per week or time equivalent to that permitted for other First Nation's fishing in the TFA. These weekly fisheries will start on Friday at a time that will be determined in weekly consultations with DFO on the Wednesday prior. If the Chinook salmon allocation has not been met by 31 August 2016, TFN will request further harvest opportunities for Chinook salmon into September. TFN understands that these additional Chinook salmon harvest opportunities will be dependent upon the Coho salmon exploitation rate.

From March 1<sup>st</sup> 2017 through March 31<sup>st</sup> of 2017, TFN's proposed Chinook salmon fisheries for ceremonial purposes is a minimum of 12 hours per week or time equivalent to that permitted for other First Nation's fishing in the TFA; and these weekly fisheries will start on Friday or Saturday at a time that will be determined in weekly consultations with DFO on the Wednesday prior.

**Gear:** Approved selective fishing methods may be used during any fishing period, if identified on the harvest documents.

Drift nets with a minimum mesh size of 12 cm/4.8 inches, a maximum length of 50 fathoms, and a maximum depth of 60 meshes may be used, except during period when larger mesh size is required to minimize the catch of Early Stuart or Late-run Sockeye salmon stocks (see below). Drift Nets with a minimum mesh size of 20 cm/8.0 inches, a maximum length of 50 fathoms, and a maximum depth of 60 meshes may be used during the period when Early Stuart Sockeye salmon are migrating through the TFN fishing areas (approximately 22 June - 20 July 2016) or during other periods when there are conservation concerns for Fraser Sockeye stocks.

**Size:** No Chinook salmon with less than 30 cm/12 inches in nose-fork length will be harvested, other than as bycatch after all efforts have been made to release salmon unharmed have been taken.

**Expectation:** The expected harvest level for 2016 is 625 Chinook salmon.

**Note:** *Sockeye salmon, Pink salmon, Chum salmon, Coho salmon, crab, intertidal bivalves, shrimp and prawns, groundfish, sturgeon and steelhead, and marine aquatic plants will be updated at a later date.*

**TSAWWASSEN ANNUAL FISHING PLAN (EXCLUDING EULACHON AND CHINOOK) – DRAFT JULY 2016**

This fishing plan has been prepared by Tsawwassen First Nation (TFN) for submission to the Joint Fisheries Committee to assist in the planning for Tsawwassen fisheries to be conducted after the Effective Date (between 1 April 2016 and 31 March 2017). A list of TFN's designated fishers and their designation numbers is provided to Fisheries and Oceans Canada (DFO) annually.

The following sections provide the proposed harvest plans and harvest expectations for each salmon species, based on pre-season run size forecasts, to ensure that the DFO is aware of potential TFN's harvest levels and preferred harvest times, areas, and methods for each species or species group. However, the Tsawwassen Annual Fishing Plan (TAFP) is subject to identified and documented conservation concerns. *This document does not include sections related to Eulachon and Chinook salmon because they were previously finalized in a separate document.*

**General**

Tsawwassen fisheries will be conducted in a manner consistent with the Tsawwassen First Nation Final Agreement, Tsawwassen First Nation Harvest Agreement (THA), Harvest Documents (HD), Tsawwassen Fisheries Operational Guidelines (FOG) document, Tsawwassen Law, Federal Laws, and British Columbia Law. As indicated in the Tsawwassen Final Agreement, Tsawwassen fisheries will be conducted within the Tsawwassen Fishing Area (TFA) or Tsawwassen Intertidal Bivalve Fishing Area, unless otherwise permitted in HD or licences issued by DFO. The specific catch monitoring requirements and plans for each species are defined in the Tsawwassen FOG document. The following species specific plans summarize the conservation issues and provide details on Tsawwassen proposed fishing times, gear and size restrictions for each species. It should be noted, that all fish species identified in the conditions of licence for non-retention will be released unless, after all efforts and attempts have been made to return them to the water alive and unharmed, they are dead.

**Sockeye Salmon**

Conservation<sup>1</sup>: Conservation concerns are anticipated for several of the components of the 2016 Sockeye salmon return to the Fraser River: the Early Stuart stock, some Early Summer stocks, some the Late-run stocks (e.g. Cultus Lake stock). Draft IFMP indicates that there will be an Early Stuart and early-timed Early Summer Sockeye salmon closure in Area 29 from June 26<sup>th</sup> until July 20<sup>th</sup>. The window closure will depend on inseason assessments. In some years when there has been concern regarding the return strength of the early timed component of the Early Summer run, a one week extension to the Early Stuart closure window has been implemented to protect these stocks. Depending on in-season information, this approach or other actions may be considered to support meeting management objectives for this stock group. If however, the in-season information indicates above average run size warranting directed fisheries on the Early Stuart stock then TFN intends to fish.

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<sup>1</sup> The run timing for the various Fraser Sockeye salmon stock timing groups are not final (based on draft IFMP).



From late July 2016 through mid-August 2016, most of the Sockeye salmon migrating through the TFN salmon fishing area are expected to be originating from the Summer-run stocks. After mid-August 2016, the Late-run stocks (including Cultus Lake) could begin to enter the Fraser River in significant numbers depending on the extent to which these fish delay in the lower Georgia Strait. The midpoint pre-season forecasts for the total return of Fraser Sockeye salmon in 2016 is 2,271,000 million (36,000 Early Stuart, 447,000 Early Summers, 1,677,000 Summers, and 111,000 Lates). These estimates represent the 50% probability level for each timing group (i.e. there is a 50% probability that the run could be lower than these estimates).

**TFN Fishery:** Sockeye salmon may be harvested for FSC purposes by any designated TFN fishers at the times and locations defined in a Tsawwassen HD. Once the first in-season Canadian Commercial Total Allowable Catch (CCTAC) has been determined for Fraser Sockeye salmon, TFN will be issued licences by DFO for the Tsawwassen commercial allocation for Fraser River Sockeye salmon, as defined in the TFN Harvest Agreement. TFN will work with DFO to determine the timing, location and other details related to TFN commercial harvest opportunities. TFN fishers and the TFN Fisheries Department will endeavor to minimize the encounter rate and harvest for non-target species (i.e. species without directed fishing effort during the Sockeye salmon fishing periods). A portion of the TFN FSC Sockeye salmon allocation may be retained to be taken as bycatch in TFN FSC fisheries conducted in August to harvest the TFN allocation for Chinook salmon.

**Timing:** If any inter-First Nation FSC sharing arrangement fisheries are permitted to target Early Stuart Sockeye salmon, TFN expects that its members will be provided an opportunity to harvest some Sockeye salmon during the period when Early Stuart Sockeye salmon are migrating through the TFA. These fisheries would typically start on Friday. The duration and timing of these fisheries will be determined in weekly consultations with DFO, typically on the Wednesday prior.

From 21 July through 7 August 2016 the TFN's proposed Sockeye salmon fishing is 48 hours per week, subject to conservation; and these weekly fisheries will start on Friday at a time that will be determined in weekly consultations with DFO on the Wednesday prior.

From 8 August through 31 August 2016 the TFN's proposed Sockeye salmon fishing is 24 hours per week (subject to conservation), if required to achieve the TFN Sockeye salmon allocation. These weekly fisheries will start on Friday or Saturday at a time that will be determined in weekly consultations with DFO on the Wednesday prior. Note the end dates for Sockeye salmon fisheries depend on the approach taken for IFR Coho in 2016.

**Gear:** Approved selective fishing methods may be used during any fishing period, if identified on the HD.

Drift nets with a minimum mesh size of 10 cm/4 inches, a maximum length of 50 fathoms, and a maximum depth of 60 meshes may be used.

**Size:** No Sockeye salmon less than 30 cm/12 inches in nose-fork length will be harvested, other than by catch after all efforts have been made to release salmon unharmed have been taken.

Expectation<sup>2</sup>: Based escapement plan options outlined in the draft IFMP and the pre-season (50% probability) run size forecast, the Canadian Total Allowable Catch (CTAC) is estimated to be below 3 million Sockeye salmon. Therefore, the expected harvest level for the 2016 TFN FSC Sockeye salmon fisheries will not reach the FSC maximum amount of 15,226. TFN's commercial allocation for Sockeye salmon is 0.78% of the CCTAC of Fraser River Sockeye salmon. The harvest level for the 2016 TFN commercial Sockeye salmon fisheries will be determined as soon as the CCTAC has been defined for Fraser River Sockeye salmon. Both the TFN FSC and commercial allocations may change during the fishing season with changes in the returning abundance of Fraser River Sockeye salmon.

### **Pink Salmon**

Conservation: Even year returns of Fraser River Pink salmon are typically too small to warrant any direct harvest of these stocks

TFN Fishery: N/A

Timing: N/A

Gear: N/A

Size: N/A

Expectation: N/A

### **Chum Salmon**

Conservation: The expected abundance of Fraser River Chum is expected to be near target in 2016 (Salmon Outlook of 4). However, conservation concerns related to Fraser Steelhead, Lower Fraser Coho salmon, and Interior Fraser Coho salmon could affect the timing and fishing methods permitted for commercial fisheries that target Fraser Chum salmon stocks. The IFMP defines the decision guidelines for fisheries that target Fraser River Chum salmon stocks. TFN recommends that no commercial fisheries be permitted to harvest Fraser Chum salmon until a TAC has been determined.

TFN Fishery: Chum salmon may be harvested for FSC purposes by any designated TFN fishers at the times and locations defined in a Tsawwassen HD. Once the first in-season CCTAC has been determined for Fraser Chum salmon, TFN will be issued a HD by DFO for the Tsawwassen commercial allocation for Fraser River Chum salmon, as defined in the TFN Harvest Agreement. TFN will work with DFO to determine the timing, location and other details related to TFN commercial harvest opportunities. TFN fishers and the TFN Natural Resource Department will endeavor to minimize the encounter rate and harvest for non-target species (e.g. Steelhead, Sturgeon, Lower Fraser Coho salmon, Interior Fraser Coho salmon).

Timing:<sup>3</sup> From 8 October through 30 November 2016 and depending on the outcome of IFR Coho salmon discussions, TFN's proposed Chum salmon fishery is 24 hours for the first week and 48 hours per week thereafter, and these weekly fisheries will start on Friday or

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<sup>2</sup> CTAC and TFN's FSC allocation is based on pre-season estimates (draft salmon IFMP) and will continue to change in-season.

<sup>3</sup> Timing dates for FSC Chum salmon fisheries based on draft salmon IFMP.

Saturday at a time that will be determined in weekly consultations with DFO on the Wednesday prior.

If TFN has a commercial Chum salmon allocation in 2016, TFN proposes to use their standard Chum salmon drift nets during similar time periods when Area E and other Fraser First Nations are permitted to conduct commercial fisheries that target Fraser Chum salmon (should they sign Economic Access Agreements with the Department) and to conduct an experimental selective fishery to harvest the portion of their commercial Chum salmon allocation that was not harvested using their standard Chum salmon drift nets. The timing for these commercial fisheries is expected to be in late October or early November (after 22 October).

**Gear:** Previously approved selective fishing methods may be used during any fishing period, if identified in the HD.

Drift nets with a minimum mesh size of 15.8 cm/6 ¼ inches, a maximum length of 50 fathoms, and a maximum depth of 60 meshes may be used during the period of approximately 8 October through 30 November 2016. Revival boxes will be present on vessels greater than thirty feet – representing about 19% of TFN's fleet.

**Size:** No Chum salmon less than 30 cm/12 inches in nose-fork length will be harvested other than as by catch when a mortal wound is obvious.

**Expectation:** TFN Chum salmon allocation for FSC fisheries would be 2,576 Chum salmon assuming Terminal Surplus is greater than 100,000 in 2016. TFN's commercial allocation for Chum salmon is 3.27% of the Terminal Commercial Catch (TCC) of Fraser River Chum salmon. The TCC will be determined in-season (mid-October). The TFN commercial allocations may change during the fishing season with changes in the returning abundance of Fraser River Chum salmon.

### **Coho Salmon**

**Conservation:** Conservation concerns have been identified for Interior Fraser Coho salmon and Lower Fraser Coho salmon. For 2016, the status of southern BC stocks ranges from low to near target. Most adults returning in 2016 are from the 2013 brood year that smolted in 2015. Ocean indicators suggest conditions affecting early marine survival deteriorated in 2015. Therefore, a decline in abundance relative to recent years is expected in 2016. Therefore, regardless of the exploitation rate selected for the 2016 fishing season, First Nations fisheries both off the mouth of, and in, the Fraser River will likely continue be affected to some degree from early September until mid-October.

**TFN Fishery:** Coho salmon may be harvested for FSC purposes, consistent with relevant provisions laid out in the IFMP, by any designated TFN fishers at the times and locations defined in a Tsawwassen HD. TFN fishers and the TFN Fisheries Department will endeavor to minimize the encounter rate and harvest for non-target species (e.g. Sturgeon and Steelhead).

**Timing:<sup>4</sup>** From approximately 8 October through 30 November 2016, TFN may harvest Coho salmon captured in their Chum salmon FSC fisheries up to a pre-determined maximum of 500 pieces. The Department will work with TFN to provide access to Coho salmon in

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<sup>4</sup> Timing dates for harvesting FSC Coho salmon are based on draft salmon IFMP.

times and areas with minimal impact on stocks of concern, and consistent with the overall 2016 IFR Coho salmon management approach.

**Gear:** Approved selective fishing methods may be used during any fishing period, if identified in the harvest documents.

Drift nets with a minimum mesh size of 15.8 cm/6 ¼ inches, a maximum length of 50 fathoms, and a maximum depth of 60 meshes may be used during the period of 8 October through 30 November 2016.

**Size:** No Coho salmon less than 30 cm/12 inches in nose-fork length will be harvested other than as by-catch when a mortal wound is obvious.

**Expectation:** As outlined in Appendix J-2 of the TFA, TFN's Coho salmon allocation for FSC fisheries will be **500 Coho salmon** (hatchery-marked or unmarked) in 2016 and will be harvested:

- a. Incidentally in fisheries that target other species; or
- b. Using selective harvesting techniques to capture specific Coho salmon stocks.

If other Fraser River First Nations are permitted to harvest unmarked Coho salmon in non-selective fisheries within the Fraser River, TFN expects the DFO will permit TFN members to harvest a portion of the TFN Coho salmon allocation in non-selective fisheries.

## Crab

**Conservation:** The following conservation issues have been identified by DFO:

- There is a concern that undersized, female and soft-shell crab are being removed through either illegal harvests or incidental mortality due to intensive fishing. Due to increased injury and mortality, the capture and handling of undersized, female, and soft-shell crab is a conservation concern.
- Illegal crab trap gear continues to be a conservation concern. Crab traps having undersized, missing, or closed escape rings contribute to higher undersized, female, and soft-shell mortalities. If lost, these traps can continue to fish until they structurally deteriorate or become buried in the substrate.<sup>5</sup>
- All harvesters (Commercial, First Nation, and Recreational) should have the same minimum size limit for conservation of male crab.
- Commercial and recreational harvesters must release all females regardless of size. First Nation fishers are encouraged to release all female crabs caught in FSC fisheries in Pacific Region Management Areas 28 & 29.
- Crab harvesting during "soft shell" periods is not authorized for commercial harvesters for conservation reasons. Crabs with soft shells are susceptible to significant mortality during the fishing and handling process required for release of female and undersized crabs. At this time First Nation harvesting for domestic purposes is allowed during the commercial closed period for soft shell (December to mid-June in Areas 28 and 29, and December to mid-July in Boundary Bay).

