

## Errata Sheet for GOA Trawl Bycatch Management (Item C-7) September 29, 2014

### 1 Updated allocated species information

This section of the errata sheet is an update to the sections of the program framework discussion paper that define which species might be allocated. Information regarding Table 23 and Table 24 is presented first, and then a substitute for Table 1 is presented.

#### Errata for Section 4.3.1 (Primary Species, p. 76)

NMFS Alaska Region Office (AKRO) Sustainable Fisheries (SF) staff recommends allocating all target species included in the Council’s April 2014 motion. NMFS staff also recommends that the Council consider allocating one species and one species group in the Central GOA that were not included in the April 2014 motion. A summary of these additional recommended species is included in Table 23. SF staff recommends the Council also consider allocating **Central GOA flathead sole** and **Central GOA shallow water flatfish** because most other Central GOA flatfish species are being considered for allocation. If the Council allocates West Yakutat Pacific ocean perch, then NMFS AKRO SF staff recommends adding West Yakutat dusky rockfish, since the harvest of the two species is closely linked. SF staff also recommends allocating Western GOA flatfish. Justification for considering allocating those species is presented later in this section.

**Table 23 Additional NMFS AKRO SF recommendations for allocated target species in the GOA Trawl Bycatch Management Program (in reference to Part 5 of the Council’s April motion) – Reference to p. 76**

Target species	NMFS recommends allocating (Yes/No)
<b>CGOA flathead sole</b>	Yes
<b>CGOA shallow water flatfish</b>	Yes
<b>WY dusky rockfish</b>	Yes - If WY POP is allocated
<b>WGOA flatfish: rex sole, flathead sole, arrowtooth flounder, deep water flatfish, and shallow water flatfish</b>	Yes

Note: Species in bold are recommendations to allocate species that were not included in the Council’s April motion.

**Errata for Section 4.3.1.1 (Additional primary species suggested by NMFS SF for allocation, p. 78)**

**Central GOA flathead sole**

NMFS recommends that the Council consider allocating Central GOA (CGOA) flathead sole as a target species under the proposed GOA trawl LLP. NMFS notes that the Council is proposing to allocate most other flatfish species in the Central GOA and fishing effort may increase for CGOA flathead sole if it is not allocated in the GOA trawl LLP program. Management experience with LAPPs in Alaska indicates that fishing effort can increase for species that are not allocated to the program as vessels seek new opportunities outside of the program. If the increase in effort is unpredictable or is likely to be significant enough to result in TAC overages, NMFS may close the directed fishery for a species or species group to avoid exceeding the TAC, and instead manage the species or species group under maximum retainable amounts (MRAs).

*[The rest of Section 4.3.1.1 follows as drafted in the original document]*

**Errata for beginning of Section 4.3.2 (Secondary Species) and Table 24 (p. 81):**

**Table 24 NMFS AKRO SF staff recommendation for allocating secondary species (in reference to Part 5 of the Council’s April motion) – Reference to p. 81**

Secondary species	NMFS recommends allocating (Yes/No)
CGOA skates (big and longnose)	No
<b>WY other rockfish</b>	Yes

Note: Species in bold is a recommendation to allocate a species that was not included in the Council’s April motion.

NMFS recommends allocating all secondary species included in the Council’s April motion except for Central GOA big skate and longnose skates. NMFS is concerned that skate allocations could be limiting due to the amount of Incidental Catch Allowance needed for the fixed gear fisheries. In addition, the skate catch history on which the allocations would be based includes catch by vessels that “topped off” on skates up to the MRA. Leaving valuable secondary species unallocated can create an incentive to top off on those species, which is a management concern if the species is fully harvested or have experienced overages in recent years. However, the Council is currently considering a separate action to reduce big and longnose skate MRAs in the GOA. NMFS anticipates implementation of this action would reduce the incentive to top off on skates.

NMFS also recommends the Council consider allocating the “other rockfish” species complex in the WY area. If the other rockfish species are not allocated in the GOA trawl LAPP program, fishing effort may increase for these species as vessels seek new opportunities outside of the program. If the increase in effort is unpredictable or is likely to be significant enough to result in TAC or ABC overages, NMFS may close the species or species group for directed fishing to avoid overages. NMFS also suggests that further analysis of the GOA trawl LAPP program consider the management impacts of potential increases in harvest of thornyhead rockfish, shortraker rockfish, and rougheye/blackspotted rockfish in the WY area following implementation of the program.

*[The rest of Section 4.3.2 follows as written in original document]*

**Revised Table 1 from Section 1.5.4 (Allocations) of original document (p. 13):**

Species	Area	CV	C/P
Pollock (Closed to all offshore)	Shumagin (610)	C	
	Chirikof (620)	C	
	Kodiak (630)	C	
	WYK (640)	C	
Pacific cod (Closed Western/CP/Trawl)	W	C	
	C	C	
	E		
Sablefish (Closed to Trawl)	W	C	C
	C	C	C
	WYK	C	C
Shallow-water Flatfish	W	R	R
	C	R	R
	WYK		
Deep-water Flatfish	W	R	R
	C	C	C
	WYK		
Rex Sole	W	R	R
	C	C	C
	WYK		
Arrowtooth Flounder	W	R	R
	C	C	C
	WYK		
Flathead Sole	W	R	R
	C	R	R
	WYK		
Pacific Ocean Perch	W	C	C
	C		
	WYK	C	C
Northern Rockfish	W	C	C
	C		
	E		
Shortraker Rockfish ( (closed except CG Rockfish Cooperatives))	W	C	C
	C	C	C
	E		
Dusky Rockfish (pelagic shelf rockfish)	W	C	C
	C		
	WYK	R	R
Rougheye and Blackspotted Rockfish (closed except CG Rockfish Cooperatives)	W	C	C
	C	C	C
	E		
Thornyheads (Closed)	W	C	C
	C	C	C
	E		
Other Rockfish (Closed)	W	C	C
	C	C	C
	WYK	R	R
Atka Mackerel (Closed)	GW		
Big Skates (Closed)	W		
	C	N	N
	E		
Longnose Skates (Closed)	W		
	C	N	N
	E		
Other Skates (Closed)	GW		
Sculpins	GW		
Sharks (Closed)	GW		
Squids (Closed)	GW		
Octopus (Closed)	GW		

Note: "C" means recommended in Council motion, "R" is recommended by the Region, and "N" is recommended by the Council but not recommended by the Region. Shaded cells means closed to directed fishing.

