D4 SSC Survey Prioritization

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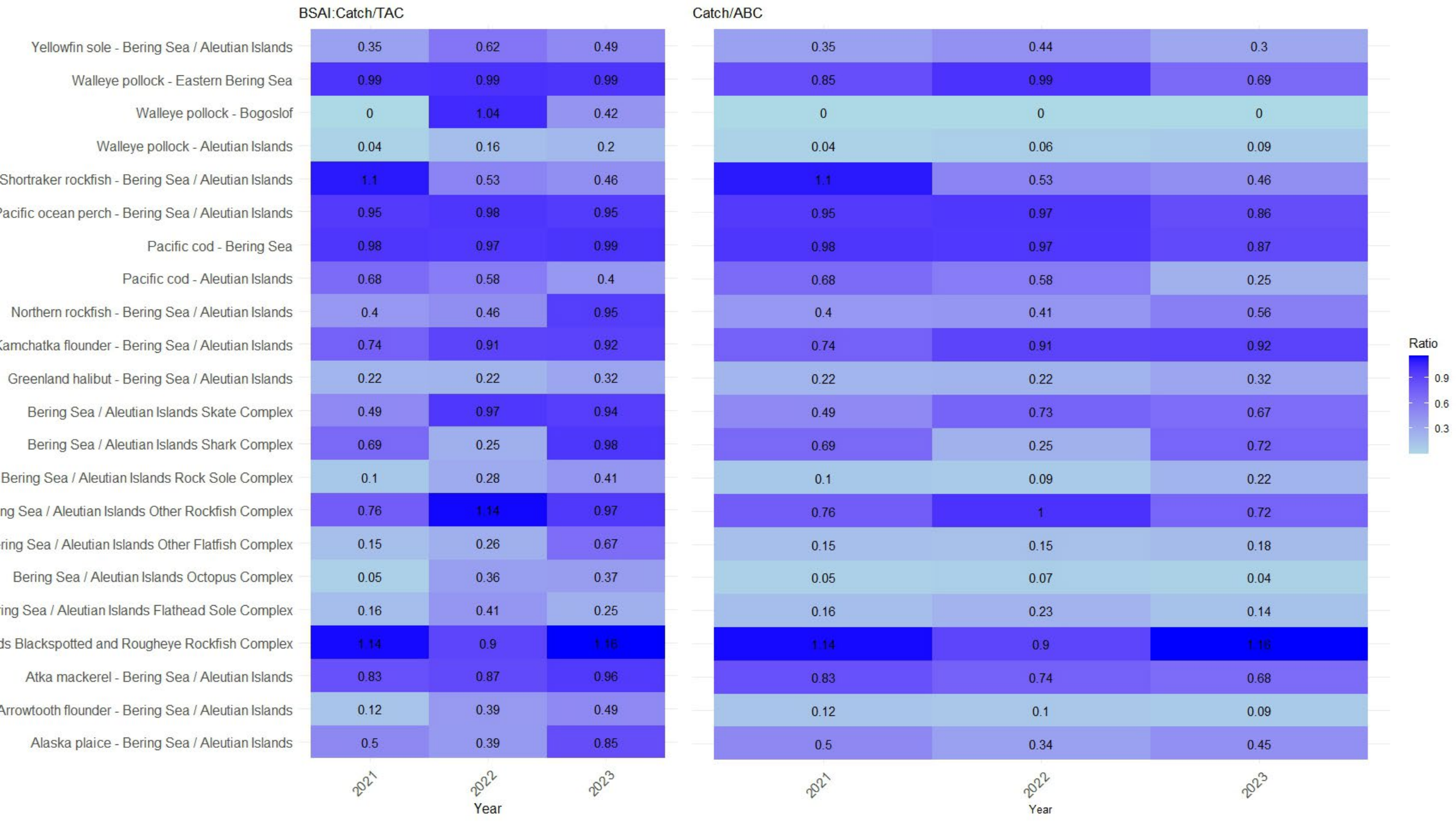# Stock assessments and other management considerations dependent on surveys

- Spreadsheet (posted) of assessments, surveys and other potential metrics
  - Walk-through on next slide
- Additional management (PSC, catch) considerations

Groundfish and Crab assessments and surveys spreadsheet
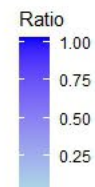
- List of all BSAI and GOA groundfish assessments, 10 BSAI crab assessments

  - Tier level (in 2024)

  - Primary, secondary and additional surveys

  - Risk table elevated concern in one or more categories in 2023-2024
    - Additional sheet on risk table consideration category that was elevated (does not imply reduction taken)
    - Link to Groundfish Risk Table Report: 2024 Update for additional information