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<sup>5</sup> Integrated Fisheries Management Plan, Crab by trap 2016.

- It is recommended that TFN crab harvesters reduce fishing effort during the soft-shell period to reduce mortalities of undersized crabs. In Areas 28 and 29, the soft-shell or moulting period is from April to mid-June (May to mid-July in Boundary Bay).

**TFN Fishery:** Crab may be harvested for FSC purposes by any designated TFN fisher at the times and locations defined in a Tsawwassen Harvest Document. TFN fishers and the TFN Fisheries Department will endeavor to minimize the encounter rate and harvest for non-target species. TFN has communal commercial access to crab, however the commercial fishery is subject to separate licence conditions and is not discussed in this document.

**Timing:** From 1 April 2016 through 31 March 2017, 24 hours per day, every day.

**Location:** As noted in the Tsawwassen FOG document, crab buoys are not permitted in the portion of the TFA defined as the “Navigational No Float Zone”. TFN fishers are permitted to fish for crab in this zone, but any buoys associated with crab traps must remain outside this zone.

**Gear:** Each TFN vessel may use up to a maximum of 50 traps to harvest crab for FSC purposes. The following requirements apply to all traps used to catch crabs:

- Biodegradable escapement mechanisms are required on each trap in the form of a rot cord, rot panel, or rot panel alternative. These mechanisms are designed to minimize the effects of ghost fishing by traps.

All crab traps must be fitted with at least two escape holes (at least 105 mm in diameter) that are not more than 100 mm below the top of the frame.

- Unique “zap strap” tags will be applied to each TFN each crab trap used in the FSC fishery to facilitate the identification of TFN traps and enforcement of fisheries regulations.
- Traps set individually will attach a floating buoy legibly marked with Tsawwassen First Nation, participant’s name and the identification number for the vessel used. Multiple traps set in a string will have a floating buoy legibly marked with Tsawwassen First Nation, participant’s name and the identification number for the vessel used attached to both ends of each string.

**Size:** The minimum size for Dungeness crab is 16.5 cm/6.5 inches and for Red Rock Crab are 11.5 cm/4.5 inches, both measured in a straight line across the widest part of the carapace, or shell. All crab less than the minimum size limit shall be immediately released to the area of capture.

### **Intertidal Bivalves**

**Conservation:** No conservation concerns have been identified for intertidal bivalves in the Tsawwassen Intertidal Bivalve Fishing Area.

**TFN Fishery:** TFN currently does not have a harvest document for bivalves, but is working with Federal and Provincial government agencies, the Canadian Shellfish Sanitation Program (CSSP) and South Coast First Nations to establish harvesting locations within the Tsawwassen Intertidal Bivalve Harvest Area (Southern Gulf Islands). Once locations have been determined and South Coast First Nations have been contacted, intertidal bivalves

may be harvested for FSC purposes by any designated TFN fishers at the times and locations defined in a Tsawwassen Harvest Document.

Timing: To be determined.

Location: As described in the Tsawwassen FOG document:

- Where the Tsawwassen Intertidal Bivalve Fishing Area overlaps with a National Park Reserve or a National Marine Conservation Area, terms and conditions governing harvest will be developed following consultations with Parks Canada.

Sanitary and Biotoxin Closures:

- Collection of bivalves from areas in closed status for sanitary contamination under the Management of Contaminated Fisheries Regulations is not authorized. All clam harvesters are advised to check for both bivalve shellfish biotoxin (PSP/Redtide, ASP, DSP) sanitary (emergency, annual, seasonal) contamination closures, prior to any harvest or consumption. Information on in-season closures due to biotoxins and on annual sanitary (human and animal waste) contamination closures is available at local DFO offices, by calling the toll-free information line at 1-866-431-3474, or on the Internet at [www.pac.dfo-mpo.gc.ca/psp](http://www.pac.dfo-mpo.gc.ca/psp).

Gear: TFN members propose to use typical hand pick harvesting techniques (shoves, rakes, and buckets) to harvest intertidal bivalves for FSC purposes.

Size: There are currently no size restrictions for FSC harvests of intertidal bivalves.

### **Shrimp and Prawns**

Conservation: No conservation concerns have been identified for shrimp and prawns in the TFA.

TFN Fishery: TFN currently does not hold a harvest document for Shrimp and Prawns. Upon request by TFN, shrimp and prawns may be harvested for FSC purposes by any designated TFN fishers at the times and locations defined in a Tsawwassen Harvest Document. TFN fishers and the TFN Fisheries Department will endeavor to minimize the encounter rate and harvest for non-target species.

Timing: From a date that is established in a Tsawwassen Harvest Document through 31 March 2017, 24 hours per day, every day.

Location: As noted in the Tsawwassen FOG document, buoys are not permitted in the portion of the TFA defined as the "Navigational No Float Zone". As indicated for crab, when a harvest document for shrimp and prawns is issued, TFN fishers will be permitted to fish for shrimp and prawns in this zone, but buoys for their shrimp and prawn traps must remain outside this zone.

Gear: TFN fishers propose to use standard shrimp and prawn traps to harvest shrimp and prawns for FSC purposes. Number of traps will be determined.

Size: There are currently no size restrictions for FSC shrimp and prawn harvests.

### **Rockfish, Lingcod, Halibut, Dogfish, and Sole**

Conservation: Monitoring and research programs have indicated that inshore Rockfish stocks (Yelloweye, Quillback, Copper, China and Tiger) and Lingcod in the Strait of Georgia are at low levels of abundance. The management objective for inshore rockfish species

(which include Yelloweye, Quillback, Copper, China and Tiger) is to continue conservation strategies that will ensure stock rebuilding over time. However, at this time, FSC fishing for Rockfish and Lingcod will continue to be permitted. There are currently no conservation concerns for Halibut, Dogfish or Sole in the TFN fishing area.”

- TFN Fishery:** Rockfish, lingcod, halibut, dogfish, sablefish and flatfish may be harvested for FSC purposes by any designated TFN fishers at the times and locations defined in a Tsawwassen Harvest Document. TFN fishers and the Tsawwassen Natural Resource Department will endeavor to minimize the encounter rate and harvest for non-target species.
- Timing:** From 1 April 2016 through 31 March 2017, 24 hours per day, every day. However, the timing for the current harvest document is Friday, July 1, 2016 to Friday, September 30, 2016. Renewal of the harvest document will occur after consultation with DFO.
- Gear:** TFN members will use long line gear to harvest Rockfish, Lingcod, Halibut, Dogfish, and Sole for FSC purposes.
- Size:** There are currently no size restrictions for FSC harvests of Rockfish, Lingcod, Halibut, Dogfish, and Sole.
- Expectation:** Fisheries and Oceans Canada has been asked to provide information on the status of groundfish species found in the TFA and any closures for groundfish species in the TFA.

### **Sturgeon and Steelhead**

- Conservation:** Conservation concerns have been identified for Fraser River White Sturgeon and Steelhead in the TFA.
- TFN Fishery:** All live White Sturgeon and Steelhead caught in TFN fisheries will be immediately released. No TFN fisheries will target White Sturgeon or Steelhead in 2016. In the event that a White Sturgeon or Steelhead caught in a TFN fishery is dead or a mortal wound is obvious, that fish may be retained by a TFN fisher for FSC purposes, as per the generally agreed upon practice for other Fraser River First Nation FSC fisheries. No Steelhead or Sturgeon may be retained in TFN commercial fisheries.
- Timing:** NA
- Gear:** NA
- Size:** NA

### **Marine Aquatic Plants**

- Conservation:** No conservation concerns have been identified for marine aquatic plants in the TFA.
- TFN Fishery:** Tsawwassen members may harvest marine aquatic plants for FSC purposes in the TFA as outlined in the harvest document.
- Timing:** From 1 April 2016 through 31 March 2017, 24 hours per day, every day.
- Gear:** TFN members propose to use hand picking methods, using a sharp cutting instrument, to harvest marine aquatic plants for FSC purposes.
- Expectation:** BC Minister issued the Harvest Document without a harvest limit at this time. The Province of BC will revisit the necessity of a harvest limit at some point in the future, should the need arise.





**APPENDIX B**  
**Examples of Harvest Documents**





Licence Number: XFSC 449 2016  
 File Number: LFA-16-HD 444/TSAWWASSEN  
 Valid From: 30-Jul-2016  
 Expiry Date: 31-Jul-2016

This licence is issued under the authority of SECTION 4 OF THE ABORIGINAL COMMUNAL FISHING LICENCES REGULATIONS, and SECTION 7 OF THE FISHERIES ACT.

This licence is not intended to define an Aboriginal right to fish or its scope; however, for the fishing season, it is intended to provide a mechanism, for reasons of proper management and control of the fisheries and conservation and protection of fish, for requiring compliance with the provisions of this licence.

This licence is subject to the *Fisheries Act* and regulations thereunder, and confers the authority to fish under the following conditions: Food, Social, and Ceremonial purposes.

**Licence/Permit Activity Description:**

HARVEST DOCUMENT FOR TSAWWASSEN FIRST NATION FOR SALMON

Whereas a final agreement with Tsawwassen First Nation is now in effect;  
 And whereas the final agreement describes a fishing right and provides for the issuance of harvest documents for the fishing right.  
 And whereas, under the final agreement, a harvest document may be, among other things, a licence or other document, or amendment thereto, issued by the Minister under Federal Law or Provincial Law in respect of the fishing right;  
 Now therefore, this harvest document is issued under the authority of section 7 of the Fisheries Act and section 4 of the Aboriginal Communal Fishing Licences Regulations.  
 This harvest document is issued to Tsawwassen First Nation in accordance with the final agreement and confers, subject to the Fisheries Act and regulations thereunder, the authority to fish for the following purposes: Food, Social and Ceremonial.

**Period of Activity:**

Subject to amendments to the conditions of this harvest document and subject to close times as may be varied by the Director General, Pacific Region, DFO in accordance with the Fishery (General) Regulations, species of fish set out in this harvest document may be harvested under this licence. Subject to closures and other terms and conditions of this licence, the authority to fish under this licence will expire on Sunday, July 31, 2016 or earlier if DFO, after consultation with Tsawwassen First Nation has determined there is a conservation concern.

**Licence Holder:**

FIN: 108234 Tsawwassen First Nation

**Allowable Fishing Times:**

Fishing periods defined for a species supersede all periods defined in this section.

**Start:** Saturday, July 30, 2016 at 12:00 **End:** Sunday, July 31, 2016 at 06:00

**Details:**

**Species, Quantity of Fish, Area(s) and Gear:**

**Species:** SOCKEYE SALMON (*Oncorhynchus nerka*)  
**Allowable Fishing Times:** Start: Saturday, July 30, 2016 at 12:00  
 End: Sunday, July 31, 2016 at 06:00  
 Details:



Licence Number: XFSC 449 2016

File Number: LFA-16-HD 444/TSAWWASSEN

Valid From: 30-Jul-2016

Expiry Date: 31-Jul-2016

**Gear:** Net, Drift  
Net, Set

**Licence Area:** Lower Fraser

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### Additional Information:

Additional Information:

**Drift Nets** on condition that:

- i. Nets do not exceed a maximum of 50 fathoms or 300 feet in length and a maximum depth of 60 meshes with a maximum mesh size of 5 7/8" and a maximum 3:1 hang ratio.
- ii. Each Participant fishes only one net,
- iii. Only one net is fished from any vessel,
- iv. Each net is attended at all times by the Participant who is fishing the net.
- v. No vessel fishing under the authority of this harvest document has on board, in a hung condition, any net that does not meet the conditions in (i) above, and
- vi. Spare nets on board a vessel actively fishing are kept in a stowed condition.

- Set Nets** on condition that:
- i. Nets do not exceed a maximum of 10 fathoms or 60 feet and a maximum depth of 60 meshes with a maximum mesh size of 5 7/8" and a maximum 3:1 hang ratio .
  - ii. All Set Nets are identified by a floating buoy prominently displaying the Participant's designation number, and the Participant's designation number is the only number displayed on the buoy, and.
  - iii. All Set Nets fished from poles have buoys attached to the end of the net farthest from the beach by means of a tag line of sufficient length to allow the buoys to be on the surface of the water and clearly visible for inspection at all times.

**AREA:** Fishing is permitted in the following area: Those waters of the main arm of the Fraser River westerly of the power lines immediately downstream of the Port Mann Bridge, the waters of the North Arm of the Fraser River from the junction of the main arm downstream to the Arthur Laing Bridge, the waters of the Middle arm of the Fraser River, the waters of the Strait of Georgia bounded by a line commencing at 49° 11' 3.1524" N latitude and 123° 12' 26.08868" W longitude then to 49° 7' 48.216" N latitude and 123° 19' 50.4228" W longitude then to 49° 5' 15.6948" N latitude and 123° 18' 36.8958" W longitude then to 49° 0' 8.0028" N latitude and 123° 18' 5.1156" W longitude then to 49° 0' 7.5564" N latitude and 123° 5' 27.528" W longitude and the waters of Boundary Bay bounded by a line commencing at 49° 0' 7.5198" N latitude and 123° 2' 6.5898" W longitude then to 49° 0' 7.5414" N latitude and 122° 49' 10.8552" W longitude then to 49° 1' 15.2256" N latitude and 122° 48' 20.7858" W longitude. Portions of DFO Management Subareas 29-6, 29-7, 29-8, 29-9, 29-10, 29-11, 29-12, 29-13, 29-14, 29-17.

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### Terms and Conditions:

#### Definitions

"Drift Net" means a gillnet free floating in the water, not attached in any manner to the shore, operated from a boat.

"DFO" means the Department of Fisheries and Oceans.

"Fishery" means fishing under the authority of this harvest document.

"Identification Number" in respect of a vessel means

(a) in the case of a registered commercial fishing vessel, the vessel registration number, and

(b) in the case of a vessel that is not a registered commercial fishing vessel, the number of the vessel identification decal issued by Tsawwassen First Nation.

"Observer" means an observer designated under section 39 of the Fishery (General) Regulations.

"Participant" means an individual carrying on fishing or any related activity, including transporting fish caught under the authority of this harvest document.

"Set Net" means a gillnet that is either tied to shore at one end and anchored in the river at the other end, or anchored in the river at both ends, or tied to the shore at one end and tied to a net pole at the other end.

"TFN" means Tsawwassen First Nation



Licence Number: XFSC 449 2016

File Number: LFA-16-HD 444/TSAWWASSEN

Valid From: 30-Jul-2016

Expiry Date: 31-Jul-2016

“TFD” means Tsawwassen Fishing Department located at 1926 Tsawwassen Drive, V4M 4G2 604-943-2112.

### **Species and Quantity**

The Fishery is limited to the harvest of Sockeye salmon and incidental harvest of Chinook salmon.

All efforts and attempts shall be made to return all non-target species including Steelhead and Sturgeon to the water alive and unharmed.

Steelhead and Sturgeon must not be retained.

### **Designation of Individuals and Vessels**

Tsawwassen First Nation may not designate individuals who are not Tsawwassen Members to harvest salmon.

Where Tsawwassen First Nation designates an individual; a Tsawwassen fishing licence will be issued. An individual fishing under this harvest document must carry their Tsawwassen fishing licence at all times while participating in the Fishery or while transporting fish harvested in the Fishery and must present it to any DFO Fishery Officer, DFO Fishery Guardian or Aboriginal Fishery Officer upon request.

