

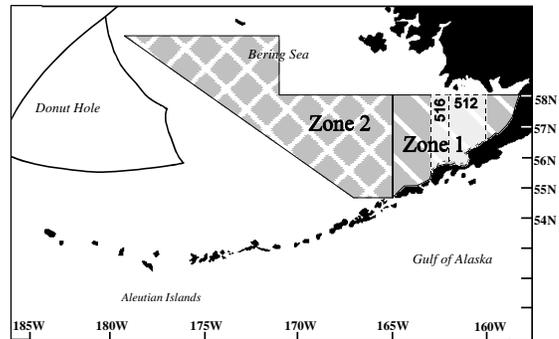
1.4.4 Bycatch Limits

The Council has adopted and NMFS has implemented numerous limits on the harvest of ecosystem components. A summary is provided below.

Crab - Prescribed bottom trawl fisheries in specific areas are closed when prohibited species catch (PSC) limits of *C. bairdi* Tanner crab, *C. opilio* crab, and red king crab are taken. Bycatch limitation zones for Tanner and red king crab PSC are shown in the figure below. Crab PSC limits for groundfish trawl fisheries are based on crab abundance as shown in the table below.

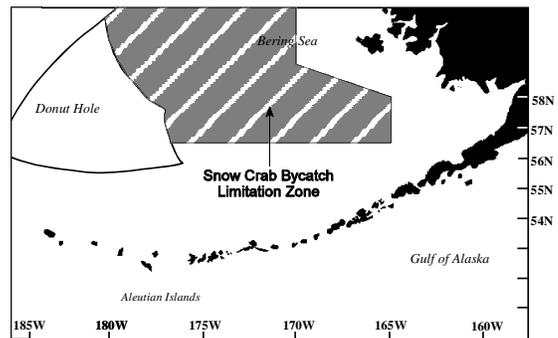
PSC limits for red king crab and *C. bairdi* Tanner crab.

Species	Zone	Crab Abundance	PSC Limit
Red King Crab	Zone 1	Below threshold or 14.5 million lbs of effective spawning biomass (EBS)	35,000
		Above threshold, but below 55 million lbs of EBS	100,000
		Above 55 million lbs of EBS	200,000
Tanner Crab	Zone 1	0-150 million crabs	0.5% of abundance
		150-270 million crabs	750,000
		270-400 million crabs	850,000
		over 400 million crabs	1,000,000
Tanner Crab	Zone 2	0-175 million crabs	1.2% of abundance
		175-290 million crabs	2,100,000
		290-400 million crabs	2,550,000
		over 400 million crabs	3,000,000



Location of the crab bycatch limitation zones.

Under Amendment 40, PSC limits for snow crab (*C. opilio*) taken in groundfish fisheries will be based on total abundance of *opilio* crab as indicated by the NMFS standard trawl survey. The snow crab PSC cap is set at 0.1133% of the Bering Sea snow crab abundance index, with a minimum PSC of 4.5 million snow crab and a maximum of 13 million snow crab. Snow crab taken within the “Snow Crab Bycatch Limitation Zone” accrue towards the PSC limits established for individual trawl fisheries. Upon attainment of a snow crab PSC limit apportioned to a particular trawl target fishery, that fishery are prohibited from fishing within the snow crab zone.



Location of the snow crab bycatch limitation zone.

Crab bycatch limits have also been established for the Alaska scallop fisheries. Annual crab bycatch limits (CBLs) are specified for red king crab and Tanner crab species in each registration area or district thereof. In Registration Area Q (the Bering Sea), the annual CBLs shall equal the following amounts:

1. The CBL of red king crab caught while conducting any fishery for scallops shall be within the range of 500 to 3,000 crab based on specific considerations.

