# Alaska Fisheries Information Network Comprehensive PSC



Date	Author	<b>Change Comments</b>	Version
10/28/2008	Camille Kohler	Original version	1.0
12/29/2008	A.K. Zebdi	Updated version with reformatting and use of template.	2.0
02/08/2010	Michael Fey	Updated Variables and descriptions	2.1
11/10/2010	Michael Fey	Updated Sources	2.2
04/16/2012	Michael Fey	Updated Sources	2.3
05/17/2022	Michael Fey	New Version	3.0

# **Summary**

AKFIN has developed a series of comprehensive datasets that allow multiple users and analysts across multiple organizations to collaborate and enhance base data sources into a user friendly and vetted format. AKFIN enhances the base data sources by adding fields and joining secondary sources requested by stakeholders and analysts. AKFIN supports the Comprehensive Datasets and provides various access points. The following agencies have provided feedback and insight to help develop the comprehensives:

- The Alaska Department of Fish and Game (ADF&G),
- The National Marine Fisheries Service, Alaska Regional Office (<u>AKR</u>),
- The North Pacific Fishery Management Council (NPFMC),
- The Alaska Fisheries Science Center (AFSC),
- The Commercial Fisheries Entry Commission (CFEC), and
- The International Pacific Halibut Commission (IPHC).

This data is confidential and access is restricted to analysts with special permission. Please contact the AKFIN Project Manager at <a href="http://www.akfin.org/contact-us/">http://www.akfin.org/contact-us/</a> for further information about accessing the data.

# **Comprehensive PSC Overview**

The Comprehensive PSC is a combination of prohibited species catch (PSC) sources from AKR starting in 1991. Prohibited species are identified in the FMPs (Fishery Management Plans) and include; Pacific halibut, Pacific herring, Pacific salmon, steelhead trout, king crab, and Tanner crab. Species identified as prohibited must be avoided while fishing groundfish and must be immediately returned to the sea with a minimum of injury when caught and brought aboard, except when their retention is authorized by other applicable law or when their retention is required. Analysts utilize the Comprehensive PSC to track current and historic interactions with PSC amongst various groups.

The pscnq\_estimate or the halibut\_mortality\_tons would be the fields an analyst would typically use from the Comprehensive PSC to determine amounts. The pscnq\_estimate can be a census number, which is typically seen for salmon in the pollock fisheries, or an estimated amount calculated using observer data. Halibut is the only species that is managed by mortality. Halibut mortality is estimated using the halibut\_mortality\_rate and the pscnq\_estimate. Crab and salmon are reported in number of animals and herring is reporting in tons.

Auxiliary sources are appended to the base data and used to enhance the Comprehensive PSC. The source of the Comprehensive PSC changes in 2003 from the blend data (v\_blend\_psc) to the current Catch Accounting (CA) source, v\_cas\_psc. The data prior to 2003 is largely static and changes would not be expected. There are many caveats to the data from 1991-2002, for example management programs and statistical areas are not available prior to 2003. Vessel counts are also

problematic in this earlier period, for these reasons and others analysts should use extra caution when querying data prior to 2003.

For the years 2003-present the source is consistent however AKR and AKFIN treat 2003-2012 differently from 2013-current data. At this time IFQ psc is only reported in the comprehensive after 2012. The 2003-2012 data also remains largely static.

### Base Data Sources

These are the critical sources of data that provide key measures of the comprehensive.

- 1. PSC data prior to Catch Accounting-V\_BLEND\_PSC 1991-2002; data provided to AKFIN in weekly feed from AKR however it is a static source.
- 2. PSC data with Catch Accounting-V\_CAS\_PSC 2003-current; data provided to AKFIN in weekly feed from AKR. 2003-2012 typically does not change. 2013-current changes periodically. The most recent three-month window is subject to change as new data points affect the estimation process. Data within the most recent three-month window may not be suitable for publication.

## **Auxiliary Data Sources**

Additional data sources are incorporated into the comprehensive to enhance the end product. These are considered valuable fields by the historic user groups. Any further additions or recommendations are welcome. The below list is not intended to encompass all the translations as many value added fields are simple references (e.g. target\_fishery\_name, a80\_vessel\_flag). Below are some of the more important or complex sources appended.

- Processor location information-AKFIN\_STATE\_PROC\_DATA\_V; The processor data is
  pulled from multiple ADFG sources into a procedure to determine the processor
  information associated with the processor\_permit\_id received from AKR. The procedure
  is updated annually in conjunction with eLandings and may lag significantly due to this
  linkage.
- 2. CFEC Vessel Characteristics-CFEC\_VESSEL\_V; vessel licensing data is provided to AKFIN quarterly from CFEC. CFEC provides the VES\_VIEW source which has been agreed as the best source for vessel information by multiple user groups.
- 3. AKR Vessel Characteristics-V\_Vessel; AKR vessel table, AKR.VESSEL, is typically similar to CFEC however differences on the FFP may cause some discrepancies. Analysts have historically requested both CFEC and AKR vessel characteristics however it may not be currently needed.