A vessel used in the Fishery must be identified by affixing a vessel identification decal issued by Tsawwassen First Nation. The decal must be affixed to the vessel so that the decal is legible and unobstructed when viewed from another vessel or from shore. Where the vessel is not a registered commercial vessel, the decal must be uniquely numbered. Where the vessel is a registered commercial vessel, the decal must not be numbered.

Prior to each fishing period, the Tsawwassen First Nation will provide to DFO a list of Tsawwassen First Nation members and vessels designated to fish under this Harvest Document and, in the case of a vessel, the vessel's Identity Number, and will immediately inform DFO of any changes to the list.

### **Use of Fish**

Fish caught under this licence are for food, social and ceremonial purposes. Without prejudice to future agreements or regulations, sale of Fish caught under this licence is **not** permitted.

### **Catch Monitoring and Harvest Reporting**

#### **1.1 Participant and Interview Data**

Participants are required to notify the TFD of their intentions to harvest fish prior to their participation in each fishing period and report their catch and fishing effort information to the TFD after completion of each fishing period. These notifications and reports can be provided by phone to the TFD or by interview to an on-duty member of the TFN catch monitoring crew. Interviewers will record Salmon catch and effort information on the “TFN Salmon Fisheries Interview Data Form”.

#### **1.2 Daily Fishing Logs**

Each Participant will maintain a daily fishing log using the “TFN Salmon Fisheries Log Data Form”. Upon completion of each fishing period, each Participant will submit logs to monitors at landing sites or directly to the TFD office.

#### **1.3 Validation**

TFN will conduct on-water catch monitoring surveys or TFN fisheries officer patrols at least once every day during fishing period and, will record vessels participating in the Fishery. TFN will compare these records with the list of vessels designated to fish under this harvest document, will observe catches and compare it with catch reported orally to the TFD or recorded in daily logs.

Catch per vessel data will be verified through a random and representative sampling of a percentage of vessel landings by TFN shore based monitors. Efforts should be made to provide a representative sample of the various vessel types, fishing locations and gear observed in the Fishery in these validation activities. During landing validation TFN monitors will interview the Participants to obtain hours fished, number and species of Salmon and other species retained and released and perform a count the vessel's catch. The percentage of vessels needing validation will vary dependent on the type of fishery and will be discussed at joint technical committee meetings or in season as needed



Licence Number: XFSC 449 2016  
File Number: LFA-16-HD 444/TSAWWASSEN  
Valid From: 30-Jul-2016  
Expiry Date: 31-Jul-2016

but it is proposed that coverage should be in the range of 20%.

#### **1.4 Reporting**

Within 24 hours of the close of a fishing period, TFN will provide a preliminary catch report to DFO, including the names and the Vessel Identification Numbers that participated in the Fishery, the gear used, hours fished, status of the report (final or preliminary), number and species of Salmon and other species retained, and number and species of Salmon and other species released. Along with reported catch information, TFN will submit a report of validations conducted during the opening, including Vessel Identification Numbers, gear type, hours fished, number and species of Salmon and other species kept and number and species of Salmon and other species released. TFN will contact Participants who did not report after the Fishing period to determine whether they did participate, and if so, collect the requisite information. The preliminary catch report will be finalized within 48 hours of the close of the Fishing period.

#### **Compliance with the Fisheries Act**

Pursuant to subsection 22(6) of the Fishery (General) Regulations, compliance with the Fisheries Act and the regulations made under the Act is a condition of this licence.

---

Issued by: Brian Matts, Resource Manager - Lower Fraser Area  
Fisheries and Oceans Canada

Date

Licence Issued: 29 July 2016

Licence Printed: 29 July 2016



Licence Number: XFSC 523 2015

File Number: LFA-16-HD 402/TSAWWASSEN

Valid From: 01-Jan-2016

Expiry Date: 31-Mar-2016

## HARVEST DOCUMENT FOR TSAWWASSEN FIRST NATION FOR CRAB

Whereas a final agreement with Tsawwassen First Nation is now in effect;

And whereas the final agreement describes a fishing right and provides for the issuance of harvest documents for the fishing right.

And whereas, under the final agreement, a harvest document may be, among other things, a licence or other document, or amendment thereto, issued by the Minister under Federal Law or Provincial Law in respect of the fishing right;

Now therefore, this harvest document is issued under the authority of section 7 of the Fisheries Act and section 4 of the Aboriginal Communal Fishing Licences Regulations.

This harvest document is issued to Tsawwassen First Nation in accordance with the final agreement and confers, subject to the Fisheries Act and regulations thereunder, the authority to fish for the following purposes: Food, Social and Ceremonial.

---

### Period of Activity:

Subject to amendments to the conditions of this harvest document and subject to close times as may be varied by the Director General, Pacific Region, DFO in accordance with the Fishery (General) Regulations, species of fish set out in this licence may be harvested under this licence. Subject to closures and other terms and conditions of this licence, the authority to fish under this licence will expire on Thursday, March 31, 2016 or earlier if DFO, after consultation with the First Nation has determined that the maximum quantity has been reached.

---

### Licence Holder:

FIN: 108234

1926 Tsawwassen Drive  
Tsawwassen BC V4M 4G2

Tsawwassen First Nation

Contact Number: 604-943-4199

Fax Number: 604-943-9226

---

### Allowable Fishing Times:

Fishing periods defined for a species supersede all periods defined in this section.

**Start:** Friday, January 1, 2016 at 00:01

**End:** Thursday, March 31, 2016 at 23:59

### Details:

---

### Individuals or groups assisting with the authorized activity:

Tsawwassen First Nation may not designate individuals who are not Tsawwassen Members to harvest crab.

Where Tsawwassen First Nation designates an individual; a Tsawwassen fishing licence will be issued. The Tsawwassen fishing licence must be carried at all times while participating in the Fishery or while transporting fish harvested in the Fishery and must be presented to any DFO Fishery Officer, DFO Fishery Guardian or Aboriginal Fishery Officer upon request.

A vessel used in the Fishery must be identified by affixing a vessel identification decal issued by Tsawwassen First Nation. The decal must be affixed to the vessel so that the decal is legible and unobstructed when viewed from another vessel or from shore. Where the vessel is not a registered commercial vessel, the decal must be uniquely numbered. Where the vessel is a registered commercial vessel, the decal must not be numbered.

Before the Fishery commences, Tsawwassen First Nation will provide to DFO a list of Tsawwassen First Nation members and vessels designated to fish under this Harvest Document and, in the case of a vessel, the vessel's Identity



Number, and will immediately inform DFO of any changes to the list.

---

**Species, Quantity of Fish, Area(s) and Gear:**

**Species:** DUNGENESS CRAB (*Cancer magister*)

**Allowable Fishing Times:** Start: Friday, January 1, 2016 at 00:01  
End: Thursday, March 31, 2016 at 23:59  
Details:

**Gear:** Hand Picking  
Net, Ring  
Trap, Crab

**Licence Area:** Lower Fraser: See Additional Description

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**Species:** GRACEFUL CRAB (*Cancer gracilis*)

**Allowable Fishing Times:** Start: Friday, January 1, 2016 at 00:01  
End: Thursday, March 31, 2016 at 23:59  
Details:

**Gear:** Hand Picking  
Net, Ring  
Trap, Crab

**Licence Area:** See Additional Description

---

**Species:** RED ROCK CRAB (*Cancer productus*)

**Allowable Fishing Times:** Start: Friday, January 1, 2016 at 00:01  
End: Thursday, March 31, 2016 at 23:59  
Details:

**Gear:** Hand Picking  
Net, Ring  
Trap, Crab

**Licence Area:** See Additional Description

**Additional Descriptions:** **Fishing is permitted in the following area(s):**  
The waters of the Strait of Georgia bounded by a line commencing at 49° 11' 3.1524" N latitude and 123° 12' 26.08868" W longitude then to 49° 7' 48.216" N latitude and 123° 19' 50.4228" W longitude then to 49° 5' 15.6948" N latitude and 123° 18' 36.8958" W longitude then to 49° 0' 8.0028" N latitude and 123° 18' 5.1156" W longitude then to





Licence Number: XFSC 523 2015

File Number: LFA-16-HD 402/TSAWWASSEN

Valid From: 01-Jan-2016

Expiry Date: 31-Mar-2016

49°0' 7.5564" N latitude and 123° 5' 27.528" W longitude and the waters of Boundary Bay bounded by a line commencing at 49° 0' 7.5198" N latitude and 123° 2' 6.5898" W longitude then to 49° 0' 7.5414" N latitude and 122° 49' 10.8552" W longitude then to 49° 1' 15.2256" N latitude and 122° 48' 20.7858" W longitude. Portions of DFO Management Sub-areas 29-6, 29-7, 29-8, 29-9, 29-10.

**Species and Quantity:**

The Fishery is limited to a harvest of: Dungeness Crab, Graceful Crab and Red Rock Crab. The minimum size for Dungeness Crab is 165 mm and for Red Rock Crab is 115 mm, both measured in a straight line across the widest part of the carapace, or shell. All crab less than the minimum size limit shall be immediately released to the area of capture. Fishers are encouraged to immediately release all female crabs to the area of capture in a manner that causes least harm.

**The following gear is permitted to be used:**

Hand-picking, Dip Net, Ring Net, and Traps, on condition that: (i) Traps set individually each have attached a floating buoy legibly marked with the name of the First Nation and Participant and with the Identification Number for the vessel used; and multiple traps set in a string have a floating buoy legibly marked name of the First Nation and Participant and with the Identification Number for the vessel used attached to both ends of each string. (ii) All buoy lines must be of a non-floating material so that the lines remain below the surface of the water while fishing, in order to minimize navigational hazards. (iii) All crab traps must be fitted with at least one escape hole (ring) that is at least 100mm in diameter and that is not more than 100 mm below the top of the frame. (iv) All traps have a section in the top or side that has been secured by a length of untreated cotton twine no greater than No. 120. On deterioration this must produce a rectangular opening with a minimum size of 7 cm x 20 cm, or a square opening with a minimum size of 11 cm x 11 cm. (v) A maximum of 50 traps may be fished per vessel. (vi) Each trap shall have a plastic trap tag attached to it. Each fisherman is issued 50 trap tags and 10 extra trap tags (in case some traps are lost). All submerged fishing gear must



Licence Number: XFSC 523 2015

File Number: LFA-16-HD 402/TSAWWASSEN

Valid From: 01-Jan-2016

Expiry Date: 31-Mar-2016

have a float of sufficient size such that it will not submerge with tidal or current change. Floating buoys must remain at all times outside of the Navigational No Float Zone shown on the map in Schedule A to this harvest document. Any floating buoys placed in the Navigational No Float Zone are subject to removal under authority of the Navigable Waters Protection Act.

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### **Additional Information:**

#### Soft-Shell Periods

Fishers are reminded that there is increased mortality during the crab soft-shell periods and are encouraged to carry out their fishing activity, as much as possible, during other time periods. The crab soft-shell periods are April to mid-June in the Fraser River estuary and May to mid-July in Boundary Bay.

#### Commercial Fishing Vessels

Any commercial fishing vessels participating in the Tsawwassen FSC crab fishery must be available for inspection prior to engaging in the Area I commercial fishery.

No fish harvested under the authority of this licence may be on board a vessel engaged in commercial fishing operations.

Commercial and FSC crab fishing trips must be conducted separately.

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### **Terms and Conditions:**

#### **Definitions**

“DFO” means the Department of Fisheries and Oceans.

“First Nation” means the Tsawwassen First Nation.

“Fishery” means fishing under the authority of this harvest document.

“Identification Number” in respect of a vessel means

(a) in the case of a registered commercial fishing vessel, the vessel registration number, and

(b) in the case of a vessel that is not a registered commercial fishing vessel, the number of

the vessel identification decal issued by Tsawwassen First Nation.

“Observer” means an observer designated under section 39 of the Fishery (General) Regulations.

“Participant” means an individual carrying on fishing or any related activity, including transporting fish caught, under the authority of this harvest document.

#### **Use of Fish**

Fish caught under this licence are for food, social and ceremonial purposes. Without prejudice to future agreements or regulations, sale of Fish caught under this licence is **not** permitted.

#### **Catch Monitoring and Harvest Reporting**

Participants will notify the Tsawwassen fisheries department before they initiate fishing efforts and will report their catch and fishing effort information after each fishing trip. These notifications and reports may be reported directly to the Tsawwassen fishing department or by interview to an on-duty member of the Tsawwassen fisheries department catch monitoring crew. The Tsawwassen fisheries department will record catch and effort information on the “TFN



Licence Number: XFSC 523 2015

File Number: LFA-16-HD 402/TSAWWASSEN

Valid From: 01-Jan-2016

Expiry Date: 31-Mar-2016

Crab Fishery Interview Data Form”.

Within 72 hours of the end of each month, Tsawwassen First Nation will provide DFO with a list of all Participants and vessels that participated in the Fishery and a preliminary estimate of the total catch by species for that month.

Each Participant will maintain a daily fishing log for crab fishing efforts using the “TFN Crab Fisheries Log Data Form”.

#### Validation

Tsawwassen First Nation will conduct on-water catch monitoring surveys or Tsawwassen First Nation’s fisheries officer patrols at random intervals during the Fishery and will record Fishery participants and observe catches for comparison with reported list of Fishery participants and the catch reported in daily logs. Tsawwassen First Nation will conduct interviews, after completed fishing trips of fishers to obtain data that to validate the information recorded in the harvest logs.

#### Reporting

Within 72 hours of the end of each month, Tsawwassen First Nation will provide to Matthew Parslow, DFO Management Biologist (telephone: 604 666-6608, fax:604-666-7112) a summary table showing the number of Participants interviewed after a fishing trip, the catch and effort observed and the catch and effort reported directly to Tsawwassen fisheries department and recorded in the daily fishing logs.

#### **Compliance with the Fisheries Act**

Pursuant to subsection 22(6) of the Fishery (General) Regulations, compliance with the Fisheries Act and the regulations made under the Act is a condition of this licence.