## 2 Updated data

This section presents nine tables. The first three tables show percentages of halibut PSC mortality, Chinook salmon PSC, and groundfish catch during the three qualifying time periods proposed in the Council's April 2014 motion. Each of the first three tables represents a qualifying period. For example, Table 1 shows the 2003 through 2012 qualifying period. The top section of that table shows halibut mortality, broken out by CPs and CVs. The GOA Total column for CP (28.24%) and CV (71.76%) shows the sector-level split of trawl halibut mortality if those years were used and if the split was based on sector usage (as proposed). Data in those first three tables further breaks down PSC and groundfish catch by target fishery and area. The GOA Total cell for each AKFIN target species shows the portion of PSC or catch taken in each target fishery, by harvest mode. For example, 10.07% of the GOA halibut PSC mortality was taken by CPs in the arrowtooth flounder fishery. Information on the percent of halibut PSC taken by CPs in the WG is shown in the CP Total row of the WG column (6.40%). **Table 2** and Table 3 show similar information for the proposed qualifying periods of 2007 through 2012 and 2008 through 2012.

Table 4 through Table 9 show the amount of halibut PSC mortality, Chinook salmon PSC, groundfish catch, and PSC rates that were reported during the three qualifying year periods. CPs and CVs are presented in separate tables. The information in each of these tables is similar to the data presented in Tables 16 and 17 of the original document (pp. 69-70) with two main differences: (1) data are aggregated by proposed qualifying years as opposed to showing annual data, and (2) additional AKFIN targets are included.

The source of all data in this section is AKFIN summaries of NMFS catch accounting and PSC data. Tables begin on the next page.

**Table 1 Percentage of PSC and Groundfish by area, target, and sector (2003 through 2012)**

Data Group	Sector	Target	Area			
			WG	CG	WY	GOA Total
Halibut Mortality	CP	Arrowtooth Flounder	2.20%	7.87%	0.00%	10.07%
		Atka Mackerel	0.00%	0.00%	0.00%	0.01%
		Flathead Sole	1.10%	1.26%	0.00%	2.36%
		Other Species	0.01%	0.05%	0.00%	0.06%
		Pacific Cod	0.47%	0.78%	0.00%	1.25%
		Pollock	0.01%	0.03%	0.00%	0.04%
		Rex Sole - GOA	0.50%	7.72%	0.00%	8.21%
		Rockfish	1.91%	1.44%	0.18%	3.53%
		Sablefish	0.00%	0.00%	0.01%	0.01%
		Shallow Water Flatfish - GOA	0.20%	2.50%	0.00%	2.71%
	CP Total		6.40%	21.66%	0.18%	28.24%
	CV	Arrowtooth Flounder	0.00%	15.57%	0.00%	15.58%
		Deep Water Flatfish - GOA	0.00%	0.34%	0.08%	0.42%
		Flathead Sole	0.02%	1.34%	0.00%	1.36%
		Other Species	0.00%	0.18%	0.00%	0.18%
		Pacific Cod	3.02%	21.16%	0.00%	24.18%
		Pollock	0.10%	3.02%	0.01%	3.13%
		Rex Sole - GOA	0.00%	0.32%	0.00%	0.32%
		Rockfish	0.00%	2.89%	0.03%	2.92%
		Sablefish	0.00%	0.00%	0.00%	0.00%
Shallow Water Flatfish - GOA		0.01%	23.66%	0.00%	23.67%	
CV Total		3.16%	68.48%	0.12%	71.76%	
Chinook Salmon	CP	Arrowtooth Flounder	1.77%	2.38%	0.00%	4.15%
		Atka Mackerel	0.01%	0.00%	0.00%	0.01%
		Flathead Sole	0.64%	0.39%	0.00%	1.02%
		Other Species	0.00%	0.00%	0.00%	0.00%
		Pacific Cod	0.24%	0.06%	0.00%	0.30%
		Pollock	0.02%	0.00%	0.00%	0.02%
		Rex Sole - GOA	0.17%	5.56%	0.00%	5.73%
		Rockfish	0.42%	0.32%	0.28%	1.01%
		Sablefish	0.00%	0.00%	0.00%	0.00%
		Shallow Water Flatfish - GOA	0.00%	0.02%	0.00%	0.03%
	CP Total		3.26%	8.73%	0.28%	12.27%
	CV	Arrowtooth Flounder	0.02%	4.09%	0.00%	4.12%
		Deep Water Flatfish - GOA	0.00%	0.00%	0.00%	0.00%
		Flathead Sole	0.01%	0.27%	0.00%	0.27%
		Other Species	0.00%	0.00%	0.00%	0.00%
		Pacific Cod	0.23%	2.82%	0.00%	3.05%
		Pollock	24.97%	51.59%	0.80%	77.36%
		Rex Sole - GOA	0.00%	0.28%	0.00%	0.28%
		Rockfish	0.00%	0.78%	0.01%	0.79%
		Sablefish	0.00%	0.00%	0.00%	0.00%
Shallow Water Flatfish - GOA		0.00%	1.85%	0.00%	1.85%	
CV Total		25.23%	61.69%	0.81%	87.73%	
Groundfish	CP	Arrowtooth Flounder	0.99%	3.91%	0.00%	4.90%
		Atka Mackerel	0.00%	0.01%	0.00%	0.01%
		Flathead Sole	0.32%	0.38%	0.00%	0.70%
		Other Species	0.00%	0.02%	0.00%	0.02%
		Pacific Cod	0.18%	0.15%	0.00%	0.33%
		Pollock	0.00%	0.01%	0.00%	0.02%
		Rex Sole - GOA	0.17%	1.93%	0.00%	2.10%
		Rockfish	4.31%	2.70%	1.10%	8.10%
		Sablefish	0.00%	0.00%	0.02%	0.02%
		Shallow Water Flatfish - GOA	0.03%	0.32%	0.00%	0.35%
	CP Total		6.01%	9.44%	1.12%	16.57%
	CV	Arrowtooth Flounder	0.00%	8.52%	0.00%	8.52%
		Deep Water Flatfish - GOA	0.00%	0.15%	0.01%	0.16%
		Flathead Sole	0.01%	0.28%	0.00%	0.29%
		Other Species	0.00%	0.11%	0.00%	0.11%
		Pacific Cod	2.77%	7.96%	0.00%	10.72%
		Pollock	16.74%	36.94%	1.21%	54.89%
		Rex Sole - GOA	0.00%	0.16%	0.00%	0.16%
		Rockfish	0.03%	3.09%	0.19%	3.31%
		Sablefish	0.00%	0.00%	0.00%	0.00%
Shallow Water Flatfish - GOA		0.00%	5.27%	0.00%	5.27%	
CV Total		19.55%	62.46%	1.41%	83.43%	

