PacFIN Groundfish Sector Criteria

March 28, 2013

The field "dahl_sector" in the PacFIN vessel daily rockfish distributed summary table (VDRFD) contains numeric codes identifying groundfish "sectors." These sectors are meant to identify landings according to fishery components, or sectors, used in management. Sectors are defined through a combination of species composition of landings, gear type, and permit status, among other factors. It should be noted that the results of this coding may differ from other categorizations of landings, such as that developed by the West Coast Groundfish Observer Program in their total mortality reports, because of differences in the underlying data structure (e.g., use of fish ticket data versus vessel summary data) and the procedures used to code the data. The record level for coding data is:

- Sector codes assigned at vessel-day-gear level
- Species composition criteria used in sector coding are calculated on a vessel-day-gear basis (agid+drvid+tdate+grgroup)

Sector codes 1, 2, and 16 are not available in the PacFIN Explorer tool, because the necessary landings data reside in a separate database (NORPAC).

The PFMC trawl rationalization program was implemented in 2011. This introduced individual fishing quota (IFQ) management for trawl-endorsed groundfish limited access permits. The program also allows vessels with these permits to use any legal groundfish gear. To account for this change a new sector was created (sector 20) for the shoreside nontrawl IFQ sector and the procedure for updating the sector field was updated accordingly.

The criteria used to code landings by sector are described below.

Global criteria

- Year ≥ 1994
- Catch is from a PFMC area
- Sectors 1-15 PARGRP=C
- Sectors 16-19 PARGRP=I
- Sectors 01, 02, and 16 AGID = N (as noted)
- Sectors 03-15, 17-19 AGID = W, O, C

1: Whiting Catcher Processor Sector

- AGID =N
- Gear Group is TWL
- Valid trawl endorsement
- DRVID=PROC

2: Whiting Mothership Sector

- AGID =N
- Gear Group is TWL
- Valid trawl endorsement
- DRVID not equal to PROC

3: Shoreside Whiting Sector (Shoreside IFQ Trawl)

- Removal type (ftl.removal_type) not R (research)
- Whiting (PWHT) RWT >= 50% total vessel-day-gear RWT
- Gear Group is TWL
- Valid trawl endorsement

4: Shoreside Nonwhiting Trawl Sector (Shoreside IFQ Trawl)

- Removal type (ftl.removal_type) not E or R (EFP, research)
- Whiting (PWHT) RWT < 50% total vessel-day-gear RWT
- Nonwhiting groundfish (sp.mgrp=GRND and sp.spid <> PWHT) RWT >= 50% total vessel-day-gear RWT
- Groundfish (sp.mgrp=GRND) RWT > California halibut (CHLB, CHL1) RWT
- Pink shrimp, ridgbeback prawn, or spot prawn (PHSP, RPRW, SPRW) RWT < 100 lbs
- Gear Group is TWL
- Valid trawl endorsement

5: Nearshore Sector (Limited Entry)

- Gear Group is HKL or POT
- Removal type (ftl.removal_type) not E or R (EFP, research)
- Sum of nearshore species[1] vessel-day-gear RWT >0
- Sablefish RWT = 0
- Groundfish (sp.mgrp=GRND) >= 50% of total vessel-day-gear RWT.[2]
- Valid longline endorsement or pot gear endorsement.
- IFQ landing flag (ifq_landing) = 'N'[3]

6: Nearshore Sector (Open Access)

- Gear Group = HKL or POT
- Removal type (ftl.removal_type) not E or R (EFP, research)
- Sum of nearshore species vessel-day-gear RWT >0
- Sablefish RWT = 0
- Groundfish (sp.mgrp=GRND) >= 50% of total vessel-day-gear RWT
- No valid longline endorsement or pot gear endorsement
- IFQ landing flag (ifq_landing) = 'N'

7: Non Nearshore Sector (Limited Entry)

- Gear Group is HKL or POT
- Removal type (ftl.removal_type) not E or R (EFP, research)
- Sum of nearshore species RWT =0
- Sablefish RWT >0
- Groundfish (sp.mgrp=GRND) >= 50% of total vessel-day-gear RWT
- Valid longline endorsement or pot gear endorsement

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[1] Nearshore rockfish species as defined by WCGOP spid list, see Table 2.
[2] This is equivalent to Groundfish (sp.mgrp=GRND) >= nongroundfish (all other sp.mgrp) by weight.
[3] The ifq_landing code is assigned at the fish ticket level (ft table). This means that species not managed under the Groundfish Shoreside IFQ Program are flagged if landed with IFQ species.