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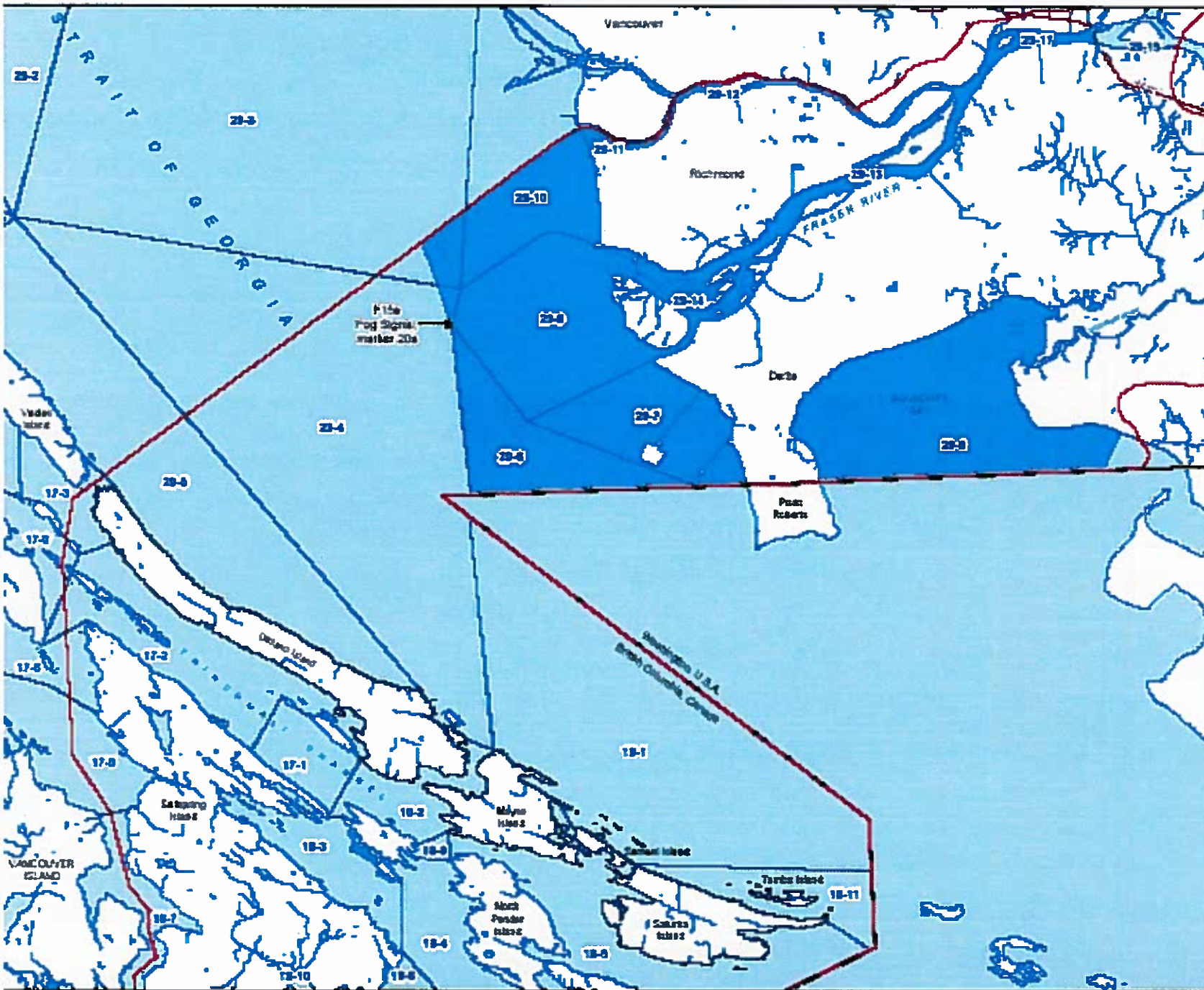
Issued by: Brian Matts, Resource Manager  
Fisheries and Oceans Canada

Date

Licence Issued: 30 December 2015

Licence Printed: 30 December 2015

# Appendix J-1: Tsawwassen Fishing Area and Tsawwassen Intertidal Bivalve Fishing Area



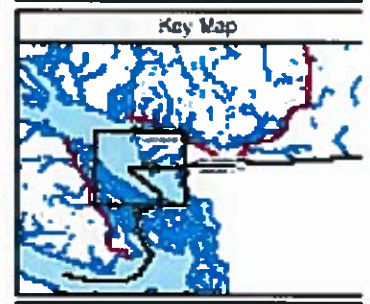
**Legend**

- Tsawwassen fishing Area
- Tsawwassen Intertidal Bivalve Area
- Tsawwassen Territory
- DFO Sub-area
- Water Body
- Watercourse
- Highway 1

THE OFFICIAL VERSION OF THIS MAP IS HELD BY DFO/CFR AND THE TERRITORIES OF CANADA AND THE PROVINCES OF BRITISH COLUMBIA. THIS MAP IS FOR ILLUSTRATIVE PURPOSES ONLY.

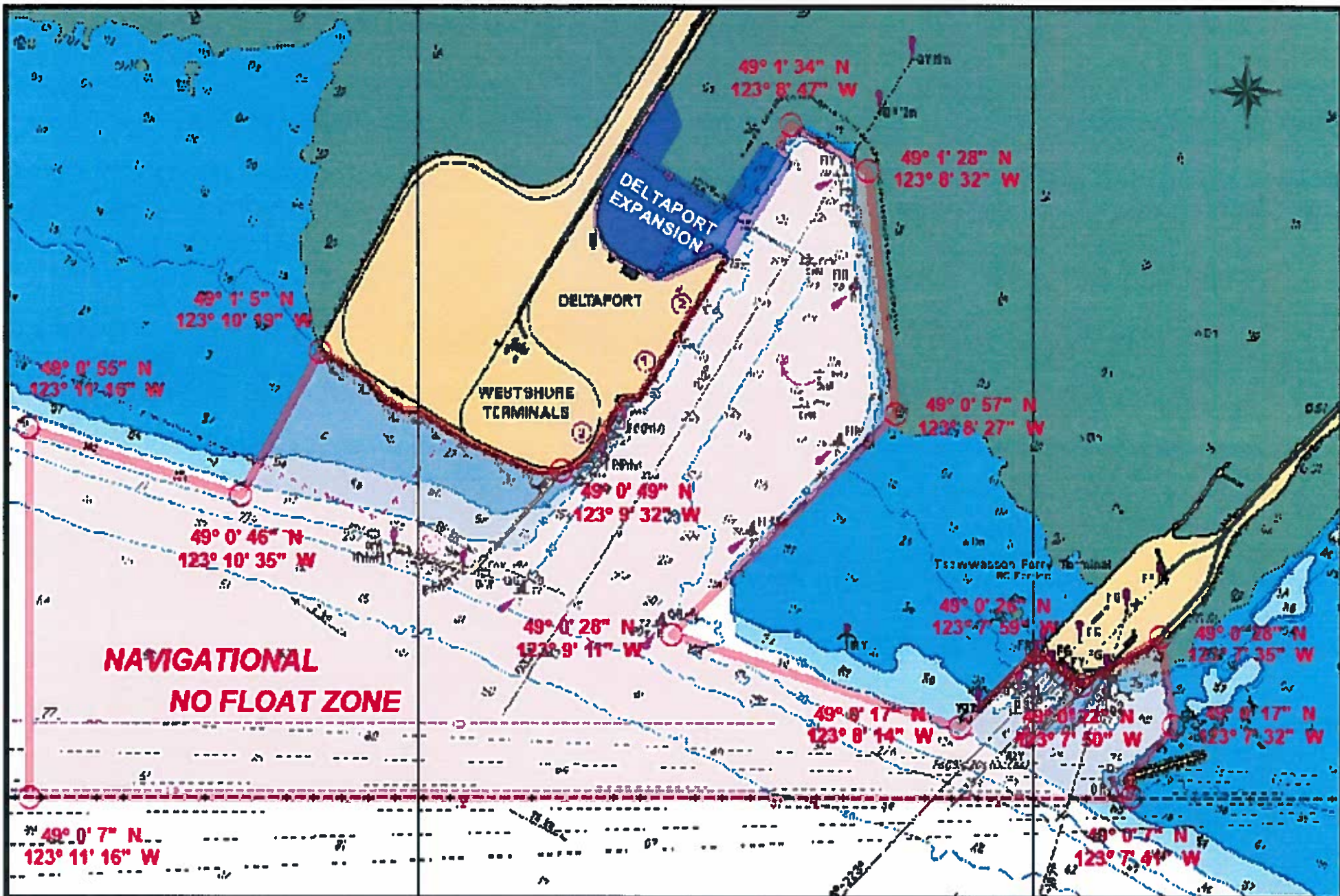
1:50,000

0 5 10  
Kilometers  
0 5 10  
Miles



Produced November 22, 2005  
 Data map derived from 1:25,000 TFSW data

**Tsawwassen First Nation**



**ROBERTS BANK**  
**NAVIGATIONAL NO FLOAT ZONE**  
**FIRST NATIONS**

Map created on October 10, 2008.



Licence Number: XFSC 138 2016  
File Number: LFA-16-LP406/Tsawwassen  
Valid From: 16-Apr-2016  
Expiry Date: 17-Apr-2016

## HARVEST DOCUMENT FOR TSAWWASSEN FIRST NATION FOR EULACHON

Whereas a final agreement with Tsawwassen First Nation is now in effect;  
And whereas the final agreement describes a fishing right and provides for the issuance of harvest documents for the fishing right.  
And whereas, under the final agreement, a harvest document may be, among other things, a licence or other document, or amendment thereto, issued by the Minister under Federal Law or Provincial Law in respect of the fishing right;  
Now therefore, this harvest document is issued under the authority of section 7 of the Fisheries Act and section 4 of the Aboriginal Communal Fishing Licences Regulations.  
This harvest document is issued to Tsawwassen First Nation in accordance with the final agreement and confers, subject to the Fisheries Act and regulations thereunder, the authority to fish for the following purposes: Food, Social and Ceremonial.

---

### Period of Activity:

Subject to amendments to the conditions of this harvest document and subject to close times as may be varied by the Director General, Pacific Region, DFO in accordance with the Fishery (General) Regulations, species of fish set out in this harvest document may be harvested under this licence. Subject to closures and other terms and conditions of this licence, the authority to fish under this licence will expire on April 17, 2016 or earlier if DFO, after consultation with Tsawwassen First Nation has determined there is a conservation concern.

---

### Licence Holder:

FIN: 108234

Tsawwassen First Nation

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### Allowable Fishing Times:

Fishing periods defined for a species supersede all periods defined in this section.

**Start Date:** Saturday, April 16, 2016

**End Date:** Sunday, April 17, 2016

**Times:** 10:30 - 16:30 daily

**Details:**

---

### Individuals or groups assisting with the authorized activity:

TFN has designated the following individuals to participate in this fishery for the following dates:

**Steve Stark- M/V 'Sunshine Bay'**

Designations are personal and non-transferable. Participants who fish under this licence shall carry their Designation or Band Card to establish their membership in the First Nation while participating in the Fishery and while transporting fish harvested in the Fishery and will present such documentation on request by any fishery officer or fishery guardian.

---

### Species, Quantity of Fish, Area(s) and Gear:

**Species:**

EULACHON (*Thaleichthys pacificus*)



Licence Number: XFSC 138 2016  
File Number: LFA-16-LP406/Tsawwassen  
Valid From: 16-Apr-2016  
Expiry Date: 17-Apr-2016

**Allowable Fishing Times:**

Start Date: Saturday, April 16, 2016  
End Date: Sunday, April 17, 2016  
Times: 10:30 - 16:30 daily  
Details:

**Gear:**

Gill Net

**Licence Area:**

Lower Fraser: Watershed: Fraser River

**To be Retained:**

228.5 Pounds

---

**Additional Information:**

Drift Nets on condition that:

- i. Each Participant may fish using one drift net.
- ii. Drift nets shall be no more than one hundred (100) metres in length and shall have a mesh size of no less than twenty-five (25) millimetres and no greater than fifty (50) millimetres.
- iii. Soak times of 20 minutes or less.
- iv. An monitor/observer will be on board during all fishing activity.

AREA: Drift fishing is permitted in the following area:

Those waters of the main arm of the Fraser River westerly of the power lines immediately downstream of the Port Mann Bridge, the waters of the North Arm of the Fraser River from the junction of the main arm downstream to the Arthur Laing Bridge, the waters of the Middle arm of the Fraser River, the waters of the Strait of Georgia bounded by a line commencing at 49° 11' 3.1524" N latitude and 123° 12' 26.08868" W longitude then to 49° 7' 48.216" N latitude and 123° 19' 50.4228" W longitude then to 49° 5' 15.6948" N latitude and 123° 18' 36.8958" W longitude then to 49° 0' 8.0028" N latitude and 123° 18' 5.1156" W longitude then to 49° 0' 7.5564" N latitude and 123° 5' 27.528" W longitude and the waters of Boundary Bay bounded by a line commencing at 49° 0' 7.5198" N latitude and 123° 2' 6.5898" W longitude then to 49° 0' 7.5414" N latitude and 122° 49' 10.8552" W longitude then to 49° 1' 15.2256" N latitude and 122° 48' 20.7858" W longitude. Portions of DFO Management Sub-areas 29-6, 29-7, 29-8, 29-9, 29-10, 29-11, 29-12, 29-13, 29-14, 29-17.

---

**Terms and Conditions:**

**Definitions**

"Drift Net" means a gillnet free floating in the water, not attached in any manner to the shore, operated from a boat.

"DFO" means the Department of Fisheries and Oceans.

"Eulachon" means *Thaleichthys pacificus*

"Fishery" means fishing under the authority of this harvest document.

"Identification Number" in respect of a vessel means

(a) in the case of a registered commercial fishing vessel, the vessel registration number, and

(b) in the case of a vessel that is not a registered commercial fishing vessel, the number of the vessel identification decal issued by Tsawwassen First Nation.

"Observer" means an observer designated under section 39 of the Fishery (General) Regulations.

"Participant" means an individual carrying on fishing or any related activity, including transporting fish caught under the authority of this harvest document.

"TFN" means Tsawwassen First Nation

"TFD" means Tsawwassen Fishing Department located at 1926 Tsawwassen Drive, V4M 4G2 604-943-2112.

**Species and Quantity**

The Fishery is limited to the harvest of 228.5 lbs Eulachon (*Thaleichthys pacificus*).



Licence Number: XFSC 138 2016

File Number: LFA-16-LP406/Tsawwassen

Valid From: 16-Apr-2016

Expiry Date: 17-Apr-2016

All efforts and attempts shall be made to return all non-target species including Chinook salmon, Steelhead salmon and Sturgeon to the water alive and unharmed. Chinook salmon, Steelhead salmon and Sturgeon must not be retained.

### **Use of Fish**

Fish caught under this licence are for food, social and ceremonial purposes. Without prejudice to future agreements or regulations, sale of Fish caught under this licence is not permitted.

### **Designation of Individuals and Vessels**

Tsawwassen First Nation may not designate individuals who are not Tsawwassen Members to harvest Eulachon.

Where Tsawwassen First Nation designates an individual; a Tsawwassen fishing licence will be issued. An individual fishing under this harvest document must carry their Tsawwassen fishing licence at all times while participating in the Fishery or while transporting fish harvested in the Fishery and must present it to any DFO Fishery Officer, DFO Fishery Guardian or Aboriginal Fishery Officer upon request.

A vessel used in the Fishery must be identified by affixing a vessel identification decal issued by Tsawwassen First Nation. The decal must be affixed to the vessel so that the decal is legible and unobstructed when viewed from another vessel or from shore. Where the vessel is not a registered commercial vessel, the decal must be uniquely numbered. Where the vessel is a registered commercial vessel, the decal must not be numbered.

### **Catch Monitoring and Harvest Reporting**

#### **1.0 Participant and Interview Data**

Participants are required to notify the TFD of their intentions to harvest fish prior to their participation in each fishing period and report their catch and fishing effort information to the TFD after completion of each fishing period. These notifications and reports can be provided by phone to the TFD or by interview to an on-duty member of the TFN catch monitoring crew. Interviewers will record Eulachon catch and effort information on the "TFN Eulachon Fisheries Interview Data Form".

#### **1.1 Reporting**

Within 24 hours of the close of a fishing period, TFN will provide a preliminary catch report to DFO, including the names and the Vessel Identification Numbers that participated in the Fishery, the gear used, hours fished, status of the report (final or preliminary), number of Eulachon retained, and the number of other species released. Along with reported catch information, The preliminary catch report will be finalized within 48 hours of the close of the Fishing period.

