

## **Documentation of North Coast (Statistical Areas 1 to 6) Salmon Escapement Information**

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by

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## **Abstract**

Spilsted, B., and Spencer, B. 2009. Documentation of North Coast (Statistical Areas 1 to 6) salmon escapement information. Can. Manuscr. Rep. Fish. Aquat. Sci. 2802: vi + 66 p.

This report documents sockeye, coho, pink, chum and Chinook salmon escapement information held by the North Coast Stock Assessment Unit for streams located in the North Coast of British Columbia, Statistical Areas 1 to 6. A description of the type, format, scope and content of these data holdings, as well as information on the procedure for accessing these data is provided.

Paper records documenting annual salmon spawning ground assessments in the North Coast, commonly known as BC16 files, may in some cases extend back to the early 1920's. Electronic scanned images of these files for all years up to 2003 are part of North Coast Stock Assessment Unit data holdings. Electronic spreadsheet data tables summarizing annual escapement estimates noted on BC16 reports are organized by Statistical Area, by Management Subarea, by species, by stream and by year. These data are available for all years of existing records to present. A review of annual escapement data has reconciled numeric values between north coast electronic spreadsheet data tables and regional salmon escapement data (currently known as NuSEDS V2.0) held within the Pacific Biological Station salmon escapement database.

Completeness of paper records of individual stream inspection logs, known as SIL's are highly variable between streams and years. There may be large data gaps of daily assessment observations prior to 1998, as information collected in paper format have not been successfully retained due to an ad hoc storage system. An electronic database capturing information of all SIL's received from field staff is available from the North Coast Stock Assessment Unit, however complete records of stream inspections only exist for the years 1998 to present.

Additional information summarized in this report includes a list of all streams in the North Coast which have received at least one annual stream escapement report, an inventory of stream names (Gazetted and common), watershed coding information, maps showing names and locations of streams, and spawner run timing data.

## Résumé

Spilsted, B., and Spencer, B. 2009. Documentation of North Coast (Statistical Areas 1 to 6) salmon escapement information. Can. Manusc. Rep. Fish. Aquat. Sci. 2802: vi + 66 p.

Ce rapport fait le bilan de l'information dont dispose le Service de recensement des stocks de la côte Nord concernant les échappées de saumon rouge, de saumon coho, de saumon rose et de saumon quinnat dans la région de la côte Nord de la Colombie-Britannique, plus précisément dans les zones statistiques 1 à 6. On y trouve une description du type d'information consigné, des types de présentation matérielle, de la taille et du contenu des fonds de données disponibles, et une explication des modalités d'accès à l'information.

Les documents d'archives montrant les résultats des campagnes annuelles de recensement des frayères de saumon de la côte Nord (fiches BC16), peuvent dans certains cas remonter jusqu'au début des années 1920. Des images numérisées de ces documents couvrant toute la période d'archivage jusqu'à l'année 2003 enrichissent le fonds de données du Service de recensement des stocks de la côte Nord. Des tableurs électroniques indiquent le nombre d'échappées annuelles consigné sur les fiches BC16, selon la zone statistique, le secteur de gestion, l'espèce, le cours d'eau et l'année. Les données sont disponibles pour toutes les années recensées jusqu'à ce jour. Un examen des données d'échappées consignées pour chaque année a permis de faire des rapprochements entre les valeurs numériques enregistrées sur les tableurs électroniques établis pour la côte Nord et les valeurs consignées dans les fiches d'échappées régionales (NuSEDS V2.0) versées dans la base de données de la Station biologique du Pacifique.

L'exhaustivité des fiches d'information papier contenues dans chaque registre d'inspection de cours d'eau (« RICE ») varie grandement d'un cours d'eau et d'une année à l'autre. On observe notamment d'importants « trous d'information » pour les recensements journaliers effectués avant l'année 1998 du fait que les renseignements étaient consignés sur des fiches papier qui se sont perdues dans le système d'archivage spécial où elles étaient déposées. Une base de données électronique – dans laquelle est saisie l'information qui figure sur les fiches RICE remises par le personnel de terrain – est disponible auprès du Service de recensement des stocks de la côte Nord, mais l'archivage complet des données d'inspection des cours d'eau concernés n'existe que pour les années comprises entre 1998 et aujourd'hui.

Le rapport contient aussi d'autres informations utiles : liste de tous les cours d'eau de la côte Nord ayant fait l'objet d'au moins un rapport annuel d'échappées; nomenclature des noms de cours d'eau (nom enregistré dans la *Gazette* et nom commun); codes d'identification des bassins hydrologiques; cartes montrant les noms et emplacements des cours d'eau d'intérêt; et périodes de remonte.

## **1. Introduction**

This paper provides an overview of salmon escapement data holdings of Fisheries and Oceans Canada (DFO) North Coast (N/C) Stock Assessment Unit of the Pacific Region Stock Assessment Division (StAD) for streams located in Statistical Areas 1 through 6. Maps showing each North Coast DFO Statistical Area (SA) and Fishery Management Subareas are provided in Figures 1 to 7. These data holdings provide escapement and spawner run timing information for sockeye salmon (*Oncorhynchus nerka*) (Burgner 1991), coho salmon (*Oncorhynchus kisutch*) (Sandercock 1991), pink salmon (*Oncorhynchus gorbuscha*) (Heard 1991), chum salmon (*Oncorhynchus keta*) (Salo 1991) and Chinook salmon (*Oncorhynchus tshawytscha*) (Healey 1991). There are currently 883 streams on file for the North Coast (Table 1). Maps identifying stream locations within each SA are shown in Figures 8 to 18.

## **2. Description of Escapement and Timing Information**

### **2.1 Paper Documents**

#### **2.1.1 Annual Escapement Reports.**

Within the North Coast, the bulk of stream walks and over-flights assessing salmon stocks for the years prior to the 1980's were conducted by the local Fishery Officer and his staff, located within each SA. In general, these officers were responsible for the compilation of observations from individual stream inspection information into summarized estimates of total escapement which was documented in the BC16 Annual Report of Salmon Streams and Spawning Populations. These historic paper reports exist as far back as the early 1920's for certain geographic areas, streams and species. Hard copies of annual BC16 reports are sorted by Statistical Area by stream name and by year and are on file at the N/C StAD Unit. Since the 1980's, the salmon Resource Manager responsible for each of the Queen Charlotte Islands and the North Coast along with seasonal patrol staff, First Nations and other non-governmental groups now provide the bulk of coastal salmon stock assessment information.

The term 'BC16' which is used to identify these annual stream escapement reports has a simple origin. In the early 1930's, the form number designation for this annual report was 'BC16'. Since then, although the document format and form number has changed over the years, it continues to be referred to as a 'BC16' report.

Annual BC16 reports from the 1900's to 1933 use text abundance descriptors of "heavy", "medium" and "light" indicating run size rather than actual numeric values. No generic descriptions have been found in these early reports as to what numeric values these text descriptions represent. In cases where a numeric value was found as a comment noted in a report, the numeric value superseded the corresponding text descriptor. From 1934 to 1984 a letter code system indicating a run size range (Table 2) was used. Within this period, in addition to letter codes, which are the most prevalent, specific numeric values can also be found. When a letter code was found in the historic documents, a single value for the electronic annual escapement tables was derived by taking the mid point of the range of numeric values designated by letter code. It should be noted that as the numbers within these

ranges increase, the range between values increase as well. For example the letter code ‘C’ denotes a numeric range of 100 to 200 with a mid-point of 150, for letter code ‘M’, the corresponding range is from 50,000 to 100,000 with a mid-point of 75,000. This represents increasing uncertainty around the mid-point value used as escapement estimates increase. If a single escapement value was cited for a certain species in the annual escapement report, then this value was used in our data tables. Single numeric values representing annual escapement estimates began to be recorded on BC16 forms commencing in 1985.

The N/C StAD office has a relatively complete series of paper records of N/C annual BC16 reports for the years 1950 to present. Where gaps existed, an examination of data holdings in various N/C StAD and Fisheries Management offices as well as files located at the Pacific Biological Station was conducted to locate missing records. The records on file in the N/C StAD office represent the results of this document search. BC16 stream records prior to 1950 have a greater frequency of missing reports, although there are a number of north coast streams with remarkably complete information back to the 1920’s.

Each paper record of each stream’s annual escapement (BC16) report has been electronically scanned for all years up to 2003 for all streams located in Statistical Areas 1 to 6 and is also available from the N/C StAD Unit.

### **2.1.2 Stream Inspection Log (SIL) Reports**

Individual N/C spawner assessment stream inspections (known as Stream Inspection Logs, or SILs) began to be documented in an organized and standardized manner in the early 1980’s through the use of paper forms. An example of the current form is provided in Figure 19, and a summary of the form definitions are provided in Table 3. The intent was to capture the underlying assessment observations which are used to establish annual escapement estimates recorded on BC16 reports. Unfortunately, collection and preservation of these early paper documents was not effective, resulting in large data gaps within this time series. N/C StAD staff inspected data holdings in Departmental field offices in the late 1990’s and met with very limited success in recovering documents. All paper SILs recovered from field offices are held at the N/C StAD Unit office. As of the date of publication of this document, Areas 4 and 5 have SIL data recorded back to 1983; Area 1 to 1989 and Areas 2 West, 3 and 6 have SIL information back to 1985. Presently, there is no SIL data recovered for Area 2 East for years prior to 1998.

### **2.2 Documentation of Stream Names**

There can be confusion by data users over identification of specific streams, as each North Coast stream may have several names associated with it. To help inform users, a spreadsheet is maintained that includes Statistical Area, Management Subarea, Island Name, Watershed Name, BC16 Stream Name, Gazetted Name and Alias1 and Alias 2 names. The intent of this list documenting the multiple names for various streams is to clarify and facilitate identification of streams for data users. The ‘BC16 Stream Name’ represents the most common name that was historically in use for each stream. The ‘Streamlist’ spreadsheet can be found via the intranet for internal users on the North Coast DFO public drive P:\ESCDATA\Streamlist - Areas 1-6\North Coast Streamlist.xls. The Provincial stream watershed coding system is used and is associated with streams noted within this

‘Streamlist’ file. Persons external to the Department can contact N/C StAD by methods noted in Section 2.3.2.1 to obtain copies of this file.

North Coast stream names have been reconciled with the names used in the Pacific Biological Station regional escapement database (NuSEDS V2.0).

## **2.3 Electronic Data**

### **2.3.1 Access™ Escapement Database**

In response to the need for a more formal process to record and store detailed stream assessment data, N/C StAD developed an electronic database program commencing in 1998 using Microsoft Access™ software. This database stores information entered into individual stream inspection logs (SIL’s). The Live Adult Summary report (Figure 20) provides individual daily SIL data for each recorded stream survey. The Database also stores information entered into Annual Stream (BC16) reports (Figure 21). The Escapement Summary report (Figure 22) provides total escapement estimates generated from BC16 data for each surveyed stream. Definitions of various terms used in the BC16 report are provided in Table 4. SIL reports recovered from North Coast field offices for the years prior to 1998 have also been entered into the database.

At the completion of each assessment season, StAD datasets are promptly updated and a copy of the data is sent to the regional NuSEDS V2.0 escapement data repository located at the Pacific Biological Station, where it is electronically uploaded. The regional database mirrors N/C StAD’s annual escapement dataset for the years 1950 to present. Identical stream naming structure is used, with the same primary stream name identified for each stream to avoid confusion. The Provincial watershed code system is used and linked to each stream noted in the N/C StAD escapement dataset.

All amendments to historic escapement data generated by N/C StAD from data reconciliation reviews or from updates due to finalization of data are updated in our N/C data holdings as well as uploaded electronically to the regional Salmon Escapement Data System (NuSEDS V2.0).

### **2.3.2 Spreadsheet Format Data**

#### **2.3.2.1 Escapement Data**

Escapement data found in NC StAD Microsoft Excel™ data tables have been populated since 1998 by annual electronic downloads with data originating from reports generated from the N/C StAD BC16 and SIL Microsoft Access™ database. These data have been downloaded into Microsoft™ Excel™ spreadsheet format because the Microsoft™ Access™ Database is not all in one file for all years. A separate database is used for each year. Excel™ spreadsheet format was used to combine all years into one data file providing information in ‘user friendly’ format summarizing annual escapement estimates organized by Statistical Area by species by stream.

Annual stream escapement (BC16) data for all years and all streams on file at the N/C StAD Unit exist for each North Coast Statistical Area in electronic spreadsheet format using Microsoft™ Excel™ software. Many streams in each SA have annual escapement information dating back to the 1930’s or 1920’s.

Annual escapement spreadsheet summaries for all years, streams and species documenting N/C StAD's data holdings (Statistical Areas 1 to 6) are electronically available to Departmental data users by accessing the internal intranet pathway: \\pacnccdfp1\public\ESCDATA\. First Nations groups, agencies and non-governmental organizations or persons external to DFO wishing to obtain any data noted in this report can contact the N/C StAD Unit by e-mail at NCSTADDDataManager@dfo-mpo.gc.ca or via telephone at 250-627-3423.

A list of tab names and Excel™ spreadsheet descriptions found in each escapement file can be found in Table 5. Within each Statistical Area file, annual total escapement estimates for all species are summarized in the 'Annual Esc. Summary' tab. An example of this information is provided in Table 6. The stream specific annual escapement data are organized by separate species tabs and grouped by DFO Fisheries Management (FM) Subarea and by decade. These FM Subareas were established by DFO and represent geographic stream aggregates (ie. groups of streams located in the same general area) within a SA. These sub-groupings of streams were intended to collate escapement data into standardized stream aggregates, providing finer resolution of escapement trends within a SA to assist stock management. An example of information found in a species tab is presented in Table 7. The spreadsheet tab called 'Linked Datasheet - All Species' (Table 8) provides escapement data organized as a continuous time series in one table, with filters on column headings to select specific groupings of data, which facilitates extraction of blocks of data for data users. Data can be easily grouped by FM Subarea, by specific island name or mainland group, by watershed name, by stream name and by species. The 'Select Chart' tabs (Figure 23) provide selection options for instantaneous charting of escapement data by species, by stream, by FM Subarea or Statistical Area. All data tables are organized into Microsoft Excel™ spreadsheet format.

### **2.3.2.2 In-Stream Arrival and Spawning Timing**

Spreadsheet summaries documenting salmon stream arrival and spawning timing are available by stream by species for streams located in Statistical Areas 1 to 6 from the NC StAD Unit.

#### **2.3.2.2.1 Historic Arrival and Spawning Timing Data**

Information noted in this section is based on timing data compiled in the Salmon Escapement and Timing Data report series which are cited in Section 5.4 of this document. These data have not been reviewed or updated since the reports were published in 1988 or 1989. This information represents the best estimates of arrival and spawning timing compiled through consultation with field staff and review of historic BC16 annual stream reports. These data reflect mean estimates of arrival and spawning timing from field observations by field staff over many years and from information obtained from historic BC16 files. Actual annual variations from historic averages of timing data may occur. Spawner arrival timing at each stream's estuary is documented for Queen Charlotte Islands Statistical Areas 1, 2 East and 2 West. Although not all streams or stream species have associated timing data at the time of report publication, streams in close proximity can generally be used as a guide. Table 9 provides an overview with respect to the content and format of historic arrival and spawning timing data held at NC StAD. These Excel™ spreadsheet data are organized by Statistical Area tabs and can be accessed electronically by Departmental staff by using the following intranet file pathway:

\PACNCDFP1\PUBLIC\ESCDATA\Escapement Run Timing. Information requests originating external to DFO are addressed in Section 2.3.2.1.

### **2.3.2.2.2 Electronic Arrival and Spawning Timing Data from Stream Inspection Logs (SIL's).**

Observations of adult arrival and spawning timing information recorded on individual stream inspection logs (SIL's) are noted for years as early as 1951 and all streams identified in the NC StAD SIL database. These data have been downloaded into spreadsheet format and can be accessed and viewed electronically. Departmental staff can access this information using the following DFO intranet file pathway: \PACNCDFP1\PUBLIC\ESCDATA\North Coast SIL and BC16 Data\NC SIL Data.xls. Information requests originating external to DFO are addressed in Section 2.3.2.1. This file is updated annually as new SIL data becomes available.

Currently, SIL information provided only in paper format by assessment groups external to the Department are entered into the electronic SIL database annually by N/C StAD staff.

### **2.3.2.2.3 Electronic Arrival and Spawning Timing Data from BC16 Annual Stream Reports.**

Timing data may also be recorded separately in the NC StAD BC16 database on each completed Annual Report of Salmon Stream and Spawning Populations (BC16) and reflects the combined observations from individual stream inspection logs. Table 10 lists field headings of timing information held within the BC16 database. These data have been downloaded into spreadsheet format since 1998 and can be accessed and viewed electronically. Departmental staff can access this information using the following DFO intranet file pathway: \PACNCDFP1\PUBLIC\ESCDATA\North Coast SIL and BC16 Data\NC BC16 Data.xls. Information requests originating external to DFO are addressed in Section 2.3.2.1. This file is updated annually as new BC16 data becomes available.

## **2.4 Data Codes**

In addition to numeric escapement values populating NC StAD's annual escapement data spreadsheets, letter codes can also be found. These information codes indicate that a numeric value is not present on the original BC16 report due to various circumstances such as no inspection occurred, a particular species was not observed, a species was present but no escapement estimate was made or that a particular BC16 stream report is not on file. The various letter codes used in the electronic data tables and their definitions are listed in Table 11.

## **2.5 Sources of Escapement Information**

The primary information source for electronic spreadsheet data files summarizing historic annual escapement estimates by Statistical Area are the paper copies of Annual Report of Salmon Stream and Spawning Populations (BC16 reports) on file with N/C StAD.

Current sources of salmon escapement data are quite diverse in the North Coast. First Nations and non-governmental groups work in cooperation with NC StAD to accomplish a wide range of stock assessment activities. These field programs include operation of fence counting facilities and most other methods of assessing escapement. Annual technical

meetings with these organizations identify methodologies and formats for data gathering and sharing of information. Sharing of data both to and from individuals, First Nations and non-governmental groups and agencies outside the Department has been enhanced through the use of common stream nomenclature, SIL and BC16 database system and data formats.

### **3. Data Limitations**

Escapement estimates found in annual BC16 reports are derived from many different methodologies and techniques. Field inspection methodologies include such activities as fence count, fixed and rotary wing over-flight, mark-recapture, swim, boat floats and stream walks. Techniques used to estimate escapement include total count, partial count, peak live plus dead, area-under-the curve and documented and undocumented expansions. Expansions may occur in total estimates for individual stream inspections and for estimates of total annual spawners. Documentation in BC16 reports outlining methodologies used to assess salmon escapement was not specifically recorded until the mid-1980's. A descriptor relating to the 'reliability' of an annual escapement estimate also was first recorded in the mid-1980's. Caution should be taken when reviewing reliability information as this particular piece of data appears to have had a wide range of interpretation by field personnel. Prior to the mid-1980's, no formal descriptor format was used to quantify the reliability of annual estimates. The uncertainty surrounding annual estimates may likely vary within and between streams, species and years due to observer efficiency, stream conditions, spawner behavior of each species and methodologies used to expand actual counts and annual estimates.

Original unexpanded stream inspection information can be accessed for the years 1998 to present using data found within the North Coast electronic BC16/SIL database. Caution should also be considered when using SIL data prior to 1998, since for some streams and years, the recovered paper documents entered into the database may represent only a partial dataset of what was originally generated by field staff. There may have been more SIL documents used to generate an annual total than what is currently captured in electronic format. SIL data in the data holdings for the time period prior to 1998 represents information located by NC StAD staff, but may not be all of the SIL's originally generated.

When accessing this electronic escapement data, a 'data disclaimer' narrative (Figure 24) will be found in a tab in each Statistical Area file. This disclaimer attempts to outline a number of important limitations associated with this data in order to instill clients with a cautionary approach when using escapement information. Uncertainty associated with assessing salmon spawning varies with survey methodology. For example, accuracy of visual surveys is a function of factors such as number and timing of inspections, assumptions with respect to in-stream survey life of a species and observer efficiency. Accuracy of total escapement estimates is dependent on in-stream assessment technique and of methodologies used to calculate the estimate (Holt and Cox 2008, English *et al.* 1992, Irvine *et al.* 1992, Tschaplinski and Hyatt 1991, Symons and Waldichuk 1984, Cousens *et al.* 1982).

## **4. Access to Escapement Information**

### **4.1 Information originating from the SIL and BC16 database.**

These data represent the source input from field staff into the database. North Coast Microsoft Access™ SIL and BC16 database information are downloaded annually into Microsoft Excel™ spreadsheet files that can be accessed by Department of Fisheries and Oceans (DFO) staff by using the following intranet pathway to the N/C public drive: \\pacncdfp1\public\\ESCDATA\North Coast SIL and BC16 Data.

## **5. Historic North Coast Escapement and Spawner Timing Reports**

There are four report series on file in the N/C StAD office which include historic annual escapement data and important background information listed for each stream. These documents represent a wealth of background information for N/C streams and include such stream-specific information as inventory of salmon species present, arrival and spawning timing, distribution of spawners by species, presence of potential barriers, maps identifying geographic location of individual streams and detailed stream maps,

### **5.1 Stream Summary Catalogues**

Statistical Area stream summary catalogues published by the Department's Fish Habitat Inventory and Information Program (FHIIP) contains summaries of information on fish and fish habitat, historic annual escapement, enhancement activities, as well as maps noting obstructions to upstream migration, and spawning locations by stream by species. In this report series, data for each stream is organized by watershed code.

Catalogues in this series include reports for Statistical Areas 1 (FHIIP 1989), 2 East (FHIIP Volume 1 1990; FHIIP Volume 2 1990), 2 West (FHIIP 1990), 3 (FHIIP 3A 1991; FHIIP 3B 1991), 4 (FHIIP 4A 1991; FHIIP 4B 1991; FHIIP 4C 1991; FHIIP 4D Volume 1 1991; FHIIP 4D Volume 2 1991), 5 (FHIIP 1992) and 6 (FHIIP 6N Kitimat, 1989; FHIIP 6S Volume 1 Inside, 1989; FHIIP 6S Volume 2 Outside, 1989).

### **5.2 Catalogue of Salmon Streams and Spawning Escapements Series**

The Catalogues of Salmon Streams and Spawning Escapements Data Reports are an information series published by DFO and contains information such as historic annual escapement, spawning distribution and timing by stream by species and barriers to upstream migration. Topographic maps showing location of each stream and detailed hand drawn maps for most streams are also provided.

These data reports include information for Statistical Areas 1 (Brown and Musgrave 1979), 2 East (Marshall *et al.* 1978), 2 West (Marshall *et al.* 1978), 3 (Hancock and Marshall 1984), 4 (Hancock *et al.* 1983a, Lower Skeena River; Hancock *et al.* 1983b, Upper Skeena River, 5 (Britton *et al.* 1982) and 6 (Manzon and Marshall 1981, Area 6 North; Leaney-East *et al.* 1982, Area 6 South).

### **5.3 Catalogue of Salmon Spawning Grounds and Tabulation of Escapements in the Skeena River and Department of Fisheries Statistical Area 4.**

This report series published by the Fisheries Research Board of Canada provides historic annual escapement data, spawner timing and stream habitat characteristics for streams

located in various geographic aggregates within the Skeena River (Section 1, Smith and Lucop 1966a; Section 2, Smith and Lucop 1966b; Section 3, Smith and Lucop 1966c; Section 4, Smith and Lucop 1969; Section 5, Smith and Lucop 1966d).

#### **5.4 Salmon Escapement and Timing Data Report Series**

The Salmon Escapement and Timing Data report series contains historic annual stream escapement estimates and adult in-stream arrival and spawning timing information. These report series were compiled by local Departmental staff for Statistical Areas 1 (Spilsted *et al.* 1988), 2 East (Spilsted *et al.* 1989), 2 West (Spilsted and Sjolund 1989), 3 (Jantz *et al.* 1989a), 4 (Jantz *et al.* 1989b), 5 (Jantz *et al.* 1989c) and 6 (Thomson *et al.* 1988).

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**Table 1.** List of North Coast Streams, Statistical Areas 1 to 6.

Table 1. cont. List of North Coast Streams, Statistical Areas 1 to 6.

Table 1. cont. List of North Coast Streams, Statistical Areas 1 to 6.

Table 1. cont. List of North Coast Streams, Statistical Areas 1 to 6.

