
Pacific Fisheries Information Network

APEX REPORTING SYSTEM

User Documentation



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1. Introduction


Following the successful redevelopment of the PacFIN database in 2014, PacFIN reports have been recreated from the new data warehouse with the ultimate goal of providing more flexibility to customize and export PacFIN data. The new reporting system uses Oracle Application Express (APEX) as the platform for developing and deploying reports. APEX was selected because it is a free, easy-to-use, rapid web application development tool for Oracle databases.

Highlights of the new PacFIN APEX reporting system include:

1. Navigable – the APEX report website uses a navigable tree to organize reports so that users can find a report easily and quickly.
2. Interactive – users can customize reports using a set of parameters. For example, the user can extract data by year range, agency, gear code, etc.
3. Secure – all reports display aggregated catch information (i.e., weight, revenue, price, number of trips) summed at an annual and/or state level. The APEX reporting system has a public site for all users and a secure site for users authorized to access confidential data. On the public site, confidentiality rules are applied (i.e., non-confidential catch summaries will include a minimum of 3 vessels and 3 dealers in the aggregation) to filter confidential catch values in order to protect the privacy of fishermen and seafood dealers as required by the Magnuson-Stevens Act. The secure site is password protected to restrict access to authorized users.
4. Low maintenance – APEX reports pull data from the PacFIN comprehensive fish tickets database. The comprehensive fish ticket database is updated automatically on a daily basis. Updates of APEX reports are scheduled to be in sync with the comprehensive fish ticket database.
5. Exportable – users can download reports in Excel or CSV format and then import the data into other applications such as Excel, R, Matlab, etc. for further analysis.

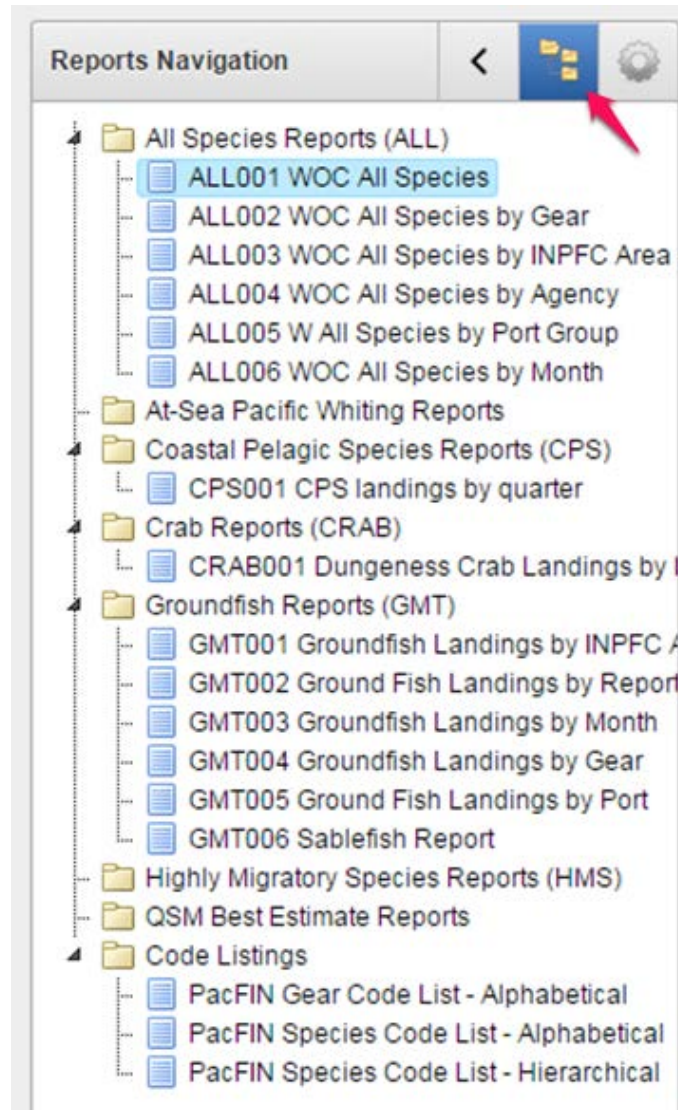
2. Getting Started

1. Click the link <http://reports.psmfc.org/pacfin> to go to the new PacFIN APEX report website.
2. Browse PacFIN reports using the report tree on the **Reports Navigation** panel on the left side.