### **Compliance with the Fisheries Act**

Pursuant to subsection 22(6) of the Fishery (General) Regulations, compliance with the Fisheries Act and the regulations made under the Act is a condition of this licence.

---

Issued by: Brian Matts, Resource Manager - Lower Fraser Area  
Fisheries and Oceans Canada

Date





Licence Number: XFSC 138 2016

File Number: LFA-16-LP406/Tsawwassen

Valid From: 16-Apr-2016

Expiry Date: 17-Apr-2016

Licence Issued: 15 April 2016

Licence Printed: 15 April 2016



Licence Number: XFSC 584 2016  
 File Number: LFA-16-HD 466-TSAWWASSEN  
 Valid From: 26-Oct-2016  
 Expiry Date: 29-Oct-2016

**HARVEST DOCUMENT FOR TSAWWASSEN FIRST NATION FOR SALMON  
 COMMUNAL COMMERCIAL HARVEST DOCUMENT FOR CHUM SALMON**

Whereas a final agreement with Tsawwassen First Nation is now in effect;  
 And whereas the final agreement describes a fishing right and provides for the issuance of harvest documents for the fishing right.  
 And whereas, under the final agreement, a harvest document may be, among other things, a licence or other document, or amendment thereto, issued by the Minister under Federal Law or Provincial Law in respect of the fishing right;  
 Now therefore, this harvest document is issued under the authority of section 7 of the Fisheries Act and section 4 of the Aboriginal Communal Fishing Licences Regulations.  
 This harvest document is issued to Tsawwassen First Nation in accordance with the final agreement and confers, subject to the Fisheries Act and regulations thereunder, the authority to fish for the following purposes: Food, Social and Ceremonial and economic opportunities.

**Period of Activity:**

Subject to amendments to the conditions of this harvest document and subject to close times as may be varied by the Director General, Pacific Region, DFO in accordance with the Fishery (General) Regulations, species of fish set out in this harvest document may be harvested under this licence. Subject to closures and other terms and conditions of this licence, the authority to fish under this licence will expire on Saturday, October 29, 2016 or earlier if DFO, after consultation with Tsawwassen First Nation has determined there is a conservation concern.

**Licence Holder:**

FIN: 108234 Tsawwassen First Nation

**Allowable Fishing Times:**

Fishing periods defined for a species supersede all periods defined in this section.

**Date:** Wednesday, October 26, 2016  
**Times:** 08:00 - 20:00  
**Details:**

**Date:** Saturday, October 29, 2016  
**Times:** 08:00 - 20:00  
**Details:**

**Species, Quantity of Fish, Area(s) and Gear:**

<b>Species:</b>	CHUM SALMON ( <i>Oncorhynchus keta</i> )
<b>Allowable Fishing Times:</b>	<p><b>Date:</b> Wednesday, October 26, 2016  <b>Times:</b> 08:00 - 20:00  <b>Details:</b></p> <hr/> <p><b>Date:</b> Saturday, October 29, 2016  <b>Times:</b> 08:00 - 20:00  <b>Details:</b></p>



Licence Number: XFSC 584 2016

File Number: LFA-16-HD 466-TSAWWASSEN

Valid From: 26-Oct-2016

Expiry Date: 29-Oct-2016

**Gear:** Gill Net  
Net, Set

**Licence Area:** Lower Fraser

---

## Terms and Conditions:

### Definitions

'DFO' means the Department of Fisheries and Oceans.

'Drift Net' means a gillnet free floating in the water, not attached in any manner to the shore, operated from a boat;

'Fishery' means fishing under the authority of this licence;

'Hatchery Marked Coho' means a coho salmon marked by the absence of the adipose fin and having a healed scar in place of that absent fin (an adipose fin consists of a small fleshy appendage without fin ray support, located dorsally between the rayed dorsal fin and caudal (tail) fin);

'Identification Number' in respect of a vessel means:

- (a) in the case of a registered commercial fishing vessel, the vessel registration number, and
- (b) in the case of a vessel that is not a registered commercial fishing vessel, the number of the vessel identification decal issued by Tsawwassen First Nation;

'Landing Site' means a site designated by DFO and the Monitoring and Enforcement Committee that has a monitor on duty during the Fishery. For this licence, the landings sites are located at:

- 1) Ladner Harbour
- 2) Wellington Point
- 3) packer vessel **M/V 'Calvada'**

'Monitor' means an individual hired by the First Nation to carry out monitoring activities;

'Monitoring and Enforcement Committee' means a joint technical committee consisting of three (3) DFO representatives and four (4) representatives of the First Nations (two each from Musqueam and Tsawwassen);

'Observer' means an observer designated under section 39 of the Fishery (General) Regulations;

'Participant' means an individual carrying on fishing or any related activity, including transporting fish caught under the authority of this licence;

'Set Net' means a gillnet that is either tied to shore at one end and anchored in the river at the other end, or anchored in the river at both ends, or tied to the shore at one end and tied to a net pole at the other end;

'TFN' means Tsawwassen First Nation;

'TFD' means Tsawwassen Fishing Department located at 1926 Tsawwassen Drive, V4M 4G2 604-943-2112; and,

'Wild Coho' means any coho salmon that has an adipose fin.

### Species and Quantity

The Fishery is limited to a harvest of chum salmon and hatchery marked coho salmon.

All efforts and attempts shall be made to return all non-target species including sockeye salmon, chinook salmon, wild



Licence Number: XFSC 584 2016

File Number: LFA-16-HD 466-TSAWWASSEN

Valid From: 26-Oct-2016

Expiry Date: 29-Oct-2016

coho salmon, steelhead salmon and sturgeon, to the water alive and unharmed.

Chinook salmon, wild coho salmon, sockeye salmon, steelhead salmon and sturgeon must not be retained.

### **Use of Fish**

Fish caught under this licence are for food, social and ceremonial purposes. Without prejudice to future agreements or regulations, sale of chum salmon and hatchery marked coho salmon caught under this licence **is** permitted.

### **Gear and Gear Identification**

The following gear is permitted to be used:

#### **Drift Nets on condition that:**

- (i) Nets do not exceed a maximum of 100 fathoms or 600 feet in length and a maximum depth of 60 meshes with a minimum mesh size of 6 ¼ inches with 3:1 hang ratio.
- (ii) Each Participant fishes only one net.
- (iii) Only one net is fished from any vessel.
- (iv) Each net is attended at all times by the Participant who is fishing the net.
- (v) No vessel fishing under the authority of this licence may have on board any net that does not meet the conditions in (i) above.
- (vi) Spare nets on board a vessel actively fishing are kept in a stowed condition.

#### **Set Nets on condition that:**

- (i) Nets do not exceed a maximum of 10 fathoms or 60 feet and a maximum depth of 60 meshes with a minimum mesh size of 6 ¼ inches.
- (ii) All Set Nets are identified by a floating buoy prominently displaying the Participant's designation number, and the Participant's designation number is the only number displayed on the buoy.
- (iii) All Set Nets fished from poles have buoys attached to the end of the net farthest from the beach by means of a tag line of sufficient length to allow the buoys to be on the surface of the water and clearly visible for inspection at all times.

### **Area**

Those waters of the main arm of the Fraser River westerly of the power lines immediately downstream of the Port Mann Bridge, the waters of the North Arm of the Fraser River from the junction of the main arm downstream to the Arthur Laing Bridge, the waters of the Middle arm of the Fraser River, the waters of the Strait of Georgia bounded by a line commencing at 49° 11' 3.1524" N latitude and 123° 12' 26.08868" W longitude then to 49° 7' 48.216" N latitude and 123° 19' 50.4228" W longitude then to 49° 5' 15.6948" N latitude and 123° 18' 36.8958" W longitude then to 49° 0' 8.0028" N latitude and 123° 18' 5.1156" W longitude then to 49° 0' 7.5564" N latitude and 123° 5' 27.528" W longitude and the waters of Boundary Bay bounded by a line commencing at 49° 0' 7.5198" N latitude and 123° 2' 6.5898" W longitude then to 49° 0' 7.5414" N latitude and 122° 49' 10.8552" W longitude then to 49° 1' 15.2256" N latitude and 122° 48' 20.7858" W longitude. Portions of DFO Management Sub-areas 29-6, 29-7, 29-8, 29-9, 29-10, 29-11, 29-12, 29-13, 29-14, 29-17.

### **Designation of Individuals and Vessels**

Tsawwassen First Nation may not designate individuals who are not Tsawwassen Members to harvest salmon.

Where Tsawwassen First Nation designates an individual; a Tsawwassen fishing licence will be issued. An individual fishing under this harvest document must carry their Tsawwassen fishing licence at all times while participating in the Fishery or while transporting fish harvested in the Fishery and must present it to any DFO Fishery Officer, DFO Fishery Guardian or Aboriginal Fishery Officer upon request.

A vessel used in the Fishery must be identified by affixing a vessel identification decal issued by Tsawwassen First Nation. The decal must be affixed to the vessel so that the decal is legible and unobstructed when viewed from



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another vessel or from shore. Where the vessel is not a registered commercial vessel, the decal must be uniquely numbered. Where the vessel is a registered commercial vessel, the decal must not be numbered.

Prior to each fishing period, the Tsawwassen First Nation will provide to DFO a list of Tsawwassen First Nation members and vessels designated to fish under this Harvest Document and, in the case of a vessel, the vessel's Identity Number, and will immediately inform DFO of any changes to the list.

### **Revival Tank**

When Fishing, where sale of Chum Salmon is authorized, all vessels greater than 30 feet in length shall be equipped with a revival tank, the purpose of which is to revive and hold those species of Fish, including Coho Salmon and Steelhead Salmon, which the vessel is prohibited from retaining. The revival tank shall meet the following specifications:

- (a) constructed of non-transparent material;
- (b) minimum inside dimensions of 90 cm x 40 cm x 40 cm;
- (c) equipped with a tight fitting lid; and
- (d) designed so as to receive a continuous flow of oxygenated seawater throughout the tank.

The revival tank must be operating at all times while Fishing and also when Fish are being held in the tank after Fishing is completed. While operating, the revival tank must be filled with water and there must be a constant exchange of oxygenated seawater throughout the tank.

The revival tank and equipment shall be kept clean and the tank shall be used for no other purpose than that set out above.

### **Landing Slips**

All fish caught by a Participant under the authority of this licence must be inspected by an Observer, Monitor, DFO fishery officer, or Aboriginal Fisheries Officer at the Participant's Landing Site, and such person shall issue a landing slip ('Landing Slip') to the Participant. The Participant must obtain a Landing Slip each and every time that salmon caught under the authority of this Licence are landed. The Landing Slip will specify:

- the Landing Site;
- the date and time of landing;
- the Participant's name and designation number;
- the number of salmon landed for each species of salmon;
- the name and signature of the inspecting Observer, Monitor, DFO fishery officer, or Aboriginal Fisheries Officer ; and
- in the case of drift net fishing, the vessel name, commercial fishing vessel number or Ministry of Transport identification number.

### **Proof of Landing**

Except where fishing or transporting salmon to a Landing Site, a Participant having possession of salmon caught under the authority of this Licence must carry a Landing Slip for the salmon. The Participant shall show Landing Slips to any DFO Fishery Officer, Aboriginal Fisheries Officer, Monitor or Observer upon request.

### **Transportation of Salmon**

A Participant will transport all fish caught under the Communal Commercial Licence from the fishing site where, or the boat from which, the fish were caught immediately and directly to a Landing Site for inspection and counting by species within one hour after the closing time as set out by the Communal Commercial Licence. A Participant may identify to the First Nation a second Participant who may transport the salmon to the Landing Site. No Participant will be authorized to transport salmon on behalf of more than three Participants in addition to him/herself. A Participant must



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inform the First Nation of such arrangements at least forty-eight hours prior to the start of a Fishery opening. The First Nation will provide DFO and the Planning Committee with a list of Participants authorized to transport salmon on behalf of other Participants during normal office hours of 0800 hours to 1600 hours, Monday to Thursday and prior to 1300 hours on Friday, and not less than six hours before the start of the Fishery opening.

### **Monitoring, Reporting and Validation**

#### **Participant and Interview Data**

Participants are required to notify the TFD of their intentions to harvest fish prior to their participation in each fishing period and report their catch and fishing effort information to the TFD after completion of each fishing period. These notifications and reports can be provided by phone to the TFD or by interview to an on-duty member of the TFN catch monitoring crew. Interviewers will record Salmon catch and effort information on the "TFN Salmon Fisheries Interview Data Form".

#### **Daily Fishing Logs**

Each Participant will maintain a daily fishing log using the "TFN Salmon Fisheries Log Data Form". Upon completion of each fishing period, each Participant will submit logs to monitors at landing sites or directly to the TFD office.

#### **Validation**

TFN will conduct on-water catch monitoring surveys or TFN fisheries officer patrols at least once every day during fishing period and, will record vessels participating in the Fishery. TFN will compare these records with the list of vessels designated to fish under this harvest document, will observe catches and compare it with catch reported orally to the TFD or recorded in daily logs.

Catch per vessel data will be verified through a random and representative sampling of a percentage of vessel landings by TFN shore based monitors. Efforts should be made to provide a representative sample of the various vessel types, fishing locations and gear observed in the Fishery in these validation activities. During landing validation TFN monitors will interview the Participants to obtain hours fished, number and species of Salmon and other species retained and released and perform a count the vessel's catch. The percentage of vessels needing validation will vary dependent on the type of fishery and will be discussed at joint technical committee meetings or in season as needed but it is proposed that coverage should be in the range of 20%.

#### **Reporting**

Within 24 hours of the close of a fishing period, TFN will provide a preliminary catch report to DFO, including the names and the Vessel Identification Numbers that participated in the Fishery, the gear used, hours fished, status of the report (final or preliminary), number and species of Salmon and other species retained, and number and species of Salmon and other species released. Along with reported catch information, TFN will submit a report of validations conducted during the opening, including Vessel Identification Numbers, gear type, hours fished, number and species of Salmon and other species kept and number and species of Salmon and other species released. TFN will contact Participants who did not report after the Fishing period to determine whether they did participate, and if so, collect the requisite information. The preliminary catch report will be finalized within 48 hours of the close of the Fishing period.

### **Compliance with the Fisheries Act**

Pursuant to subsection 22(6) of the Fishery (General) Regulations, compliance with the Fisheries Act and the regulations made under the Act is a condition of this licence.



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Fisheries and Oceans Canada

Licence Issued: 25 October 2016

Licence Printed: 25 October 2016



Licence Number: XFSC 345 2016

File Number: LFA-16-HD 433/TSAWWASSEN

Valid From: 01-Jul-2016

Expiry Date: 30-Sep-2016

## HARVEST DOCUMENT FOR TSAWWASSEN FIRST NATION FOR GROUND FISH

Whereas a final agreement with Tsawwassen First Nation is now in effect;

And whereas the final agreement describes a fishing right and provides for the issuance of harvest documents for the fishing right.

And whereas, under the final agreement, a harvest document may be, among other things, a licence or other document, or amendment thereto, issued by the Minister under Federal Law or Provincial Law in respect of the fishing right;

Now therefore, this harvest document is issued under the authority of section 7 of the Fisheries Act and section 4 of the Aboriginal Communal Fishing Licences Regulations.