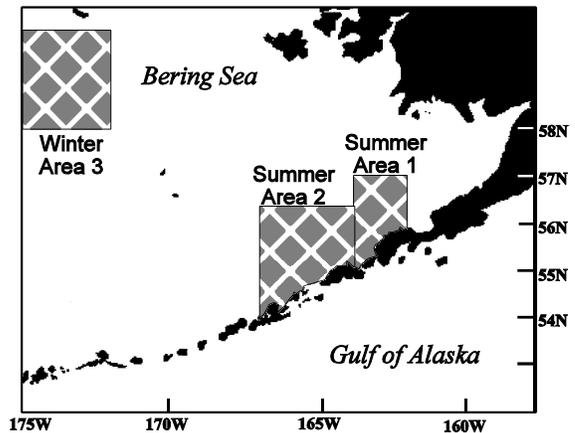
2. The CBL of *C. opilio* Tanner crab caught while conducting any fishery for scallops is 0.003176 percent of the most recent estimate of *C. opilio* abundance in Registration Area Q.
3. The CBL of *C. bairdi* Tanner crab caught while conducting any fishery for scallops is 0.13542 percent of the most recent estimate of *C. bairdi* abundance in Registration Area Q.

In other Registration Areas (Gulf of Alaska and Aleutian Islands), CBLs will be based on the biological condition of each crab species, historical bycatch rates in the scallop fishery, and other socioeconomic considerations that are consistent with the goals and objectives of the FMP.

Weathervane scallop registration areas, seasons, GHL's (pounds, shucked), and crab bycatch limits established for the 1997 scallop fishery, by area.

<u>Area</u>	<u>GHL</u> <u>(pounds)</u>	<u>Fishing</u> <u>Season</u>	<u>Crab Bycatch Limits</u>		
			<u>king</u> <u>crab</u>	<u>Tanner</u> <u>crab</u>	<u>Snow</u> <u>crab</u>
D - District 16	0 - 35,000	Jan 10 - Dec 31	n/a	n/a	n/a
D - Yakutat	0 - 250,000	Jan 10 - Dec 31	n/a	n/a	n/a
E - Eastern PWS	0 - 50,000	Jan 10 - Dec 31	n/a	500	n/a
Western PWS	combined	Jan 10 - Dec 31	n/a	130	n/a
H - Cook Inlet (Kamishak)	0 - 20,000	Aug 15 - Oct 31	60	24,992	n/a
Cook Inlet (Outer area)	combined	Jan 1 - Dec 31	98	2,170	n/a
K - Kodiak (Shelikof)	0 - 400,000	July 1 - Feb 15	35	51,000	n/a
Kodiak (Northeast)	combined	July 1 - Feb 15	50	91,600	n/a
M - AK Peninsula	0 - 200,000	July 1 - Feb 15	79	45,300	n/a
O - Dutch Harbor	0 - 170,000	July 1 - Feb 15	10	10,700	n/a
Q - Bering Sea	0 - 600,000	July 1 - Feb 15	500	238,000	172,000
R - Adak	0 - 75,000	July 1 - Feb 15	50	10,000	n/a

Pacific Halibut - Halibut bycatch limits are established in terms of total mortality. Overall bycatch mortality is limited to 4,665 mt (3,775 mt for trawl and 900 mt for non-trawl fisheries). The trawl halibut bycatch limits are apportioned to the following six fisheries in proportion to their anticipated bycatch use: (1) Yellowfin sole, (2) Rock sole/"other flatfish," (3) Turbot/arrowtooth flounder/sablefish, (4) Rockfish, (5) Pacific cod, and (6) Pollock/Atka Mackerel/"other species." Non-trawl halibut bycatch limits are primarily allocated to the Pacific cod longline fishery. Careful release requirements have been implemented in addition to bycatch limits for longline fisheries.



Pacific Herring - Herring PSC is established annually at 1% of the estimated eastern Bering sea herring biomass. The herring PSC cap is apportioned among trawl fisheries expected to take herring as bycatch. Attainment of a herring PSC apportionment will trigger trawl closures in two Herring Summer Savings Areas north of the Alaska peninsula and a Herring Winter Savings Area northwest of the Pribilof Islands to the affected fishery. These Herring Savings Areas are depicted in the adjacent figure.

Salmon - The Chum Salmon Savings Area closes to all trawling from August 1 through August 31, and remains closed if a bycatch limit of 42,000 chum salmon is taken in the catcher vessel operational area (CVOA). Trawling is prohibited in the Chinook Salmon Savings Areas upon attainment of a bycatch limit of 48,000 chinook salmon in the BSAI. These areas are shown in the adjacent figure.