**Table 2 Percentage of PSC and Groundfish by area, target, and sector (2007 through 2012)**

Data Group	Sector	Target	Area			
			WG	CG	WY	Total
Halibut Mortality	CP	Arrowtooth Flounder	1.84%	7.83%	0.00%	9.67%
		Atka Mackerel	0.00%	0.01%	0.00%	0.01%
		Flathead Sole	0.80%	1.98%	0.00%	2.78%
		Other Species	0.00%	0.00%	0.00%	0.00%
		Pacific Cod	0.38%	0.18%	0.00%	0.56%
		Pollock	0.02%	0.05%	0.00%	0.07%
		Rex Sole - GOA	0.24%	8.57%	0.00%	8.80%
		Rockfish	2.17%	0.46%	0.18%	2.81%
		Sablefish	0.00%	0.00%	0.00%	0.00%
		Shallow Water Flatfish - GOA	0.04%	0.81%	0.00%	0.85%
	CP Total		5.49%	19.88%	0.18%	25.55%
	CV	Arrowtooth Flounder	0.00%	18.97%	0.00%	18.97%
		Deep Water Flatfish - GOA	0.00%	0.00%	0.00%	0.00%
		Flathead Sole	0.00%	1.53%	0.00%	1.53%
		Other Species	0.00%	0.01%	0.00%	0.01%
		Pacific Cod	3.65%	19.37%	0.00%	23.02%
		Pollock	0.15%	4.43%	0.02%	4.60%
		Rex Sole - GOA	0.00%	0.53%	0.00%	0.53%
		Rockfish	0.00%	0.06%	0.04%	0.10%
		Sablefish	0.00%	0.00%	0.00%	0.00%
Shallow Water Flatfish - GOA		0.00%	25.68%	0.00%	25.68%	
CV Total		3.80%	70.58%	0.07%	74.45%	
Chinook Salmon	CP	Arrowtooth Flounder	0.57%	2.67%	0.00%	3.24%
		Atka Mackerel	0.01%	0.00%	0.00%	0.01%
		Flathead Sole	0.14%	0.56%	0.00%	0.70%
		Other Species	0.00%	0.00%	0.00%	0.00%
		Pacific Cod	0.26%	0.00%	0.00%	0.26%
		Pollock	0.03%	0.00%	0.00%	0.03%
		Rex Sole - GOA	0.04%	5.13%	0.00%	5.17%
		Rockfish	0.61%	0.22%	0.34%	1.17%
		Sablefish	0.00%	0.00%	0.00%	0.00%
		Shallow Water Flatfish - GOA	0.00%	0.03%	0.00%	0.03%
	CP Total		1.67%	8.61%	0.34%	10.62%
	CV	Arrowtooth Flounder	0.00%	5.55%	0.00%	5.55%
		Deep Water Flatfish - GOA	0.00%	0.00%	0.00%	0.00%
		Flathead Sole	0.00%	0.00%	0.00%	0.00%
		Other Species	0.00%	0.00%	0.00%	0.00%
		Pacific Cod	0.14%	1.69%	0.00%	1.82%
		Pollock	29.01%	49.39%	0.79%	79.19%
		Rex Sole - GOA	0.00%	0.41%	0.00%	0.41%
		Rockfish	0.00%	0.02%	0.02%	0.04%
		Sablefish	0.00%	0.00%	0.00%	0.00%
Shallow Water Flatfish - GOA		0.00%	2.35%	0.00%	2.35%	
CV Total		29.15%	59.42%	0.81%	89.38%	
Groundfish	CP	Arrowtooth Flounder	0.63%	4.27%	0.00%	4.90%
		Atka Mackerel	0.00%	0.02%	0.00%	0.02%
		Flathead Sole	0.23%	0.52%	0.00%	0.75%
		Other Species	0.00%	0.00%	0.00%	0.00%
		Pacific Cod	0.18%	0.04%	0.00%	0.23%
		Pollock	0.00%	0.02%	0.00%	0.03%
		Rex Sole - GOA	0.11%	2.17%	0.00%	2.28%
		Rockfish	4.90%	1.29%	1.14%	7.33%
		Sablefish	0.00%	0.00%	0.02%	0.02%
		Shallow Water Flatfish - GOA	0.00%	0.34%	0.00%	0.35%
	CP Total		6.06%	8.68%	1.16%	15.91%
	CV	Arrowtooth Flounder	0.00%	10.36%	0.00%	10.36%
		Deep Water Flatfish - GOA	0.00%	0.07%	0.00%	0.07%
		Flathead Sole	0.00%	0.26%	0.00%	0.26%
		Other Species	0.00%	0.01%	0.00%	0.01%
		Pacific Cod	2.96%	8.36%	0.00%	11.32%
		Pollock	15.28%	38.84%	1.35%	55.47%
		Rex Sole - GOA	0.00%	0.24%	0.00%	0.24%
		Rockfish	0.04%	0.27%	0.26%	0.56%
		Sablefish	0.00%	0.00%	0.00%	0.00%
Shallow Water Flatfish - GOA		0.00%	5.79%	0.00%	5.79%	
CV Total		18.27%	64.21%	1.61%	84.09%	