This harvest document is issued to Tsawwassen First Nation in accordance with the final agreement and confers, subject to the Fisheries Act and regulations thereunder, the authority to fish for the following purposes: Food, Social and Ceremonial.

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### Period of Activity:

Subject to amendments to the conditions of this harvest document and subject to close times as may be varied by the Director General, Pacific Region, DFO in accordance with the Fishery (General) Regulations, species of fish set out in this licence may be harvested under this licence. Subject to closures and other terms and conditions of this licence, the authority to fish under this licence will expire on September 30, 2016 or earlier if DFO, after consultation with the First Nation has determined that the maximum quantity has been reached.

---

### Licence Holder:

FIN: 108234

1926 Tsawwassen Drive  
Tsawwassen BC V4M 4G2

Tsawwassen First Nation

Contact Number: 604-943-4199

Fax Number: 604-943-9226

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### Allowable Fishing Times:

Fishing periods defined for a species supersede all periods defined in this section.

**Start:** Friday, July 1, 2016 at 00:01

**End:** Friday, September 30, 2016 at 23:59

#### Details: Longline Gear:

- 1) Each vessel will be equipped with long lines from one to three miles (1.6-5km) long.
- 2) The number of lines per vessel will not be limited; however, the number of hooks will not exceed 500/vessel.
- 3) Each line will be baited then set and marked with floats, the lines will be checked at regular intervals.
- 4) Prior to the fishery commencing the TFN will provide DFO with a list of TFN members and vessels (maximum 4 vessels) designated to fish under his Harvest Document and the vessels identity number. TFN will immediately inform DFO of any changes to the list.
- 5) All members designated to fish will be informed that only one vessel is able to participate per day with a crew of up to four designated fishers.

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### Individuals or groups assisting with the authorized activity:





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Tsawwassen First Nation may not designate individuals who are not Tsawwassen Members to harvest groundfish.

Where Tsawwassen First Nation designates an individual; a Tsawwassen fishing licence will be issued. The Tsawwassen fishing licence must be carried at all times while participating in the Fishery or while transporting fish harvested in the Fishery and must be presented to any DFO Fishery Officer, DFO Fishery Guardian or Aboriginal Fishery Officer upon request.

A vessel used in the Fishery must be identified by affixing a vessel identification decal issued by Tsawwassen First Nation. The decal must be affixed to the vessel so that the decal is legible and unobstructed when viewed from another vessel or from shore. Where the vessel is not a registered commercial vessel, the decal must be uniquely numbered. Where the vessel is a registered commercial vessel, the decal must not be numbered.

Before the Fishery commences, Tsawwassen First Nation will provide to DFO a list of Tsawwassen First Nation members and vessels designated to fish under this Harvest Document and, in the case of a vessel, the vessel's Identity Number, and will immediately inform DFO of any changes to the list.

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**Species, Quantity of Fish, Area(s) and Gear:**

**Species:** Halibut, Sablefish, Dogfish, Lingcod, Flatfish, Rockfish  
**Gear:** Longline  
**Licence Area:** Tsawwassen First Nation fishing area in PFMA 29

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**Additional Information:**

**Fishing is permitted in the following area(s):**

The waters of the Strait of Georgia bounded by a line commencing at 49°11' 3.1524" N latitude and 123° 12' 26.08868" W longitude then to 49° 7' 48.216" N latitude and 123°19' 50.4228" W longitude then to 49° 5' 15.6948" N latitude and 123° 18' 36.8958" W longitude then to 49° 0' 8.0028" N latitude and 123° 18' 5.1156" W longitude then to 49°0' 7.5564" N latitude and 123° 5' 27.528" W longitude and the waters of Boundary Bay bounded by a line commencing at 49 0' 7.519" N latitude a 123 2' 6.5898 W longitude then to 49 0' 7.5414 N latitude and 122 49' 10.8552" W longitude then o 49 1' 15.2256" N latitude and 122 48' 20.7858" W longitude. Portions of DFO Management Sub-areas 29-6, 29-7, 29-8, 29-9, 29-10.

---

**Terms and Conditions:**

**Definitions**

"DFO" means the Department of Fisheries and Oceans.  
"First Nation" means the Tsawwassen First Nation.  
"Fishery" means fishing under the authority of this harvest document.  
"Identification Number" in respect of a vessel means



Licence Number: XFSC 345 2016

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(a) in the case of a registered commercial fishing vessel, the vessel registration number, and

(b) in the case of a vessel that is not a registered commercial fishing vessel, the number of

the vessel identification decal issued by Tsawwassen First Nation.

'Longline' means a fishing technique that uses a longline, called the mainline, with baited hooks attached at intervals by means of branch lines called snoods (or gangions). A snood is a short length of line, attached to the main line by a clip or swivel, with the hook at the other end.

"Observer" means an observer designated under section 39 of the Fishery (General) Regulations.

"Participant" means an individual carrying on fishing or any related activity, including transporting fish caught, under the authority of this harvest document.

### **Species and Quantity**

The Fishery is limited to the harvest of halibut and an incidental harvest of sablefish, dogfish, lingcod, flatfish, and rockfish.

All efforts and attempts shall be made to return all non-target species to the water alive and unharmed.

### **Use of Fish**

Fish caught under this licence are for food, social and ceremonial purposes. Without prejudice to future agreements or regulations, sale of fish caught under this licence is **not** permitted.

### **Catch Monitoring and Harvest Reporting**

All vessels participating in this fishery will have a TFN monitor trained in groundfish identification onboard during all fishing activity. Participants will notify the Tsawwassen Fisheries Department (TFD) before they initiate fishing efforts to ensure an on-board monitor is present. Fishing times and locations will be provided to DFO prior to each fishing period so DFO monitoring or audits of fishing can occur.

The on-board TFN monitor will collect information on hours fished, location fished (PFMA sub-area), number and species of groundfish and other species retained and released. The monitor will record this information on the "TFN Groundfish Fishery Interview Data Form".

Within 72 hours of the end of each month, Tsawwassen First Nation will provide to Matthew Parslow (DFO Management Biologist : t 604-666-6608; fax 604-666-7112) a summary table showing the number of participants, catch and effort observed by and reported directly to the TFD staff (including patrol logs and daily fishing logs).

### **Compliance with the Fisheries Act**

Pursuant to subsection 22(6) of the Fishery (General) Regulations, compliance with the Fisheries Act and the regulations made under the Act is a condition of this licence.



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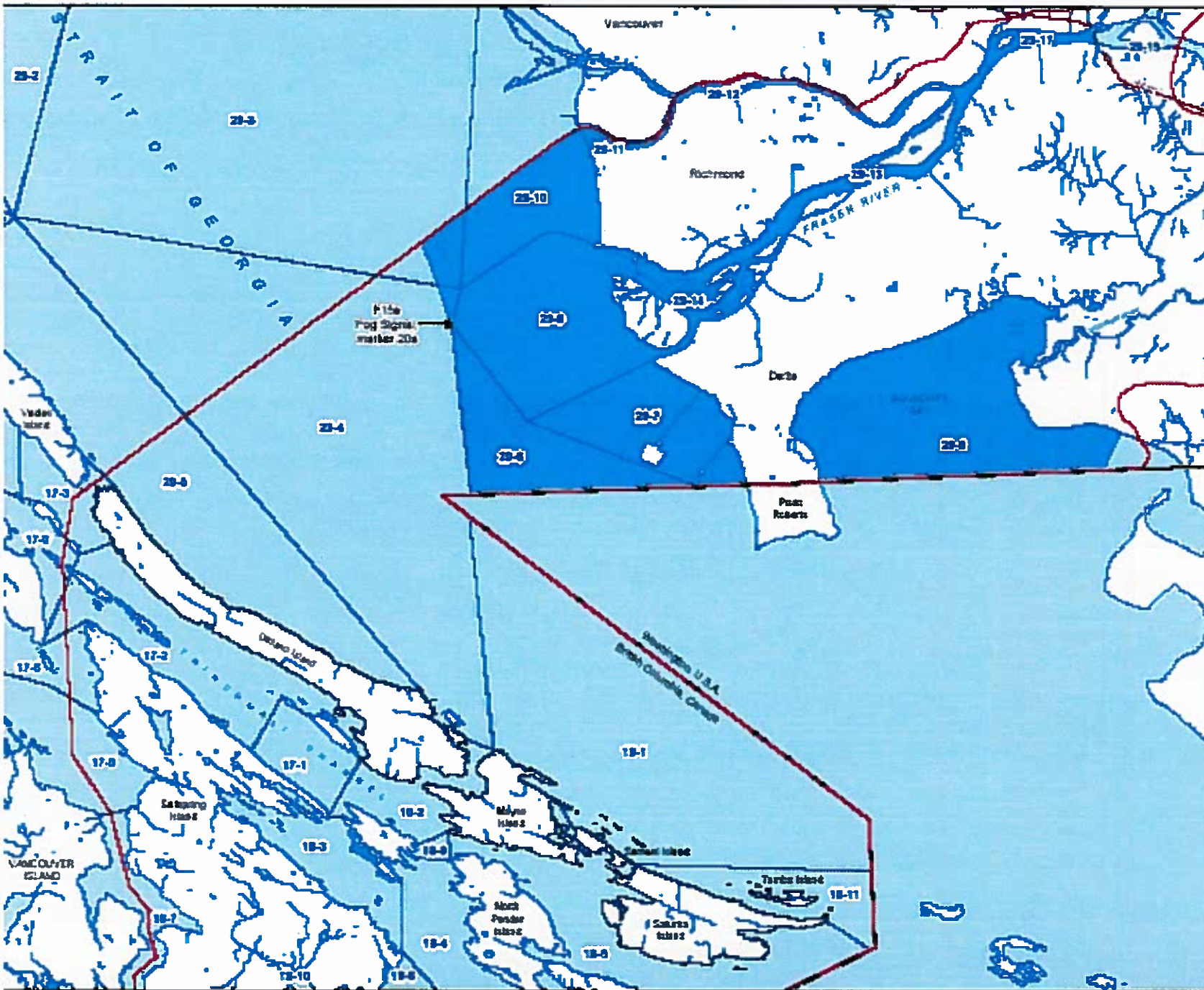
Issued by: Brian Matts, Resource Manager  
Fisheries and Oceans Canada

Date

Licence Issued: 28 June 2016

Licence Printed: 28 June 2016

# Appendix J-1: Tsawwassen Fishing Area and Tsawwassen Intertidal Bivalve Fishing Area

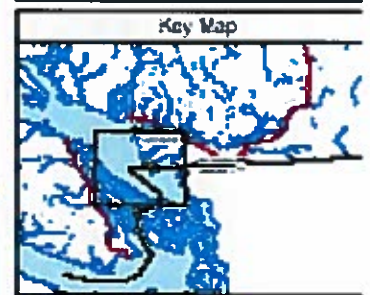


**Legend**

- Tsawwassen fishing Area
- Tsawwassen Intertidal Bivalve Area
- Tsawwassen Territory
- DFO Sub-area
- Water Body
- Watercourse
- Highway 1

THE OFFICIAL VERSION OF THIS MAP IS HELD BY DFO/CFR AND THE TERRITORIES OF CANADA AND THE PROVINCE OF BRITISH COLUMBIA. THIS MAP IS FOR ILLUSTRATIVE PURPOSES ONLY.

0 5 10  
Kilometers



Produced November 22, 2005  
 Data map derived from 1:25,000 TFSW data

**Tsawwassen First Nation**



## Aquatic Plant Harvest Document for Tsawwassen First Nation

File No.: 20560-20-HD Tsawwassen  
Harvest Document No.: Tsawwassen -01

**Issued To:** Attention: Hegus, Tsawwassen First Nation  
Tsawwassen First Nation  
1926 Tsawwassen Drive  
Tsawwassen BC V4M 4G2

This Harvest Document is issued by the Minister under the authority of Section 14 of the *Tsawwassen First Nation Final Agreement Act* and clauses 59 to 64 of Chapter 9 [Fisheries] of the Tsawwassen First Nation Final Agreement, for Aquatic Plant species managed by the Province of British Columbia. All terms used in this document have the same meaning as that contained in the Tsawwassen First Nation Final Agreement and applicable legislation.

Accordingly, this Harvest Document authorizes Tsawwassen First Nation to exercise their Tsawwassen Fishing Right to harvest Aquatic Plants for Domestic Purposes, in accordance with the following conditions:

**Harvest Period:** April 1, 2016 to March 31, 2017

**Harvest Location:** Tsawwassen Fishing Area

**Harvestable Aquatic Plant Species:**

- Group 1:** Giant kelp (*Macrocystis integrifolia*) / Bull kelp (*Nereocystis luetkeana*)
- Group 2:** Sugar kelp (*Saccharina* spp.) / Ribbon kelp (*Alaria* spp.) / Feather Boa kelp (*Egregia menziesii*) / *Eisenia arborea* / *Costaria costata* / *Agarum* spp. / Sea Cabbage (*Hedophyllum sessile*) / Three Ribbed kelp (*Cymathere triplicatei*) / *Pterygophora californica*
- Group 3:** *Gracilaria* spp. / *Gracilariopsis sjoestedtii* / *Gelidium* spp. / *Gymnogrongus* spp / *Ahnfeltia* spp. / Red Weed (*Agardhiella tenera*) / *Endocladia muricata* / *Gloiopeltis furcata*
- Group 4:** *Iridaea* spp. / Little Turkish Towel (*Gigartina* spp.)
- Group 5:** Rockweed (*Fucus* spp.) / *Sargassum muticum* / Chain Bladder (*Cystoseira geminata*)
- Group 6:** Nori (*Porphyra* spp.) / *Rhodomenia* spp. / Sea Lettuce (*Ulva* spp.) / Gut Weed (*Enteromorpha* spp.) / *Monostroma* spp.
- Group 7:** Eelgrass (*Zostera marina*) / Surfgrass (*Phyllospadix* spp.)
- Group 8:** Sea Asparagus (*Salicornia* spp.)
- Group 9:** Other marine plants not referenced above.

**Monitoring & Reporting:** As per the Tsawwassen Fisheries Operation Guidelines, and for greater clarity, Tsawwassen First Nation Harvesters are required to identify harvested plants by group in the Tsawwassen First Nation Aquatic Plant Harvest Log. Tsawwassen First Nation will submit the aggregate harvesting values to the Joint Fisheries Committee at the conclusion of the Harvest Period defined in this Harvest Document.

These conditions may be amended in accordance with Paragraph 63 and 64 of the Fisheries Chapter of the Tsawwassen First Nation Final Agreement.