Make sure the **Tree** button  is turned on (i.e., highlighted in blue). If not, the report tree doesn't display. You will need to click the **Tree** button to display the report tree. The report tree contains 8 folders:


- a. All Species Reports (ALL) – This folder contains the landing reports for all fisheries, summarized by year, month, INPFC area, reporting agency, port group, and /or gear group.
- b. At-Sea Pacific Whiting Reports – coming soon
- c. Coastal Pelagic Species Reports (CPS)
- d. Crab Reports (CRAB)
- e. Groundfish Reports (GMT) – This folder contains landing reports for groundfish as well as a few other non-groundfish species, prepared for the Pacific Fishery Management Council (PFMC) Groundfish Management Team (GMT). The reports summarize landings by year, month, INPFC area, reporting agency, port group, and /or gear group.

- f. Highly Migratory Species Reports (HMS)
- g. QSM Best Estimate Reports (QSM) – coming soon
- h. Code Listings



3. View Reports Online

1. Select a report of interest.

On the **Reports Navigation** panel, expand the reports folder if needed, then click the report name. The report will be displayed on the main report window. In this user manual, we will use report 'ALL001 WOC ALL Species' as an example to demonstrate the procedure for viewing a PacFIN report online. When a report is called, the **Report Navigation** panel displays all parameters. Notice that the Parameter button  is highlighted in blue.

Species Report: Commercial Landed Catch: Metric-Tons (mt), Revenue, and Price-per-pound (Price/lbs)
 This report was generated using the state agency fish ticket data from the PacFIN comprehensive fish ticket table and at sea observer data. This report includes all U.S. catch areas including the Puget Sound, and other inland areas where marine fish are caught. Canadian and Alaskan catches have been excluded. Shoreside reported catches have species and area composition samples applied. On board observers did not distinguish between retained and discarded catch prior to 1997, so at-sea data prior to 1997 is not included. Data that involve fewer than three vessels or dealers have been withheld to preserve confidentiality.

Report run time: June 18th, 2015 2:09pm
 Included year(s): 2015
 Included agency(ies): Washington, Oregon, California, At-Sea, and Combined WOC (incl. At-Sea)

Year	Agency	Management Group	Complex	Common Name	Species Code	Round Weight (mt)	Round Price/lbs	Revenue (\$)	Confidential
2015	AT-SEA	CPEL	---	PACIFIC HERRING	PHRG	0.0	\$0.00	\$0	-
2015	AT-SEA	CPEL	---	__NO COMPLEX	-	0.0	-	\$0	-
2015	AT-SEA	CPEL	---	__ALL COASTAL PELAGIC	-	0.0	-	\$0	-
2015	AT-SEA	GRND	FLAT	ARROWTOOTH FLOUNDER	ARTH	0.7	\$0.00	\$0	-
2015	AT-SEA	GRND	FLAT	DOVER SOLE	DOVR	-	-	-	*
2015	AT-SEA	GRND	FLAT	REX SOLE	REX	1.4	\$0.00	\$0	-
2015	AT-SEA	GRND	---	__ALL FLATFISH	-	2.1	-	\$0	*
2015	AT-SEA	GRND	MGRN	SPINY DOGFISH	DSRK	0.4	\$0.00	\$0	-
2015	AT-SEA	GRND	MGRN	LONGNOSE SKATE	LSKT	-	-	-	*
2015	AT-SEA	GRND	---	__MISC. GROUND FISH	-	0.4	-	\$0	*
2015	AT-SEA	GRND	ROCK	AURORA ROCKFISH	ARRA	-	-	-	*
2015	AT-SEA	GRND	ROCK	BANK ROCKFISH	BANK	0.0	\$0.00	\$0	-
2015	AT-SEA	GRND	ROCK	BOCACCIO	BCAC	-	-	-	*
2015	AT-SEA	GRND	ROCK	CHILIPEPPER ROCKFISH	CLPR	-	-	-	*
2015	AT-SEA	GRND	ROCK	CANARY ROCKFISH	CNRY	-	-	-	*