### Data Fields

The below table represents the field name, description, datatype and source available in the Comprehensive PSC. The description is provided by the agency source when available. Please feel free to contact AKFIN regarding any questions or issues.

Field Name	Description	Datatype	Source
A80_PROCESSOR_FLAG	Flag indicating processing vessel is an Amendment 80 vessel	CHAR(1)	AKR
A80_VESSEL_FLAG	Flag indicating harvesting vessel is an Amendment 80 vessel	CHAR(1)	AKR
ADFG_STAT_AREA_CODE	6-digit numeric code representing the ADFG statistical area that the fishing activity occurred in.	VARCHAR2 (25 Char)	AKR
AFA_MOTHERSHIP_FLAG	Flag indicating that the processing vessel is an AFA permitted mothership	VARCHAR2(1)	AKR
AFA_PROCESSOR_FLAG	If the processing entity holds an AFA permit a Y is placed in this field	CHAR(1)	AKR
AFA_PROCESSOR_PERMIT_TYPE	The type of AFA permit that the processor holds. CP, IS, MS etc.	VARCHAR2(2)	AKR
AFA_VESSEL_FLAG	If the catcher vessel has an AFA permit a Y is placed in this field.	CHAR(1)	AKR
AFA_VESSEL_PERMIT_TYPE	The type of AFA permit that the catcher vessel holds. CV, CP etc.	VARCHAR2(2)	AKR
AGENCY_GEAR_CODE	Gear code (HAL, JIG, POT, PTR, NPT, TRW) without translation, TRW shows up prior to 2013	VARCHAR2(5)	AKR
AKFIN_LOAD_DATE	Date the data from the sources were last loaded into the AKFIN database	DATE(7)	AKFIN
AKFIN_VDATE	Date the comprehensive table was refreshed.	DATE(7)	AKFIN
AKFIN_YEAR	Year	VARCHAR2(4)	AKFIN
AVG_SST_CELSIUS,	Average Sea Surface Temperature in degrees Celsius	NUMBER	AFSC
CATCH_REPORT_SOURCE_PK	Numeric identifier of the catch report from which this species amount was either reported or estimated.	NUMBER(22)	AKR
CATCH_REPORT_TYPE_CODE	Character code that identifies the type of catch report from which this transaction originated: CDQ = CDQ Catch Report, ELLR = eLandings Landing Report, ELPR = eLandings Production Report, OBS = Observer haul, SLOG = Shoreside Logbook, SWPR = Shoreside Weekly Production Report, VWPR = Vessel Weekly Production Report.	VARCHAR2(6)	AKR
CATCHER_VESSEL_ID	The numeric identifier of the harvesting vessel in the NMFS AKR database (VESSEL table). For CVs and CPs, the vessel ID and catcher vessel ID will be the same. For Mothership reports, the vessel ID represents the mothership and the catcher vessel ID represents the delivering vessel. Only available after 2002 Y or N indicating whether the vessel/account is participating in	NUMBER(22)	AKR
CDQ_FLAG	the CDQ Program.	CHAR(1)	AKFIN
CDQ_GROUP_ID	Community Development Quota group number (51-56).	NUMBER(22)	AKR
CDQ_GROUP_NAME	CDQ Group name from the AKR CDQ Group Table	VARCHAR2(60)	AKR
FMP_AREA	FMP Areas (BSAI, GULF, INSD) calculated from NMFS_AREA	VARCHAR2(4)	AKFIN
FMP_GEAR	FMP gear code (TRW, HAL, POT, JIG, OTH) based on translating agency_gear_code PTR and NPT to TRW	VARCHAR2(5)	AKFIN
FMP_SUBAREA	FMP Sub-areas (AI,BS,WG,CG,WY,SE,SEI,PWDI) calculated from NMFS_AREA	VARCHAR2(4)	AKFIN
GF_HARVEST_SECTOR	This field only applies to groundfish and marks if the catcher vessel was acting as a federal catcher processor or a catcher vessel	VARCHAR2(2)	AKFIN
GF_PROCESSING_SECTOR	This field only applies to groundfish and marks if the processor is a federal shoreside plant, a federal catcher processor, or a federal mothership for this fish ticket.	VARCHAR2(2)	AKFIN
HALIBUT_MORTALITY_RATE	Percentage of the discarded catch that died as a result of catching or handling processes.	NUMBER(22)	AKR
HALIBUT_MORTALITY_TONS	Metric Tons of Halibut Mortality (pscnq_mortality/1000)	NUMBER(22)	AKR
HARVEST_SECTOR	Identifies distinction between catcher vessel and catcher processor modes of operation.	VARCHAR2(2)	AKR
ITO_ADFG	Processor's ADFG according to ITO/ENCOAR	VARCHAR2(5)	ADFG
ITO_CITY	Processor city	VARCHAR2(50)	ADFG
ITO_CODE	ITO processor code as translated from the AKFIN_PROC_CODE_XREF_V data source	VARCHAR2(5)	ADFG