**Issued By:**



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Steve Thomson  
Minister of Forests, Lands and Natural Resource Operations

**Issue Date:**

**APPENDIX C**  
**Dataforms**





## TSAWWASSEN FIRST NATION - SALMON FISHERIES INTERVIEW DATA FORM

Monitor's Name : \_\_\_\_\_

**SET NET / DRIFT NET**  
Put Set and Drift Net Catch on Separate Sheets Even  
 from the Same Fisher.

Date : \_\_\_\_\_ Sheet ID : \_\_\_\_\_

Site Location : \_\_\_\_\_

Fishing Area (Zone) : \_\_\_\_\_

#	Name of Fisher	No.	Fishing Area	Mesh Size	Count or Hail?	# Drifts	Interview Time		Net Set (Start of Fishing)		Net Picked (End of Fishing)		Fish Kept						Fish Released				Still Fish'n (Y/N)						
							Date	Time	Date	Time	Date	Time	Sock	Chin	Pink	Coho	Chum	Other	Sturg	FL	Sthd	Other							
1					C/H																								
2					C/H																								
3					C/H																								
4					C/H																								
5					C/H																								
6					C/H																								
7					C/H																								
8					C/H																								
9					C/H																								
10					C/H																								
11					C/H																								
12					C/H																								
13					C/H																								
14					C/H																								
15					C/H																								
16					C/H																								
17					C/H																								
Fishing Areas	* T1 = Roberts Bank (29-6,29-7), T2 = Sandheads (29-9, 29-10), T3 = Canoe Pass to Deas (29-14), T4 = Steveston-Pattullo (29-13), T5 = Pattullo-Port Mann (29-17), T6 = North Arm (29-12).											<b>TOTALS</b>																	

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

USE ONE DATA COLLECTION FORM FOR EACH SET NET FISHER OR FISHING GROUP.  
 PLEASE REMEMBER TO TOTAL UP ALL OF THE CATCH, AND HOURS FISHED, ON EACH OF YOUR PAGES.

**TSAWWASSEN FIRST NATION - SALMON FISHERIES LOG DATA FORM**

Fisher Name/No. \_\_\_\_\_

Vessel Name/No: \_\_\_\_\_

Sheet ID : \_\_\_\_\_

#	Fishing Location	Location Code	Net Length (feet)	Mesh Size (inches)	# of drifts	Data Recorded		Net Set (Start of Fishing)		Net Picked (End of Fishing)		Fishing Effort Hours	Fish Kept						Fish Released (species & #)	Hailed in Y/N			
						Date	Time	Date	Time	Date	Time		Sock	Chin	Pink	Coho	Chum	Steelhd			Other		
	Canoe Pass	T3	300	4.5	3	Apr 4	2100	Apr 4	0900	Apr 4	2000	1.1		3						1 Surgeon	Y		
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							
15																							
16																							
<b>Fishing Areas</b>	* T1 = Roberts Bank (29-6,29-7), T2 = Sandheads (29-9, 29-10), T3 = Canoe Pass to Deas (29-14), T4 = Steveston-Pattullo (29-13), T5 = Pattullo-Port Mann (29-17), T6 = North Arm (29-12).										<b>TOTALS</b>												

Comments: \_\_\_\_\_

**TSAWWASSEN FIRST NATION - CRAB FISHING INTERVIEW DATA FORM**

Sheet ID: \_\_\_\_\_

Monitor's Name: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_

#	TFN FISHER		FISHING METHOD	STAT. AREA	HAULED		SOAK TIME	DEPTH	SPECIES	CATCH INFO.		Number of Traps Pulled	REMARKS OR COMMENTS
	NAME	No.	(GL/SL)	(Area-Sub)	Date	Time	Hours	Meters	(DU/RR)	Number Kept	Number Released		
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

Methods: GL = Ground Line, SL= Single Lines

Species: DU= Dungeness, RR=Red Rock, G=Graceful

**TSAWWASSEN FIRST NATION - CRAB FISHING LOG DATA FORM**

Sheet ID: \_\_\_\_\_

Fisher Name/No. \_\_\_\_\_

Vessel Name/No. \_\_\_\_\_

#	FISHING METHOD	STAT. AREA	HAULED		SOAK TIME	DEPTH	SPECIES	CATCH INFO.		Number of Traps Pulled	REMARKS OR COMMENTS
	(GL/SL)	(Area-Sub)	Date	Time	Hours	Feet	(DU/RR)	Number Kept	Number Released		
	SL	29-6	Apr 20	1800	48	50	DU	8	2	2	2 female crab released
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Methods: GL = Ground Line, SL= Single Lines

Species: DU= Dungeness, RR=Red Rock, G=Graceful

**TSAWWASSEN FIRST NATION - OTHER FISHERIES INTERVIEW DATA FORM**

Sheet ID: \_\_\_\_\_

Monitor's Name: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_

#	TFN FISHER		SPECIES (Code)	FISHING METHOD (Code)	STAT. AREA (Area-Sub)	LANDING		FISHING TIME Hours	DEPTH Meters	CATCH INFO.		Units (Code)	Number of Traps Pulled	REMARKS OR COMMENTS
	NAME	No.				Date	Time			Number Kept	Number Released			
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														

Species: RF= Rockfish, LC = Lingcod, HB=Halibut, DF=Dogfish, C=Clams, O= Oysters, P=Prawns, S=Shrimp

Methods: HL= Hook & Line, LL=Long-line, HP= Hand pick, T=Trap

Units: P = Pieces, KG=kilograms, LB=pounds, B=5 gallon bucket

**TSAWWASSEN FIRST NATION - OTHER FISHERIES LOG DATA FORM**

Sheet ID: \_\_\_\_\_

Fisher Name/No. \_\_\_\_\_

Vessel Name/No. \_\_\_\_\_

#	SPECIES	FISHING METHOD	STAT. AREA	LANDING		FISHING TIME	DEPTH	CATCH INFO.		Units	Number of Traps Pulled	REMARKS OR COMMENTS
	(Name)	(Code)	(Area-Sub)	Date	Time	Hours	Meters	Number Kept	Number Released	(Code)		
1												
2												
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Species: RF= Rockfish, LC = Lingcod, HB=Halibut, DF=Dogfish, FS=flounder/sole, C=Clams, O= Oysters, P=Prawns, S=Shrimp  
 Methods: RR=Rod & Reel, LL=Long-line, HP= Hand pick, T=Trap  
 Units: P = Pieces, KG=kilograms, LB=pounds, B=5 gallon bucket

# TSAWWASSEN FIRST NATION AQUATIC PLANT HARVEST LOG

Name of Tsawwassen First Nation Harvester: \_\_\_\_\_

Harvest Document #: \_\_\_\_\_

Date Harvested (yyyy/mm/dd)	DFO Stat Area and Subarea	Specific Area Description	Species Harvested	Quantity Harvested (Kg wet weight)	Initial of Harvester
<b>Total Weight [Kilograms (Kg)] for this log sheet</b>					

I declare this harvest log to be correct and true to the best of my knowledge

**Return this form to:**  
**Tsawwassen First Nation**  
**1926 Tsawwassen Drive**  
**Tsawwassen BC V4M 4G2**

**Signature of Harvester:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Print name:** \_\_\_\_\_





**APPENDIX D**  
**2016 Fraser River Sockeye In-season Status Report**



**Anita Blakley**

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**From:** Matts, Brian <Brian.Matts@dfo-mpo.gc.ca>  
**Sent:** August 10, 2016 12:49 PM  
**To:** Anita Blakley; Burnett, Karen; Evers, Sheldon; gmoore@tsawwassenfirstnation.com; Green, Ken; Karl English; Kyle Flindt; Laura Cassidy; Liana Williams; Magera, Anna; Matts, Brian; mike baird; Nurse, Lourdes; Parslow, Matthew; Sneddon, Debra; TFN General Fisheries e-mail  
**Subject:** TFN Final Agreement TACs as of August 10, 2016  
**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Please find attached the TFN domestic and commercial TAC calculations as of Aug 10, 2016

<b>Tsawwassen First Nation domestic &amp; commercial TAC calcs</b>	
CTAC	107,900
CCTAC	-
	TFN
domestic allocation	1,079
CTD	
balance	1,079
commercial allocation	-
CTD	
balance	-
<i>allocation updated:</i>	<i>10-Aug-16</i>

**Brian Matts**  
Resource Manager, Lower Fraser Area  
Fisheries & Oceans Canada/Government of Canada

**Fraser River Sockeye - TAC Calculations and Catch 2016**

Note: Projected catches ARE included in this table

Catch sharing parameters	Share	Early Stuart	Early Summer	Summer	Late	Total
In-season run size		22,000	250,000	700,000	111,000	1,083,000
Spawning Escapement Target		22,000	156,000	700,000	111,000	989,000
	<i>effective ER%:</i>		1%			

**Deductions**

Spawning Escapement Target		22,000	156,000	700,000	111,000	989,000
Management Adjustments		15,200	92,000	77,000	52,200	236,400
Aboriginal Fishery Exemption		1,100	22,000	64,000	21,700	108,800
PSC test fishing (CTD or projected)			3,000	6,000	500	9,680
Other		-	-	-	-	-
<b>Total Deductions</b>		<b>38,480</b>	<b>273,000</b>	<b>847,000</b>	<b>185,400</b>	<b>1,343,880</b>

Run Size - Deductions (used)

-

**Available TAC for International Sharing**

US (Washington) TAC	16.5%	-	-	-	-	-
Payback (up to 5% of US allocation)	#####	-	-	-	-	900
Proportionally distr. TAC + payback		-	-	-	-	-
U.S. catch to date		-	600	900	100	1,600
US catch remaining (balance)		-	(600)	(900)	(100)	(1,600)
non-proportional US catch adjustment		-	-	-	-	-
revised US catch balance		-	(600)	(900)	(100)	(1,600)

**Canadian domestic planned shares:**

Canada TAC		-	-	-	-	-
non-proportional US catch adjustment		-	-	-	-	-
US overage		-	(600)	(900)	(100)	(1,600)
Aboriginal Fishery Exemption		1,100	22,000	64,000	21,700	108,800
<b>Total</b>		<b>1,100</b>	<b>21,400</b>	<b>63,100</b>	<b>21,600</b>	<b>107,200</b>

Charter (Alblon)

-

balance

1,100 21,300 62,700 21,400 106,500

Allocations	Marine First Nations FSC	-	5,400	16,000	5,400	26,800
	Fraser River FN FSC	1,100	15,900	46,700	16,000	79,700
	less CFA reduction		-	-	-	-
	<b>FSC Sub-total</b>	<b>1,100</b>	<b>21,300</b>	<b>62,700</b>	<b>21,400</b>	<b>106,500</b>

Recreational + Commercial

-

Recreational Fisheries

	Marine	-	-	-	-	-
	Fraser River	-	-	-	-	-
	<b>Sub-total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

Sub-total for Comm'l+ sharing

-

TFN Economic 0.78%

-

FN Economic 0.00%

-

Area F overage

-

subtotal

-

Commercial Area-Gear

-

FN Demo 13.18%

-

T'aaq-wihak demo

-

Commercial (all)Sub-total

-

<b>Total Canadian Catch to Date (Alblon, FN, REC, COM)</b>	<b>600</b>	<b>22,400</b>	<b>74,700</b>	<b>5,100</b>	<b>102,800</b>
<b>Total CDN Balance Remaining</b>	<b>500</b>	<b>(1,000)</b>	<b>(11,600)</b>	<b>16,500</b>	<b>4,400</b>

<b>Total U.S., Can, and Test fishing Catch to Date</b>	<b>800</b>	<b>25,400</b>	<b>80,000</b>	<b>5,600</b>	<b>111,700</b>
<b>Total Balance of Fraser SK</b>	<b>500</b>	<b>(1,600)</b>	<b>(12,500)</b>	<b>16,400</b>	<b>2,800</b>
<b>Total Exploitation rate</b>	<b>3.6%</b>	<b>10.2%</b>	<b>11.4%</b>	<b>5.0%</b>	<b>10.3%</b>
Low Abundance Exploitation Rate (LAER)	10%	10%	10%	20%	
run-catch	21,200	224,600	620,000	105,400	
%DBE	-41%	-37%	-10%	-32%	
proj. DBE	(8,656)	(83,342)	(61,441)	(33,699)	
Projected esc w. DBE (w no add'l catch)	12,544	141,258	558,559	71,701	

**Total U.S., Can, and Test fishing Catch of Lates (excl. Harrison & BK+) sockeye** (does NOT incl US bal)  
**Proxy Cultus Exploitation Rate based on Lates (excl. Harrison & BK+) ER**

Note: Projected catches ARE included in this table

Catch sharing parameters	Share	Early Stuart	Early Summer	Summer	Late	Total
Detailed Catch to Date and Balances (Projected Catch Fisheries)						
<i>FSC Fisheries</i>						
Marine FSC	-	5,400	16,000	5,400	26,800	
CTD	-	3,300	19,100	1,900	24,300	
<i>projected balance</i>	-	2,100	(3,100)	3,500	2,500	
<i>%remaining</i>						9%
LFrA FSC	500	8,800	25,900	8,900	44,100	
Below Vedder CTD	-	6,600	31,000	3,200	40,800	
Vedder to Sawmill CTD	200	3,600	6,300	-	10,100	
<i>projected balance</i>	300	(1,400)	(11,400)	5,700	(6,800)	
<i>%remaining</i>						-15%
BCI FSC	1,600	7,100	20,800	7,100	36,600	
CTD	400	8,800	18,000	-	27,200	
<i>projected balance</i>	1,200	(1,700)	2,800	7,100	9,400	
<i>%remaining</i>						26%
<hr/>						
<i>FSC CTD sub-total</i>	600	22,300	74,400	5,100	102,400	
<i>%remaining</i>						95%
<hr/>						
DFO Charter (Albion TF)						
Projected catch	-	100	400	200	700	
CTD	-	100	300	-	400	
<i>projected balance</i>	-	-	100	200	300	
<hr/>						
<i>Recreational Fisheries</i>						
Marine projected	-	-	-	-	-	
CTD	-	-	-	-	-	
<i>projected balance</i>	-	-	-	-	-	
Fraser River projected	-	-	-	-	-	
CTD	-	-	-	-	-	
<i>projected balance</i>	-	-	-	-	-	
<hr/>						
<i>Recreational CTD sub-total</i>	-	-	-	-	-	

Detailed Catch to Date and Balances (Commercial Fisheries)

Note: Projected catches ARE included in this table  
 Catch sharing parameters

	Share	Early Stuart	Early Summer	Summer	Late	Total
<b>Commercial Area-Gear Fisheries</b>						
B TAC		-	-	-	-	-
CTD		-	-	-	-	-
balance		-	-	-	-	-
%remaining		-	-	-	-	-
D TAC		-	-	-	-	-
CTD		-	-	-	-	-
balance		-	-	-	-	-
%remaining		-	-	-	-	-
E TAC		-	-	-	-	-
CTD		-	-	-	-	-
balance		-	-	-	-	-
%remaining		-	-	-	-	-
G TAC		-	-	-	-	-
CTD		-	-	-	-	-
balance		-	-	-	-	-
%remaining		-	-	-	-	-
H TAC		-	-	-	-	-
CTD		-	-	-	-	-
balance		-	-	-	-	-
%remaining		-	-	-	-	-
				B & H ITQ release:		-
B & H balance by agg	-	-	-	-	-	-
% remaining	-	-	-	-	-	-
<hr/>						
comm'l CTD subtotal	-	-	-	-	-	-
comm'l balance subtotal	-	-	-	-	-	-
% remaining	-	-	-	-	-	-
<b>Economic, Demo &amp; TFN com'l Fisheries</b>						
LFrA EO, TFN, demo TAC		-	-	-	-	-
CTD		-	-	-	-	-
balance		-	-	-	-	-
%remaining		-	-	-	-	-
BCI Demo TAC		-	-	-	-	-
CTD		-	-	-	-	-
balance		-	-	-	-	-
%remaining		-	-	-	-	-
T'aaq-wilhak demo TAC		-	-	-	-	-
CTD		-	stock ID unavailable until post-season		-	-
balance		-	-	-	-	-
%remaining		-	-	-	-	-
<hr/>						
FN EO, demo, TFN CTD sub-total	-	-	-	-	-	-
balance	-	-	-	-	-	-
%remaining	-	-	-	-	-	-
<b>Canadian Balances</b>						
Total FSC TAC	1,100	21,300	62,700	21,400		106,500
Total FSC CTD	600	22,300	74,400	5,100		102,400
Balance FSC Fisheries	500	(1,000)	(11,700)	16,300		4,100
Total Recreational TAC	-	-	-	-		-
Total Recreational CTD	-	-	-	-		-
Balance Recreational Fisheries	-	-	-	-		-
Total Commercial TAC	-	-	-	-		-
Total Commercial CTD	-	-	-	-		-
Balance Commercial Fisheries	-	-	-	-		-
Total Canadian TAC	1,100	21,400	63,100	21,600		107,200
Total Canadian CTD (incl. Alblon)	600	22,400	74,700	5,100		102,800
Total Balance Remaining	500	(1,000)	(11,800)	16,500		4,400