**Table 1. cont. List of North Coast Streams, Statistical Areas 1 to 6.**

STAT. AREA	MANAGEMENT SUB AREA	ISLAND NAME	BC16 STREAM NAME	WATERSHED NAME	GAZETTED NAME	GEO. TYPE	WATERSHED CODE	WATER BODY ID
2W	TASU	MORESBY ISL.	FLAT CREEK	FLAT CREEK	FLAT CREEK	Stream	9150-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	RENNELL SOUND	GRAHAM ISL.	GIVENCHY ANCHORAGE CREEK	GIVENCHY ANCHORAGE CREEK		Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	ENGLEFIELD BAY	MORESBY ISL.	GOLD HARBOUR CREEK	GOLD HARBOUR CREEK		Stream	955-8-780-0000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	SOUTH END	MORESBY ISL.	GOSKI BAY CREEK	GOSKI BAY CREEK		Stream	955-8-780-0000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	RENNELL SOUND	GRAHAM ISL.	GREGORY CREEK	GREGORY CREEK		Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	WEST SKIDGATE	GRAHAM ISL.	GUDAL CREEK	GUDAL CREEK		Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	ENGLEFIELD BAY	HASTINGS POINT CREEK	HASTINGS POINT CREEK			Stream	955-8-780-0000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	ATHLO-O-TARD	HIPPA CREEK	HIPPA CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	ENGLEFIELD BAY	HOBBS CREEK	HOBBS CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	RENNELL SOUND	JASON CREEK	JASON CREEK			Stream	955-8-780-0000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	ENGLEFIELD BAY	KANG INLET HEAD CREEK	KANG INLET HEAD CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	ENGLEFIELD BAY	KOOTENAY INLET NORTH ARM CREEK	KOOTENAY INLET NORTH ARM CREEK			Stream	955-8-780-0000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	TASU	KOOTENAY INLET SOUTH ARM CREEK	KOOTENAY INLET SOUTH ARM CREEK			Stream	955-8-780-0000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	SOUTH END	LOMSON BAY CREEK	LOMSON BAY CREEK			Stream	955-8-780-0000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	ATHLO-O-TARD	LOUSCOONE INLET CR CREEK	LOUSCOONE INLET CR CREEK			Stream	955-8-780-0000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	ENGLEFIELD BAY	LOUSCOONE INLET CREEK OUTER	LOUSCOONE INLET CREEK OUTER			Stream	955-8-780-0000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	ATHLO-O-TARD	MACE CREEK	MACE CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	ENGLEFIELD BAY	MERCER CREEK	MERCER CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	RENNELL SOUND	MITCHELL INLET LEFT HAND CREEK	MITCHELL INLET LEFT HAND CREEK			Stream	955-8-780-0000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	ENGLEFIELD BAY	MOUNTAIN CREEK	MOUNTAIN CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	ATHLO-O-TARD	MUDGE CREEK	MUDGE CREEK			Stream	955-8-780-0000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	WEST SKIDGATE	NESTO INLET CREEK INNER	NESTO INLET CREEK INNER			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	OTARD CREEK	NORTH ARM CREEK RIGHT HAND	NORTH ARM CREEK RIGHT HAND			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	RENNELL SOUND	OTARD CREEK	OTARD CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	ENGLEFIELD BAY	PEEI INLET 1ST LEFT HAND CREEK	PEEI INLET 1ST LEFT HAND CREEK			Stream	955-8-770-00000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	ENGLEFIELD BAY	PEEI INLET 2ND LEFT HAND CREEK	PEEI INLET 2ND LEFT HAND CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	ENGLEFIELD BAY	PEEL INLET HEAD CREEK	PEEL INLET HEAD CREEK			Stream	955-8-770-00000-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	ATHLO-O-TARD	PORT LOUIS CREEK OUTER	PORT LOUIS CREEK OUTER			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	RENNELL SOUND	RENNELL CREEK	RENNELL CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	RENNELL SOUND	RILEY CREEK	RILEY CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	RENNELL SOUND	ROCKRUN CREEK	ROCKRUN CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	RENNELL SOUND	SEAL INLET CREEK	SEAL INLET CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	ENGLEFIELD BAY	SECURITY INLET LEFT HAND CREEK	SECURITY INLET LEFT HAND CREEK			Stream	955-8-770-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	RENNELL SOUND	SHELLY CREEK	SHELLY CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	RENNELL SOUND	SHIELDS CREEK	SHIELDS CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	SOUTH END	SPEAR BAY CREEK	SPEAR BAY CREEK			Stream	955-8-770-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	ATHLO-O-TARD	STAHL CREEK	STAHL CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	RENNELL SOUND	STEEL CREEK	STEEL CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	RENNELL SOUND	TARTU INLET HEAD CREEK	TARTU INLET HEAD CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	TASU	TARTU INLET OUTLET CREEK	TARTU INLET OUTLET CREEK			Stream	955-8-770-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	WEST SKIDGATE	TAUS CREEK	TAUS CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
2W	SOUTH END	WEST NARROWS CREEK	WEST NARROWS CREEK			Stream	955-8-770-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
2W	COASTAL	YAKULANAS RIGHT HAND CREEK	YAKULANAS RIGHT HAND CREEK			Stream	955-8-770-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
3	COASTAL	AMERICAN BAY CREEK	AMERICAN BAY CREEK			Stream	955-8-770-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
3	PORTLAND CANAL	BELLE BAY CREEK	BELLE BAY CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
3	RENNELL SOUND	BESSIE CREEK	BESSIE CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
3	COASTAL	BOAT HARBOUR CREEK	BOAT HARBOUR CREEK			Stream	955-8-770-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
3	OBSERVATORY INLET	BONANZA CREEK	BONANZA CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
3	COASTAL	BRUNDIGE CREEK	BRUNDIGE CREEK			Stream	955-8-770-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
3	COASTAL	BRUNDIGE CREEK #2	BRUNDIGE CREEK #2			Stream	955-8-770-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	
3	NASS RIVER	BURTON CREEK	BURTON CREEK			Stream	940-7826217-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000GRAI	
3	COASTAL	WALE'S ISL.	CANNERY CREEK			Stream	955-8-770-00000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000-0000MORI	

**Table 1. cont. List of North Coast Streams, Statistical Areas 1 to 6.**

STAT. AREA	MANAGEMENT SUB AREA	ISLAND NAME	BC16 STREAM NAME	WATERSHED NAME	GAZETTED NAME	GEO. TYPE	WATERSHED CODE	WATER BODY ID
3	OBSERVATORY INLET	MAINLAND	CASCADE CREEK	CASCADE CREEK	CASCADE CREEK	Stream	91-906000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	PORTLAND INLET	MAINLAND	CEDAR CREEK	CEDAR CREEK	CEDAR CREEK	Stream	91-8656000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	NASS RIVER	MAINLAND	CHAMBERS CREEK	NASS RIVER	CHAMBERS CREEK	Stream	500-0509000-00000-00000-00000-00000-00000-00000-00000	000000LNAR
3	PORTLAND INLET	MAINLAND	CLIFF CREEK			Stream	UNNAMED	
3	PORTLAND INLET	MAINLAND	CRAIG CREEK			Stream	95-886000-92400-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND INLET	MAINLAND	CROW LAGOON CREEK			Stream	91-878500-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	OBSERVATORY INLET	MAINLAND	DAK RIVER	KITSAULT RIVER	DAK RIVER	Stream	94-86100-05000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	PORTLAND CANAL	MAINLAND	DOGFISH CREEK			Stream	91-97150-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	PORTLAND CANAL	MAINLAND	DONAHUE CREEK			Stream	91-9856000-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	WORK CHANNEL	MAINLAND	ENSHESHIE CREEK			Stream	90-91400-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	OBSERVATORY INLET	MAINLAND	FAL'S CREEK	KITSAULT RIVER	FALLS CREEK	Stream	91-920200-03000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	NASS RIVER	MAINLAND	FLEMING CREEK			Stream	500-070700-00000-00000-00000-00000-00000-00000-00000-00000	000000LNAR
3	WORK CHANNEL	MAINLAND	FORTUNE CREEK			Stream	91-946100-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND CANAL	MAINLAND	GEORGIE RIVER			Stream	91-98180-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	OBSERVATORY INLET	MAINLAND	GWINNTIA CREEK			Stream	91-930200-02000-02000-00000-00000-00000-00000-00000-00000	000000KSHR
3	COASTAL	MAINLAND	Haida Bay Creek			Stream	91-930200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	NASS RIVER	MAINLAND	IKNUUK RIVER			Stream	500-03000-00000-00000-00000-00000-00000-00000-00000-00000	000001NAR
3	OBSERVATORY INLET	MAINLAND	ILLIANCE RIVER			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	PORTLAND INLET	MAINLAND	KHUTZEYMAATEN RIVER			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	NASS RIVER	MAINLAND	KINCOLTH RIVER			Stream	500-020200-00000-00000-00000-00000-00000-00000-00000-00000	000001NAR
3	OBSERVATORY INLET	MAINLAND	KITSAULT RIVER			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	OBSERVATORY INLET	MAINLAND	KITSAULT SIDE CHANNELS			Artificial Channel	91-920200-02300-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	OBSERVATORY INLET	MAINLAND	KLAYDIC CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	OBSERVATORY INLET	MAINLAND	KSH'WAN RIVER			Stream	91-91800-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	PORTLAND INLET	MAINLAND	KSI SGAWBAN			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	OBSERVATORY INLET	MAINLAND	KWINANMASS RIVER			Stream	91-868600-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	WORK CHANNEL	MAINLAND	LA ROSE CREEK			Stream	91-930200-22900-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	PORTLAND INLET	MAINLAND	LACHMACH RIVER			Stream	91-946300-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	WORK CHANNEL	MAINLAND	LARCH CREEK			Stream	91-868600-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND INLET	MAINLAND	LEVERSON CREEK			Stream	91-874700-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND INLET	MAINLAND	LIZARD CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND INLET	MAINLAND	MANDANITA COVE CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND CANAL	MAINLAND	MARMOT RIVER			Stream	91-987700-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	PORTLAND INLET	MAINLAND	MOUSE CREEK			Stream	91-880200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND INLET	MAINLAND	NASOGA GUL CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	COASTAL	MAINLAND	NEAK'TALK CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	OBSERVATORY INLET	MAINLAND	PEARL CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND INLET	MAINLAND	PEARSE ISL.			Stream	91-920200-30100-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	OBSERVATORY INLET	MAINLAND	PERRY BAY CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	PORTLAND INLET	MAINLAND	PIRATE COVE CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND INLET	MAINLAND	ROBERSON CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	PORTLAND INLET	MAINLAND	ROBERT CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	OBSERVATORY INLET	MAINLAND	SALMON COVE CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND INLET	MAINLAND	SAM BAY CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	COASTAL	DUNDAS ISL.	SANDY BAY CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	OBSERVATORY INLET	MAINLAND	STA'COC CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	COASTAL	MAINLAND	STUMAIN CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND INLET	MAINLAND	TALAHAA T CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	WORK CHANNEL	MAINLAND	TOON RIVER			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	COASTAL	MAINLAND	TRACY BAY #2 CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	PORTLAND INLET	MAINLAND	TRACY BAY CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	COASTAL	MAINLAND	TRAIL BAY CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000WORC
3	WORK CHANNEL	MAINLAND	WALT CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR
3	PORTLAND CANAL	MAINLAND	WALT CREEK			Stream	91-920200-00000-00000-00000-00000-00000-00000-00000-00000	000000KSHR

**Table 1. cont. List of North Coast Streams, Statistical Areas 1 to 6.**

STAT. AREA	MANAGEMENT SUB AREA	ISLAND NAME	BC16 STREAM NAME	WATERSHED NAME	GAZETTED NAME	GEO. TYPE	WATERSHED CODE	WATER BODY ID
3	NASS RIVER	MAINLAND	WELDA CREEK	WELDA CREEK	Stream	500-06300-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	COASTAL	DUNDAS ISL.	WHITLY POINT CREEK	WILIAUKS CREEK	Stream	9-5-823600-67700-00000-00000-00000-00000-00000-00000	000000WORC	
3	OBSERVATORY INLET	MAINLAND	WILIAUKS CREEK	ANLYNN CREEK	Stream	9-15-939600-00000-00000-00000-00000-00000-00000-00000	000000KSHR	
3	NASS RIVER	MAINLAND	ANSEDAGAN CREEK	ANSEDAGAN CREEK	Stream	500-147200-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	ANUDOL CREEK	ANUDOL CREEK	Stream	500-08700-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	BEAR RIVER	BEAR RIVER	Stream	9-12-939400-00000-00000-00000-00000-00000-00000-00000	000000KSHR	
3	PORTLAND CANAL	MAINLAND	BELL-IRVING RIVER	BELL-IRVING RIVER	Stream	500-098700-00000-00000-00000-00000-00000-00000-00000	000000UBIR	
3	NASS RIVER	MAINLAND	BOW-SER RIVER	BOW-SER RIVER	Stream	500-098600-00000-00000-00000-00000-00000-00000-00000	000000LBIR	
3	NASS RIVER	MAINLAND	BROWN BEAR CREEK	BROWN BEAR CREEK	Stream	500-077700-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	CANBERRY RIVER	CANBERRY RIVER	Stream	500-060000-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	DAMDOOCHAX CREEK	DAMDOOCHAX CREEK	Stream	500-060000-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	DISKANGIEQ CREEK	DISKANGIEQ CREEK	Stream	500-082000-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	GINGIT CREEK	GINGIT CREEK	Stream	500-055700-00360-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	GINULAK CREEK	GINULAK CREEK	Stream	500-096500-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	GITZYON CREEK	GITZYON CREEK	Stream	500-057000-05200-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	HODIER RIVER	BELL-IRVING RIVER	Stream	500-065600-00000-00000-00000-00000-00000-00000-00000	000000UBIR	
3	NASS RIVER	MAINLAND	ISHKEHENICK RIVER	ISHKEHENICK RIVER	Stream	51-0000000-00000-00000-00000-00000-00000-00000-00000	007-54UNAR	
3	NASS RIVER	MAINLAND	KINSKUCH RIVER	KINSKUCH RIVER	Stream	500-060000-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	KITEN RIVER	KITEN RIVER	Stream	5-30-023200-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	KSEUD CREEK	KSEUD CREEK	Stream	500-02000-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	KSEMAMATH CREEK	KSEMAMATH CREEK	Stream	500-04800-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	KMINAEEFEE CREEK	KMINAEEFEE CREEK	Stream	500-07800-00000-00000-00000-00000-00000-00000-00000	000000NASR	
3	NASS RIVER	MAINLAND	KWINIYARH CREEK	KWINIYARH CREEK	Stream	500-06800-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	MCKNIGHT CREEK	MCKNIGHT CREEK	Stream	5-30-074400-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	MEZUDIN LAKE	MEZUDIN LAKE	Lake	55-0-00000-00000-00000-00000-00000-00000-00000-00000	001-47KNR	
3	NASS RIVER	MAINLAND	MEZUDIN RIVER	MEZUDIN RIVER	Stream	55-0-00000-00000-00000-00000-00000-00000-00000-00000	001-53KNR	
3	NASS RIVER	MAINLAND	NASS RIVER	NASS RIVER	Stream	500-06000-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	OMEEGEE CREEK	OMEEGEE CREEK	Stream	500-072400-00000-00000-00000-00000-00000-00000-00000	000000UBIR	
3	NASS RIVER	MAINLAND	QUALIALU CREEK	QUALIALU CREEK	Stream	NODATA : B34-N1-B6-C ONLY		
3	NASS RIVER	MAINLAND	QUILGAU CREEK	QUILGAU CREEK	Stream	500-075000-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	PORTLAND CANAL	MAINLAND	RAINY CREEK	SALADAMIS CREEK	Stream	9-15-939400-0560-00000-00000-00000-00000-00000-00000	000000KSHR	
3	NASS RIVER	MAINLAND	SEASKINNISH CREEK	SEASKINNISH CREEK	Stream	500-57600-00000-00000-00000-00000-00000-00000-00000	000000NASR	
3	NASS RIVER	MAINLAND	SHIMUL CREEK	SHIMUL CREEK	Stream	500-07800-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	SNOWBANK CREEK	SNOWBANK CREEK	Stream	500-582100-14800-00000-00000-00000-00000-00000-00000	000000UBIR	
3	NASS RIVER	MAINLAND	TOHTIN RIVER	TOHTIN RIVER	Stream	500-287800-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	TEIGEN CREEK	TEIGEN CREEK	Stream	500-582300-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	TEAX CREEK	TEAX CREEK	Stream	500-95700-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	TESAX SLough	VAN DYKE CREEK	Stream	500-283900-00000-00000-00000-00000-00000-00000-00000	000000NASR	
3	NASS RIVER	MAINLAND	VETTER CREEK	WEGLADAP CREEK	Stream	500-085700-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	WEGLADAP CREEK	WILYAYAAANOOTH CREEK	Stream	500-28400-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	WIMINASIK LAKE SYSTEM	WIMINASIK LAKE SYSTEM	Stream	500-289700-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
3	NASS RIVER	MAINLAND	ZOLZAP CREEK	ZOLZAP CREEK	Stream	NODATA : B34-N1-B6-C ONLY		
3	NASS RIVER	MAINLAND	ZOLZAP SLOUGH	NASS RIVER	Stream	500-283900-00000-00000-00000-00000-00000-00000-00000	000000LNAR	
4	OTHER LOWER SKENA	MAINLAND	ABERDEEN CREEK	ABERDEEN CREEK	Stream	4-00-025100-00000-00000-00000-00000-00000-00000-00000	000000LSKE	
4	COASTAL	MAINLAND	AIRPORT DOCK CREEK	SKEEENA RIVER	Stream	9-15-789600-56600-00000-00000-00000-00000-00000-00000	000000WORC	
4	OTHER LOWER SKENA	MAINLAND	ALASTAIR LAKE	ALASTAIR LAKE	Lake	4-05-18400-00000-00000-00000-00000-00000-00000-00000	004981SKE	
4	KITSUMKALUM	MAINLAND	ALICE CREEK	ALICE CREEK	Stream	4-30-286100-00000-00000-00000-00000-00000-00000-00000	000000KLUM	
4	KITSUMKALUM	MAINLAND	ALLARD CREEK	ALLARD CREEK	Stream	4-30-387900-00000-00000-00000-00000-00000-00000-00000	000000MORI	
4	OTHER LOWER SKENA	MAINLAND	ALWYN CREEK	ALWYN CREEK	Stream	4-05-18600-00000-00000-00000-00000-00000-00000-00000	000000SKE	

Table 1, cont. List of North Coast Streams, Statistical Areas 1 to 6.

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**Table 2. Letter Codes Used for Numeric Range Estimate of Number of Parent Fish on Spawning Grounds.**

<b>Letter Code</b>	<b>NUMERIC RANGE</b>
A	1 - 50
B	50 - 100
C	100 - 300
D	300 - 500
E	500 - 1,000
F	1,000 - 2,000
G	2,000 - 5,000
H	5,000 - 10,000
K	10,000 - 20,000
L	20,000 - 50,000
M	50,000 - 100,000
N	OVER 100,000

**Table 3. Stream Inspection Log (SIL) Definitions.**

 <b>Fisheries and Oceans</b> <b>Pêches et Océans</b> <span style="float: right;"><b>Stream Inspection Log Definitions, (2006)</b></span>		
1	Area	DFO Statistical Management Area.
3	Observer(s)	Full name of the person responsible for conducting the inspection (e.g. crew chief's name). Other names or initials could also be entered following the crew chief's name.
4	Affiliation	Name of the company/organisation that the Observer is associated with.
5	Date	Day/Month/Year of the stream inspection.
6	Start Time	Time the inspection began, use 24 hour format (eg. Enter 1630 for 4:30 PM)
7	Stop Time	Time the inspection ended, use 24 hour format (eg. Enter 1630 for 4:30 PM)
8	Target Species	Circle the species on which most enumeration effort is focused. Timing, methodology, and location should be appropriate for the target species. If you wish to record more than one species be sure that the amount of enumeration effort put towards each of those species is the same.
9	Inspection Mode(s)	Circle the mode that best represents the main inspection method. If you choose to circle a second inspection mode please fill in the Rationale for Estimated Adult Live to better understand how your estimates were generated. You may also wish to use the "Section Inspected", 'Fish Distribution', or 'General Comments' sections to document segment count information relating to the different inspection modes.
10	Section Inspected	Provide landmarks or descriptions of the sections within the stream that were enumerated. To improve understanding and repeatability be descriptive and consistent with your choice of words. Be sure to indicate if all of the potential salmon stream habitat was inspected, or if only a spot check was conducted, or whether the stream was inspected up to the furthest point of fish presence. This section may be ignored if similar information is captured within the start and stop boundary descriptions.
11	Fish Distribution	Use the space provided to briefly describe the distribution of salmon in the stream, (eg. Pink - lower portion of stream below railway bridge. Sockeye - Scattered throughout with a large proportion holding in the first pool above the railway bridge).
12	Distance Inspected	Total stream length segment enumerated in meters as measured from a map, hip chain, aerial photo, etc. If the segment length is 500 m, but 200m could not be inspected due to bear presence then the distance inspected is 300.
13	Start Boundary	A description of where the observed stream segment starts. This should be a permanent landmark to ensure repeatable enumerations in the future.
14	Stop Boundary	A description of where the observed stream segment ends. This should be a permanent landmark to ensure repeatable enumerations in the future.
-	Coordinates	These are start and stop boundary coordinates in either UTM or Lat/Long.
15	Brightness	Meant to give a measure of light conditions that will influence fish visibility. It quantifies the amount of light reaching the water surface. This is influenced by factors such as cloud thickness and overhead tree canopy. <b>Full</b> = direct sunlight, shadows well defined. <b>Bright</b> = Hazy or light cloud cover, outline of sun visible, shadows are poorly defined. <b>Medium</b> = Cannot see the outline of the sun, no shadows, yet there is a distinguishable bright area of the sun in the sky. <b>Dark</b> = No outline of the sun, no shadows, and no distinguishable bright area of the sun in the sky. Be sure to mention in the comments if too much sun was a problem.
16	Precipitation	An average of the rain or snow conditions during the inspection that will influence fish visibility. Circle the type of precipitation and its intensity.
17	Windy	Circle "Yes" if wind is negatively affecting fish visibility and clarify how this is so in the comments section.
18	Temperature	Temperature of the water in degrees Celsius.
19	Bankfull	Circle the condition that best describes the portion of the channel that is full. Ideally, pick a glide area (smooth flowing water) rather than a riffle or pool area and visualise the cross-sectional area of the stream as if it was full, (water up to the permanent vegetation on the banks).
20	Colour	Circle the average colour condition of the water.
21	Stream Visibility	Circle the classification which best describes overall fish visibility.

**Table 3 cont. Stream Inspection Log (SIL) Definitions.**

 Fisheries and Oceans      Pêches et Océans <b>Stream Inspection Log Definitions, (2006) cont.</b>		
23	Holding Outside Stream	An estimate of the number of fish holding outside the stream mouth, (at the confluence of its associated lower order stream, estuary, or lake). Indicate in the comments if you are unsure whether these fish holding outside the stream will enter the stream being enumerated.
24	Holding	The number of fish that are not paired and have not spawned. This number may be zero if there are no fish present or if all fish are spawning and/or dead.
25	Spawning/Spawned Out	The number of fish that are paired, actively spawning, or spawned out.
26	Adult Live - Observed Total	Total number of instream fish recorded as holding and spawning. This value can be adjusted if holders and spawners were not differentiated.
27	Adult Live - Estimated Total	An estimation of the number of total live fish estimated to be present in the section inspected. <b>Do not include fish holding outside the stream.</b> Unseen fish could be in areas such as: under cutbanks, log jams, deep water, or side channels. If adults were observed to be present but not enumerated record A/P for Adults Present for the appropriate species.
28	New (Since Last Inspection)	An estimate of the <b>Total Number, (Not Percentage)</b> of fish that have arrived to the stream since it was last inspected. This could be based on the physical condition and behaviour of the fish relative to previous inspections and could be difficult to estimate unless frequent inspections have been made.
29	Adult Live - Fish Countability	Nil, Poor, Fair, Good, or Excellent: For each species observed enter the description which best describes its visibility.
30	Adult Live - Estimated Reliability	Circle the ranking which best describes the reliability of the <b>Total Estimated Adult Live.</b> It should be based on the inspection detail parameters recorded for this inspection, particularly proportion of the stream inspected and all factors affecting fish visibility.
31	Adult Dead - Observed	Number of dead adult fish observed. Dead fish include all carcasses that can be identified to species and are reasonably complete (e.g. not just a fragment of spine or pyloric caeca).
32	Adult Dead - Estimated	An estimation of the number of dead fish thought to be in the segment and includes the observed count plus the number of dead fish that the observer feels were in the segment, but were not observed. These areas could include under cutbanks, log jams, deep water, side channels, or riparian area.
33	% Pre-Spawn Mortality	Estimated percentage of adult fish that died prior to spawning (i.e. gonads intact as detected by incision).
34	Jack Live - Observed	Number of live jacks observed.
35	Jack Live - Estimated	The total number of live jacks estimated to be present in the section inspected. Unseen jacks could be in areas such as: under cutbanks, log jams, deep water, or side channels. If jacks were observed to be present but not enumerated record J/P for Jacks Present for the appropriate species.
36	Active Spawning	Circle the mode which best represents the timing of the inspection relative to spawning, (Before, Start, Peak, End).
37	Estimated Active Spawning Date	An <b>estimate</b> of the date <b>corresponding to the mode</b> selected for Active Spawning: B-Before, S-Start, P-Peak, E-End, (i.e. Stream was inspected on <b>Oct. 19</b> and based on your observations "Peak" was selected for the Active Spawning field. The Active Spawning Date for the <b>Peak</b> of Spawning was <b>estimated</b> to be 4 days earlier on <b>Oct. 15th</b> ).
38	Estimated Escapement To Date	An estimate of the total fish escapement to date based on this inspection and previous ones. It is unlikely an estimate could be made based on very few or infrequent inspections.
39	Rationale for Estimated Adult Live	This is an explanation for the inclusion of any unobserved fish that were recorded in the Estimated Adult Live field. If additional rationales are provided for any other estimates be sure to include what estimate goes with what rationale.
40	Unusual Conditions:	
	<i>Fish Assessment:</i>	
	Pre-Spawn Mortality	Unusually high or unusually low numbers of adult fish that died prior to spawning, (best indicated by incision).
	Disease/Parasites	An indication of unusual presence or absences of fish diseases or parasites.
	Sex Ratio	An indication of an unusually high proportion of males or females, to determine this carcasses or live fish could be used providing there is a clear distinction between males and females using size, shape, and/or colour.
	<i>Stream Assessment:</i>	
	Recent Flood	A flood of unusually high magnitude that has recently occurred and has produced changes to the stream channel or enough bedload movement to significantly scour redds and eggs.
	Drought	Conditions dry enough to impede normal fish migration/spawning or to result in the desiccation of redds.
	Ice Conditions	Freezing conditions that could result in a significant loss of eggs, (when ice has formed in the gravel and is impeding water flow).
	Water Temperature	Temperatures well above the seasonal norm.
	Habitat Conditions	Unusual records on the following topics: Debris jams/obstructions, silting of spawning beds, bank erosion, riparian cover loss, slides and/or stream bed movement.
41	General Comments:	Use the space provided to further describe any of the above fields or to include any additional comments about the inspection.
42	Miscellaneous:	This area could be used to draw in a map of the stream and its inspected areas or be used as an additional comments section.