ITO_COMPANY	Company name	VARCHAR2(50)	ADFG
ITO_PLANT	Processor plant or processing type	VARCHAR2(3)	ADFG
ITO_STATE	Processor state	VARCHAR2(2)	ADFG
ITO_TYPE	Processor type code	VARCHAR2(4)	ADFG
ITO_VNAME	Processor's vessel name according to ITO/ENCOAR	VARCHAR2(50)	ADFG
ITO_YEAR	Most recent year of ITO registration for ITO CODE	VARCHAR2(4)	ADFG
ITO_ZIP	Processor zip	VARCHAR2(6)	ADFG
MANAGEMENT_GROUP_CODE	The code for the management program group associated for the fishing activity. For CDQ fishing, this will be the identifier of the CDQ Group (51 - 56). For AFA fishing, this will be the code for the coop (100 - 107, 200 for CPs, 300 for Motherships). 2003-current	VARCHAR2 (10 Char)	AKR
MANAGEMENT_PROGRAM_CODE	Code representing the management program to which the catch on this production report applies (e.g., CDQ,AFA, SMPC). 2003-current  The numeric identifier of the federal processing permit for the	VARCHAR2 (4 Char)	AKR
PROCESSOR_PERMIT_ID	processing plant. Historically, this number was identical to the processing plant ID, but as plants and permits change hands over time, the permit IDs change, while the processing plant IDs remain the same.	VARCHAR2(6)	AKR
PSC_FISHERY_ID	Numeric identifier of the PSC fishery (CAS_PSC_FISHERY table) that the fishing activity occurred in.	NUMBER(22)	AKR
PSCNQ_ESTIMATE	The estimated amount of prohibited species catch (PSC), in metric tons (halibut/herring) or number of animals (crab/salmon), before any adjustments for halibut mortality rates (PSCNQ_ESTIMATE = RATE * TOTAL_GF_BASIS_WEIGHT). This will be either a weight or a count depending on how the species group is measured.	NUMBER(22)	AKR
PSCNQ_PROCESSING_SECTOR	Code representing processing operations for purposes of estimating prohibited species catch and non-quota bycatch: S = shoreside, M = mothership, CP = catcher processor.	VARCHAR2(2)	AKR
PSCNQ_RATE	Calculated rate of discards for non-CDQ hauls with PSC bycatch; weights in kilograms for halibut and herring, counts for chinook and non-chinook salmon, red king crab, Bairdi crab, and Opilio crab; depends on which precedence level is used	NUMBER(22)	AKR
PSCNQ_RATE_PRECEDENCE	If the species amount is estimated, the precendence (50 for reporting area-wide, or 40 for FMP area-wide) of the rate factor of the rate used to calculate the estimate. Null if the amount is reported.	VARCHAR2(40)	AKR
REPORTING_AREA_CODE	The three digit code for the federal reporting area (e.g. '541') in which the fishing activity occurred.	VARCHAR2(6)	AKR
RETAINED_GF_BASIS_WEIGHT	The retained basis weight is the sum of weights, in metric tons, of all retained groundfish (excluding PSC and non-target species) on the catch report. A species group is considered to be a groundfish species if the GROUNDFISH_FLAG on the associated SPECIES_GROUP record = 'Y'.	NUMBER(22)	
TOTAL_GF_BASIS_WEIGHT	The total groundfish basis weight from the catch report.	NUMBER(22)	AKR
SOURCE	Primary_PSC or Blend	VARCHAR2(14)	AKFIN
SPECIAL_AREA_CODE	Character code for a special area that the fishing activity occurred in, e.g. 'COBLZ', 'CVOA', etc.	VARCHAR2(6)	AKR
SPECIES_GROUP_CODE	The species group code (found in AKFISH.SPECIES_GROUP) for the species associated with the account and allocations/limits.	VARCHAR2(4)	AKR
SPECIES_GROUP_NAME	The long name of the species group.	VARCHAR2(64)	AKR
STDDEV_SST_CELSIUS	Standard Deviation of Sea Surface Temperature	NUMBER(22)	AFSC
TRIP_TARGET_CODE	Code representing target fishery calculated for a trip (CV) or a week (CP/M).	VARCHAR2(1)	AKR
TRIP_TARGET_NAME	Description of the observer TRIP_TARGET_CODE	VARCHAR2(60)	AKR
VES_AKR_ADFG	Vessel ADF&G number from AKR vessel source	VARCHAR2(5)	AKR