- IFQ landing flag (ifq_landing) = 'N'

8: Non Nearshore Sector (Open Access)

- Gear Group = HKL or POT
- Removal type (ftl.removal_type) not E or R (EFP, research)
- Sum of nearshore species RWT =0
- Sum of sablefish vessel-day-gear RWT >0
- Groundfish (sp.mgrp=GRND) >= 50% of total vessel-day-gear RWT
- No valid longline endorsement or pot gear endorsement
- IFQ landing flag (ifq_landing) = 'N'

9: Non Nearshore Non Sablefish Sector (Limited Entry)

- Gear Group is HKL or POT
- Removal type (ftl.removal_type) not E or R (EFP, research)
- Sum of nearshore species RWT =0
- Sablefish RWT =0
- Groundfish (sp.mgrp=GRND) >= 50% of total vessel-day-gear RWT
- Valid longline endorsement or pot gear endorsement
- IFQ landing flag (ifq_landing) = 'N'

10: Non Nearshore Non Sablefish Sector (Open Access)

- Gear Group = HKL or POT
- Removal type (ftl.removal_type) not E or R (EFP, research)
- Sum of nearshore species RWT =0
- Sablefish =0
- Groundfish (sp.mgrp=GRND) >= 50% of total vessel-day-gear RWT
- No valid longline endorsement or pot gear endorsement
- IFQ landing flag (ifq_landing) = 'N'

11: Non Fixed Gear Directed Open Access Sector

- Gear Group = NET or TLS
- Removal type (ftl.removal_type) not E or R (EFP, research)
- Groundfish (sp.mgrp=GRND) RWT >= 50% of total vessel-day-gear RWT
- IFQ landing flag (ifq_landing) = 'N'

12: Incidental Open Access Sector

- Removal type (ftl.removal_type) not E or R (EFP, research)
- Groundfish (sp.mgrp=GRND) RWT > 0 and <50% of total vessel-day-gear RWT
- Gear Group = HKL or POT or NET or TLS
- No valid longline endorsement or pot gear endorsement
- IFQ landing flag (ifq_landing) = 'N'

13: Exempted Trawl Sector (With Groundfish Landings)

- Removal type (ftl.removal_type) not E or R (EFP, research)
- Gear group is TWL or TWS
- Groundfish (sp.mgrp=GRND) RWT > 0

- California halibut (CHLB, CHL1) RWT > 0 or pink shrimp, ridgebeback prawn, or spot prawn (PSHP, RPRW, SPRW) RWT => 100 lbs
- No valid trawl endorsement

14: EFP and Miscellaneous Sector
- Groundfish (sp.mgrp=GRND) RWT > 0
- *Landings not accounted for in other sectors*

15: Commercial Nongroundfish Sector
- groundfish (sp.mgrp=GRND) RWT = 0
- IFQ landing flag (ifq_landing) = 'N'

16: Treaty Mothership Whiting Sector
- AGID =N
- Whiting (PWHT) RWT >= 50% total vessel-day-gear RWT
- Gear Group is TWL
- PROC is a mothership

17: Treaty Shoreside Whiting Sector
- Whiting (PWHT) RWT >= 50% total vessel-day-gear RWT
- Gear Group is TWL

18: Treaty Shoreside Nonwhiting Groundfish Sector
- Whiting (PWHT) RWT < 50% total vessel-day-gear RWT
- Groundfish (sp.mgrp=GRND) RWT > 0

19: Treaty Nongroundfish Sector
- Groundfish (sp.mgrp=GRND) RWT = 0

20: Shoreside IFQ Nontrawl Sector[4]
- Gear Group not TWL
- Removal type (ftl.removal_type) not E or R (EFP, research)
- IFQ landing flag (ifq_landing) = 'Y'

XX:
- Remaining records not accounted for in sectors

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[4] The vdrfd.dahl_sector column is coded by means of a SQL searched CASE expression. In a CASE expression the conditions are evaluated in order. When a condition evaluates to TRUE, the corresponding result is returned, and the execution of CASE logic ends. Therefore the order of each clause in the expression is relevant. The clause for Sector 20 is placed between those for Sector 12 and Sector 13.