**Table 3 Percentage of PSC and Groundfish by area, target, and sector (2008 through 2012)**

Data Group	Sector	Target	Area				
			WG	CG	WY	Total	
Halibut Mortality	CP	Arrowtooth Flounder	1.10%	8.34%	0.00%	9.44%	
		Atka Mackerel	0.01%	0.01%	0.00%	0.01%	
		Flathead Sole	0.80%	2.36%	0.00%	3.16%	
		Other Species	0.00%	0.00%	0.00%	0.00%	
		Pacific Cod	0.35%	0.22%	0.00%	0.57%	
		Pollock	0.02%	0.06%	0.00%	0.08%	
		Rex Sole - GOA	0.16%	9.01%	0.00%	9.17%	
		Rockfish	2.19%	0.45%	0.16%	2.81%	
		Sablefish	0.00%	0.00%	0.00%	0.00%	
	Shallow Water Flatfish - GOA	0.02%	0.96%	0.00%	0.99%		
	CP Total			4.65%	21.42%	0.16%	26.23%
	CV	Arrowtooth Flounder	0.00%	20.28%	0.00%	20.28%	
		Deep Water Flatfish - GOA	0.00%	0.00%	0.00%	0.00%	
		Flathead Sole	0.00%	1.82%	0.00%	1.82%	
		Other Species	0.00%	0.02%	0.00%	0.02%	
		Pacific Cod	3.94%	18.90%	0.00%	22.84%	
		Pollock	0.17%	4.47%	0.03%	4.67%	
		Rex Sole - GOA	0.00%	0.64%	0.00%	0.64%	
		Rockfish	0.00%	0.04%	0.04%	0.08%	
		Sablefish	0.00%	0.00%	0.00%	0.00%	
Shallow Water Flatfish - GOA	0.00%	23.42%	0.00%	23.42%			
CV Total			4.11%	69.58%	0.07%	73.77%	
Chinook Salmon	CP	Arrowtooth Flounder	0.70%	3.05%	0.00%	3.75%	
		Atka Mackerel	0.01%	0.00%	0.00%	0.01%	
		Flathead Sole	0.18%	0.71%	0.00%	0.89%	
		Other Species	0.00%	0.00%	0.00%	0.00%	
		Pacific Cod	0.19%	0.00%	0.00%	0.19%	
		Pollock	0.04%	0.00%	0.00%	0.04%	
		Rex Sole - GOA	0.03%	6.07%	0.00%	6.10%	
		Rockfish	0.77%	0.25%	0.43%	1.45%	
		Sablefish	0.00%	0.00%	0.00%	0.00%	
	Shallow Water Flatfish - GOA	0.00%	0.04%	0.00%	0.04%		
	CP Total			1.92%	10.13%	0.43%	12.47%
	CV	Arrowtooth Flounder	0.00%	6.40%	0.00%	6.40%	
		Deep Water Flatfish - GOA	0.00%	0.00%	0.00%	0.00%	
		Flathead Sole	0.00%	0.01%	0.00%	0.01%	
		Other Species	0.00%	0.00%	0.00%	0.00%	
		Pacific Cod	0.17%	1.85%	0.00%	2.02%	
		Pollock	34.74%	40.14%	0.99%	75.87%	
		Rex Sole - GOA	0.00%	0.53%	0.00%	0.53%	
		Rockfish	0.00%	0.02%	0.02%	0.04%	
		Sablefish	0.00%	0.00%	0.00%	0.00%	
Shallow Water Flatfish - GOA	0.00%	2.67%	0.00%	2.67%			
CV Total			34.91%	51.61%	1.01%	87.53%	
Groundfish	CP	Arrowtooth Flounder	0.50%	4.35%	0.00%	4.85%	
		Atka Mackerel	0.00%	0.01%	0.00%	0.01%	
		Flathead Sole	0.19%	0.57%	0.00%	0.76%	
		Other Species	0.00%	0.00%	0.00%	0.00%	
		Pacific Cod	0.16%	0.05%	0.00%	0.21%	
		Pollock	0.01%	0.02%	0.00%	0.03%	
		Rex Sole - GOA	0.09%	2.15%	0.00%	2.24%	
		Rockfish	4.62%	1.17%	1.13%	6.91%	
		Sablefish	0.00%	0.00%	0.02%	0.02%	
	Shallow Water Flatfish - GOA	0.00%	0.39%	0.00%	0.39%		
	CP Total			5.58%	8.71%	1.15%	15.44%
	CV	Arrowtooth Flounder	0.00%	10.33%	0.00%	10.33%	
		Deep Water Flatfish - GOA	0.00%	0.08%	0.00%	0.08%	
		Flathead Sole	0.00%	0.29%	0.00%	0.29%	
		Other Species	0.00%	0.01%	0.00%	0.01%	
		Pacific Cod	2.81%	8.53%	0.00%	11.34%	
		Pollock	15.06%	39.84%	1.53%	56.44%	
		Rex Sole - GOA	0.00%	0.27%	0.00%	0.27%	
		Rockfish	0.03%	0.23%	0.25%	0.51%	
		Sablefish	0.00%	0.00%	0.00%	0.00%	
Shallow Water Flatfish - GOA	0.00%	5.29%	0.00%	5.29%			
CV Total			17.91%	64.87%	1.78%	84.56%	