**Table 4. Annual Report of Salmon Stream and Spawning Populations (BC16) Definitions.**

BC16 DEFINITIONS					
<b>1</b>	<b>ARRIVAL IN STREAM:</b> This is the approximate start date of a population for the current season when the fish first arrive in the stream				
	MONTH	Record the months first three letters, (AUG = August)			
	DAY	Circle the appropriate letter code - (A) 1st - 10th (B) 11th - 20th (C) 21st - 31st			
<b>2</b>	<b>DATES OF SPAWNING:</b> Enter the Month and Day codes as described above				
	START	This is the approximate spawning start date of a population for the current season when fish are beginning to pair on the spawning grounds, schools of fish may be holding (pools or mouth) and there are very few, if any, carcasses or redds.			
	PEAK	This is the approximate peak of spawning of a population for the current season. The majority of fish present are paired and actively spawning.			
	END	This is the approximate end of spawning of a population for the current season. Almost no unspawned fish anywhere, and lots of spawned-out fish and fish carcasses.			
<b>3</b>	<b># OF INSPECTIONS USED:</b> This is the total number of stream inspection logs used to compose the final annual estimate for a population.				
<b>4</b>	<b>ESTIMATE METHOD:</b> From the list below record the number that corresponds to the estimate method that was used to compose the annual estimate for the population. Please use Section 9: Annual Estimate Rationale to justify your selection.				
1	PEAK LIVE PLUS DEAD	The annual estimate is based on the stream inspection in which the maximum live count was observed or estimated. Its adult live and adult dead, (observed or estimated) for this peak estimate are added together to generate the final annual estimate. Using Section 9: Annual Estimate Rationale, please provide any further explanation to support your estimate, be sure to include whether estimated or observed numbers were used.			
2	PEAK LIVE PLUS CUMULATIVE DEAD	The annual estimate is based on the stream inspection in which the maximum live count was observed or estimated. The adult live count for this peak inspection is added to the cumulative total of the dead counts, (preferably dead pitch counts to ensure the same dead are not counted in subsequent inspections) prior to and including the peak survey to create the annual estimate. Using Section 9: Annual Estimate Rationale, please provide any further explanation to support your estimate, be sure to include whether estimated or observed numbers were used.			
3	AREA UNDER THE CURVE	The annual estimate is based primarily on a calculation that includes live observed counts or live observed spawner counts, estimated or measured % observer efficiency range, and the estimated or measured number of stream or spawner residence day range. Using Section 9: Annual Estimate Rationale document the stream inspection logs and counts that were used, the % observer efficiency range, residence time type and duration range, and any other information needed to duplicate your final population estimate. For more information or to obtain an AUC Calculator spreadsheet please contact your DFO Fishery Manager/Coordinator.			
4	FIXED SITE CENSUS	An annual estimate based on the addition of fence count observations. Using Section 9: Annual Estimate Rationale, be sure to reference where or in what document the primary fence count information is located.			
5	EXPERT OPINION	Expert Opinion estimates are mental expansion estimates based on one or several stream inspections, and the stream observer's knowledge of that particular stream/stock. Using Section 9: Annual Estimate Rationale, please provide as much information as possible to support your estimate and justify the assigned Estimate Classification.			
6	REDD COUNT	Using counts of redds from SIs and multiplied by a factor such as 2. Using Section 9: Annual Estimate Rationale, please provide as much information as possible to support your estimate and justify the assigned Estimate Classification.			
8	MARK AND RECAPTURE	An abundance estimate is calculated using capture and re-capture tagging data. Using Section 9: Annual Estimate Rationale, please specify the type of Mark and Recapture method used and provide as much information as possible to support your estimate and justify the assigned Estimate Classification.			
12	OTHER	Please provide an explanation under Section 9: Annual Estimate Rationale in order to fully document the approach used, justify the assigned Estimate Classification, and enable the addition of your method to the Estimate Method list.			
<b>5</b>	<b>ESTIMATE CLASSIFICATION:</b> Please record the appropriate estimate classification number between 1 and 6 based on your understanding of the following:				
1	An estimate of high resolution from an unbreached fence count. This does not include stream estimates based exclusively on walking, floating or flying inspections, AUC calculations, Mark & Recapture estimates, or incomplete fence counts. The estimate uncertainty is believed to be less than plus or minus 10% of the actual estimate.				
2	An estimate of high resolution based on documented data from a Mark & Recapture, incomplete (relative) fence count, or highly reliable AUC calculation with measured observer efficiency and stream or spawning residency time ranges. This does not include estimates based exclusively on fish counts from walking, floating, or flying inspections. The estimate uncertainty is believed to be more than plus or minus 10% of the actual estimate.				
3	An estimate of high resolution based on three or more documented inspections of walking, floating, or flying which clearly define the peak of spawning and contain high adult live estimates with high fish countabilities; Or an estimate of medium resolution based on documented data from a Mark & Recapture, Fixed Site method, or medium to high AUC calculation. The estimate uncertainty is believed to be less than plus or minus 25% of the actual estimate.				
4	An estimate of medium resolution based on the documentation of two or more walking, floating, or flying inspections around the peak of spawning containing high adult live estimates with high fish countabilities; Or possibly low reliable fence count records, Mark & Recapture data or low to medium AUC calculations. The estimate uncertainty is believed to be no better than plus or minus 25% of the actual estimate.				
5	An estimate of low resolution, that would most likely exclude Mark & Recapture and Fixed Site estimate methods. This classification would be selected due to the estimate resulting from one of the following cases: A low number of documented surveys, (eg. 1 stream inspection); Vaguely defined, inconsistent, or poorly executed surveys or analyses; An estimate of unknown confidence/certainty; The recording of a minimum observed escapement in favour of stating Adults Present, (A/P). Using section 9: Annual Estimate Rationale, please provide an explanation detailing whatever the case may be.				
6	Default for N/O (None Observed), A/P (Adults Present), N/I (Not Inspected), DNS (Does Not Spawn), and F/P (Fry Present).				

**Table 4 cont. Annual Report of Salmon Stream and Spawning Grounds (BC16) Definitions.**

BC16 DEFINITIONS CONT.		
<b>6</b>	<b>ANNUAL ESTIMATE:</b> Annual Estimate for Adult Salmon -All salmon that have reached maturity, excluding jacks (jacks are salmon that have matured at an early age).	
N/O	NONE OBSERVED	Stream inspected during the run timing for this species and conditions were good but no fish were observed.
A/P	ADULTS PRESENT	Stream inspected and adult salmon observed but the information gathered was not adequate to estimate escapement, (ie. Too few inspections, poor counting conditions, etc.).
N/I	SPECIES NOT INSPECTED	The stream was not inspected during the normal run timing for this species or the stream was inspected during the normal run timing but conditions were so poor that no fish were observed.
DNS	DOES NOT SPAWN	Species not known to spawn in this system.
F/P	FRY PRESENT	Stream inspected and only fry salmon observed.
<b>7</b>	<b>ENTIRE STREAM ESTIMATE:</b> Is the species estimate for the entire stream?	
Y	YES	Circle "Yes" if the provided estimate represents the entire population of that species within the specified stream.
N	NO	Circle "No" if the provided estimate represents a portion, segment, or tributary of that species population within the specified stream. If "No" is circled, using Section 9: Annual Estimate Rationale, describe what the estimate provided represents.
<b>8</b>	<b>ESTIMATE STAGE:</b>	
P	PRELIMINARY	Source data may be incomplete and their accuracy has not been verified. Significant changes from Preliminary estimates are probable.
NF	NEAR FINAL	Based on data that have been verified for completeness and accuracy. Further analysis may take place. Final data verification and analysis have not been completed. Minor changes in Near Final estimates are possible.
F	FINAL	Released after all data have been incorporated into the analyses and all verification steps have been completed. Changes are not anticipated.
<b>9</b>	<b>ANNUAL ESTIMATE RATIONALE:</b> Please provide any additional details for the estimate method chosen for each of the annual species estimate, (i.e. calculations, multiplication factors, population information, etc.).	
<b>10</b>	<b>UNUSUAL FISH CONDITIONS:</b>	
	Pre-Spawn Mortality	Unusually high number of adult fish that died prior to spawning, (best indicated by incision).
	Disease/Parasites	An indication of unusual presence or absences of fish diseases or parasites.
	Sex Ratio	An indication of an unusually high proportion of males or females, to determine this carcasses or live fish could be used providing there is a clear distinction between males and females using size, shape, and/or colour.
<b>11</b>	<b>UNUSUAL STREAM CONDITIONS:</b>	
	Recent Flood	A flood of unusually high magnitude not previously documented on an Annual Salmon Spawning Report, that has produced changes to the stream channel or enough bedload movement to significantly scour redds and eggs.
	Drought	Conditions dry enough to impede normal fish migration/spawning or to result in the desiccation of redds.
	Ice Conditions	Freezing conditions that could result in a significant loss of eggs, (when ice has formed in the gravel and is impeding water flow).
	Water Temperature	Temperatures well above the seasonal norm.
	Habitat Conditions	Unusual records on the following topics: Debris jams/obstructions, silting of spawning beds, bank erosion, riparian cover loss, slides and/or stream bed movement.

**Table 5. A Description of the Subfolder Tabs and Corresponding Spreadsheets Found Within the Statistical Area Annual Escapement Summary Excel™ Files.**

<b>Tab Name</b>	<b>Spreadsheet Description</b>
DISCLAIMER	Outlines a number of important limitations associated with this data (Figure 23).
ANNUAL ESC. SUMMARY	An annual summary by species of the total escapement for streams surveyed.
SOCKEYE	Annual sockeye Salmon escapement estimates by Fisheries Management Area (scroll down) by stream by year (1950 to present), grouped by decade (scroll right).
COHO	Annual coho Salmon escapement estimates by Fisheries Management Area (scroll down) by stream by year (1950 to present), grouped by decade (scroll right).
PINK	Annual pink Salmon escapement estimates by Fisheries Management Area (scroll down) by stream by year (1950 to present), grouped by decade (scroll right).
CHUM	Annual chum Salmon escapement estimates by Fisheries Management Area (scroll down) by stream by year (1950 to present), grouped by decade (scroll right).
CHINOOK	Annual Chinook Salmon escapement estimates by Fisheries Management Area (scroll down) by stream by year (1950 to present), grouped by decade (scroll right).
LINKED DATASHEET - ALL SPECIES	A single spreadsheet containing all species, all streams and all years (1950 to present, and 1920's to 1949 where existing). Various filters can be activated to select and group data of interest.
SELECT CHART - SX	A charting function which will graph annual sockeye escapement of individual streams or by streams grouped by Statistical Area or Fisheries Management Area aggregates. May be grouped with another species.
SELECT CHART - CO	A charting function which will graph annual coho escapement of individual streams or by streams grouped by Statistical Area or Fisheries Management Area aggregates. May be grouped with another species.
SELECT CHART - PK ALL YEARS	A charting function which will graph annual pink escapement of individual streams or by streams grouped by Statistical Area or Fisheries Management Area aggregates.
SELECT CHART - PK ODD YR	A charting function which will graph annual odd-year pink escapement of individual streams or by streams grouped by Statistical Area or Fisheries Management Area aggregates.
SELECT CHART - PK EVEN YR	A charting function which will graph annual even-year pink escapement of individual streams or by streams grouped by Statistical Area or Fisheries Management Area aggregates.
SELECT CHART - CM	A charting function which will graph annual chum escapement of individual streams or by streams grouped by Statistical Area or Fisheries Management Area aggregates. May be grouped with another species.
SELECT CHART - CK	A charting function which will graph annual Chinook escapement (species not present in Area 2 West) of individual streams or by streams grouped by Statistical Area or Fisheries Management Area aggregates. May be grouped with another species.

**Table 6. Annual Escapement Summary by Species of the Total Estimated Escapement for Streams Surveyed.**

TOTAL SALMON ESCAPEMENT FOR STATISTICAL AREA 5.					
YEAR	ESCAPEMENT				
	SOCKEYE	COHO	PINK	CHUM	CHINOOK
2006	22,600	285	31,880	2,575	200
2005	14,000	770	277,400	2600	230
2004	18,200	355	88,330	2,670	100
2003	42,850	1,010	233,825	4,110	125
2002	9,700	1,400	409,810	4,965	150
2001	21,500	323	395,650	3,080	UNK
2000	22,600	800	278,150	1,070	100
1999	23,500	1,150	313,450	900	100
1998	10,450	900	161,250	9,250	UNK
1997	28,400	500	68,750	2,260	UNK
1996	24,100	UNK	270,100	3,200	UNK
1995	8,700	UNK	90,900	3,880	UNK
1994	6,800	800	44,725	870	UNK
1993	33,150	1,925	39,475	1,795	2
1992	22,895	3,982	41,161	731	10
1991	32,035	2,981	70,160	4,113	50
1990	5,676	5,006	202,244	3,607	100
1989	21,900	1,000	178,500	4,750	150
1988	33,400	7,775	162,000	12,750	100
1987	26,550	6,000	127,950	10,175	25
1986	25,000	22,289	313,900	16,450	150
1985	37,250	4,350	177,075	11,765	15
1984	17,150	8,175	162,450	6,830	25
1983	12,450	4,300	81,025	4,596	UNK
1982	19,450	2,620	70,300	7,370	UNK
1981	16,000	18,025	121,850	3,120	UNK
1980	16,800	11,525	225,825	9,350	UNK
1979	16,000	17,275	43,000	13,950	25
1978	28,650	18,650	264,850	13,775	UNK
1977	11,400	25,410	110,275	32,170	25
1976	19,050	21,475	348,450	19,625	25
1975	50,000	33,000	170,375	10,075	UNK
1974	43,925	18,450	337,075	34,025	UNK
1973	32,425	18,000	56,375	18,975	UNK
1972	24,400	21,820	280,725	17,725	UNK
1971	55,225	9,975	80,761	25,625	UNK
1970	23,750	10,600	139,850	12,250	UNK
1969	21,650	14,225	17,775	3,375	UNK
1968	57,500	52,575	271,700	10,450	UNK
1967	38,550	32,050	22,175	13,000	UNK
1966	108,450	74,750	295,350	16,775	UNK
1965	54,000	62,350	115,075	17,800	UNK
1964	55,775	68,175	217,225	17,850	UNK
1963	97,200	49,500	175,275	20,725	UNK
1962	45,250	29,950	442,900	27,675	UNK
1961	55,500	69,525	244,675	21,400	UNK
1960	38,750	32,875	174,400	12,050	75
1959	80,800	46,000	154,325	7,825	200
1958	40,950	30,375	218,525	33,150	200
1957	48,500	55,500	66,375	54,475	200
1956	31,200	48,850	138,975	12,250	200
1955	27,200	47,500	62,650	12,825	200
1954	37,900	36,500	111,900	43,350	400
1953	31,150	27,750	58,050	19,475	200
1952	23,123	25,900	234,150	24,700	UNK
1951	19,230	21,025	98,400	36,200	UNK
1950	23,453	13,375	179,300	47,850	300

**Table 7. Annual (Species) Salmon Escapement Estimates by Fisheries Management Area, by Stream, by Year, Grouped by Decade.**

NORTH COAST - AREA 5 CHUM SALMON ESCAPEMENT DATA.										
AREA 5 CHUM ESCAPEMENT TABLE: 1960-1969.										
STREAM	1960	1961	1962	1963	1964	1965	1966	1967	1968	AVERAGE 1960-69
<b>OUTSIDE BANKS ISLAND SUB AREA:</b>										
INDIAN HARBOUR CREEK	N/R	N/R	N/R	N/R	N/R	N/R	200	N/O	400	300
KENZUWASH CREEKS	N/R									
KINGKOWN INLET SYSTEM	1,500	3,500	750	1,500	750	1,500	400	750	400	1,180
QUITONSTA CREEK	N/R									
RANAWAY CREEK	400	1,200	1,200	400	400	1,200	200	200	760	
SKULL CREEK	N/I	N/I	400	1,500	750	400	UNK	1,500	400	25
LEWIS CREEK	N/R	711								
SUB AREA TOTAL	1,900	5,000	2,650	3,000	2,650	1,550	3,000	2,850	1,350	2,498
<b>UPPER PRINCIPE / BROWNING ENT. SUB AREA:</b>										
DEADMAN CREEK	N/O	25	UNK	400	25	UNK	200	200	25	129
END HILL CREEK	400	200	1,500	750	1,500	200	750	75	400	585
HANKIN CREEK	N/R									
KESWAR CREEK	N/O	N/O	N/O	200	200	400	400	200	75	214
SPENCER CREEK	N/O	N/O	25	25	25	750	75	25	25	128
SUB AREA TOTAL	400	225	1,525	1,375	1,750	1,350	1,425	500	525	928
<b>LOWER PRINCIPE SUB AREA:</b>										
BOLTON CREEK	N/R									
CURTIS INLET CREEK	N/R									
DEVON LAKE CREEK	75	75	75	200	75	UNK	75	200	75	106
DEVON LAKE SYSTEM	N/R									
KEECHA CREEK	200	200	200	400	200	750	200	400	200	283
KOORYET CREEK	400	400	75	200	75	1,500	75	200	75	308
MIKADO LAKE SYSTEM	200	25	75	200	200	N/O	200	200	N/O	163
MONCKTON INLET CREEK	N/O	N/O	75	N/I	N/I	UNK	UNK	25	N/O	50
OAR POINT CREEK	N/R									
PORT STEPHENS CREEK	N/O	UNK								
SHENEZZA CREEK	200	200	75	75	200	750	200	75	200	205
SUB AREA TOTAL	1,075	900	575	1,075	750	3,000	750	1,075	775	1,020
<b>PETREL CHANNEL / ALA PASS SUB AREA:</b>										
HEVENOR INLET CREEK	750	1,500	1,500	1,500	25	750	400	750	25	723
MARKE INLET CREEK	400	400	400	750	400	750	400	400	200	413
NEWCOMBE HARBOUR CREEK	200	1,500	400	400	25	750	200	200	25	390
PETREL POINT CREEK	N/R									
RYAN CREEK	400	750	750	400	400	750	400	200	750	500
SHAW CREEK	400	400	750	400	750	750	400	200	400	448
WILSON CREEK	1,500	1,500	750	3,500	1,500	750	1,500	1,500	750	1,328
SUB AREA TOTAL	3,650	6,050	4,550	6,950	3,100	4,500	3,300	3,250	2,325	3,800
<b>STREAM</b>										
1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	AVERAGE 1960-69
<b>UPPER GRENVILLE CHANNEL SUB AREA:</b>										
FALSE STEWART CREEK	N/R									
KUMAS INLET CREEK	200	200	400	400	200	200	N/O	200	75	217
KUBAS CREEK	N/R									
KUMEALON CREEK	400	750	200	200	400	750	200	200	400	370
KXNGEAL CREEK	N/R									
NORTHNESS CREEK	N/R									
NORTH KUMEALON CREEK	N/R									
PA-AAT RIVER	400	750	400	400	200	400	200	N/O	200	331
SUB AREA TOTAL	1,000	1,700	1,000	1,000	800	1,350	400	400	675	863
<b>STREAM</b>										
1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	AVERAGE 1960-69
<b>LOWER GRENVILLE CHANNEL SUB AREA:</b>										
BELOWE CREEK	750	3,500	3,500	3,500	3,500	1,500	3,500	1,500	1,500	2,278
LAGOON CREEK	750	200	750	200	200	200	750	75	200	335
STEWART CREEK	750	1,500	1,500	1,500	750	750	1,500	1,500	750	1,125
THREE MILE CREEK	N/O	N/I	3,500	UNK	N/I	N/I	N/O	N/O	N/O	1,880
TSIMTACK LAKE SYSTEM	750	1,500	7,500	1,500	3,500	1,500	1,500	1,500	1,500	2,115
SUB AREA TOTAL	3,000	6,700	16,750	6,700	7,950	3,950	7,250	4,575	4,150	6,223
<b>STREAM</b>										
1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	AVERAGE 1960-69
<b>OGDEN CHANNEL / KIT KATLA INLET SUB AREA:</b>										
ALPHA CREEK	25	25	25	25	25	200	25	75	25	N/O
BILLY CREEK	N/R									
CAPTAIN CREEK	400	750	200	400	400	1,500	200	200	400	453
KITKATLA CREEK	200	25	200	200	400	200	200	75	200	173
PHOENIX CREEK	N/R	25	200	N/R	25	200	200	N/R	25	N/R
SKENE COVE CREEK	N/R									
SUB AREA TOTAL	625	825	625	625	850	2,100	625	350	650	100
<b>STREAM</b>										
1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	AVERAGE 1960-69
<b>PORCHER INLET SUB AREA:</b>										
FOOTE CREEK	400	N/R	400							
HEAD CREEK	N/R									
PORCHER CREEK	N/R	N/R	N/R	N/R	N/R	N/R	25	N/R	N/R	25
SUB AREA TOTAL	400							25		213
<b>SUMMARY OF AREA 5 SUB AREA CHUM ESCAPEMENTS:</b>										
SUB AREA:	1960	1961	1962	1963	1964	1965	1966	1967	1968	AVERAGE 1960-69
OUTSIDE BANKS ISLAND	1,900	5,000	2,650	3,000	2,650	1,550	3,000	2,850	1,350	1,025
UPPER PRINCIPE/BROWNING ENT.	400	225	1,525	1,375	1,750	1,425	500	525	200	928
LOWER PRINCIPE	1,075	900	575	1,075	750	3,000	750	1,075	775	1,120
PETREL CHANNEL/ALA PASS	3,650	6,050	4,550	6,950	3,100	4,500	3,300	3,250	2,325	3,800
UPPER GRENVILLE CHANNEL	1,000	1,700	1,000	1,000	800	1,350	400	400	675	863
LOWER GRENVILLE CHANNEL	3,000	6,700	16,750	6,700	7,950	3,950	7,250	4,575	4,150	6,223
OGDEN CHANNEL/KIT KATLA INL.	625	825	625	625	850	2,100	625	350	650	100
PORCHER INLET	400							25		213
AREA 5 TOTAL	12,050	21,400	27,675	20,725	17,850	17,800	16,775	13,000	10,450	3,375
										16,110