* Data has been withheld from this row for confidentiality purposes.
 ** WITHHELD FOR CONFIDENTIALITY includes species not displayable in this report due to confidentiality restrictions.

2. Customize a report.

Use the parameters in the **Reports Navigation** panel to customize a PacFIN report and then click the Submit button **Submit** to refresh the report. For example, there are 4 parameters for the all species report ALL001:

- a. Year Range – allows user to select a year range between 1981 and the current year
- b. Display by Year – user can decide between 2 options
 - i. Yes - sum up the catch for all years specified by the year range parameter
 - ii. No - display the catch by year
- c. Agency – user can check a single agency or multiple agencies
 - i. (W)ashington – display the catch landed to all Washington ports
 - ii. (O)regon – display the catch landed to all Oregon ports
 - iii. (C)alifornia – display the catch landed to all California ports
 - iv. At-Sea – displays catch processed offshore by catcher-processor vessels or mothership vessels
 - v. Combined WOC (incl. At-sea) – sum the catch from all the above 4 sources by species and year.
- d. Select a Measure Set – user can decide between the 2 options
 - i. Round Weight (mt); Round Price/lbs – display the round weight and price
 - ii. Landed Weight (mt); Landed Price/lbs – display the landed weight and price

In the example below, the user wants to select total annual catch (in round weight) by state for all species in 2014 and 2015. Report ALL001 WOC All Species is selected, then the parameters are set accordingly

- a. Year Range – between 2014 and 2015
- b. Display by Year – yes
- c. Agency - (W)ashington, (O)regon, and (C)alifornia
- d. Select a Measure Set - Round Weight (mt); Round Price/lbs

Species Report: Commercial Landed Catch: Metric-Tons (mt), Revenue, and Price-per-pound (Price/lbs)

This report was generated using the state agency fish ticket data from the PacFIN comprehensive fish ticket table and at sea observer data. This report includes all U.S. catch areas including the Puget Sound, and other inland areas where marine fish are caught. Canadian and Alaskan catches have been excluded. Shoreside reported catches have species and area composition samples applied. On board observers did not distinguish between retained and discarded catch prior to 1997, so at-sea data prior to 1997 is not included. Data that involve fewer than three vessels or dealers have been withheld to preserve confidentiality.

Report run time: June 18th, 2015 10:47pm
 Included year(s): 2014 - 2015
 Included agency(ies): Washington, Oregon, and California

Year	Agency	Management Group	Complex	Common Name	Species Code	Round Weight (mt)	Round Price/lbs	Revenue (\$)	Confidential
2014	C	CRAB	---	UNSP. CRAB	UCRB	2.2	\$0.39	\$1,863	-
2014	C	CRAB	... SUBTOTAL	__NO COMPLEX	-	9,355.1	-	\$69,455,803	-
2014	C	CRAB	KCRB	UNSP. KING CRAB	UKCR	5.6	\$4.22	\$51,782	-
2014	C	CRAB	KCRB SUBTOTAL	__ALL KING CRAB	-	5.6	-	\$51,782	-
2014	C	CRAB	TCRB	BAIRDI TANNER CRAB	BTCR	-	-	-	*
2014	C	CRAB	TCRB SUBTOTAL	__ALL TANNER CRAB	-	0.0	-	\$0	*
2014	C	CRAB SUBTOTAL	-	__ALL CRAB	-	9,360.7	-	\$69,507,585	*
2014	C	GRND	---	PACIFIC GRENADIER	GREN	-	-	-	*
2014	C	GRND	... SUBTOTAL	__NO COMPLEX	-	0.0	-	\$0	*
2014	C	GRND	FLAT	NOM. ARROWTOOTH FLOUNDER	ART1	18.4	\$0.11	\$4,282	-
2014	C	GRND	FLAT	ARROWTOOTH FLOUNDER	ARTH	57.0	\$0.10	\$12,557	-
2014	C	GRND	FLAT	BUTTER SOLE	BSOL	0.0	\$0.47	\$34	-
2014	C	GRND	FLAT	CURLFIN SOLE	CSOL	1.7	\$0.44	\$1,629	-
2014	C	GRND	FLAT	DOVER SOLE	DOVR	1,597.4	\$0.45	\$1,572,339	-