**Table 4 PSC and Groundfish by vessel mode (CP), target fishery, area, and qualifying period (2008 through 2012)**

	Target	Data	2008 through 2012			
			WG	CG	WY	Total
CP	Arrowtooth Flounder	Halibut Mortality (mt)	109	714	0	823
		Chinook Salmon (# fish)	966	3,483	0	4,449
		Groundfish (mt)	3,850	26,745	0	30,595
		Halibut Rate (mort/gfish)	0.028	0.027		0.027
		Chinook Rate (#fish/gfish)	0.251	0.130		0.145
	Atka Mackerel	Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	0	0	0
		Halibut Rate (mort/gfish)				
		Chinook Rate (#fish/gfish)				
	Flathead Sole	Halibut Mortality (mt)	61	223	0	284
		Chinook Salmon (# fish)	212	483	0	695
		Groundfish (mt)	1,037	3,970	0	5,007
		Halibut Rate (mort/gfish)	0.059	0.056		0.057
		Chinook Rate (#fish/gfish)	0.204	0.122		0.139
	Other Species	Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	0	0	0
		Halibut Rate (mort/gfish)				
		Chinook Rate (#fish/gfish)				
	Pacific Cod	Halibut Mortality (mt)	297	1,671	0	1,968
		Chinook Salmon (# fish)	213	2,200	0	2,414
		Groundfish (mt)	15,932	53,124	0	69,056
		Halibut Rate (mort/gfish)	0.019	0.031		0.028
		Chinook Rate (#fish/gfish)	0.013	0.041		0.035
	Pollock	Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	0	183	183
		Halibut Rate (mort/gfish)			0.000	0.000
		Chinook Rate (#fish/gfish)			0.000	0.000
	Rex Sole - GOA	Halibut Mortality (mt)	12	759	0	771
		Chinook Salmon (# fish)	0	6,179	0	6,179
		Groundfish (mt)	665	14,203	0	14,869
		Halibut Rate (mort/gfish)	0.018	0.053		0.052
		Chinook Rate (#fish/gfish)	0.000	0.435		0.416
	Rockfish	Halibut Mortality (mt)	193	42	16	250
		Chinook Salmon (# fish)	1,059	152	591	1,802
		Groundfish (mt)	32,242	8,645	6,951	47,837
		Halibut Rate (mort/gfish)	0.006	0.005	0.002	0.005
		Chinook Rate (#fish/gfish)	0.033	0.018	0.085	0.038
	Sablefish	Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	0	183	183
		Halibut Rate (mort/gfish)			0.000	0.000
		Chinook Rate (#fish/gfish)			0.000	0.000
	Shallow Water Flatfish - GOA	Halibut Mortality (mt)	2	58	0	60
		Chinook Salmon (# fish)	0	55	0	55
		Groundfish (mt)	12	1,315	0	1,327
		Halibut Rate (mort/gfish)	0.196	0.044		0.046
		Chinook Rate (#fish/gfish)	0.000	0.042		0.041
	Total	Halibut Mortality (mt)	412	1,820	16	2,248
		Chinook Salmon (# fish)	2,483	10,355	591	13,429
		Groundfish (mt)	39,056	55,328	7,135	101,519
		Halibut Rate (mort/gfish)	0.011	0.033	0.002	0.022
		Chinook Rate (#fish/gfish)	0.064	0.187	0.083	0.132



**Table 5 PSC and Groundfish by vessel mode (CV), target fishery, area, and qualifying period (2008 through 2012)**

CV	Target		2008 through 2012			
			WG	CG	WY	Total
Arrowtooth Flounder		Halibut Mortality (mt)	0	1,767	0	1,767
		Chinook Salmon (# fish)	0	5,497	0	5,497
		Groundfish (mt)	0	67,053	0	67,053
		Halibut Rate (mort/gfish)		0.026		0.026
		Chinook Rate (#fish/gfish)		0.082		0.082
Deep Water Flatfish - GOA		Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	511	0	511
		Halibut Rate (mort/gfish)		0.000		0.000
		Chinook Rate (#fish/gfish)		0.000		0.000
Flathead Sole		Halibut Mortality (mt)	0	180	0	180
		Chinook Salmon (# fish)	0	9	0	9
		Groundfish (mt)	0	2,202	0	2,202
		Halibut Rate (mort/gfish)		0.082		0.082
		Chinook Rate (#fish/gfish)		0.004		0.004
Other Species		Halibut Mortality (mt)	0	2	0	2
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	100	0	100
		Halibut Rate (mort/gfish)		0.015		0.015
		Chinook Rate (#fish/gfish)		0.000		0.000
Pacific Cod		Halibut Mortality (mt)	297	1,671	0	1,968
		Chinook Salmon (# fish)	213	2,200	0	2,414
		Groundfish (mt)	15,932	53,124	0	69,056
		Halibut Rate (mort/gfish)	0.019	0.031		0.028
		Chinook Rate (#fish/gfish)	0.013	0.041		0.035
Pollock		Halibut Mortality (mt)	16	290	2	308
		Chinook Salmon (# fish)	45,778	44,246	1,118	91,142
		Groundfish (mt)	107,892	225,271	8,761	341,924
		Halibut Rate (mort/gfish)	0.000	0.001	0.000	0.001
		Chinook Rate (#fish/gfish)	0.424	0.196	0.128	0.267
Rex Sole - GOA		Halibut Mortality (mt)	0	46	0	46
		Chinook Salmon (# fish)	0	366	0	366
		Groundfish (mt)	0	1,393	0	1,393
		Halibut Rate (mort/gfish)		0.033		0.033
		Chinook Rate (#fish/gfish)		0.263		0.263
Rockfish		Halibut Mortality (mt)	0	4	4	8
		Chinook Salmon (# fish)	0	23	29	52
		Groundfish (mt)	264	1,743	1,934	3,941
		Halibut Rate (mort/gfish)	0.000	0.002	0.002	0.002
		Chinook Rate (#fish/gfish)	0.000	0.013	0.015	0.013
Sablefish		Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	1	0	1
		Halibut Rate (mort/gfish)		0.035		0.035
		Chinook Rate (#fish/gfish)		0.000		0.000
Shallow Water Flatfish - GOA		Halibut Mortality (mt)	0	2,190	0	2,190
		Chinook Salmon (# fish)	0	3,197	0	3,197
		Groundfish (mt)	0	36,196	0	36,196
		Halibut Rate (mort/gfish)		0.061		0.061
		Chinook Rate (#fish/gfish)		0.088		0.088
Total		Halibut Mortality (mt)	313	6,148	6	6,467
		Chinook Salmon (# fish)	45,992	55,537	1,147	102,675
		Groundfish (mt)	124,088	387,594	10,695	522,377
		Halibut Rate (mort/gfish)	0.003	0.016	0.001	0.012
		Chinook Rate (#fish/gfish)	0.371	0.143	0.107	0.197