**Table 8. An Example of the ‘Linked Datasheet - All Species’ Tab for Statistical Area 5.**

AREA 5 ESCAPEMENT DATA BY STREAM BY SPECIES, 1950 TO 2009.							
STAT AREA	SUBAREA	ISLAND NAME	WATERSHED NAME	STREAM NAME	SPECIES	2007	2006
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	INDIAN HARBOUR CREEK	INDIAN HARBOUR CREEK	SOCKEYE	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	KENZUWASH CREEKS	KENZUWASH CREEKS	SOCKEYE	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	KINGKOWN INLET SYSTEM	KINGKOWN INLET SYSTEM	SOCKEYE	N/I	4,500
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	LEWIS CREEK	LEWIS CREEK	SOCKEYE	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	QUITONSTA CREEK	QUITONSTA CREEK	SOCKEYE	N/I	N/I
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	BANKS ISLAND	END HILL CREEK	END HILL CREEK	SOCKEYE	N/I	N/I
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	MCCAULEY ISLAND	HANKIN CREEK	HANKIN CREEK	SOCKEYE	N/I	N/I
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	MCCAULEY ISLAND	KESWAR CREEK	KESWAR CREEK	SOCKEYE	N/I	N/I
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	BANKS ISLAND	SPENCER CREEK	SPENCER CREEK	SOCKEYE	N/I	A/P
AREA 5	LOWER PRINCIPE	BANKS ISLAND	BOLTON CREEK	BOLTON CREEK	SOCKEYE	N/I	A/P
AREA 5	LOWER PRINCIPE	PITT ISLAND	CURTIS INLET CREEK	CURTIS INLET CREEK	SOCKEYE	9,500	3,000
AREA 5	LOWER PRINCIPE	BANKS ISLAND	DEER LAKE CREEK	DEER LAKE CREEK	SOCKEYE	N/I	N/I
AREA 5	LOWER PRINCIPE	PITT ISLAND	DEVON LAKE SYSTEM	DEVON LAKE SYSTEM	SOCKEYE	2,500	5,000
AREA 5	LOWER PRINCIPE	BANKS ISLAND	KEECHAA CREEK	KEECHAA CREEK	SOCKEYE	2,500	2,000
AREA 5	LOWER PRINCIPE	BANKS ISLAND	KOORYET CREEK	KOORYET CREEK	SOCKEYE	5,100	A/P
AREA 5	LOWER PRINCIPE	PITT ISLAND	MIKADO LAKE SYSTEM	MIKADO LAKE SYSTEM	SOCKEYE	3,000	4,000
AREA 5	LOWER PRINCIPE	PITT ISLAND	MONCKTON INLET CREEK	MONCKTON INLET CREEK	SOCKEYE	N/I	N/I
AREA 5	LOWER PRINCIPE	PITT ISLAND	SHENEZZA CREEK	SHENEZZA CREEK	SOCKEYE	N/I	N/I
AREA 5	PETREL CHANNEL/ALA PASS	PITT ISLAND	HEVENOR INLET CREEK	HEVENOR INLET CREEK	SOCKEYE	A/P	N/I
AREA 5	PETREL CHANNEL/ALA PASS	PITT ISLAND	MARLKE INLET CREEK	MARLKE INLET CREEK	SOCKEYE	N/I	A/P
AREA 5	PETREL CHANNEL/ALA PASS	MCCAULEY ISLAND	RYAN CREEK	RYAN CREEK	SOCKEYE	N/I	N/I
AREA 6	PETREL CHANNEL/ALA PASS	PITT ISLAND	WILSON CREEK	WILSON CREEK	SOCKEYE	DNS	A/P
AREA 5	UPPER GRENVILLE CHANNEL	PITT ISLAND	FALSE STEWART CREEK	FALSE STEWART CREEK	SOCKEYE	DNS	A/P
AREA 5	UPPER GRENVILLE CHANNEL	MAINLAND	KLEWNUGGIT INLET CREEK	KLEWNUGGIT INLET CREEK	SOCKEYE	A/P	N/I
AREA 5	UPPER GRENVILLE CHANNEL	MAINLAND	KUMEALON CREEK	KUMEALON CREEK	SOCKEYE	A/P	A/P
AREA 6	UPPER GRENVILLE CHANNEL	MAINLAND	KNGEAL CREEK	KNGEAL CREEK	SOCKEYE	DNS	A/P
AREA 7	UPPER GRENVILLE CHANNEL	PITT ISLAND	PA-AA-T RIVER	PA-AA-T RIVER	SOCKEYE	A/P	A/P
AREA 5	LOWER GRENVILLE CHANNEL	MAINLAND	BELOWE LAKE SYSTEM	BELOWE LAKE SYSTEM	SOCKEYE	A/P	A/P
AREA 5	LOWER GRENVILLE CHANNEL	MAINLAND	LOWE INLET SYSTEM	LOWE INLET SYSTEM	SOCKEYE	A/P	A/P
AREA 5	LOWER GRENVILLE CHANNEL	FARRANT ISLAND	STEWART CREEK	STEWART CREEK	SOCKEYE	N/I	A/P
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	THREE MILE CREEK	THREE MILE CREEK	SOCKEYE	N/I	N/I
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	TSIMTACK LAKE SYSTEM	TSIMTACK LAKE SYSTEM	SOCKEYE	A/P	A/P
AREA 5	OGDEN CHANNEL/KITKATLA INLET	PITT ISLAND	CAPTAIN COVE CREEK	CAPTAIN COVE CREEK	SOCKEYE	A/P	A/P
AREA 5			SUBAREA TOTAL: OUTSIDE BANKS ISLAND		SOCKEYE		4,500
AREA 5			SUBAREA TOTAL: UPPER PRINCIPE/BROWNING ENT.		SOCKEYE		150
AREA 5			SUBAREA TOTAL: LOWER PRINCIPE		SOCKEYE	22,600	14,000
AREA 5			SUBAREA TOTAL: PETREL CHANNEL/ALA PASS		SOCKEYE		13,500
AREA 5			SUBAREA TOTAL: UPPER GRENVILLE CHANNEL		SOCKEYE		7,000
AREA 5			SUBAREA TOTAL: LOWER GRENVILLE CHANNEL		SOCKEYE		1,000
AREA 5			SUBAREA TOTAL: OGDEN CHAN:KITKATLA INLET		SOCKEYE		3,000
AREA 5			AREA 5 TOTAL		SOCKEYE	22,600	14,000
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	INDIAN HARBOUR CREEK	COHO	N/I	N/I	
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	KENZUWASH CREEKS	COHO	N/I	N/I	
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	KINGKOWN INLET SYSTEM	COHO	N/I	N/I	
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	LEWIS CREEK	COHO	N/I	N/I	
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	QUITONSTA CREEK	COHO	N/I	N/I	
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	RAWLINSON CREEK	COHO	N/I	N/I	
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	SKULL CREEK	COHO	N/I	N/I	
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	BANKS ISLAND	DEADMAN CREEK	COHO	N/I	N/I	
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	BANKS ISLAND	END HILL CREEK	COHO	N/I	N/I	
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	MCCAULEY ISLAND	HANKIN CREEK	COHO	N/I	N/I	
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	MCCAULEY ISLAND	KESWAR CREEK	COHO	N/I	N/I	
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	BANKS ISLAND	SPENCER CREEK	COHO	N/I	A/P	
AREA 5	LOWER PRINCIPE	BANKS ISLAND	BOLTON CREEK	COHO	A/P	A/P	
AREA 5	LOWER PRINCIPE	PITT ISLAND	CURTIS INLET CREEK	COHO	A/P	A/P	
AREA 5	LOWER PRINCIPE	BANKS ISLAND	DEER LAKE CREEK	COHO	N/I	N/I	
AREA 5	LOWER PRINCIPE	PITT ISLAND	DEVON LAKE SYSTEM	COHO	A/P	N/I	
AREA 5	LOWER PRINCIPE	BANKS ISLAND	JOANIE CREEK	COHO	N/I	N/I	
AREA 5	LOWER PRINCIPE	BANKS ISLAND	KEECHAA CREEK	COHO	A/P	N/I	
AREA 5	LOWER PRINCIPE	BANKS ISLAND	KOORYET CREEK	COHO	A/P	A/P	
AREA 5	LOWER PRINCIPE	PITT ISLAND	MIKADO LAKE SYSTEM	COHO	A/P	A/P	
AREA 5	LOWER PRINCIPE	PITT ISLAND	MONCKTON INLET CREEK	COHO	N/I	N/I	
AREA 5	LOWER PRINCIPE	PITT ISLAND	OAR POINT CREEK	COHO	N/I	N/I	
AREA 5	LOWER PRINCIPE	PITT ISLAND	PORT STEPHENS CREEK	COHO	N/I	N/I	
AREA 5	LOWER PRINCIPE	PITT ISLAND	SHENEZZA CREEK	COHO	N/I	N/I	
AREA 5	PETREL CHANNEL/ALA PASS	PITT ISLAND	HEVENOR INLET CREEK	COHO	N/I	N/I	
AREA 5	PETREL CHANNEL/ALA PASS	PITT ISLAND	MARLKE INLET CREEK	COHO	A/P	A/P	
AREA 5	PETREL CHANNEL/ALA PASS	PITT ISLAND	NEWCOMBE HARBOUR CREEK	COHO	N/I	N/I	
AREA 5	PETREL CHANNEL/ALA PASS	PITT ISLAND	PETREL POINT CREEK	COHO	N/I	N/I	
AREA 5	MCCAULEY ISLAND	RYAN CREEK	RYAN CREEK	COHO	N/I	N/I	
AREA 5	PETREL CHANNEL/ALA PASS	MCCAULEY ISLAND	SHAW CREEK	COHO	A/P	A/P	
AREA 5	PETREL CHANNEL/ALA PASS	PITT ISLAND	WILSON CREEK	COHO	A/P	N/I	
AREA 5	UPPER GRENVILLE CHANNEL	PITT ISLAND	FALSE STEWART CREEK	COHO	N/I	A/P	
AREA 5	UPPER GRENVILLE CHANNEL	MANLAND	KLEWNUGGIT INLET CREEK	COHO	A/P	N/I	
AREA 5	UPPER GRENVILLE CHANNEL	PITT ISLAND	KUBAS CREEK	COHO	N/I	N/I	
AREA 5	UPPER GRENVILLE CHANNEL	MANLAND	KUMEALON CREEK	COHO	A/P	A/P	
AREA 5	UPPER GRENVILLE CHANNEL	MANLAND	NORTH KUMEALON CREEK	COHO	N/I	N/I	
AREA 5	UPPER GRENVILLE CHANNEL	PITT ISLAND	PA-AA-T RIVER	COHO	A/P	N/I	
AREA 5	LOWER GRENVILLE CHANNEL	MANLAND	BELOWE CREEK	COHO	130	320	
AREA 5	LOWER GRENVILLE CHANNEL	FARRANT ISLAND	LAGOON CREEK	COHO	N/I	N/I	
AREA 5	LOWER GRENVILLE CHANNEL	MANLAND	LOWE INLET SYSTEM	COHO	A/P	A/P	
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	RED BLUFF CREEK	COHO	N/I	N/I	
AREA 5	LOWER GRENVILLE CHANNEL	FARRANT ISLAND	STEWART CREEK	COHO	A/P	A/P	
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	SYLVIA CREEK	COHO	45	200	
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	THREE MILE CREEK	COHO	N/I	N/I	
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	TSIMTACK LAKE SYSTEM	COHO	110	250	
AREA 5	OGDEN CHANNEL/KITKATLA INLET	PITT ISLAND	ALPHA CREEK	COHO	A/P	A/P	
AREA 5	OGDEN CHANNEL/KITKATLA INLET	PORCHER ISLAND	BILLY CREEK	COHO	N/I	N/I	
AREA 5	OGDEN CHANNEL/KITKATLA INLET	PITT ISLAND	CAPTAIN COVE CREEK	COHO	A/P	A/P	
AREA 5	OGDEN CHANNEL/KITKATLA INLET	PORCHER ISLAND	KITKATLA CREEK	COHO	N/I	N/I	
AREA 5	OGDEN CHANNEL/KITKATLA INLET	PORCHER ISLAND	PHOENIX CREEK	COHO	N/I	N/I	
AREA 5	OGDEN CHANNEL/KITKATLA INLET	PITT ISLAND	SHOW/GRL CREEK	COHO	N/I	N/I	
AREA 5	OGDEN CHANNEL/KITKATLA INLET	PORCHER ISLAND	SKENE COVE CREEK	COHO	N/I	N/I	
AREA 5	OGDEN CHANNEL/KITKATLA INLET	PORCHER ISLAND	SNASS CREEK	COHO	N/I	N/I	
AREA 5	PORCHER INLET	PORCHER ISLAND	FOOTE CREEK	COHO	N/I	N/I	
AREA 5	PORCHER INLET	PORCHER ISLAND	HEAD CREEK	COHO	A/P	A/P	
AREA 5	PORCHER INLET	PORCHER ISLAND	PORCHER CREEK	COHO	N/I	A/P	
AREA 5	PORCHER INLET	PORCHER ISLAND	SALT LAGOON CREEK	COHO	A/P	N/I	
AREA 5	PORCHER INLET	PORCHER ISLAND	WEST CREEK	COHO	N/I	N/I	
AREA 5	PORCHER INLET	PORCHER ISLAND	WOLF CREEK	COHO	A/P	N/I	
AREA 5			SUBAREA TOTAL: OUTSIDE BANKS ISLAND		COHO		
AREA 5			SUBAREA TOTAL: UPPER PRINCIPE/BROWNING ENT.		COHO		
AREA 5			SUBAREA TOTAL: LOWER PRINCIPE		COHO		
AREA 5			SUBAREA TOTAL: PETREL CHANNEL/ALA PASS		COHO		
AREA 5			SUBAREA TOTAL: UPPER GRENVILLE CHANNEL		COHO		500
AREA 5			SUBAREA TOTAL: LOWER GRENVILLE CHANNEL		COHO	285	770
AREA 5			SUBAREA TOTAL: OGDEN CHAN:KITKATLA INLET		COHO	355	510
AREA 5			SUBAREA TOTAL: PORCHER INLET		COHO	1,000	1,400
AREA 5			AREA 5 TOTAL		COHO	285	770
AREA 5					COHO	355	1,010
AREA 5					COHO	1,400	323
AREA 5					COHO	827	

**Table 8 cont. An Example of the ‘Linked Datasheet - All Species’ Tab for Statistical Area 5.**

AREA 5 ESCAPEMENT DATA BY STREAM BY SPECIES, 1950 TO 2009.										
STAT AREA	SUBAREA	ISLAND NAME	WATERSHED NAME	STREAM NAME	SPECIES	2007	2006	2005	2004	2003
										2002
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	INDIAN HARBOUR CREEK	INDIAN HARBOUR CREEK	PINK	N/I	N/I	N/I	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	KINGKOWN INLET SYSTEM	KINGKOWN INLET SYSTEM	PINK	N/I	N/I	UNK	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	LEWIS CREEK	LEWIS CREEK	PINK	N/I	N/I	N/I	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	QUITONSTA CREEK	QUITONSTA CREEK	PINK	N/I	N/I	N/I	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	RAWLINSOON CREEK	RAWLINSOON CREEK	PINK	N/I	N/I	N/I	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	SKULL CREEK	SKULL CREEK	PINK	N/I	N/I	N/I	N/I	N/I
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	BANKS ISLAND	DEADMAN CREEK	DEADMAN CREEK	PINK	N/I	N/I	N/I	N/I	N/I
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	BANKS ISLAND	END HILL CREEK	END HILL CREEK	PINK	N/I	UNK	UNK	10,000	N/I
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	MCCAULEY ISLAND	HANKIN CREEK	HANKIN CREEK	PINK	3,500	N/I	UNK	25,000	55,000
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	MCCAULEY ISLAND	KESWAR CREEK	KESWAR CREEK	PINK	A/P	N/I	UNK	N/I	5,000
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	BANKS ISLAND	SPENCER CREEK	SPENCER CREEK	PINK	N/I	N/I	UNK	UNK	200
AREA 5	LOWER PRINCIPE	BANKS ISLAND	BOLTON CREEK	BOLTON CREEK	PINK	100	2,000	UNK	UNK	2,000
AREA 5	LOWER PRINCIPE	PITT ISLAND	CURTIS INLET CREEK	CURTIS INLET CREEK	PINK	A/P	UNK	UNK	UNK	UNK
AREA 5	LOWER PRINCIPE	BANKS ISLAND	DEER LAKE CREEK	DEER LAKE CREEK	PINK	N/I	N/I	N/I	N/I	N/I
AREA 5	LOWER PRINCIPE	PITT ISLAND	DEVON LAKE SYSTEM	DEVON LAKE SYSTEM	PINK	N/I	A/P	UNK	UNK	UNK
AREA 5	LOWER PRINCIPE	BANKS ISLAND	JOANIE CREEK	JOANIE CREEK	PINK	N/I	N/I	N/I	N/I	N/R
AREA 5	LOWER PRINCIPE	BANKS ISLAND	KEECHA CREEK	KEECHA CREEK	PINK	N/I	N/I	UNK	N/I	UNK
AREA 5	LOWER PRINCIPE	BANKS ISLAND	KOORYET CREEK	KOORYET CREEK	PINK	A/P	15,000	UNK	3,000	4,000
AREA 5	LOWER PRINCIPE	PITT ISLAND	MIKADO LAKE SYSTEM	MIKADO LAKE SYSTEM	PINK	N/I	A/P	UNK	UNK	UNK
AREA 5	LOWER PRINCIPE	PITT ISLAND	MONCKTON INLET CREEK	MONCKTON INLET CREEK	PINK	N/I	N/I	N/I	N/I	N/I
AREA 5	LOWER PRINCIPE	PITT ISLAND	OAR POINT CREEK	OAR POINT CREEK	PINK	N/I	N/I	N/I	N/I	N/I
AREA 5	LOWER PRINCIPE	PITT ISLAND	POR STEPHENS CREEK	POR STEPHENS CREEK	PINK	A/P	UNK	UNK	UNK	UNK
AREA 5	PETREL CHANNEL/ALA PASS	PITT ISLAND	SHAW CREEK	SHAW CREEK	PINK	1,800	12,000	9,000	10,500	6,000
AREA 5	PETREL CHANNEL/ALA PASS	PITT ISLAND	WILSON CREEK	WILSON CREEK	PINK	A/P	A/P	10	100	UNK
AREA 5	UPPER GRENVILLE CHANNEL	PITT ISLAND	FALSE STEWART CREEK	FALSE STEWART CREEK	PINK	A/P	8,000	2,500	13,000	7,000
AREA 5	UPPER GRENVILLE CHANNEL	MAINLAND	KLEWNUGGIT INLET CREEK	KLEWNUGGIT INLET CREEK	PINK	A/P	A/P	N/I	N/I	N/I
AREA 5	UPPER GRENVILLE CHANNEL	PITT ISLAND	KUUMALON CREEK	KUUMALON CREEK	PINK	N/I	3,000	13,000	10,000	5,000
AREA 5	UPPER GRENVILLE CHANNEL	MAINLAND	KUNGAI CREEK	KUNGAI CREEK	PINK	12,500	83,000	35,000	45,000	70,000
AREA 5	UPPER GRENVILLE CHANNEL	MAINLAND	NORTHWEST CREEK	NORTHWEST CREEK	PINK	1,300	A/P	N/I	6,500	5,000
AREA 5	UPPER GRENVILLE CHANNEL	MAINLAND	NORTH KUMEALON CREEK	NORTH KUMEALON CREEK	PINK	N/I	N/I	N/I	3,500	2,500
AREA 5	UPPER GRENVILLE CHANNEL	PITT ISLAND	PA-AAT RIVER	PA-AAT RIVER	PINK	1,300	13,000	10,000	17,000	40,000
AREA 5	LOWER GRENVILLE CHANNEL	MAINLAND	BELOWE CREEK	BELOWE CREEK	PINK	600	5,000	1,000	3,000	5,000
AREA 5	LOWER GRENVILLE CHANNEL	FARRANT ISLAND	LAGOON CREEK	LAGOON CREEK	PINK	N/I	N/I	N/I	50	250
AREA 5	LOWER GRENVILLE CHANNEL	MAINLAND	LOWE INLET SYSTEM	LOWE INLET SYSTEM	PINK	N/I	N/I	N/I	UNK	N/R
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	RED BLUFF CREEK	RED BLUFF CREEK	PINK	N/I	N/I	N/I	UNK	N/R
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	STEWART CREEK	STEWART CREEK	PINK	250	1,500	500	2,000	15,000
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	THREE MILE CREEK	THREE MILE CREEK	PINK	N/I	N/I	N/I	2,000	500
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	TSIMTACK LAKE SYSTEM	TSIMTACK LAKE SYSTEM	PINK	230	700	UNK	2,500	7,000
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PITT ISLAND	ALPHA CREEK	ALPHA CREEK	PINK	5,800	60,000	UNK	35,000	45,000
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PORCHER ISLAND	BILLY CREEK	BILLY CREEK	PINK	N/I	N/I	N/I	6,000	4,600
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PITT ISLAND	CAPTAIN COVE CREEK	CAPTAIN COVE CREEK	PINK	1,800	16,000	6,000	19,500	15,000
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PORCHER ISLAND	KITKATA CREEK	KITKATA CREEK	PINK	N/I	N/I	2,000	10,000	20,000
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PITT ISLAND	PHOENIX CREEK	PHOENIX CREEK	PINK	N/I	N/I	N/I	UNK	N/I
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PITT ISLAND	SHOWGIRL CREEK	SHOWGIRL CREEK	PINK	N/I	N/I	N/I	N/I	N/O
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PORCHER ISLAND	SKENE COVE CREEK	SKENE COVE CREEK	PINK	N/I	N/I	N/I	UNK	300
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PORCHER ISLAND	SNAKE CREEK	SNAKE CREEK	PINK	N/I	N/I	N/I	UNK	UNK
AREA 5	PORCHER INLET	PORCHER ISLAND	FOOTE CREEK	FOOTE CREEK	PINK	N/I	N/I	N/I	N/I	N/I
AREA 5	PORCHER INLET	PORCHER ISLAND	HEAD CREEK	HEAD CREEK	PINK	1,500	36,000	8,000	25,000	70,000
AREA 5	PORCHER INLET	PORCHER ISLAND	PORCHER CREEK	PORCHER CREEK	PINK	N/I	6,100	7,500	5,000	10,000
AREA 5	PORCHER INLET	PORCHER ISLAND	SALT LAGOON CREEK	SALT LAGOON CREEK	PINK	N/I	N/I	UNK	UNK	N/I
AREA 5	PORCHER INLET	PORCHER ISLAND	WEST CREEK	WEST CREEK	PINK	N/I	UNK	UNK	N/I	13,000
AREA 5	PORCHER INLET	PORCHER ISLAND	WOLF CREEK	WOLF CREEK	PINK	1,200	19,000	6,000	11,000	25,000
AREA 5			SUBAREA TOTAL: OUTSIDE BANKS ISLAND		PINK					
AREA 5			SUBAREA TOTAL: UPPER PRINCIPE/BROWNING ENT.		PINK	3,500		25,000	55,000	65,200
AREA 5			SUBAREA TOTAL: LOWER PRINCIPE		PINK	100	17,000	3,000	6,000	22,000
AREA 5			SUBAREA TOTAL: PETREL CHANNEL/ALA PASS		PINK	1,800	10,000	9,000	16,000	10,000
AREA 5			SUBAREA TOTAL: UPPER GRENVILLE CHANNEL		PINK	15,100	104,000	50,500	88,000	128,000
AREA 5			SUBAREA TOTAL: LOWER GRENVILLE CHANNEL		PINK	1,080	7,200	1,200	6,050	16,650
AREA 5			SUBAREA TOTAL: ODGEN CHAN-KITKATA INLET		PINK	7,600	76,000	6,000	56,500	76,000
AREA 5			SUBAREA TOTAL: PORCHER INLET		PINK	2,700	61,100	21,500	41,000	118,000
AREA 5					PINK	31,880	277,400	88,330	233,825	409,810
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	INDIAN HARBOUR CREEK	INDIAN HARBOUR CREEK	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	KENJUWASH CREEKS	KENJUWASH CREEKS	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	KINGKOWN INLET SYSTEM	KINGKOWN INLET SYSTEM	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	QUITONSTA CREEK	QUITONSTA CREEK	CHUM	N/I	N/I	N/R	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	RAWLINSOON CREEK	RAWLINSOON CREEK	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	SKULL CREEK	SKULL CREEK	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	OUTSIDE BANKS ISLAND	BANKS ISLAND	LEWIS CREEK	LEWIS CREEK	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	BANKS ISLAND	DEADMAN CREEK	DEADMAN CREEK	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	BANKS ISLAND	END HILL CREEK	END HILL CREEK	CHUM	N/I	N/I	N/I	UNK	N/I
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	MCCAULEY ISLAND	HANKIN CREEK	HANKIN CREEK	CHUM	N/O	N/I	N/I	100	N/O
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	MCCAULEY ISLAND	KESWAR CREEK	KESWAR CREEK	CHUM	N/I	N/I	N/I	N/I	N/O
AREA 5	UPPER PRINCIPE/BROWNING ENTRANCE	BANKS ISLAND	SPENCER CREEK	SPENCER CREEK	CHUM	N/I	N/I	N/I	UNK	N/O
AREA 5	LOWER PRINCIPE	BANKS ISLAND	BOLTON CREEK	BOLTON CREEK	CHUM	N/I	A/P	N/R	N/I	N/O
AREA 5	LOWER PRINCIPE	PITT ISLAND	CURTIS INLET CREEK	CURTIS INLET CREEK	CHUM	N/I	UNK	N/I	UNK	N/O
AREA 5	LOWER PRINCIPE	PITT ISLAND	DEVON LAKE SYSTEM	DEVON LAKE SYSTEM	CHUM	N/I	N/I	N/R	N/I	N/I
AREA 5	LOWER PRINCIPE	BANKS ISLAND	KEECHA CREEK	KEECHA CREEK	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	LOWER PRINCIPE	BANKS ISLAND	KOORYET CREEK	KOORYET CREEK	CHUM	N/I	A/P	UNK	UNK	UNK
AREA 5	LOWER PRINCIPE	PITT ISLAND	MIKADO LAKE SYSTEM	MIKADO LAKE SYSTEM	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	LOWER PRINCIPE	PITT ISLAND	MONCKTON INLET CREEK	MONCKTON INLET CREEK	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	LOWER PRINCIPE	PITT ISLAND	OAR POINT CREEK	OAR POINT CREEK	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	LOWER PRINCIPE	PITT ISLAND	POR STEPHENS CREEK	POR STEPHENS CREEK	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	LOWER PRINCIPE	PITT ISLAND	SHAW CREEK	SHAW CREEK	CHUM	A/P	UNK	150	N/O	UNK
AREA 5	PETREL CHANNEL/ALA PASS	PITT ISLAND	WILSON CREEK	WILSON CREEK	CHUM	1,100	1,300	1,500	2,000	800
AREA 5	PETREL CHANNEL/ALA PASS	PITT ISLAND	FALSE STEWART CREEK	FALSE STEWART CREEK	CHUM	N/I	A/P	N/O	UNK	N/O
AREA 5	UPPER GRENVILLE CHANNEL	PITT ISLAND	KLEWNUGGIT INLET CREEK	KLEWNUGGIT INLET CREEK	CHUM	75	N/I	N/I	N/I	N/I
AREA 5	UPPER GRENVILLE CHANNEL	MAINLAND	KUBAS CREEK	KUBAS CREEK	CHUM	N/I	N/I	N/R	N/I	N/I
AREA 5	UPPER GRENVILLE CHANNEL	MAINLAND	KUUMALON CREEK	KUUMALON CREEK	CHUM	100	600	250	100	100
AREA 5	UPPER GRENVILLE CHANNEL	MAINLAND	KUNGAI CREEK	KUNGAI CREEK	CHUM	130	A/P	N/I	130	UNK
AREA 5	UPPER GRENVILLE CHANNEL	MAINLAND	NORTHWEST CREEK	NORTHWEST CREEK	CHUM	N/I	N/I	N/I	75	25
AREA 5	UPPER GRENVILLE CHANNEL	MAINLAND	NORTH KUMEALON CREEK	NORTH KUMEALON CREEK	CHUM	N/I	N/I	N/R	N/I	N/R
AREA 5	LOWER GRENVILLE CHANNEL	MAINLAND	BELOWE CREEK	BELOWE CREEK	CHUM	475	230	100	150	700
AREA 5	LOWER GRENVILLE CHANNEL	FARRANT ISLAND	LAGOON CREEK	LAGOON CREEK	CHUM	N/I	N/I	50	150	25
AREA 5	LOWER GRENVILLE CHANNEL	FARRANT ISLAND	STEWART CREEK	STEWART CREEK	CHUM	N/I	155	200	70	250
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	THREE MILE CREEK	THREE MILE CREEK	CHUM	N/I	N/I	N/I	10	20
AREA 5	LOWER GRENVILLE CHANNEL	PITT ISLAND	TSIMTACK LAKE SYSTEM	TSIMTACK LAKE SYSTEM	CHUM	40	90	UNK	N/I	100
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PORCHER ISLAND	ALPINE CREEK	ALPINE CREEK	CHUM	A/P	UNK	UNK	N/O	10
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PORCHER ISLAND	BILLY CREEK	BILLY CREEK	CHUM	N/I	N/I	N/I	N/O	N/O
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PITT ISLAND	CAPTAIN COVE CREEK	CAPTAIN COVE CREEK	CHUM	A/P	50	10	150	100
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PORCHER ISLAND	KITKATA CREEK	KITKATA CREEK	CHUM	N/I	N/I	N/I	N/O	10
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PORCHER ISLAND	PHOENIX CREEK	PHOENIX CREEK	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	ODGEN CHANNEL/KITKATA IL INLET	PORCHER ISLAND	SKENE COVE CREEK	SKENE COVE CREEK	CHUM	N/I	N/I	N/I	N/I	N/R
AREA 5	PORCHER INLET	PORCHER ISLAND	FOOTE CREEK	FOOTE CREEK	CHUM	N/I	N/I	N/I	N/I	N/I
AREA 5	PORCHER INLET	PORCHER ISLAND	HEAD CREEK	HEAD CREEK	CHUM	N/O	UNK	N/O	N/O	N/O
AREA 5	PORCHER INLET	PORCHER ISLAND	PORCHER CREEK	PORCHER CREEK	CHUM	N/I	N/O	N/R	N/O	10
AREA 5			SUBAREA TOTAL: OUTSIDE BANKS ISLAND		CHUM					10
AREA 5			SUBAREA TOTAL: UPPER PRINCIPE/BROWNING ENT.		CHUM					10
AREA 5			SUBAREA TOTAL: LOWER PRINCIPE		CHUM					10
AREA 5			SUBAREA TOTAL: PETREL CHANNEL/ALA PASS		CHUM	1,600	2,100	3,450	2,300	2,500
AREA 5			SUBAREA TOTAL: UPPER GRENVILLE CHANNEL		CHUM	305	430	350	100	75
AREA 5			SUBAREA TOTAL: LOWER GRENVILLE CHANNEL		CHUM	670	520	170	450	1,940
AREA 5			SUBAREA TOTAL: ODGEN CHAN-KITKATA INLET		CHUM	50	50	10	150	100
AREA 5			SUBAREA TOTAL: PORCHER INLET		CHUM		</td			