Table 1. Sector codes.

Code	Sector Name
1	Whiting Catcher Processor
2	Whiting Mothership
3	Shoreside Whiting (Shoreside IFQ Trawl)
4	Shoreside Nonwhiting Trawl (Shoreside IFQ Trawl)
5	Nearshore (Limited Entry)
6	Nearshore (Open Access)
7	Non Nearshore (Limited Entry)
8	Non Nearshore (Open Access)
9	Non Nearshore Non Sablefish (Limited Entry)
10	Non Nearshore Non Sablefish (Open Access)
11	Non Fixed Gear Directed Open Access
12	Incidental Open Access
13	Exempted Trawl (With Groundfish Landings)
14	EFP and Miscellaneous
15	Commercial Nongroundfish
16	Treaty Mothership Whiting
17	Treaty Shoreside Whiting
18	Treaty Shoreside Nonwhiting Groundfish
19	Treaty Nongroundfish
20	Shoreside IFQ Nontrawl Sector

Table 2. Nearshore species list. (Source: M. Bellman, Heery, E., Jannot, J., and Majewski, J. 2010. *Explicit Retrieval and Processing of PacFIN Data Used in Total Mortality Estimation*. FRAM, NWFSC, NMFS.)

SPID	Common Name	SPID	Common Name
BISC	BROWN IRISH SCULPIN	KLPG	KELP GREENLING
BLCK	BLACK ROCKFISH	KLPR	KELP ROCKFISH
BLK1	NOM. BLACK ROCKFISH	NSHR	NORTHERN NEAR-SHORE ROCKFISH
BLU1	NOM. BLUE ROCKFISH	NUSR	NOR. UNSP. NEAR-SHORE ROCKFISH
BLUR	BLUE ROCKFISH	OLV1	NOM. OLIVE ROCKFISH
BRW1	NOM. BROWN ROCKFISH	OLVE	OLIVE ROCKFISH
BRWN	BROWN ROCKFISH	QLB1	NOM. QUILLBACK ROCKFISH
BSCL	BUFFALO SCULPIN	QLBK	QUILLBACK ROCKFISH
BYEL	BLACK-AND-YELLOW ROCKFISH	RCK2	UNSP. BOLINA RCKFSH
BYL1	NOM. BLACK-AND-YELLOW ROCKFISH	RCK7	UNSP. GOPHER RCKFSH
CBZ1	NOM. CABEZON	RCK9	BLACK+BLUE ROCKFISH
CBZN	CABEZON	RSCL	RED IRISH SCULPIN
CHN1	NOM. CHINA ROCKFISH	SCOR	CALIFORNIA SCORPIONFISH
CHNA	CHINA ROCKFISH	SCR1	NOM. CALIF. SCORPIONFISH
CLC1	NOM. CALICO ROCKFISH	SHP1	NOM. CALIFORNIA SHEEPHEAD
CLCO	CALICO ROCKFISH	SHPD	CALIFORNIA SHEEPHEAD
COP1	NOM. COPPER ROCKFISH	SSHR	SOUTHERN NEAR-SHORE ROCKFISH
COPP	COPPER ROCKFISH	SSRD	Deep So. Near-shore RF
GPH1	NOM. GOPHER ROCKFISH	SSRS	Shallow So. Near-shore RF
GPHR	GOPHER ROCKFISH	SUSR	SOU. UNSP. NEAR-SHORE ROCKFISH
GRAS	GRASS ROCKFISH	TRE1	NOM. TREEFISH
GRS1	NOM. GRASS ROCKFISH	TREE	TREEFISH
KGL1	NOM. KELP GREENLING	UDNR	UNSP. DEEP NEAR-SHORE RF
KLP1	NOM. KELP ROCKFISH	UGLG	UNSP. GREENLING
		USHR	UNSP. NEAR-SHORE ROCKFISH