**Table 6 PSC and Groundfish by vessel mode (CP), target fishery, area, and qualifying period (2007 through 2012)**

	Target	Data	2007 through 2012			
			WG	CG	WY	Total
CP	Arrowtooth Flounder	Halibut Mortality (mt)	217	814	0	1,031
		Chinook Salmon (# fish)	1,012	3,982	0	4,994
		Groundfish (mt)	5,473	30,670	0	36,143
		Halibut Rate (mort/gfish)	0.040	0.027		0.029
		Chinook Rate (#fish/gfish)	0.185	0.130		0.138
	Atka Mackerel	Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	64	0	64
		Halibut Rate (mort/gfish)		0.000		0.000
		Chinook Rate (#fish/gfish)		0.000		0.000
	Flathead Sole	Halibut Mortality (mt)	77	223	0	300
		Chinook Salmon (# fish)	212	483	0	695
		Groundfish (mt)	1,579	4,148	0	5,727
		Halibut Rate (mort/gfish)	0.049	0.054		0.052
		Chinook Rate (#fish/gfish)	0.134	0.116		0.121
	Other Species	Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	0	0	0
		Halibut Rate (mort/gfish)				
		Chinook Rate (#fish/gfish)				
	Pacific Cod	Halibut Mortality (mt)	338	2,088	0	2,426
		Chinook Salmon (# fish)	223	2,620	0	2,842
		Groundfish (mt)	20,158	60,724	0	80,882
		Halibut Rate (mort/gfish)	0.017	0.034		0.030
		Chinook Rate (#fish/gfish)	0.011	0.043		0.035
	Pollock	Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	0	183	183
		Halibut Rate (mort/gfish)			0.000	0.000
		Chinook Rate (#fish/gfish)			0.000	0.000
	Rex Sole - GOA	Halibut Mortality (mt)	24	879	0	903
		Chinook Salmon (# fish)	39	6,854	0	6,893
		Groundfish (mt)	910	16,721	0	17,631
		Halibut Rate (mort/gfish)	0.027	0.053		0.051
		Chinook Rate (#fish/gfish)	0.043	0.410		0.391
	Rockfish	Halibut Mortality (mt)	232	51	21	304
		Chinook Salmon (# fish)	1,078	202	599	1,879
		Groundfish (mt)	39,604	10,985	8,272	58,861
		Halibut Rate (mort/gfish)	0.006	0.005	0.003	0.005
		Chinook Rate (#fish/gfish)	0.027	0.018	0.072	0.032
	Sablefish	Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	0	183	183
		Halibut Rate (mort/gfish)			0.000	0.000
		Chinook Rate (#fish/gfish)			0.000	0.000
	Shallow Water Flatfish - GOA	Halibut Mortality (mt)	5	58	0	63
		Chinook Salmon (# fish)	0	55	0	55
		Groundfish (mt)	40	1,315	0	1,355
		Halibut Rate (mort/gfish)	0.118	0.044		0.046
		Chinook Rate (#fish/gfish)	0.010	0.042		0.041
	Total	Halibut Mortality (mt)	601	2,049	21	2,671
		Chinook Salmon (# fish)	2,778	11,579	599	14,956
		Groundfish (mt)	49,213	64,352	8,457	122,022
		Halibut Rate (mort/gfish)	0.012	0.032	0.003	0.022
		Chinook Rate (#fish/gfish)	0.056	0.180	0.071	0.123