**Table 9. List of Column Headings Relating to Historic Arrival and Spawning Timing Information Obtained from Salmon Escapement and Timing Data Report Series.**

Column Headings	Input Data Codes	Data Code Description
ShortSpecies	SK	Sockeye
	CO	Coho
	PK	Pink
	CM	Chum
	CN	Chinook
SpawnRun	1	Single run type
	Summer	Summer run type
	Fall	Fall run type
EstuaryArrivalDays	E	Early portion of month (1st to 10th)
	M	Mid portion of month (11th to 20th)
	L	Late portion of month (21st to end of month)
EstuaryArrivalMonth	Sep (example)	Text abbreviation of calendar month
EstuaryPeakDays		Same input data codes as EstuaryArrivalDays
EstuaryPeakMonth		Same input data codes as EstuaryArrivalMonth
EstuaryEndDays		Same input data codes as EstuaryArrivalDays
EstuaryEndMonth		Same as EstuaryArrivalMonth
StreamArrivalDays		Same input data codes as EstuaryArrivalDays
StreamArrivalMonth		Same as EstuaryArrivalMonth
StreamStartSpawnDays		Same input data codes as EstuaryArrivalDays
StreamStartSpawnMonth		Same as EstuaryArrivalMonth
StreamPeakSpawnDays		Same input data codes as EstuaryArrivalDays
StreamPeakSpawnMonth		Same as EstuaryArrivalMonth
StreamEndSpawnDays		Same input data codes as EstuaryArrivalDays
StreamEndSpawnMonth		Same as EstuaryArrivalMonth

**Table 10. List of Column Headings Relating to Historic Arrival and Spawning Timing  
Information Obtained from NC StAD BC16 Database, Text and Timing.**

Column Headings	Input Data Codes	Data Code Description
Sockeye Arrival Month	AUG (example)	Text abbreviation of calendar month
Sockeye Arrival Day	A	Early portion of month (1st to 10th)
	B	Mid portion of month (11th to 20th)
	C	Late portion of month (21st to end of month)
Sockeye Start Spawn Month		Same input data codes as Sockeye Arrival Month
Sockeye Start Spawn Day		Same input data codes as Sockeye Arrival Day
Sockeye Peak Spawn Month		Same input data codes as Sockeye Arrival Month
Sockeye Peak Spawn Day		Same input data codes as Sockeye Arrival Day
Sockeye End Spawn Month		Same input data codes as Sockeye Arrival Month
Sockeye End Spawn Day		Same input data codes as Sockeye Arrival Day
Coho Arrival month		Same input data codes as Sockeye Arrival Month
Coho Arrival day		Same input data codes as Sockeye Arrival Day
Coho Start Spawn Month		Same input data codes as Sockeye Arrival Month
Coho Start Spawn Day		Same input data codes as Sockeye Arrival Day
Coho Peak Spawn Month		Same input data codes as Sockeye Arrival Month
Coho Peak Spawn Day		Same input data codes as Sockeye Arrival Day
Coho End Spawn Month		Same input data codes as Sockeye Arrival Month
Coho End Spawn Day		Same input data codes as Sockeye Arrival Day
Pink Arrival month		Same input data codes as Sockeye Arrival Month
Pink Arrival day		Same input data codes as Sockeye Arrival Day
Pink Start Spawn Month		Same input data codes as Sockeye Arrival Month
Pink Start Spawn Day		Same input data codes as Sockeye Arrival Day
Pink Peak Spawn Month		Same input data codes as Sockeye Arrival Month
Pink Peak Spawn Day		Same input data codes as Sockeye Arrival Day
Pink End Spawn Month		Same input data codes as Sockeye Arrival Month
Pink End Spawn Day		Same input data codes as Sockeye Arrival Day
Chum Arrival month		Same input data codes as Sockeye Arrival Month
Chum Arrival day		Same input data codes as Sockeye Arrival Day
Chum Start Spawn Month		Same input data codes as Sockeye Arrival Month
Chum Start Spawn Day		Same input data codes as Sockeye Arrival Day
Chum Peak Spawn Month		Same input data codes as Sockeye Arrival Month
Chum Peak Spawn Day		Same input data codes as Sockeye Arrival Day
Chum End Spawn Month		Same input data codes as Sockeye Arrival Month
Chum End Spawn Day		Same input data codes as Sockeye Arrival Day
Chinook Arrival month		Same input data codes as Sockeye Arrival Month
Chinook Arrival day		Same input data codes as Sockeye Arrival Day
Chinook Start Spawn Month		Same input data codes as Sockeye Arrival Month
Chinook Start Spawn Day		Same input data codes as Sockeye Arrival Day
Chinook Peak Spawn Month		Same input data codes as Sockeye Arrival Month
Chinook Peak Spawn Day		Same input data codes as Sockeye Arrival Day
Chinook End Spawn Month		Same input data codes as Sockeye Arrival Month
Chinook End Spawn Day		Same input data codes as Sockeye Arrival Day

**Table 11. Letter Codes Used in Electronic Data Tables.**

<b>Letter Code</b>	<b>Code Name</b>	<b>Code Description</b>
UNK	Unknown	This has same description as A/P. Currently both codes can be found in data tables. Prior to 2005 UNK was used, but this outdated code will be replaced with A/P.
N/R	No Record	No original paper record exists for this stream, for this year. No data exists.
N/O	None Observed	The stream was inspected during the run timing for this species and counting conditions were good but no fish were observed.
A/P	Adults Present	The stream was inspected for this species and adult salmon were observed but the assessment information gathered was not adequate to estimate escapement (ie. too few inspections, poor counting conditions, etc.)
N/I	Species Not Inspected	The stream was not inspected for this species during the normal run timing or the stream was inspected during the normal run timing but counting conditions were so poor that no fish were observed.
DNS	Does Not Spawn	The species is not known to spawn in this system.
F/P	Fry Present	The stream was inspected and only salmon fry were observed.

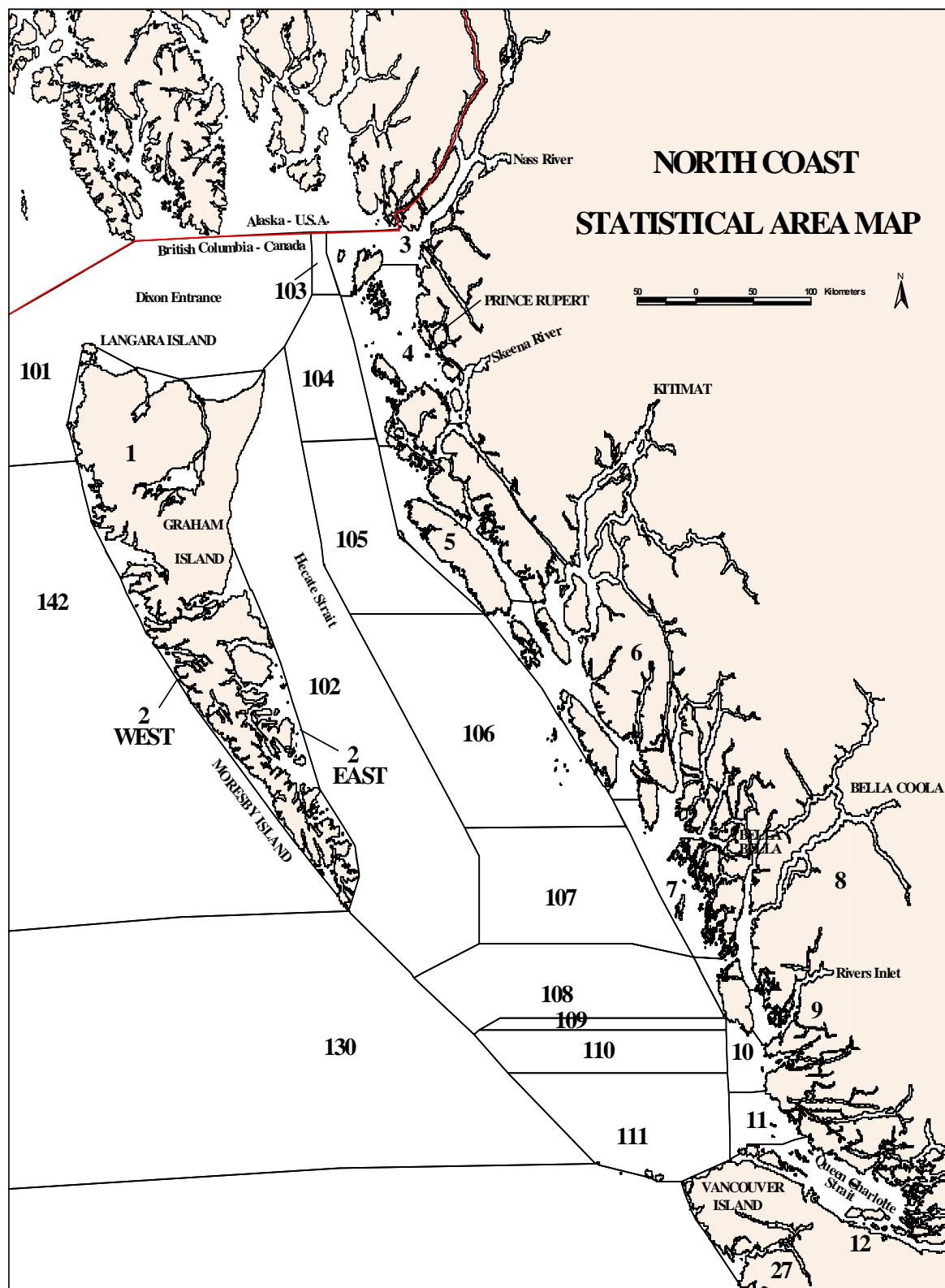
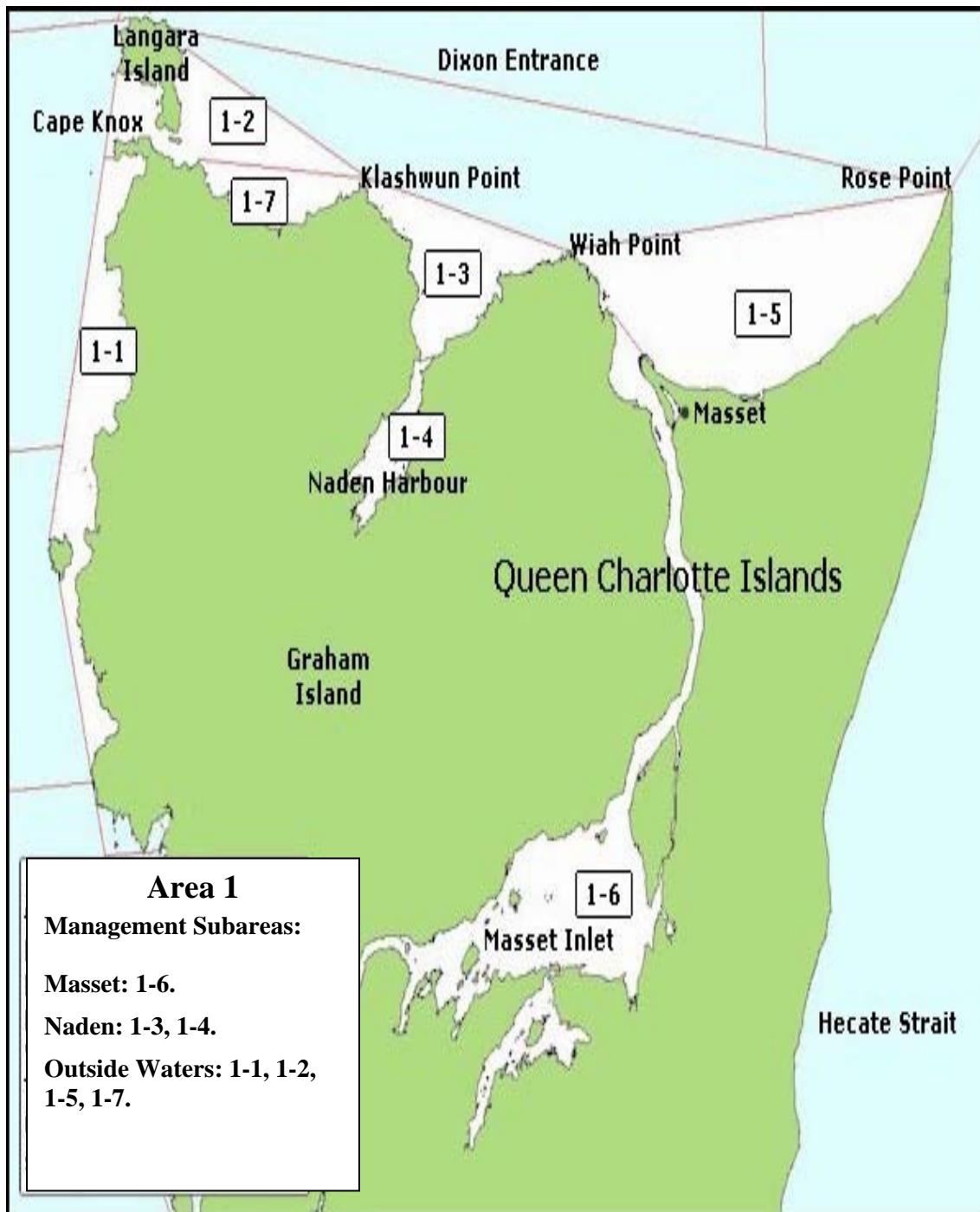
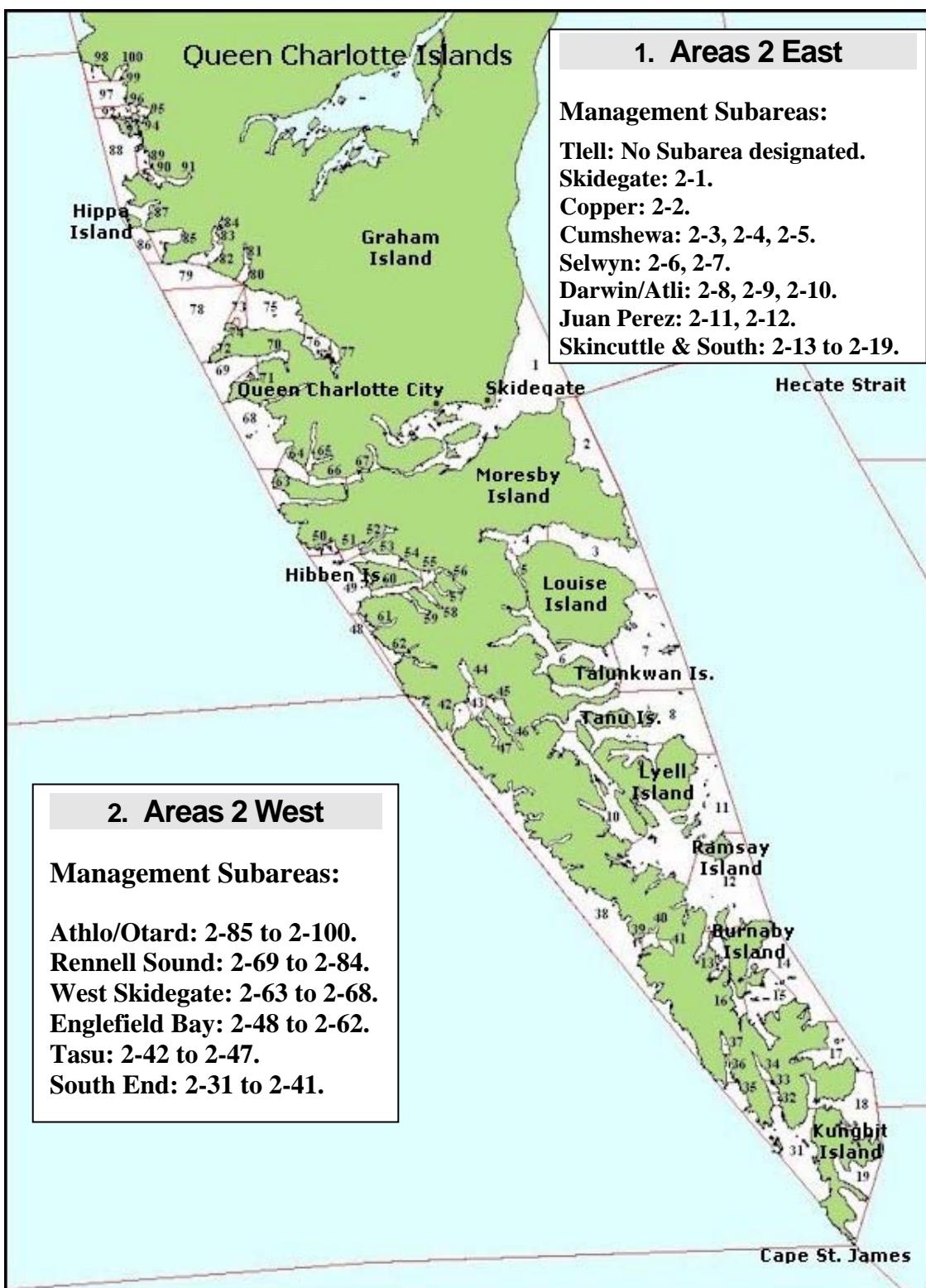


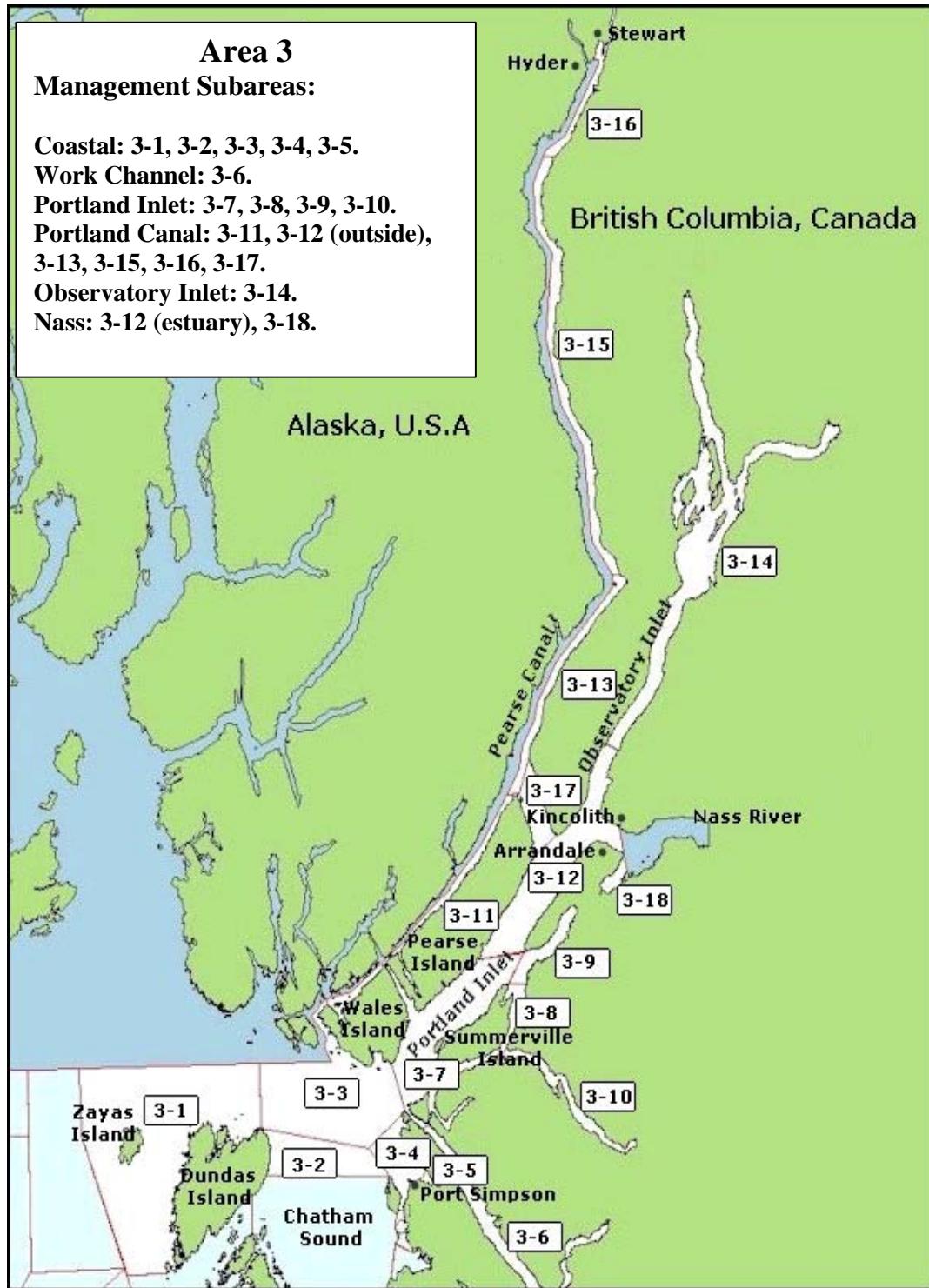
Figure 1. Map of North Coast Statistical Areas.