VES AKR CG NUM	Vessel Coast Guard Number from the AKR vessel source	VARCHAR2(10)	AKR
	Vessel gross tonnage from AKR vessel source. Relates to the		
VES_AKR_GROSS_TONNAGE	catcher vessel's total volume. Not to be confused with displacement or weight tonnage	NUMBER(22)	AKR
	Latest home-port city name for the catcher vessel. When the		
VES_AKR_HOMEPORT_CITY	AKR.V_VESSEL table contains the vessel's ADF&G number this field is sourced from the AKR else it is the same as the	VARCHAR2(40)	AKR
	VES_CFEC_HOMEPORT_CITY field.		
VES_AKR_HOMEPORT_STATE	Latest home-port state code for the catcher vessel. When the AKR.V_VESSEL table contains the vessel's ADF&G number this	VARCHAR2(5)	AKR
VL3_AKK_HOWLFOKI_STATE	field is sourced from the AKR else it is the same as the VES CFEC HOMEPORT STATE field.	VANCHANZ(3)	AKK
VES_AKR_HORSEPOWER	Vessel horsepower from AKR vessel source	NUMBER(22)	AKR
VES_AKR_LENGTH	Vessel length overall from AKR vessel source	NUMBER(22)	AKR
VES_AKR_NAME	Vessel name from AKR vessel source	VARCHAR2(60)	AKR
	Vessel net tonnage from AKR vessel source. Relates to the		
VES_AKR_NET_TONNAGE	catcher vesselâ¿¿s usable volume. Equals gross tonnage reduced by the volume occupied by propulsion machinery.	NUMBER(22)	AKR
VES_CFEC_CG_NUM	Vessel Coast Guard number from CFEC vessel source	VARCHAR2(10)	CFEC
	How much the catcher vessel can displace in metric tons as		
VES_CFEC_GROSS_TONNAGE	annually registered with the CFEC . Relates to the catcher vessel's total volume. Not to be confused with displacement or	NUMBER(22)	CFEC
	weight tonnage.		
VES_CFEC_HOMEPORT_CITY	Vessel homeport city from CFEC vessel source	VARCHAR2(18)	CFEC
VES_CFEC_HOMEPORT_STATE	Vessel homeport state from CFEC vessel source	VARCHAR2(2)	CFEC
VES_CFEC_HORSEPOWER	Vessel horsepower from CFEC vessel source	NUMBER(22)	CFEC
VES_CFEC_I_FILNUM	Vessel owner identifier from CFEC vessel source	VARCHAR2(6)	CFEC
VES_CFEC_LENGTH	Catcher vessel length (feet) as annually registered with the CFEC	NUMBER(22)	CFEC
VES_CFEC_NAME	Vessel name from CFEC vessel source	VARCHAR2(20)	CFEC
VES_CFEC_NET_TONNAGE	Vessel net tonnage from CFEC vessel source. Relates to the catcher vesselâ¿¿s usable volume. Equals gross tonnage reduced	NUMBER(22)	CFEC
V25_0/20_1121_1011111102	by the volume occupied by propulsion machinery		0.20
VES_CFEC_SEQ_NUM	Vessel sequence number for join to CFEC vessel table	VARCHAR2(3)	CFEC
VES_OWNER_CITY	Catcher vessel owner's city (based on the owner's current address)	VARCHAR2(18)	CFEC
VES_OWNER_HIST_CITY	Vessel owner's city (based on the owner's historic address)	VARCHAR2(18)	CFEC
VES_OWNER_HIST_STATE	Vessel owner's state (based on the owner's historic address)	VARCHAR2(2)	CFEC
VES_OWNER_HIST_ZIP	Vessel owner's zip (based on the owner's historic address)	VARCHAR2(9)	CFEC
VES_OWNER_NAME	Catcher vessel owner's name	VARCHAR2(30)	CFEC
VES_OWNER_NAMTYP	Catcher vessel owner's name type (business name, personal name etc)	VARCHAR2(1)	CFEC
VES_OWNER_STATE	Catcher vessel owner's state (based on the owner's current address)	VARCHAR2(2)	CFEC
VES_OWNER_ZIP	Catcher vessel owner's zip (based on the owner's current	VARCHAR2(9)	CFEC
VESSEL ID	address) The Federal Fisheries Permit (FFP) of the vessel that landed the	NUMBER(22)	AKR
WED	catch. WEEK FND DATE value reformatted as MMDD		AKR
VVLU	WEEK_END_DATE value reformatted as MMDD  Uses AKFIN.AKFIN_DATE_D to translate the	VARCHAR2(4)	ANN
WEEK_END_DATE	ADFG_H_DATE_LANDED into a week-ending date. The last day in a calendar week.	DATE(7)	AKFIN
YEAR	Four digit calendar year (e.g. '1998') in which haul occurred.	VARCHAR2(4)	AKR