**Table 7 PSC and Groundfish by vessel mode (CV), target fishery, area, and qualifying period (2007 through 2012)**

CV	Target		2007 through 2012			
			WG	CG	WY	Total
Arrowtooth Flounder		Halibut Mortality (mt)	0	2,001	0	2,001
		Chinook Salmon (# fish)	0	6,468	0	6,468
		Groundfish (mt)	0	78,316	0	78,316
		Halibut Rate (mort/gfish)		0.026		0.026
		Chinook Rate (#fish/gfish)		0.083		0.083
Deep Water Flatfish - GOA		Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	515	0	515
		Halibut Rate (mort/gfish)		0.001		0.001
		Chinook Rate (#fish/gfish)		0.000		0.000
Flathead Sole		Halibut Mortality (mt)	0	180	0	180
		Chinook Salmon (# fish)	0	9	0	9
		Groundfish (mt)	0	2,287	0	2,287
		Halibut Rate (mort/gfish)		0.079		0.079
		Chinook Rate (#fish/gfish)		0.004		0.004
Other Species		Halibut Mortality (mt)	0	2	0	2
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	103	0	103
		Halibut Rate (mort/gfish)		0.015		0.015
		Chinook Rate (#fish/gfish)		0.000		0.000
Pacific Cod		Halibut Mortality (mt)	338	2,088	0	2,426
		Chinook Salmon (# fish)	223	2,620	0	2,842
		Groundfish (mt)	20,158	60,724	0	80,882
		Halibut Rate (mort/gfish)	0.017	0.034		0.030
		Chinook Rate (#fish/gfish)	0.011	0.043		0.035
Pollock		Halibut Mortality (mt)	16	370	2	389
		Chinook Salmon (# fish)	49,042	76,003	1,152	126,197
		Groundfish (mt)	125,724	258,734	8,849	393,308
		Halibut Rate (mort/gfish)	0.000	0.001	0.000	0.001
		Chinook Rate (#fish/gfish)	0.390	0.294	0.130	0.321
Rex Sole - GOA		Halibut Mortality (mt)	0	46	0	46
		Chinook Salmon (# fish)	0	366	0	366
		Groundfish (mt)	0	1,393	0	1,393
		Halibut Rate (mort/gfish)		0.033		0.033
		Chinook Rate (#fish/gfish)		0.263		0.263
Rockfish		Halibut Mortality (mt)	0	7	5	12
		Chinook Salmon (# fish)	0	43	31	74
		Groundfish (mt)	354	2,329	2,253	4,936
		Halibut Rate (mort/gfish)	0.001	0.003	0.002	0.002
		Chinook Rate (#fish/gfish)	0.001	0.018	0.014	0.015
Sablefish		Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	1	0	1
		Halibut Rate (mort/gfish)		0.020		0.020
		Chinook Rate (#fish/gfish)		0.000		0.000
Shallow Water Flatfish - GOA		Halibut Mortality (mt)	0	2,906	0	2,906
		Chinook Salmon (# fish)	0	3,669	0	3,669
		Groundfish (mt)	0	46,200	0	46,200
		Halibut Rate (mort/gfish)		0.063		0.063
		Chinook Rate (#fish/gfish)		0.079		0.079
Total		Halibut Mortality (mt)	355	7,600	7	7,962
		Chinook Salmon (# fish)	49,265	89,178	1,183	139,626
		Groundfish (mt)	146,236	450,603	11,102	607,941
		Halibut Rate (mort/gfish)	0.002	0.017	0.001	0.013
		Chinook Rate (#fish/gfish)	0.337	0.198	0.107	0.230

**Table 8 PSC and Groundfish by vessel mode (CP), target fishery, area, and qualifying period (2003 through 2012)**

	Target	Data	2003 through 2012			Total
			WG	CG	WY	
CP	Arrowtooth Flounder	Halibut Mortality (mt)	448	1,497	0	1,945
		Chinook Salmon (# fish)	4,582	5,453	0	10,035
		Groundfish (mt)	13,580	46,722	0	60,302
		Halibut Rate (mort/gfish)	0.033	0.032		0.032
		Chinook Rate (#fish/gfish)	0.337	0.117		0.166
	Atka Mackerel	Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	64	0	64
		Halibut Rate (mort/gfish)		0.000		0.000
		Chinook Rate (#fish/gfish)		0.000		0.000
	Flathead Sole	Halibut Mortality (mt)	207	246	0	453
		Chinook Salmon (# fish)	1,615	496	0	2,111
		Groundfish (mt)	3,926	4,830	0	8,756
		Halibut Rate (mort/gfish)	0.053	0.051		0.052
		Chinook Rate (#fish/gfish)	0.411	0.103		0.241
	Other Species	Halibut Mortality (mt)	1	11	0	12
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	44	241	0	285
		Halibut Rate (mort/gfish)	0.024	0.044		0.041
		Chinook Rate (#fish/gfish)	0.000	0.000		0.000
	Pacific Cod	Halibut Mortality (mt)	524	4,122	0	4,647
		Chinook Salmon (# fish)	570	6,959	0	7,529
		Groundfish (mt)	32,134	96,299	0	128,433
		Halibut Rate (mort/gfish)	0.016	0.043		0.036
		Chinook Rate (#fish/gfish)	0.018	0.072		0.059
	Pollock	Halibut Mortality (mt)	0	1	1	2
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	21	298	320
		Halibut Rate (mort/gfish)		0.039	0.004	0.006
		Chinook Rate (#fish/gfish)		0.000	0.000	0.000
	Rex Sole - GOA	Halibut Mortality (mt)	98	1,443	0	1,541
		Chinook Salmon (# fish)	406	12,223	0	12,628
		Groundfish (mt)	2,290	24,144	0	26,434
		Halibut Rate (mort/gfish)	0.043	0.060		0.058
		Chinook Rate (#fish/gfish)	0.177	0.506		0.478
	Rockfish	Halibut Mortality (mt)	366	291	36	692
		Chinook Salmon (# fish)	1,078	629	717	2,425
		Groundfish (mt)	55,684	36,537	13,279	105,500
		Halibut Rate (mort/gfish)	0.007	0.008	0.003	0.007
		Chinook Rate (#fish/gfish)	0.019	0.017	0.054	0.023
	Sablefish	Halibut Mortality (mt)	0	1	1	2
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	21	298	320
		Halibut Rate (mort/gfish)		0.039	0.004	0.006
		Chinook Rate (#fish/gfish)		0.000	0.000	0.000
	Shallow Water Flatfish - GOA	Halibut Mortality (mt)	42	474	0	515
		Chinook Salmon (# fish)	12	59	0	71
		Groundfish (mt)	386	2,697	0	3,082
		Halibut Rate (mort/gfish)	0.108	0.176		0.167
		Chinook Rate (#fish/gfish)	0.031	0.022		0.023
	Total	Halibut Mortality (mt)	1,259	4,124	37	5,419
		Chinook Salmon (# fish)	8,294	19,015	717	28,027
		Groundfish (mt)	78,396	117,426	13,578	209,400
		Halibut Rate (mort/gfish)	0.016	0.035	0.003	0.026
		Chinook Rate (#fish/gfish)	0.106	0.162	0.053	0.134