**Figure 2. Map of Statistical Area 1 of the Queen Charlotte Islands, Showing Statistical Subareas and Fisheries Management Areas.**



**Figure 3. Map of Statistical Areas 2 East and 2 West of the Queen Charlotte Islands, Showing Statistical Subareas and Fisheries Management Areas.**



**Figure 4.** Map of Statistical Area 3 Showing Statistical Subareas and Fisheries Management Areas.

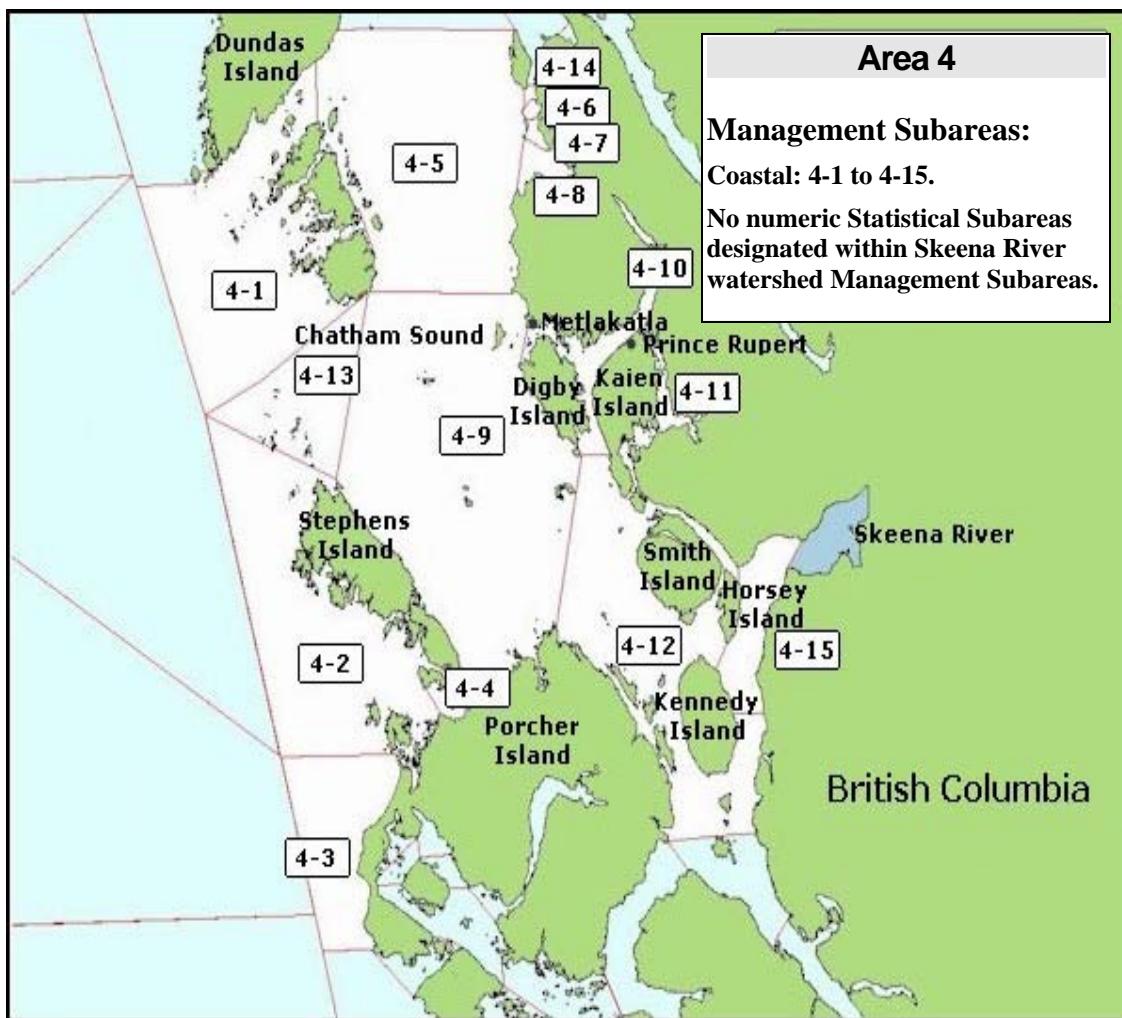
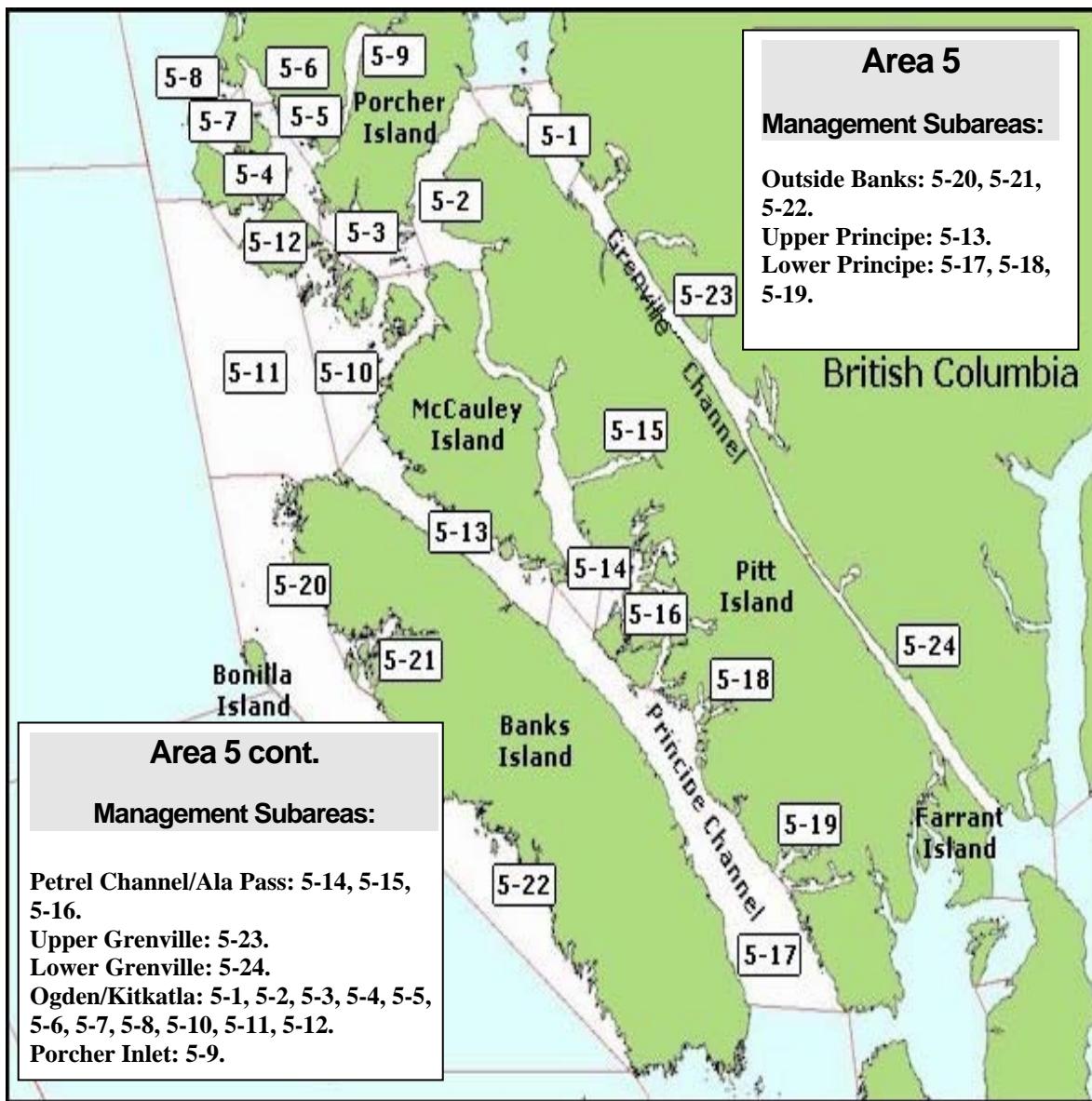
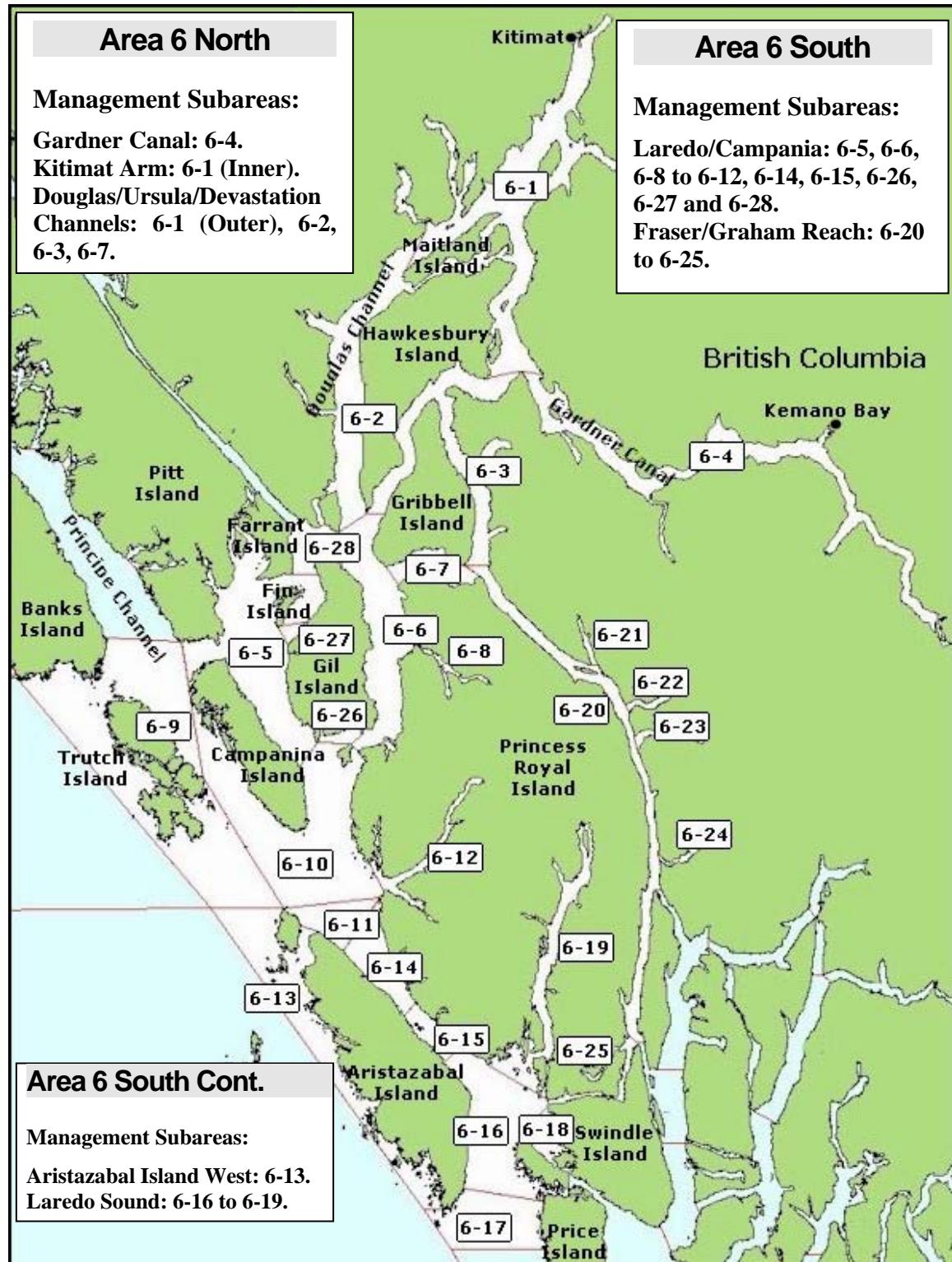


Figure 5. Map of Statistical Area 4 Showing Statistical Subareas and Fisheries Management Areas.



**Figure 6.** Map of Statistical Area 5 Showing Statistical Subareas and Fisheries Management Areas.



**Figure 7. Map of Statistical Area 6 Showing Statistical Subareas and Fisheries Management Areas.**

## Area 1: Salmon Spawning Streams

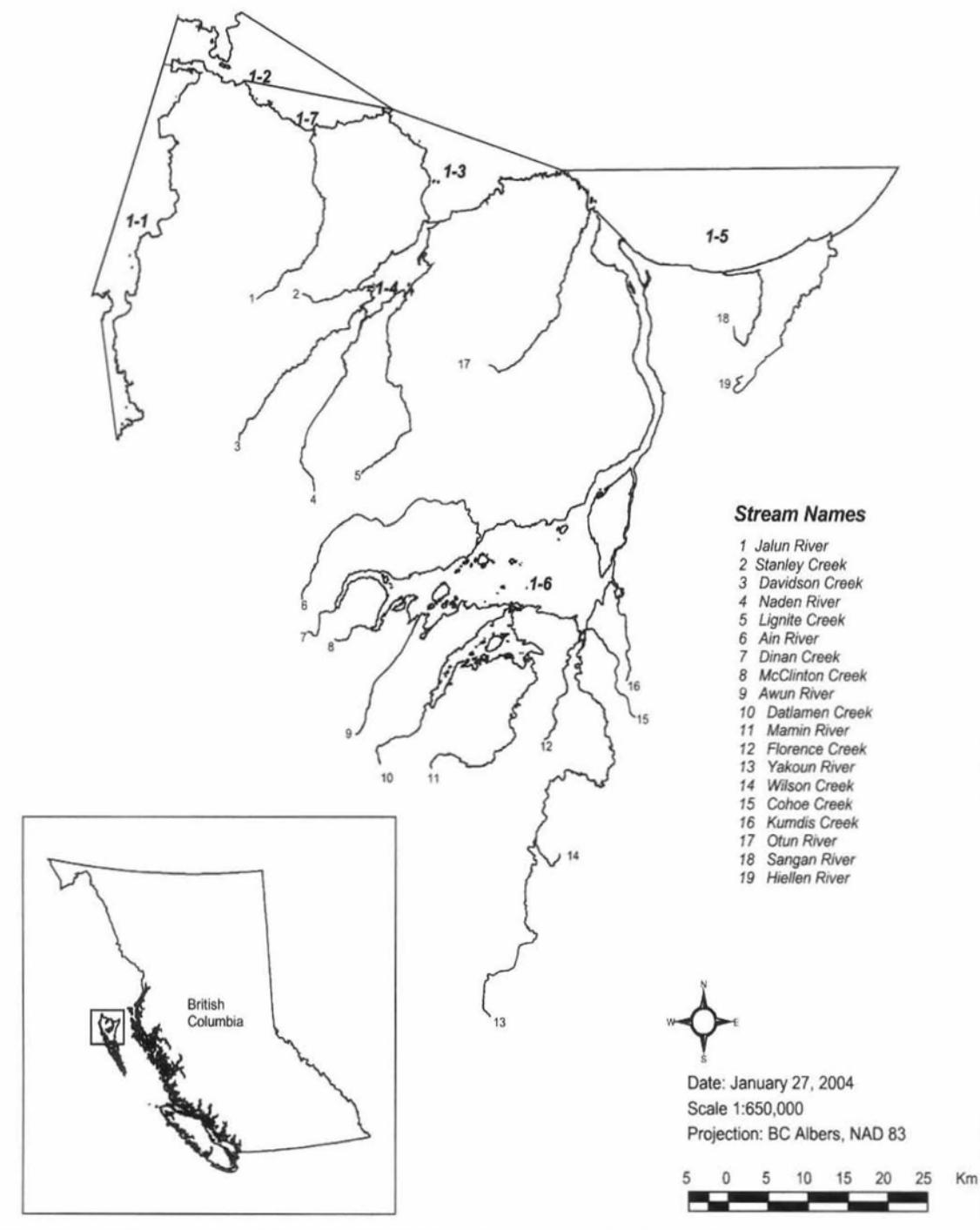


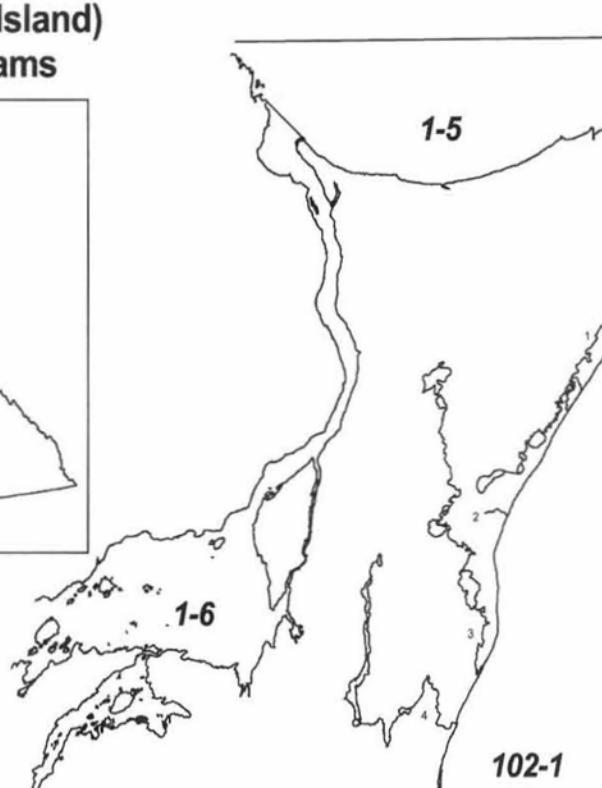
Figure 8. Map of Statistical Area 1 Showing Locations of Salmon Streams.



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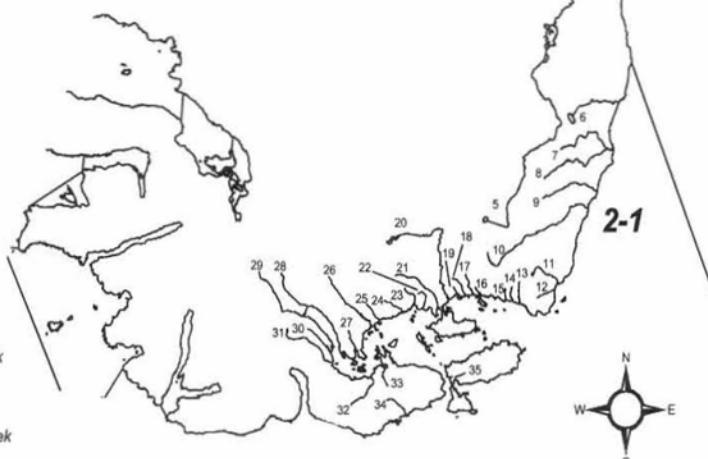
Canada

## Area 2E: (Graham Island) Spawning Streams



### Stream Names

- 1 Oeanda River
- 2 Eagle Creek
- 3 Cape Ball River
- 4 Mayer River
- 5 Tell River
- 6 Lawn Creek
- 7 Mollitor Creek
- 8 Jungle Creek
- 9 Miller Creek
- 10 Chinukundi Creek
- 11 Slarkedus Creek
- 12 Mission Creek
- 13 Muncord Creek
- 14 Jarvis Creek
- 15 Charley Valley Creek
- 16 Hartie Creek
- 17 Gore Brook
- 18 Crabapple Brook
- 19 Carson Bigallow Creek
- 20 Honna River
- 21 Tarundi Creek
- 22 Branch 10 Creek
- 23 Outlook Creek
- 24 Sleeping Beauty Creek
- 25 Slatechuck R.H. Creek
- 26 Slatechuck Creek
- 27 Mud Bay Creek
- 28 Legins Right Hand Creek
- 29 Legins Creek
- 30 Indian Cabin Creek Right Hand
- 31 Indian Cabin Creek
- 32 Saltspring Bay Creek
- 33 Saltspring Bay L.H. Creek
- 34 Two Torrent Creek
- 35 Maude Island South Creek



Date: January 27, 2004

Scale 1:500,000

Projection: BC Albers, NAD 83

5 0 5 10 15 Km



Figure 9. Map of Statistical Area 2 East (north) Showing Locations of Salmon Streams.



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## Area 2E: (Moresby) Spawning Streams

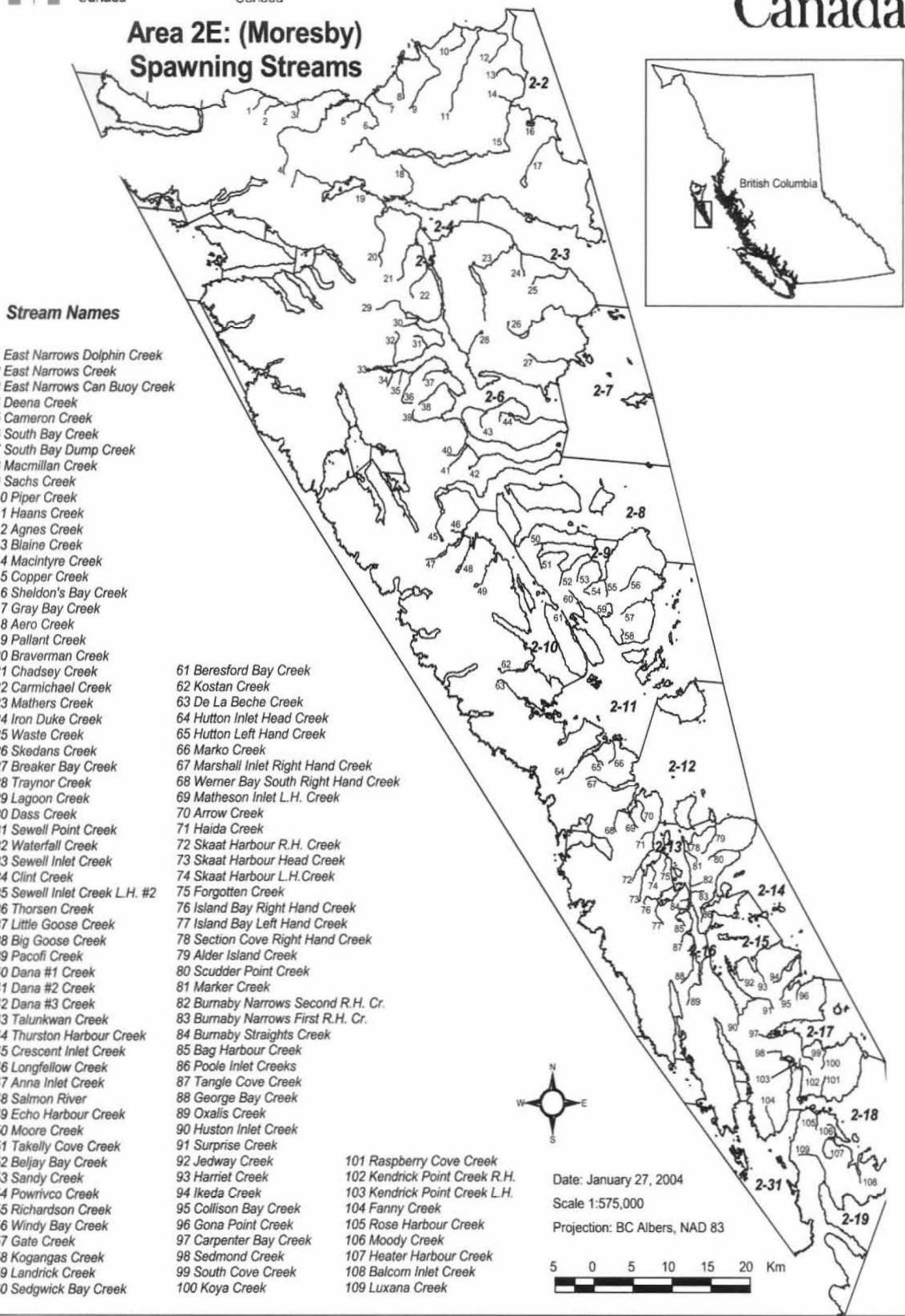


Figure 10. Map of Statistical Area 2 East (south) Showing Locations of Salmon Streams.