* Data has been withheld from this row for confidentiality purposes.
 ** WITHHELD FOR CONFIDENTIALITY includes species not displayable in this report due to confidentiality restrictions.

3. Interpret a report.

On the main report panel, there are 5 sections: report title, report description, header notes, report table, and footer notes:

- a. Report title – provides a short description of the report.
- b. Report description – provides a detailed description of the report.
- c. Header notes – summarizes the report run time, year range and selected agency. This is specific to each report refresh activity so it provides important information when a report is exported.
- d. Report table – includes:
 - i. Data rows - catch by species, year and agency
 - ii. Subtotal/total/grand total rows - aggregated by complex, management group, agency, and year.
 - iii. Confidential flag - uses "*" as an indicator where the catch values are fully hidden (for data rows) or partially hidden (for subtotal, total, and grand total rows).
 - iv. Confidential subtotal rows – aggregated confidential catch values. When there is only 1 confidential species, the confidential subtotal catch values are hidden and flagged by "*".

- e. Footnotes – additional notes placed under report table to comment on a designated part of the data.

ALL001 WOC All Species Download File: CSV Excel PDF

Species Report: Commercial Landed Catch: Metric-Tons (mt), Revenue, and Price-per-pound (Price/lbs) (a)

This report was generated using the state agency fish ticket data from the PacFIN comprehensive fish ticket table and at sea observer data. This report includes all U.S. catch areas including the Puget Sound, and other inland areas where marine fish are caught. Canadian and Alaskan catches have been excluded. Shoreside reported catches have species and area composition samples applied. On board observers did not distinguish between retained and discarded catch prior to 1997, so at-sea data prior to 1997 is not included. Data that involve fewer than three vessels or dealers have been withheld to preserve confidentiality. (b)

Report run time: June 18th, 2015 10:47pm (c)
 Included year(s): 2014 - 2015
 Included agency(ies): Washington, Oregon, and California

Year	Agency	Management Group	Complex	Common Name	Species Code	Round Weight (mt)	Round Price/lbs	Revenue (\$)	Confidential
2014	C	CRAB	....	UNSP. CRAB	UCRB	2.2	\$0.39	\$1,863	-
2014	C	CRAB	.... SUBTOTAL	__NO COMPLEX	-	9,355.1	-	\$69,455,803	-
2014	C	CRAB	KCRB	UNSP. KING CRAB	UKCR	5.6	\$4.22	\$51,782	-
2014	C	CRAB	KCRB SUBTOTAL	__ALL KING CRAB	(d)	5.6	-	\$51,782	-
2014	C	CRAB	TCRB	BAIRDI TANNER CRAB	BTCR	-	-	-	*
2014	C	CRAB	TCRB SUBTOTAL	__ALL TANNER CRAB	-	0.0	-	\$0	*
2014	C	CRAB SUBTOTAL	-	__ALL CRAB	-	9,360.7	-	\$69,507,585	*
2014	C	GRND	....	PACIFIC GRENADIER	GREN	-	-	-	*
2014	C	GRND	.... SUBTOTAL	__NO COMPLEX	-	0.0	-	\$0	*
2014	C	GRND	FLAT	NOM. ARROWTOOTH FLOUNDER	ART1	18.4	\$0.11	\$4,282	-
2014	C	GRND	FLAT	ARROWTOOTH FLOUNDER	ARTH	57.0	\$0.10	\$12,557	-
2014	C	GRND	FLAT	BUTTER SOLE	BSOL	0.0	\$0.47	\$34	-
2014	C	GRND	FLAT	CURLFIN SOLE	CSOL	1.7	\$0.44	\$1,629	-
2014	C	GRND	FLAT	DOVER SOLE	DOVR	1,597.4	\$0.45	\$1,572,339	-