**Table 9 PSC and Groundfish by vessel mode (CV), target fishery, area, and qualifying period (2003 through 2012)**

CV	Target		2003 through 2012			
			WG	CG	WY	Total
CV	Arrowtooth Flounder	Halibut Mortality (mt)	0	2,941	0	2,942
		Chinook Salmon (# fish)	58	7,283	0	7,341
		Groundfish (mt)	18	104,137	0	104,155
		Halibut Rate (mort/gfish)	0.020	0.028		0.028
		Chinook Rate (#fish/gfish)	3.254	0.070		0.070
Deep Water Flatfish - GOA		Halibut Mortality (mt)	0	70	16	86
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	1,952	72	2,024
		Halibut Rate (mort/gfish)		0.036	0.218	0.042
		Chinook Rate (#fish/gfish)		0.000	0.000	0.000
Flathead Sole		Halibut Mortality (mt)	5	273	0	278
		Chinook Salmon (# fish)	15	695	0	710
		Groundfish (mt)	87	3,820	0	3,907
		Halibut Rate (mort/gfish)	0.057	0.072		0.071
		Chinook Rate (#fish/gfish)	0.171	0.182		0.182
Other Species		Halibut Mortality (mt)	0	36	0	36
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	1,473	1	1,475
		Halibut Rate (mort/gfish)	0.010	0.024	0.045	0.024
		Chinook Rate (#fish/gfish)	0.000	0.000	0.000	0.000
Pacific Cod		Halibut Mortality (mt)	524	4,122	0	4,647
		Chinook Salmon (# fish)	570	6,959	0	7,529
		Groundfish (mt)	32,134	96,299	0	128,433
		Halibut Rate (mort/gfish)	0.016	0.043		0.036
		Chinook Rate (#fish/gfish)	0.018	0.072		0.059
Pollock		Halibut Mortality (mt)	18	464	2	484
		Chinook Salmon (# fish)	62,584	122,553	1,820	186,957
		Groundfish (mt)	220,954	423,873	13,596	658,423
		Halibut Rate (mort/gfish)	0.000	0.001	0.000	0.001
		Chinook Rate (#fish/gfish)	0.283	0.289	0.134	0.284
Rex Sole - GOA		Halibut Mortality (mt)	0	49	0	49
		Chinook Salmon (# fish)	0	374	0	374
		Groundfish (mt)	0	1,415	0	1,415
		Halibut Rate (mort/gfish)		0.035		0.035
		Chinook Rate (#fish/gfish)		0.264		0.264
Rockfish		Halibut Mortality (mt)	0	590	6	596
		Chinook Salmon (# fish)	0	2,012	31	2,043
		Groundfish (mt)	354	42,205	2,636	45,195
		Halibut Rate (mort/gfish)	0.001	0.014	0.002	0.013
		Chinook Rate (#fish/gfish)	0.001	0.048	0.012	0.045
Sablefish		Halibut Mortality (mt)	0	0	0	0
		Chinook Salmon (# fish)	0	0	0	0
		Groundfish (mt)	0	18	0	18
		Halibut Rate (mort/gfish)		0.004		0.004
		Chinook Rate (#fish/gfish)		0.000		0.000
Shallow Water Flatfish - GOA		Halibut Mortality (mt)	3	4,705	0	4,708
		Chinook Salmon (# fish)	2	4,321	0	4,323
		Groundfish (mt)	46	67,569	0	67,615
		Halibut Rate (mort/gfish)	0.066	0.070		0.070
		Chinook Rate (#fish/gfish)	0.047	0.064		0.064
Total		Halibut Mortality (mt)	551	13,251	24	13,826
		Chinook Salmon (# fish)	63,229	144,196	1,852	209,277
		Groundfish (mt)	253,592	742,763	16,305	1,012,660
		Halibut Rate (mort/gfish)	0.002	0.018	0.001	0.014
		Chinook Rate (#fish/gfish)	0.249	0.194	0.114	0.207

### 3 Additional information regarding licenses

#### Errata for Section 4.2 (Qualifying Years) Tables 19 and 20 (pp. 73-74):

The following tables are revised versions of Tables 19 and 20 in the original document. A column has been added to show the number of the would-be latent licenses that actually participated in GOA groundfish trawl fisheries during each year. The “# LLPs Active (Total)” column, from the original tables, shows how many of the would-be latent licenses were active in *any* type of groundfish fishery during each year.

**Table 19 Groundfish harvest distribution for CV LLPs that would not receive an allocation under a 2007 through 2012 qualifying period – Reference to p. 73**

Year	# LLPs Active (Total)	# LLPs Active (GOA Trawl)	GOA			BSAI		
			Trawl	Pot	HAL	Trawl	Pot	HAL
2003	18	17	20%	2%	< 1%	77%	< 1%	< 1%
2004	14	6	21%	2%	< 1%	76%	1%	< 1%
2005	12	7	9%	3%	< 1%	85%	3%	
2006	12	4	5%	2%	< 1%	90%	3%	< 1%
2007	10			4%	< 1%	93%	2%	
2008	10			3%	1%	91%	5%	< 1%
2009	10			3%	1%	88%	7%	< 1%
2010	11			5%	1%	88%	7%	< 1%
2011	11			8%	1%	87%	5%	< 1%
2012	10	1	*	5%	< 1%	92%	3%	< 1%
2013	10	2	15%	1%	1%	81%	3%	
Period Total	18	18	7%	3%	< 1%	86%	3%	< 1%

**Table 20 Groundfish harvest distribution for CV LLPs that would not receive an allocation under a 2008 through 2012 qualifying period – Reference to p. 74**

Year	# LLPs Active (Total)	# LLPs Active (GOA Trawl)	GOA			BSAI		
			Trawl	Pot	HAL	Trawl	Pot	HAL
2003	3	1	9%	2%		89%		
2004	3	1	12%			88%		
2005	3	2	22%	1%	< 1%	76%	< 1%	
2006	3	2	13%	2%	1%	84%		
2007	3	3	4%	2%	1%	93%		
2008	2			5%	1%	94%		
2009	2			7%	1%	93%		
2010	3			5%	1%	94%		
2011	2			4%	< 1%	95%		
2012	2			1%		88%	12%	
2013	2					87%	13%	1%
Period Total	3	3	7%	2%	< 1%	88%	3%	< 1%