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Canada

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Canada

Canada

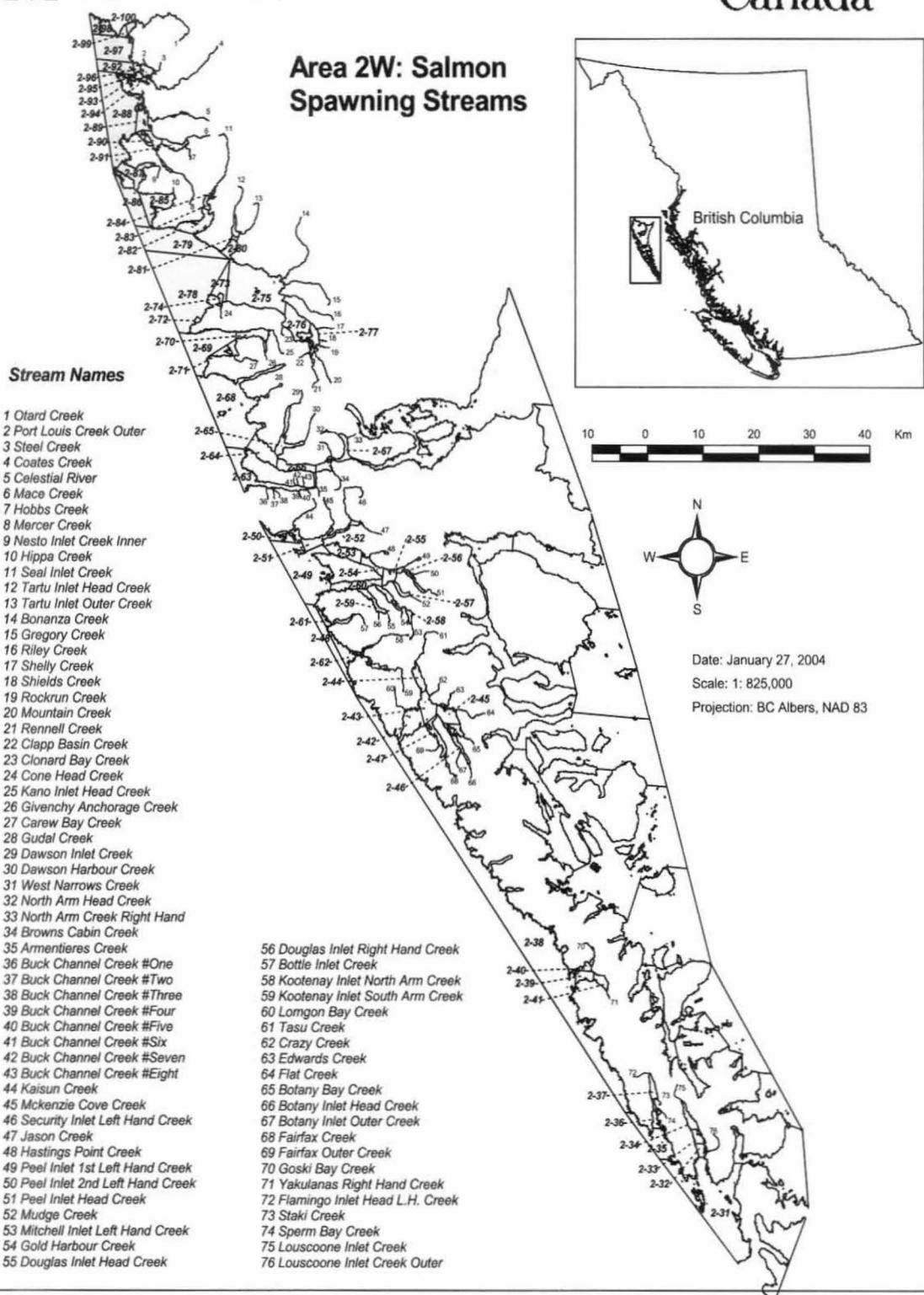


Figure 11. Map of Statistical Area 2 West Showing Locations of Salmon Streams.



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Canada

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Canada

Canada

## Area 3: Salmon Spawning Streams

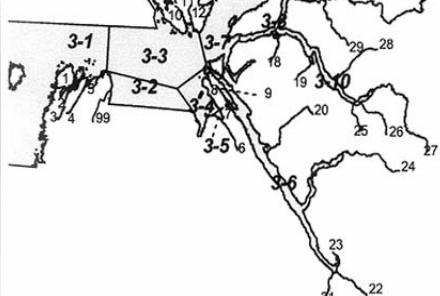


Date: January 27, 2004

Scale 1:1,250,000

Projection: BC Albers, NAD 83

20 0 20 40 Kms



### Stream Names

- 1 Boat Harbour Creek
- 2 Brundige Creek #2
- 3 Brundige Creek
- 4 Sandy Bay Creek
- 5 Whittly Point Creek
- 6 Stumaun Creek
- 7 Neaxtaalk Creek
- 8 Haide Bay Creek
- 9 Trail Bay Creek
- 10 Tracy Bay Creek
- 11 Cannery Creek
- 12 Tracy Bay #2 Creek
- 13 Manzanita Cove Creek
- 14 Crag Creek
- 15 Pirate Cove Creek
- 16 Pearse Canal Creek
- 17 Lizard Creek
- 18 Crow Lagoon Creek
- 19 Sam Bay Creek
- 20 Ensheshehe River
- 21 Fortune Creek
- 22 Lachmack River
- 23 Levenson Creek
- 24 Toon River
- 25 Cedar Creek
- 26 Larch Creek
- 27 Khutzeymateen River
- 28 Mouse Creek
- 29 Talahaat Creek
- 30 Nasoga Gulf Creek
- 31 Chambers Creek
- 32 Flewin Creek
- 33 Welda Creek
- 34 Burton Creek
- 35 Kwinanmass River
- 36 Ishkheenickh River
- 37 Dogfish Creek
- 38 Kincolith River
- 39 Inouk River
- 40 Diskangieq Creek
- 41 Anlyen Creek
- 42 Quigauw Creek
- 43 Ginlulak Creek
- 44 Anudol Creek
- 45 Wegiladap Creek
- 46 Wilayaanaooth Creek
- 47 Shumal Creek
- 48 Ksedin Creek
- 49 Ksemamaith Creek
- 50 Ansedagan Creek
- 51 Kwinyarh Creek
- 52 Zolzap Creek
- 53 Vetter Creek
- 54 Tseax River
- 55 Gitzyon Creek
- 56 Gingit Creek
- 57 Seaskinnish Creek
- 58 Kiteen River
- 59 Cranberry River
- 60 McKnight Creek
- 61 Stagoo Creek
- 62 Salmon Cove Creek
- 63 Belle Bay Creek
- 64 Cascade Creek
- 65 Roberson Creek
- 66 Bonanza Creek
- 67 Donahue Creek
- 68 Perry Bay Creek
- 69 Bessie Creek
- 70 Falls Creek
- 71 Wilauks Creek
- 72 Tchitin River
- 73 Gwynya Creek
- 74 La Rose Creek
- 75 Klayduc Creek
- 76 Olh Creek
- 77 Dak River
- 78 Kinskuch River
- 79 Illiance River
- 80 Kitsault River
- 81 Walt Creek
- 82 Georgie River
- 83 Marmot River
- 84 Kshwan River
- 85 Brown Bear Creek
- 86 Van Dyke Creek
- 87 Meziadin River
- 88 Bear River
- 89 Kwinageese River
- 90 Bowser River
- 91 Saladams Creek
- 92 Damdochax Creek
- 93 Oweegee Creek
- 94 Snowbank Creek
- 95 Teigen Creek
- 96 Bell-Irving River
- 97 Nass River
- 98 Ksi Sgawban
- 99 American Bay Creek

Figure 12. Map of Statistical Area 3 Showing Locations of Salmon Streams.



## Area 4N: Salmon Spawning Streams

### Stream Names

- 1 Skeena River
- 2 Wilson Creek
- 3 Sedan Creek
- 4 Kitwanga River
- 5 Price Creek
- 6 Shandilla Creek
- 7 Mill Creek
- 8 Kitsuns Creek
- 9 Kitsuguecia River
- 10 Deep Canyon Creek
- 11 Burdick Creek
- 12 Hazelton Creek
- 13 Glen Vowell Creek
- 14 Date Creek
- 15 Moonlit Creek
- 16 Hevenor Creek
- 17 McCully Creek
- 18 Big Fish Creek
- 19 Little Fish Lake Creek
- 20 Beaverlodge Creek
- 21 Stephens Creek
- 22 Swan Lake
- 23 Jackson Creek
- 24 Williams Lake Creek
- 25 Kispiox River
- 26 East Kispiox River
- 27 Footsore Lake Creek
- 28 Hodder Lake Creek
- 29 Nangeeese River
- 30 Sweetin River
- 31 Clifford Creek
- 32 Skunsnat Creek
- 33 Corral Creek
- 34 Deep Canoe Creek
- 35 Ironside Creek
- 36 Twin Lake Creek
- 37 Cullon Creek
- 38 Murder Creek
- 39 Bulkley River
- 40 Simpson Creek
- 41 Kathryn Creek
- 42 Toboggan Creek
- 43 Trout Creek
- 44 John Brown Creek
- 45 Porphyry Creek
- 46 Comeau Creek
- 47 Chicago Creek
- 48 Station Creek
- 49 Sharpe Creek
- 50 Causqua Creek
- 51 Harold Price Creek
- 52 Reisetor Creek
- 53 Driftwood Creek
- 54 Canyon Creek
- 55 Babine Lake
- 56 Forks Creek
- 57 Hazelwood Creek
- 58 Morrison Creek
- 59 Lower Tahlo Creek
- 60 Upper Tahlo Creek
- 61 Nine Mile Creek
- 62 Five Mile Creek
- 63 Tzezakwa Creek
- 64 Suskwa River
- 65 Nicheeskwa Creek
- 66 Sheguria River
- 67 Babine River
- 68 Boucher Creek
- 69 Onerka Lake
- 70 Nilkitkwa River
- 71 Moitase Lake
- 72 Sictine River
- 73 Azuklotz Creek
- 74 Salix Creek
- 75 Bear Lake
- 76 Bear River
- 77 Astika River
- 78 Sustut River
- 79 Spawning Lake
- 80 Johanson Creek
- 81 Moosevals Creek
- 82 Slamgeesh River
- 83 Damshlgwit Creek
- 84 Tartan Creek
- 85 Kluayax Creek
- 86 Klutantan River

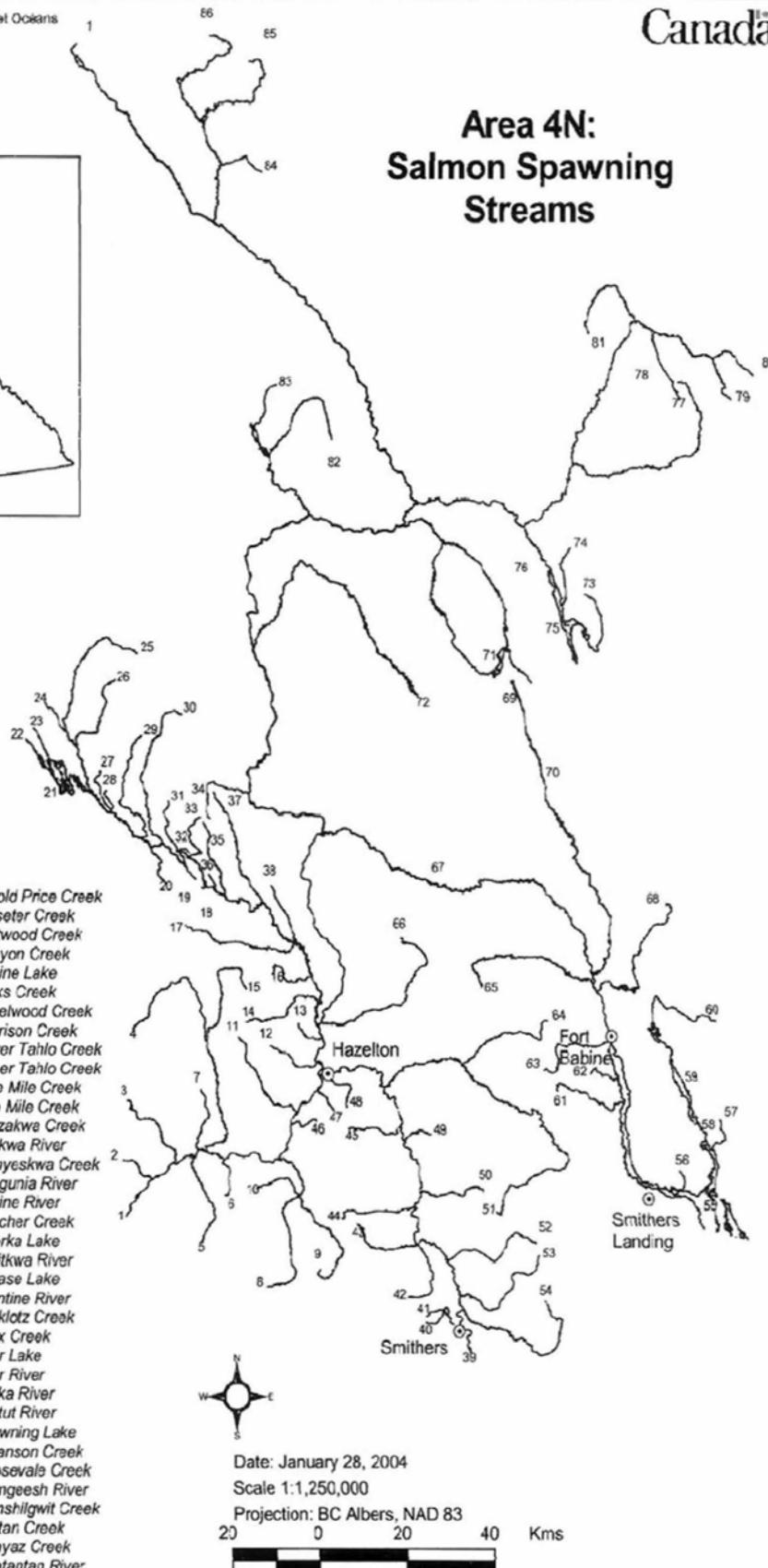


Figure 13. Map of Statistical Area 4 (north) Showing Locations of Salmon Streams.

Figure 14. Map of Statistical Area 4 (east) Showing Location of Salmon Streams.

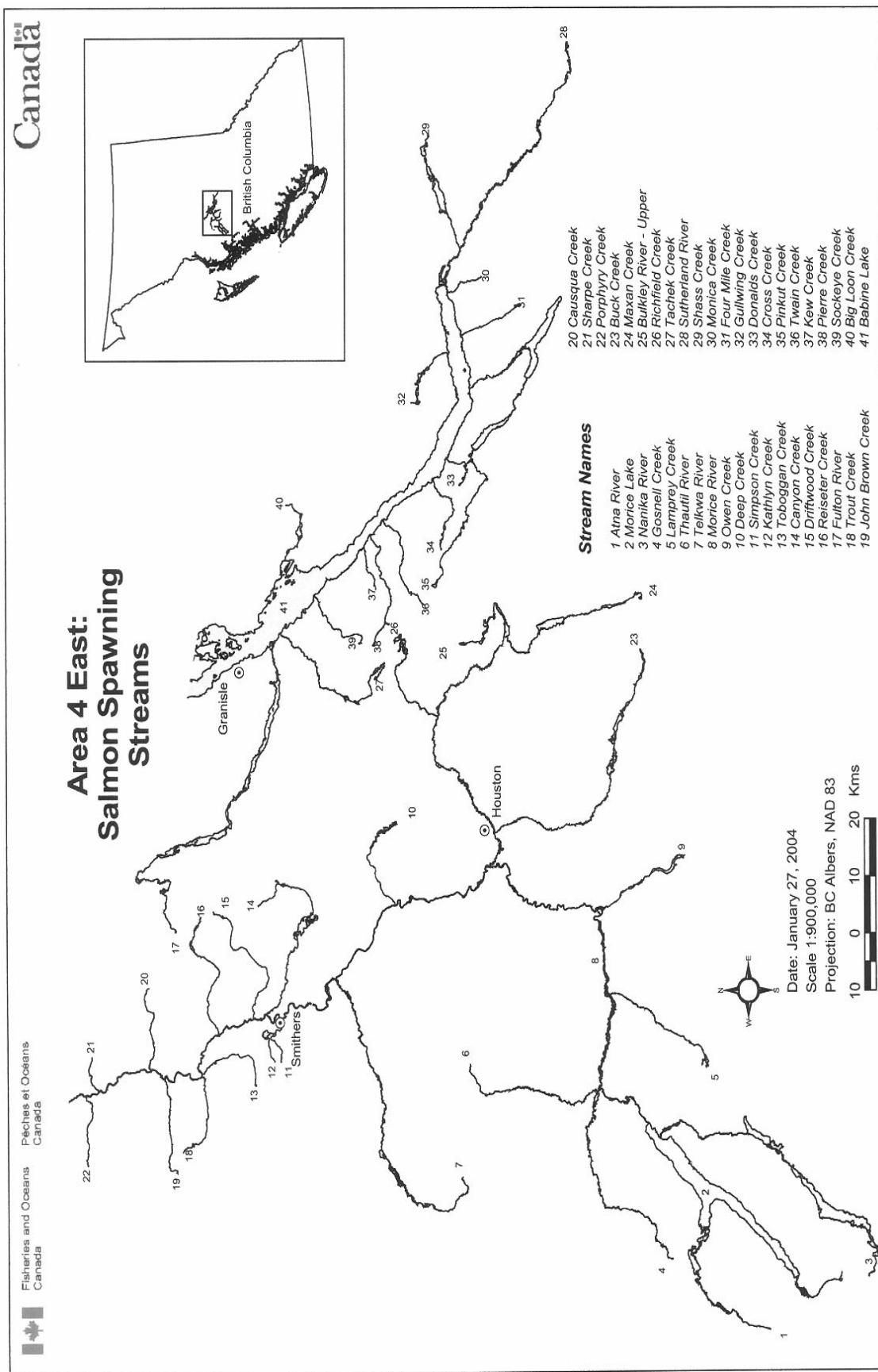
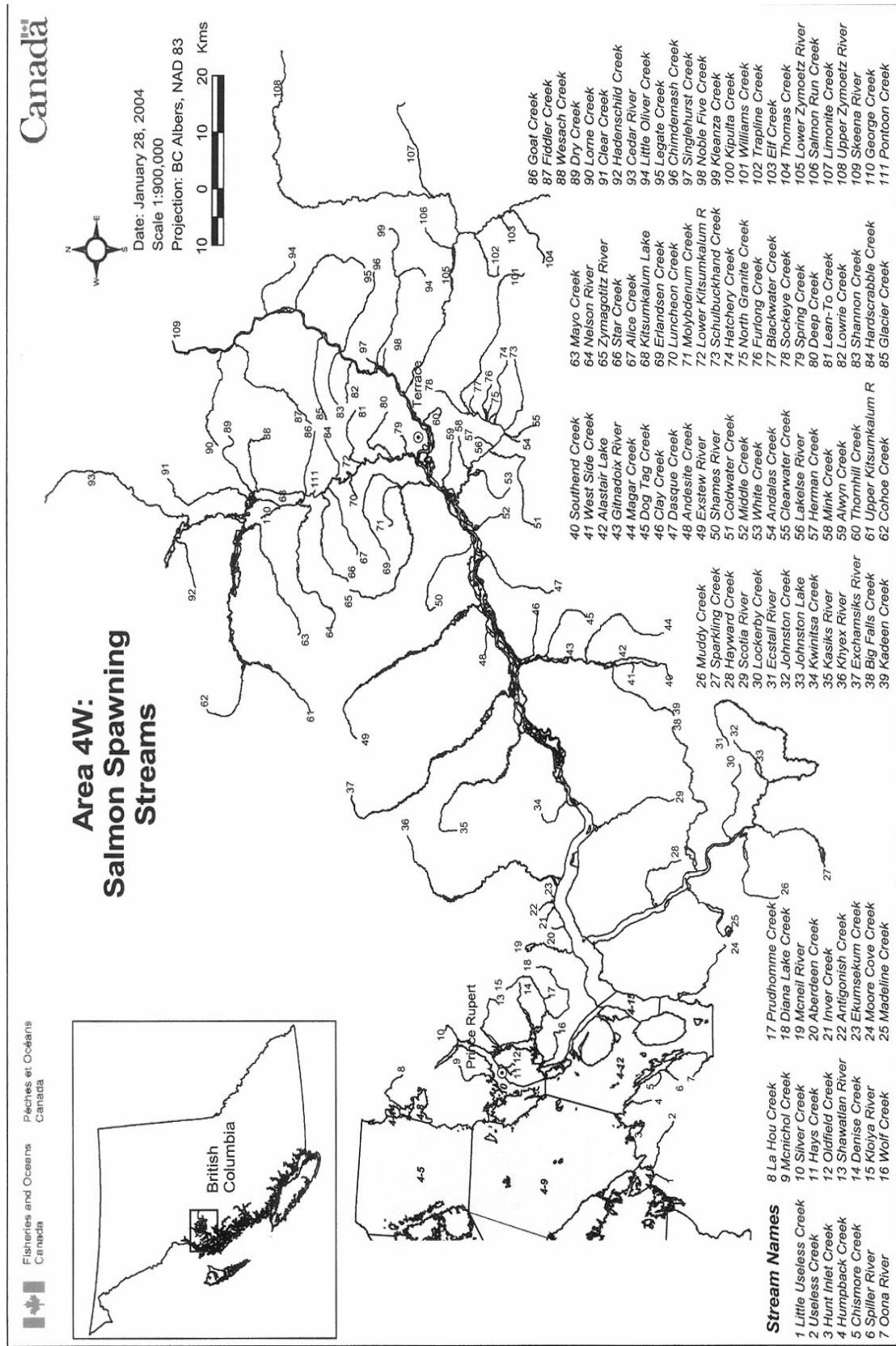


Figure 15. Map of Statistical Area 4 (west) Showing Location of Salmon Streams.





## Area 5: Salmon Spawning Streams

Date: January 28, 2004

Scale 1:500,000

Projection: BC Albers, NAD 83

5 0 5 10 15 Kms

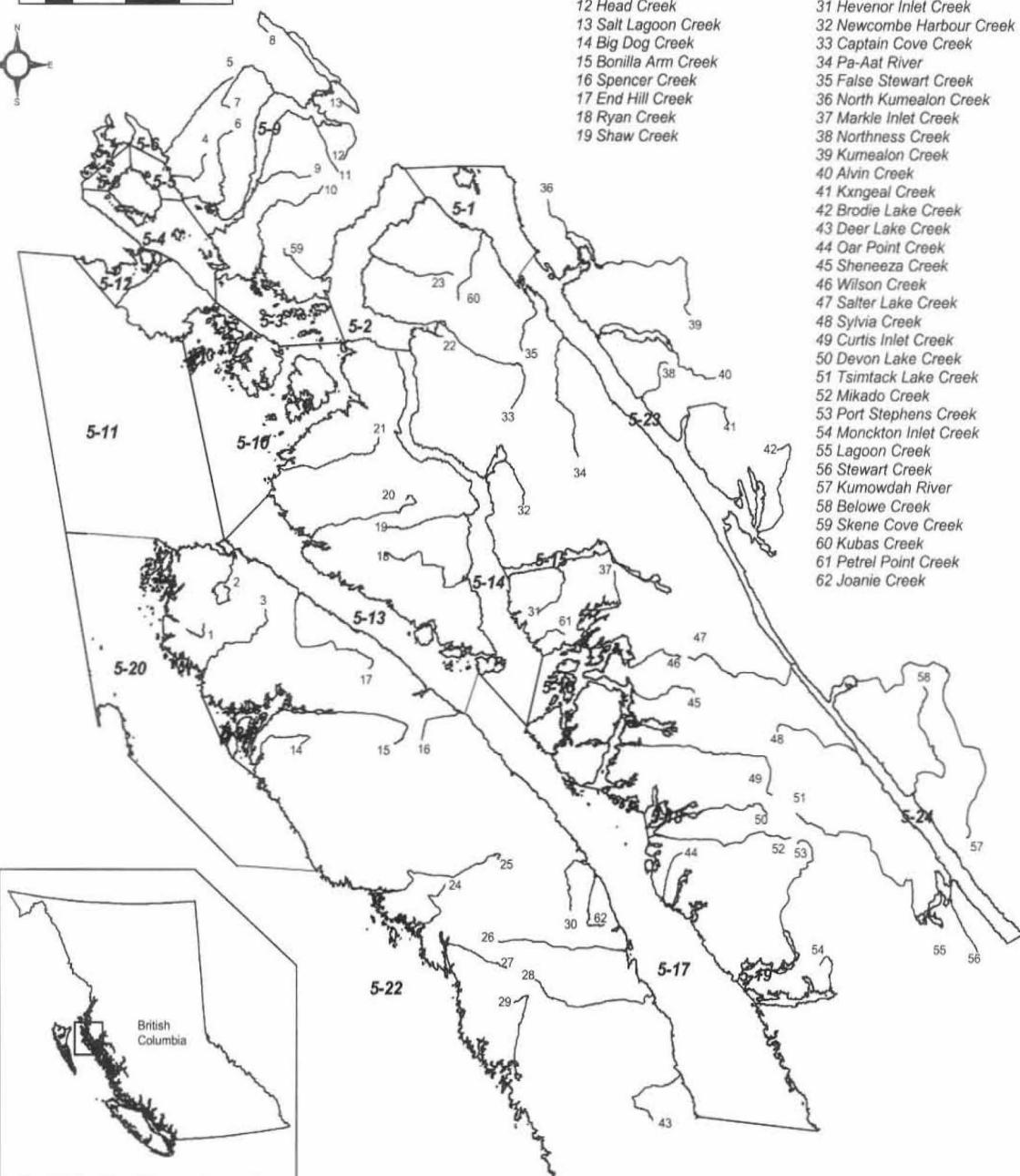
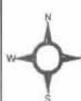


Figure 16. Map of Statistical Area 5 Showing Locations of Salmon Streams.