* Data has been withheld from this row for confidentiality purposes.
 ** WITHHELD FOR CONFIDENTIALITY includes species not displayable in this report due to confidentiality restrictions. (e)

4. View another report.

Interested in viewing another report? On the **Reports Navigation** panel, click the **Tree** button



and then select another report from the report tree. Repeat step 1-3 to build a new report.

4. Download Reports

PacFIN APEX reports allow users to download a customized report using one of 3 download buttons (CSV, Excel, PDF) located on the upper right corner of the main report window. Each button corresponds to one file format.



1. Export a report to Excel

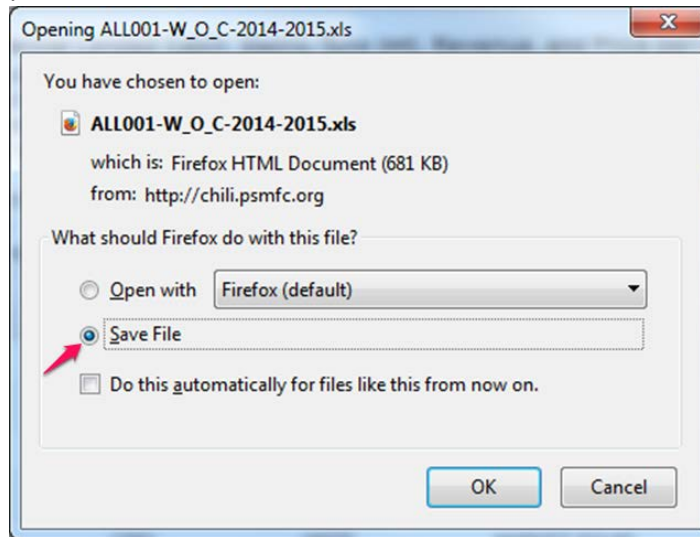
- a. Download the report.

Click the Excel button once. The user will see a message asking whether to save the file or open the file. Depending on the type of browser used, the download message will appear with a different look.

- i. Internet Explorer – user should click the **Save** button to save the excel file to a local directory.



- ii. Firefox – user should check **Save File** radio button to save the excel file to a local directory.



- iii. Chrome – user doesn't get a message as in IE or Firefox. Instead, the file is saved directly to the windows default download folder (i.e., C:\Users\your windows account name\Downloads). When the Excel button is clicked, user should see the download status and Excel file being downloaded on the lower left corner of the browser window.

Species Report: Commercial Landed Catch: Metric-Tons (mt), Revenue, and Price-per-pound (Price/lbs)

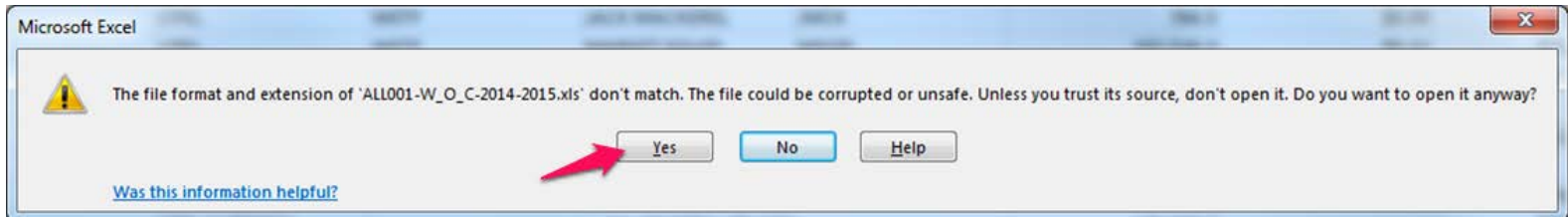
This report was generated using the state agency fish ticket data from the PacFIN comprehensive fish ticket table and at sea observer data. This report includes all U.S catch areas including the Puget Sound, and other inland areas where marine fish are caught. Canadian and Alaskan catches have been excluded. Shoreside reported catches have species and area composition samples applied. On board observers did not distinguish between retained and discarded catch prior to 1997, so at-sea data prior to 1997 is not included. Data that involve fewer than three vessels or dealers have been withheld to preserve confidentiality.