**Summary of Projections**

US Fisheries	ESum	Sum	BK+	"Cultus"	subtotal
US (total)					

**CDN Fisheries**

Cultus Exempt Projections				
	ESum	Sum	Lates	subtotals
BCI FSC	6,552	14,804	-	21,356
LF FSC (abv Ved)	-	-	-	-
in-river rec'l	-	-	-	-
FN EO (abv Ved)	-	-	-	-
BCI demo	-	-	-	-
<b>subtotal</b>	<b>6,552</b>	<b>14,804</b>		<b>21,356</b>

**Cultus Included Projections**

FSC	ESum	Sum	BK+	"Cultus"	subtotals
marine	-	-	-	-	-
in-river	1,988	11,588	1,163	263	15,000
<b>Commercial</b>					
Area B	-	-	-	-	-
Area D	-	-	-	-	-
Area E	-	-	-	-	-
Area H	-	-	-	-	-
Area G	-	-	-	-	-
FN Econ (below)	-	-	-	-	-
<b>Rec'l (Marine)</b>					
<b>subtotal</b>	<b>1,988</b>	<b>11,588</b>	<b>1,163</b>	<b>263</b>	<b>15,000</b>

**Estimates of CTD not in PSC tables**

(fisheries that have already occurred without catch estimates)

US Fisheries	ESum	Sum	BK+	"Cultus"	subtotal
	9%	72%	6%	0%	

**Cultus Exempt Projections**

	ESum	Sum	Lates	subtotals
BCI FSC	-	-	-	-
LF FSC (abv Ved)	-	-	-	-
in-river rec'l	-	-	-	(BCI)
FN EO (abv Ved)	-	-	-	-
FN demo	-	-	-	-
<b>subtotal</b>				
<i>in-river % (abv Ved)</i>	14.4%	83.7%	1.9%	

**Cultus Included Projections**

FSC	ESum	Sum	39.30559	"Cultus"	subtotal
marine	8.7%	81.7%	6.7%	3.0%	-
in-river	13.3%	77.3%	7.8%	1.8%	15,000
<b>Commercial</b>					
Area B	8.7%	81.7%	6.7%	3.0%	-
Area D	8.7%	81.7%	6.7%	3.0%	-
Area E	13.3%	77.3%	7.8%	1.8%	-
Area H	8.7%	81.7%	6.7%	3.0%	-
Area G	-	-	-	-	-
FN Econ (below)	13.3%	77.3%	7.8%	1.8%	-
<b>Rec'l (Marine)</b>	8.7%	81.7%	6.7%	3.0%	-
<b>subtotal</b>	<b>1,988</b>	<b>11,588</b>	<b>1,163</b>	<b>263</b>	<b>15,000</b>

**Projections of upcoming fisheries**

A20 projected from: 2-Aug  
JoSt projected from: 3-Aug

US Fisheries	ESum	Sum	BK+	"Cultus"	subtotal
	10%	72%	15%	3%	

**Cultus Exempt Projections**

	ESum	Sum	Lates	subtotals
BCI FSC	6,552	14,804	-	21,356
LF FSC (abv Ved)	-	-	-	-
in-river rec'l	-	-	-	-
FN EO (abv Ved)	-	-	-	-
FN demo (incl. LFrA)	-	-	-	-
<b>subtotal</b>	<b>6,552</b>	<b>14,804</b>		<b>21,356</b>
<i>in-river % (abv Ved)</i>	21.1%	78.9%	0.0%	

**Cultus Included Projections**

FSC	ESum	Sum	BK+	"Cultus"	subtotal
marine	17.0%	71.0%	11.0%	1.0%	-
in-river	20.0%	75.0%	5.0%	0.0%	-
<b>Commercial</b>					
Area B	17.0%	71.0%	11.0%	1.0%	-
Area D	17.0%	71.0%	11.0%	1.0%	-
Area E	20.0%	75.0%	5.0%	0.0%	-
Area H	17.0%	71.0%	11.0%	1.0%	-
Area G	-	-	-	-	-
FN Econ (below)	5.0%	18.0%	7.0%	70.0%	-
<b>Rec'l (Marine)</b>					
<b>subtotal</b>					





**APPENDIX E**  
**2016 Chinook Overage Documentation**





**TSAWWASSEN FIRST NATION**  
s̓əwəθən məsteyəx<sup>w</sup>

January 6, 2017

**To Tsawwassen Joint Fisheries Committee Members**

This correspondence details Tsawwassen First Nation's concerns over DFO refusal to provide TFN fishers with the opportunity to harvest their Treaty allocation of Fraser Chinook. On August 10, 2016 a closure was placed on all salmon fisheries within the Lower Fraser River due to concerns related to the bycatch of Fraser Sockeye salmon. Tsawwassen First Nation was not allowed to resume FSC Salmon Fisheries until October 8, 2016, after Fraser Chinook returns were largely complete.

During the period with TFN fishers were not permitted to conduct their weekly salmon fisheries, Fisheries and Oceans Canada permitted recreational fisheries to harvest Chinook salmon in management areas 29-4, 29-3 & 29-2 (outside of the Fraser River and offshore of Roberts Bank and Sturgeon Bank). This decision is not consistent with DFO's stated priority for First Nations FSC fisheries above all other fisheries and the TFN Final Agreement with regarding to harvest of Fraser Chinook. DFO should have permitted TFN fishers to implement a large mesh gillnet fishery to harvest the TFN Chinook allocation as requested and conducted during times when there are conservation concerns for other smaller salmon species like Sockeye.

On August 16, 2016 TFN staff corresponded with DFO staff to inquire over a Chinook underage, and in response DFO staff stated that TFN was in the position of a Sockeye overage. This, in turn, is not the case as prior to the closure (August 7<sup>th</sup> was the final Sockeye fishery for 2016) TFN had caught 2,978 pieces with 3,449 pieces remaining at the time; after the closure was imposed on August 10<sup>th</sup> the TFN allocation was scaled back to 1,079 pieces. While this appears that TFN was over by 1,899 pieces, this is not the case as this revision was done after the final sockeye fishery, and therefore, TFN does not have an overage of Sockeye.

On September 19<sup>th</sup> of 2016, your department also allowed the recreational fishery to resume harvesting Chinook, Chum and Pink salmon in management areas 29-6, 29-7, 29-9 & 29-10 (which is detailed in Fishery Notice FN0984), but no TFN fisheries for Chinook salmon were permitted at this time due to conservations concerns for Sockeye and Coho. Given DFO's own stated priorities and the lack of opportunities for TFN fishers to conduct fisheries for their Chinook allocation under their Treaty fishing right, DFO should not have permitted these recreational fisheries to harvest any Fraser Chinook salmon at this time in these areas.

As recreational fishers were given the opportunity to harvest Chinook salmon and TFN was not, TFN are claiming the 2016 season as an underage year for the TFN Chinook allocation; therefore, the 552 Chinook that TFN was not permitted to harvest in 2016 should be accounted for as an underage that would be available for harvest by TFN fishers in future years in a manner consistent with the general accounting procedures defined in the Tsawwassen Fisheries Operational Guidelines document (FOG 2013).

Sincerely,

Laura Cassidy  
TFN Natural Resources Manager



Fisheries  
and Oceans

Pacific Region  
Resource Management  
Fraser & Interior Area  
Unit 3 - 100 Annacis Parkway  
Delta, BC V3M 6A2

Pêches  
et Océans

Région du Pacifique  
Gestion des ressources  
Secteur du Fraser et l'Intérieur  
100, promenade Annacis, Unité 3  
Delta, C-B, V3M 6A2

March 22, 2017

Laura Cassidy  
TFN Natural Resources Manager  
Tsawwassen First Nation

Mike Baird  
Fisheries Coordinator  
Tsawwassen First Nation

**Re: 2016 Tsawwassen First Nation Chinook Underage Letter**

Dear Laura/Mike,

I am in receipt of your letter dated January 6, 2017 in which the Tsawwassen First Nation (TFN) proposes the share of the chinook allocation unharvested in 2016 be identified as an underage to be carried forward for harvest in future years. As I understand it, the rationale set forth is that the Department did not authorize chinook directed fisheries for TFN between August 11, 2016 and October 8, 2016.

The Department would like to acknowledge the cooperative relationship it shares with the TFN. Since the inception of the Tsawwassen Final Agreement (TFA), TFN representatives have worked collaboratively with Department staff during the consultative process as well as creating a comprehensive annual fishing plan that encompasses many species. The chinook portion of the 2016 plan was implemented on May 14, 2016

To provide context for this discussion, the following is text from the TFN Fisheries Operational Guidelines (FOG) describing the general accounting principles and procedures for the Tsawwassen Final Agreement (TFA). As well, clause 2 of the Fisheries Chapter of the TFA is included as is an excerpt from the TFN Annual Fishing Plan (AFP). This text, excluding the excerpt from the AFP, is located on page 39 of the TFN FOG.

The TFA contemplates that the disparity between what was caught by species and Tsawwassen Allocations by species will be addressed through overages and underages as defined in Appendix J-3 of the TFA, which states:

*"The procedures for calculating overages and underages for each Salmon species will be consistent with the following principles:*

- a. where a Tsawwassen harvest exceeded the defined Tsawwassen Allocation for a Salmon species in a year, an overage has occurred for that species and the amount of that overage will be accounted for in the multi-year accounting process;
- b. where a Tsawwassen harvest was less than the defined Tsawwassen Allocation for a Salmon species in a year because another group harvested more than their harvest share for that species, an underage has occurred for that species and the amount of that underage will be accounted for in the multi-year accounting process;
- c. where a Tsawwassen harvest was less than the defined Tsawwassen Allocation for a Salmon species in a year due to uncertainty in the management process for that species, an underage has occurred for that species and a defined portion of that underage will be accounted for in the multi-year accounting process;
- d. where a Tsawwassen harvest was less than the defined Tsawwassen Allocation for a Salmon species in a year due to a lack of harvesting effort on the part of Tsawwassen, no underage has occurred for that species in that year; and
- e. where Tsawwassen and Canada agree on an amount to be accounted for in the multi-year accounting process for overages and underages for a Salmon species, Tsawwassen and Canada will use that amount in the multi-year accounting process."

Clause 2 of the Fisheries Chapter of the TFA states:

*"The Tsawwassen Fishing Right is limited by measures necessary for conservation, public health or public safety."*

The TFN AFP states the following on page 1:

*"However, the Tsawwassen Annual Fishing Plan (TAFP) is subject to identified and documented conservation concerns."*

As you are aware, 2016 was the weakest return for Fraser River sockeye salmon on record (120 years). As their migration continued to unfold it became clear, through the Fraser River Panel (FRP) process, that returns were significantly lower than anticipated and that immediate measures were required to limit harvest and allow unimpeded migration to maximize the number of sockeye escaping to the spawning grounds.

Reflecting these low returns, downgrades to the in-season run-sizes were adopted on August 9, 2016. Harvests accrued in advance of these downgrades exceeded

the Low Abundance Exploitation Rate (LAER) at the lower run sizes for some run-timing groups. On August 9, 2016 sockeye non-retention in Food, Social and Ceremonial (FSC) and recreational fisheries was implemented in Pacific Fisheries Management Areas (PFMA) 11 to 21, 111, 121, 123 to 127 and 29-1 to 29-5. Actions followed on August 12, 2016 in PFMA's 29-6, 7, 9, 10; the tidal portion of the Fraser River; and Region 2 to the Alexandria Bridge that restricted the use of non-selective gear because of potential impacts on sockeye. It is important to note there were no sockeye directed commercial or recreational fisheries in 2016.

There continued to be a clear conservation concern for sockeye after August 9, 2016. On Tuesday, August 9, 2016 the FRP adopted an in-season estimate of 250,000 Early Summer-run which was between the p25 (217,000 fish) and p50 (447,000 fish) level forecast. The Summer run size estimate was reduced to 700,000 then to 600,000, on Friday, August 12, 2016, which was slightly less than the p10 (640,000) level forecast. These concerns continued through into September as sockeye migrated through the lower Fraser River area.

The Interior Fraser Coho window closure, implemented from September 6 to October 7 in PFMA's 29-6, 29-7, 29-9, and 29-10 as well as the main stem Fraser River downstream of the Mission Bridge, further impeded access to salmon via non-selective fishing methods (e.g. gillnets and use of bait in recreational fisheries). In the past decade, with the exception of 2014, the start and end dates of the window closure have been selected to protect 90% of the Interior Fraser coho migration from exposure to non-selective fishing gear, with adjustments made on an annual basis to initiate the closure period following the Labour Day weekend. The objective of protecting 90% of the run was developed when IFR coho were in critically low status, and was aligned with other domestic management measures to meet an overall domestic management objective of limiting the total Canadian exploitation rate on Interior Fraser Coho to 3% or less.

The Department did authorize selective fisheries in the Fraser River, after September 19, once sockeye migration was deemed complete in the area. FSC fisheries using beach seines and recreational fisheries (with a bait ban) were authorized after this date targeting chinook, chum and hatchery marked coho salmon. The guidelines around when selective gear would be considered were shared through Fishery Notice FN09444 issued on September 2, 2016. If TFN had selective gear that it wished to utilize during this period the Department certainly would have considered the proposal. Staff has no record of this type of request being made by TFN representatives.

Reviewing TFN chinook catches in recent years it is clear that a large proportion of the catch has been harvested after the start of August and therefore during the period when closures were in place this year to protect co-migrating sockeye stocks of concern. However, as detailed above, closures implemented were due to conservation concerns for co-migrating sockeye which were identified as a stock of concern this year.

The Department acknowledges that all First Nations that rely on access to Fraser sockeye and chinook for Food, Social and Ceremonial (FSC) purposes suffered hardship in 2016 due to the severe conservation concern for Fraser sockeye salmon and continued concerns for many Fraser chinook stocks. However, given the information above, the Department disagrees with TFN's view that there is an underage to be applied to future chinook allocations.

You also raise the question of whether or not TFN was in an overage situation for sockeye this season. The Department does not view the 2016 TFN catch of 2,978 sockeye as an overage.

If you have any further questions please call me at (604) 666-6478 to discuss further.

Sincerely yours,



Angela Bate  
Area Director-Fraser Interior Area

c.c.:

Dean Allen-A/Area Chief, Fraser Interior Area  
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