## Area 6 North: Salmon Spawning Streams

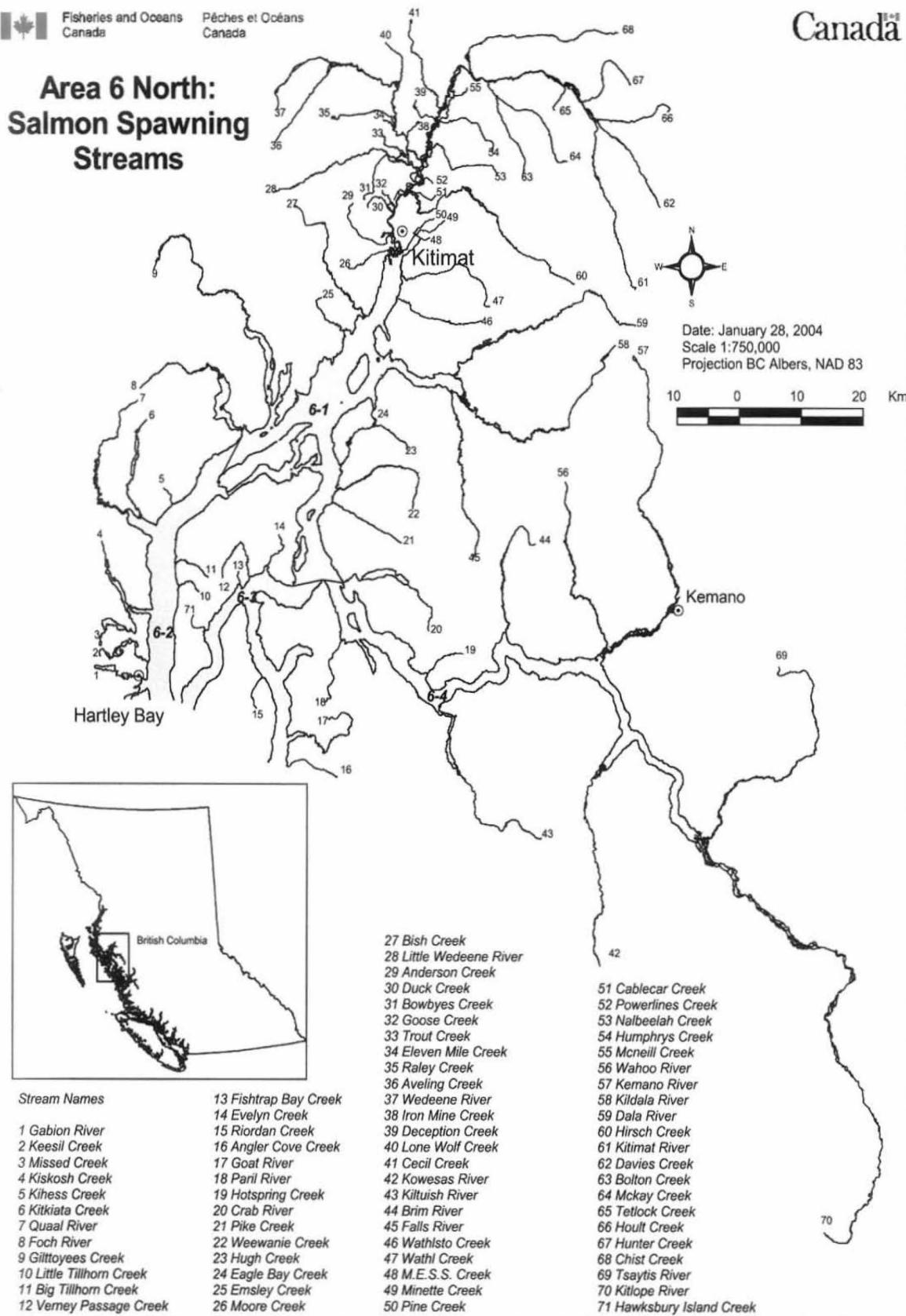


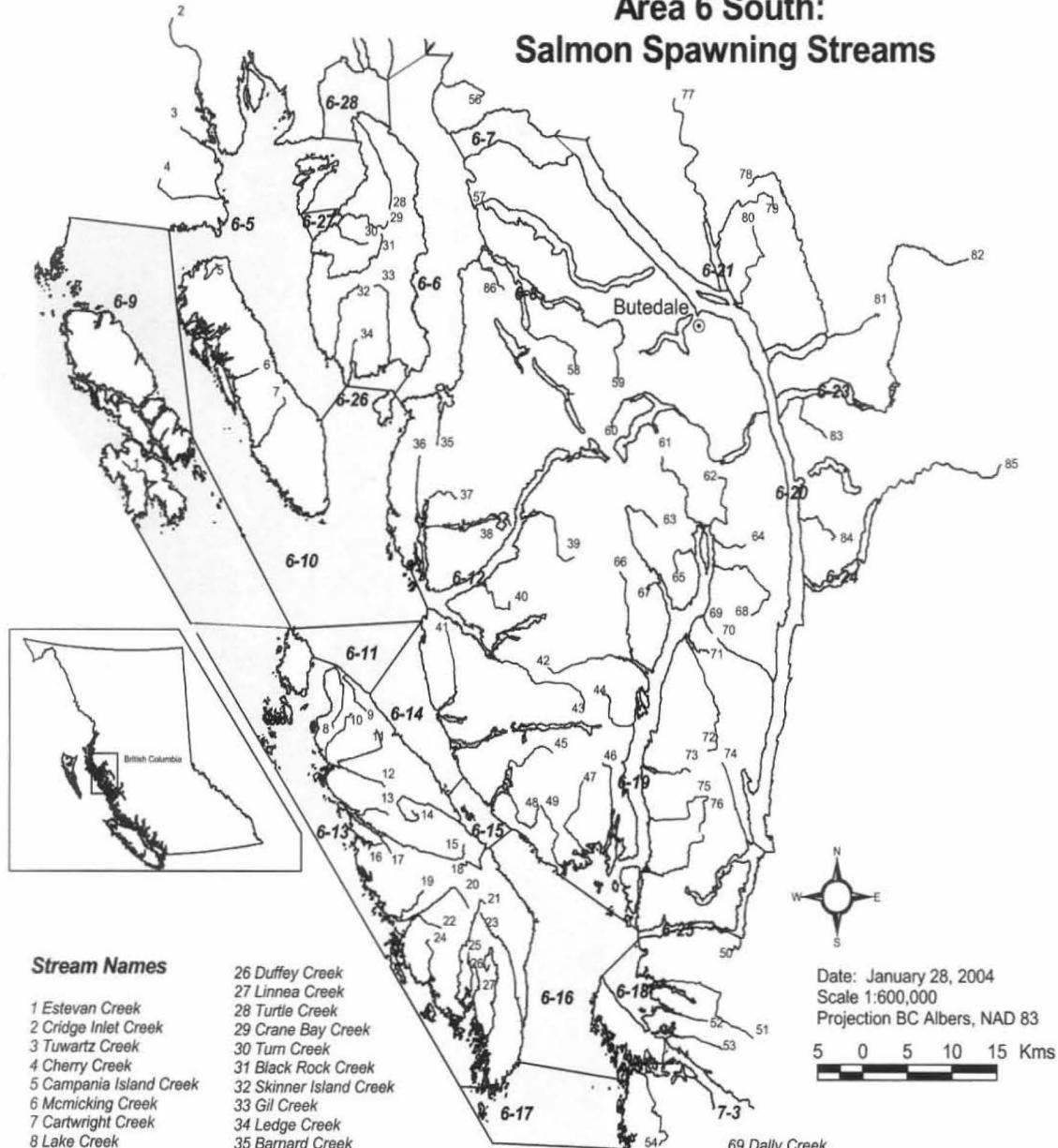
Figure 17. Map of Statistical Area 6 (north) Showing Locations of Salmon Streams.



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## Area 6 South: Salmon Spawning Streams



### Stream Names

1 Estevan Creek	26 Duffey Creek
2 Cridge Inlet Creek	27 Linnea Creek
3 Tuwartz Creek	28 Turtle Creek
4 Cherry Creek	29 Crane Bay Creek
5 Campania Island Creek	30 Turn Creek
6 Mcmicking Creek	31 Black Rock Creek
7 Cartwright Creek	32 Skinner Island Creek
8 Lake Creek	33 Gil Creek
9 Devil Creek	34 Ledge Creek
10 Fish Creek	35 Barnard Creek
11 Borrowman Creek	36 Chapple Creek
12 Stannard Creek	37 Douglas Creek
13 Treneman Creek	38 Roland Creek
14 Limestone Creek	39 Penn Creek
15 Eagle Creek	40 Argyh Creek
16 Little Kettle Creek	41 Evinrude Creek
17 Salmon Creek	42 Pynie Creek
18 Fury Creek	43 Wale Creek
19 Mcdonald Creek	44 Busey Creek
20 Flux Creek	45 Kent Inlet Lagoon #2 Creek
21 Kdlemashan Creek	46 Trahey Creek
22 Clifford Creek	47 Steep Creek
23 Don Creek	48 Talamoosa Creek
24 Sentinel Creek	49 Dallain Creek
25 Noble Creek	50 Meyers Pass Creek
	51 Kwakwa Creek
	52 Osment Creek
	53 Gull Creek
	54 Price Creek
	55 Gribble Island Creek
	56 Whalen Creek
	57 West Arm Creek
	58 East Arm Creek
	59 Canoona River
	60 Arnoup Creek
	61 Buie Creek
	62 Nais Creek
	63 Otty Creek
	64 Ronald Creek
	65 Tyler Creek
	66 Packe Creek
	67 Lomax Creek
	68 Ladekin Creek
	69 Dally Creek
	70 Soda Creek
	71 Fifer Cove Creek
	72 Bloomfield Creek
	73 Blee Creek
	74 Little Creek
	75 Powles Creek
	76 Quigley Creek
	77 Klekane River
	78 Aaltnash River
	79 Scow Bay Creek
	80 Marmot Cove Creek
	81 Head Creek
	82 Khutze River
	83 Marshall Creek
	84 Taylor Creek
	85 Green Inlet Creek
	86 Ladekin Creek

Figure 18. Map of Statistical Area 6 (south) Showing Locations of Salmon Streams.

## GIL CREEK

Area: 6	GIL ISLAND					
Location: LAREDO CHANNEL - CAMPANIA SOUND						
Alias 1: GIL CREEK	Aboriginal Name 1:					
Alias 2: GIL ISLAND CREEK	Aboriginal Name 2:					
Affiliation: Charter Patrol	Date: September 3, 2006	StartTime 7:40 StopTime 13:30				
Observers: Bernie Bernkopf	Primary Mode : Stream Walk					
Purpose: Spawner Counts	Target Species: Sx Co Pk Crn Ck Other	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
		Secondary Mode :				
Section Inspected:						
Estuary/2 Creek split above braids.	Fish distribution: Holding in pools and deep runs, last 1.5 km fish starting to spawn.					
Start Boundary	Stop Boundary					
Lat / Long: Deg Min Sec	Deg Min Sec	Lat / Long: Deg Min Sec	Deg Min Sec			
UTMs: Zone 9 N E	UTMs: Zone 9 N E					
Sky Conditions: Brightness: Medium	Windy: No	Water Conditions: Temp: 13.0 °C	Bankfull	Extremely Low		
Precipitation: None	Colour: Clear Stream Visibility: Medium					
	SOCKEYE	COHO	PINK	CHUM	CHINOOK	OTHER
Adult Presence	N.O.	A.P.	A.P.	A.P.	N.O.	N.O.
Adult Live	Holding Outside Stream		5	3,500	14	
	Holding		3	22,900		
	Spawning			350	39	
	Observed Total		3	23,250	39	
	Estimated Total		32	27,000	50	
	New Since Last Inspection		1	9,000	40	
	Estimate Reliability		Low	Medium	Low	
	Fish Countability		Poor	Good	Poor	
Adult Dead	Observed			84	11	
	Estimated			100	15	
	% Pre-Spawn Mortality					
Jack Presence	N.I.	N.I.			N.I.	
Jack Live	Observed					
	Estimated					
	Active Spawning	Before	Start	Start		
	Estimated Active Spawning Date		Sept 1	Aug 28		
	Estimated Escapement To Date	50	23,000	100		

Rationale for Estimated  
Adult Live:

General Comments : Some pinks looking very haggered. Bulk of chums look worse for wear also.

Unusual Conditions: Fish moving over cascades.

Figure 19. Example of a Completed Stream Inspection Log (SIL).

## LIVE ADULT SUMMARY

Location/Stream	Date	Observer	Live Sockeye		Live Coho		Live Pink		Live Chum		Live Chinook								
			Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.	Obs.	Est.							
			Rel.		Rel.		Rel.		Rel.		Rel.								
<b>Area 5</b>																			
<b>OGDEN / KITKATLA</b>																			
CAPTAIN COVE CREEK	25/08/2006	Joe Trainor / Sam Trainor					240	500	1	5									
							Medium	Medium											
<u>Section Inspected:</u> Estuary to creek mouth and up 500m.				<u>Fish Distribution:</u> A couple of jumpers out front. 2 chums and 10 pinks in estuary. 50 pinks at creek mouth. 90 pinks and 1 chum in next pool, then scattered pinks up to big pool. Nothing above.				<u>Distance (M):</u> Nothing above.											
<u>Start Boundary:</u>				<u>Stop Boundary:</u>															
<u>Rationale For Est Live:</u>																			
<u>General Comments:</u>																			
<u>Unusual Conditions:</u>																			
15/09/2006	Joe Trainor		4	10	990	1,200	4	10											
			Low		Medium		Medium												
<u>Section Inspected:</u> Estuary to Scouler Lake.				<u>Fish Distribution:</u> No fish seen out front. 8 pinks in the intertidal zone. 220 pinks scattered in creek up to top, then 770 in spawning gravels up to lake.				<u>Distance (M):</u> Nothing above.											
<u>Start Boundary:</u>				<u>Stop Boundary:</u>															
<u>Rationale For Est Live:</u>																			
<u>General Comments:</u>																			
<u>Unusual Conditions:</u>																			
16/09/2006	Joe Trainor	1	2	8	10	1,216	1,450	25	34										
		Medium		Low		Medium		Medium											
<u>Section Inspected:</u> Scouler to Kilpatrick connecting creek, then Wagner creek, then walked canoe down entire length of Captain Cove creek to mouth, then paddle estuary.				<u>Fish Distribution:</u> 4 pinks seen at mouth of connecting creek. One large jumper in Kilpatrick Lake, random jumpers in Scouler Lake. Pinks and chum in Wagner, 40 pink holding, 86 spawning pink, 18 dead pink and 2 chum spawning. The rest of the pink, coho and chum in main creek.				<u>Distance (M):</u> Nothing above.											
<u>Start Boundary:</u>				<u>Stop Boundary:</u>															
<u>Rationale For Est Live:</u>																			
<u>General Comments:</u> 126 pinks in Wagner, 18 dead. 2 chum seen near creek mouth. 1 sockeye holding in gravels at top of CC creek. Note: totals include count from Sept 15th.																			
<u>Unusual Conditions:</u>																			

Figure 20. Example of a Live Adult Summary Report.

## ANNUAL STREAM REPORT

**GIL CREEK**

**2006**

AREA: 6 GIL ISLAND  
 LOCATION: LAREDO CHANNEL - CAMPANIA SO  
 ALIAS 1: GIL CREEK  
 ALIAS 2: GIL ISLAND CREEK

WATERSHED CODE: 915-541700-87800-00000-0000-0000-000  
 WATERBODY ID: 00000KEEC

ABORIGINAL NAME 1:  
 ABORIGINAL NAME 2:

**INSPECTION DATES:**

Aug 07,2006	Aug 19,2006	Sep 03,2006	Sep 16,2006
Sep 28,2006			

SPECIES	ARRIVAL IN STREAM	DATES OF SPAWNING			# OF STREAM INSPECTIONS USED	METHOD	CLASS	ANNUAL ESTIMATE	ENTIRE STREAM ESTIMATE	ESTIMATE STAGE
		START	PEAK	END						
SOCKEYE	SEP A				1		6	A/P		Final
COHO	AUG B						6	A/P		Final
PINK	AUG A	AUG C	SEP A		5	3	4	60000	YES	Final
CHUM	AUG A	AUG B	SEP A	OCT A	5	3	4	300	YES	Final
CHINOOK							6	DNS		Final

**Annual Estimate Rationale:**

Sockeye - 2 seen; Coho - highest count 83.

Pink - AUC calculation using all 4 inspections with 20 & 25 day residency & 90% observer efficiency = 66,518 & 53,214. AUC calculation using the last 3 inspections with 90% observer efficiency, 15 & 20 day residency = 76,602 & 58,214. Patrolman estimate was 43,000.

Chum - AUC calculation using all four inspections with 85% observer efficiency, 10 & 15 day residency = 365 & 260. Also took into account the dead count. Patrolman estimate was 300.

**Unusual Fish Conditions:**

Lots of pinks red in color and a few coho on last inspection with fungus on their bodies.

**Unusual Stream Conditions:**

**General Comments:**

Good pink escapement compared to coast average.

Affiliation: Charter Patrol

CreatedBy: Bernie Bernkopf

October 6,2006 15:56

UpdatedBy: Dan Wagner

November 9,2006 10:33

ESTIMATE METHOD: 1 =Peak Live Plus Dead; 2 =Peak Live Plus Cumulative Dead; 3 =Area Under the Curve; 4 =Fixed Site Census; 5 =Expert Opinion; 6 =Redd Count; 8 =Mark and Recapture; 12 =Other ANNUAL ESTIMATE: N/O =None Observed; N/I =Species Not Inspected; DNS =Does Not Spawn; A/P =Adults Present; F/P =Fry Present  
 ESTIMATE CLASSIFICATION: 1 =An estimate of high resolution from an unbreached fence count. The estimate uncertainty is believed to be less than plus or minus 10% of the actual estimate; 2 =An estimate of high resolution based on documented measured data; 3 =An estimate of high resolution based on three or more documented inspections of walking, floating, or flying which clearly define the peak of spawning and contain high adult live estimates with high fish count abilities. Or an estimate of medium resolution based on documented data from a Mark & Recapture, Fixed Site method, or medium to high AUC calculation. The estimate uncertainty is believed to be less than plus or minus 25% of the actual estimate; 4 =An estimate of medium resolution based on the documentation of two or more walking, floating, or flying inspections around the peak of spawning containing high adult live estimates with high fish count abilities; Or possibly low reliable fence count records, Mark & Recapture data or low to medium AUC calculations. The estimate uncertainty is believed to be no better than plus or minus 25% of the actual estimate; 5 =Low Resolution; 6=N/O, A/P, N/I, DNS, F/P.

**DEPARTMENT OF FISHERIES AND OCEANS - NORTH COAST**

**Figure 21. Example of a Completed Annual Stream Report (BC16).**

## ESCAPEMENT SUMMARY 2006

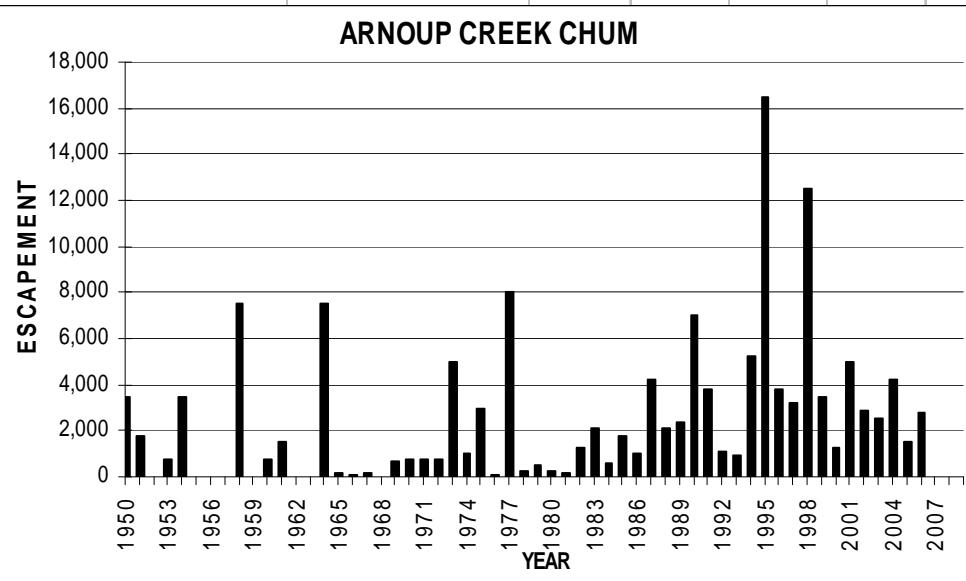
Area: 5 Location/Stream Name	Sockeye	Coho	Pink	Chum	Chinook
LOWER GRENVILLE					
BELOWE CREEK	A/P	130	600	475	DNS
LOWE INLET SYSTEM	A/P	A/P	N/I	N/I	DNS
STEWART CREEK	N/I	A/P	250	155	DNS
SYLVIA CREEK	DNS	45	N/I	N/I	DNS
TSIMTACK LAKE SYSTEM (UNION PASSAGE LAKE SYS.)	A/P	110	230	40	DNS
LOWER PRINCIPE					
BOLTON CREEK	N/I	A/P	100	N/I	DNS
CURTIS CREEK	9500	A/P	A/P	A/P	DNS
DEVON LAKE SYSTEM	2500	A/P	N/I	N/I	DNS
KEECHA CREEK	2500	A/P	N/I	N/I	DNS
KOORYET CREEK	5100	A/P	A/P	A/P	DNS
MIKADO LAKE SYSTEM	3000	A/P	N/I	N/I	DNS
OGDEN / KITKATLA					
ALPHA CREEK	DNS	A/P	5800	A/P	DNS
CAPTAIN COVE CREEK	A/P	A/P	1800	A/P	DNS
PETREL CHANNEL / ALA PASS					
HEVENOR INLET CREEKS	A/P	N/I	A/P	A/P	DNS
MARKLE INLET CREEK	N/I	A/P	A/P	500	DNS
SHAW CREEK	DNS	A/P	1800	A/P	DNS
WILSON INLET CREEK	DNS	A/P	A/P	1,100	DNS
PORCHER INLET					
HEAD CREEK	DNS	A/P	1500	N/O	DNS
PORCHER CREEK	DNS	N/I	N/I	N/I	DNS
SALT LAGOON CREEK	DNS	A/P	N/I	N/I	DNS
WEST CREEK	DNS	N/I	N/I	DNS	DNS
WOLF CREEK	DNS	A/P	1200	DNS	DNS
UPPER GRENVILLE					
FALSE STEWART CREEK	DNS	N/I	A/P	N/I	DNS
KLEWNUGGIT INLET CREEKS	A/P	A/P	A/P	75	DNS
KUMEALON CREEK	A/P	A/P	12500	100	200
KXNGEAL CREEK	DNS	DNS	1,300	130	DNS
PA-AAT RIVER	A/P	A/P	1300	A/P	DNS
UPPER PRINCIPE					
HANKIN CREEK	N/I	N/I	3500	N/O	DNS
KESWAR CREEK	N/I	N/I	A/P	N/I	DNS

Figure 22. Example of a Stream Escapement Summary Report.

## AREA 6 CHART DATA BY STREAM BY SPECIES, 1950 TO 2009.

### CHUM AND CHINOOK CHARTS:

STAT AREA	SUBAREA	STREAM NAME	SPECIES	1950	1951	1952	1953
AREA 6	LAREDO SOUND	ARNOUP CREEK	CHUM	3,500	1,800	N/R	750



Note: Chart can be changed by using Microsoft Excel™ spreadsheet filters for ‘Stream Name’ and “Species” data columns.

**Figure 23. An Example of the ‘Select Chart’ Species Tab.**

## DATA DISCLAIMER

There has been a decrease in coverage and in systematic retrieval of observation (i.e. coded as UNK meaning Unknown) from surveys for many streams in your area of interest in recent years. Further, current efforts to retrieve additional observations from recent year surveys are likely to result in updates so a portion of the data provided herein (especially post 1992) should be regarded as subject to future revision.

Escapements of zero and blanks have historically been a problem because in some cases the meaning has been lost. To address this problem the following escapement codes have been assigned:

N/O - Stream inspected, but species was not observed

UNK - Refers to indications that an inspected stream was frequented by fish, but information was not adequate to estimate total escapement (i.e. too few inspections, poor counting conditions) so it is recorded as UNK.

N/R - No record for this stream in a particular year.

N/I - Stream was not inspected at all or not inspected for a particular species.

DNS - Species does not normally spawn in this system.

F/P - Fry present

A/P - Adult present

A zero may mean that a species was surveyed and none were seen, or during a stream visit the species was simply not surveyed for, or no inspection was ever done, or possibly some other reason. Blanks may mean that a species was never surveyed or that the data never made it to the database or that the species is not known to spawn in the particular stream. Where supporting information has been lost or where time has not permitted proper analysis, some questionable zeroes and blanks may still remain in the database.

Note that many non-environmental events (e.g. changes in basic enumeration method or annual effort) that can affect year to year changes in the reliability of escapement estimates have not been well documented in the **Annual Reports of Salmon Streams and Spawning Populations** from which these escapement data are derived. Thus, comparison of annual estimates "at face value" within and between streams must be approached with caution, depending on the application under consideration. In general, all numerical estimates are useful for determination of presence or absence of a subject species. Similarly, comparison of mean abundance values by decade is certainly more reliable than comparison of pairs of single year values.

In addition, the larger the difference between time series numeric values, the greater the likelihood that they are biologically meaningful and require no further verification: i.e. large differences (changes of five fold or greater) in time series estimates may be assumed to be generally useful as indicators of trends in spawner abundance. Users wishing to attach biological significance to values that differ by less than this or users wishing further information about the estimate are advised to seek additional expert advice from appropriate Stock Assessment Division personnel regarding the relative accuracy and consistency of a given set of abundance estimates.

We hope you find this data useful and look forward to working with you on future occasions.

**Figure 24. Data Disclaimer Found in N/C StAD's Annual Escapement Files.**