Report run time: June 19th, 2015 12:17am
 Included year(s): 2014 - 2015
 Included agency(ies): Washington, Oregon, and California

Year	Agency	Management Group	Complex	Common Name	Species Code	Round Weight (mt)	Round Price/lbs	Revenue (\$)	Confidential
2014	C	CPEL	...	PACIFIC HERRING	PHRG	2,901.5	\$0.15	\$962,684	-
2014	C	CPEL	... SUBTOTAL	__NO COMPLEX	-	2,901.5	-	\$962,684	-
2014	C	CPEL	WETF	CHUB MACKEREL	CMCK	5,419.9	\$0.10	\$1,226,992	-
2014	C	CPEL	WETF	JACK MACKEREL	JMCK	784.5	\$0.09	\$148,908	-
2014	C	CPEL	WETF	MARKET SQUID	MSQD	102,516.2	\$0.32	\$71,838,379	-
2014	C	CPEL	WETF	NORTHERN ANCHOVY	NANC	10,510.7	\$0.07	\$1,620,434	-
2014	C	CPEL	WETF	PACIFIC BONITO	PBNT	32.2	\$0.35	\$24,732	-
2014	C	CPEL	WETF	PACIFIC SARDINE	PSDN	7,768.4	\$0.12	\$2,003,154	-
2014	C	CPEL	WETF	UNSP. MACKEREL	UMCK	5.8	\$0.48	\$6,160	-
2014	C	CPEL	WETF SUBTOTAL	__ALL WET FISH	-	127,037.7	-	\$76,868,779	-
2014	C	CPEL SUBTOTAL	-	__ALL COASTAL PELAGIC	-	129,939.2	-	\$77,831,463	-
2014	C	CRAB	...	DUNGENESS CRAB	DCRB	8,243.7	\$3.62	\$65,840,791	-
2014	C	CRAB	...	OTHER CRAB	OCRB	49.3	\$1.44	\$156,233	-

* Data has been withheld from this row for confidentiality purposes.
 ** WITHHELD FOR CONFIDENTIALITY includes species not displayable in this report due to confidentiality restrictions.

- b. Read the report in Excel. Find the downloaded file on your computer and then open it. You will get a warning message as shown in the screenshot below. Ignore the message and click **Yes** to open the file. The Excel file reserves all features from online (e.g., title, description, header and footer notes, as well as subtotal/total rows and formatting).



2. Export a report to a CSV file

Click the CSV button once, the APEX report will be exported into a CSV file. Unlike an Excel export, the CSV file only contains the report data, while the report descriptions and notes, and the subtotal/total/grand total rows are not included. The confidential subtotal rows are an exception because the confidential subtotal values are needed for calculating the total landed catch of all species by agency. We expect R users would want to import the CSV *file* into R for analysis. Therefore, we excluded those APEX report features from the CSV file so that users don't have to manually edit the CSV file before importing it into R.

3. Export a report to PDF

Click the PDF button once. The APEX report will be exported to a PDF file. The PDF download button is only available to the reports that are less than 26 columns, because the APEX printing service cannot handle more than 26 columns. PDF export retains the full APEX reporting features as with EXCEL export.