  - TAC/ABC 2023-2024 (in spreadsheet and following slides); Catch/TAC and Catch/ABC in next slides (2021-2024 GOA, 2021-2023 BSAI)

	BSAI:Catch/TAC			Catch/ABC		
	2021	2022	2023	2021	2022	2023
Yellowfin sole - Bering Sea / Aleutian Islands	0.35	0.62	0.49	0.35	0.44	0.3
Walleye pollock - Eastern Bering Sea	0.99	0.99	0.99	0.85	0.99	0.69
Walleye pollock - Bogoslof	0	1.04	0.42	0	0	0
Walleye pollock - Aleutian Islands	0.04	0.16	0.2	0.04	0.06	0.09
Shortraker rockfish - Bering Sea / Aleutian Islands	1.1	0.53	0.46	1.1	0.53	0.46
Pacific ocean perch - Bering Sea / Aleutian Islands	0.95	0.98	0.95	0.95	0.97	0.86
Pacific cod - Bering Sea	0.98	0.97	0.99	0.98	0.97	0.87
Pacific cod - Aleutian Islands	0.68	0.58	0.4	0.68	0.58	0.25
Northern rockfish - Bering Sea / Aleutian Islands	0.4	0.46	0.95	0.4	0.41	0.56
Kamchatka flounder - Bering Sea / Aleutian Islands	0.74	0.91	0.92	0.74	0.91	0.92
Greenland halibut - Bering Sea / Aleutian Islands	0.22	0.22	0.32	0.22	0.22	0.32
Bering Sea / Aleutian Islands Skate Complex	0.49	0.97	0.94	0.49	0.73	0.67
Bering Sea / Aleutian Islands Shark Complex	0.69	0.25	0.98	0.69	0.25	0.72
Bering Sea / Aleutian Islands Rock Sole Complex	0.1	0.28	0.41	0.1	0.09	0.22
Bering Sea / Aleutian Islands Other Rockfish Complex	0.76	1.14	0.97	0.76	1	0.72
Bering Sea / Aleutian Islands Other Flatfish Complex	0.15	0.26	0.67	0.15	0.15	0.18
Bering Sea / Aleutian Islands Octopus Complex	0.05	0.36	0.37	0.05	0.07	0.04
Bering Sea / Aleutian Islands Flathead Sole Complex	0.16	0.41	0.25	0.16	0.23	0.14
Islands Blackspotted and Rougheye Rockfish Complex	1.14	0.9	1.16	1.14	0.9	1.16
Atka mackerel - Bering Sea / Aleutian Islands	0.83	0.87	0.96	0.83	0.74	0.68
Arrowtooth flounder - Bering Sea / Aleutian Islands	0.12	0.39	0.49	0.12	0.1	0.09
Alaska plaice - Bering Sea / Aleutian Islands	0.5	0.39	0.85	0.5	0.34	0.45

Stock	GOA:Catch/TAC				Catch/ABC			
	2021	2022	2023	2024	2021	2022	2023	2024
Thornyhead Rockfish Complex	0.14	0.18	0.13	0.1	0.14	0.18	0.13	0.1
Skate Complex	0.83	1.03	0.61	0.97	0.83	1.03	0.61	0.97
Shortraker rockfish	0.75	0.67	0.7	0.54	0.75	0.67	0.7	0.54
Shark Complex	0.5	0.6	0.42	0.31	0.5	0.6	0.42	0.31
Shallow Water Flatfish Complex	0.04	0.03	0.02	0.06	0.03	0.03	0.02	0.05
Rex sole	0.02	0.04	0.02	0.03	0.02	0.04	0.02	0.03
Pollock (W/C/WY)	0.96	0.95	0.89	0.67	0.94	0.93	0.87	0.66
Pacific ocean perch	0.8	0.81	0.8	0.64	0.8	0.81	0.8	0.64
Pacific cod	0.76	0.77	0.88	0.84	0.56	0.57	0.65	0.62
Other Rockfish Complex	0.76	0.78	0.67	0.35	0.3	0.31	0.27	0.15
Octopus Complex	0.06	0.15	0.17	0.2	0.06	0.15	0.17	0.2
Northern rockfish	0.44	0.37	0.27	0.24	0.44	0.37	0.27	0.24
Longnose skate	0.4	0.37	0.44	0.31	0.4	0.37	0.44	0.31
Flathead sole	0.02	0.02	0.01	0.03	0.02	0.01	0.01	0.03
Dusky rockfish	0.54	0.48	0.44	0.29	0.54	0.48	0.44	0.29
Demersal Shelf Rockfish Complex	0.42	0.45	0.69	0.55	0.42	0.45	0.69	0.55
Deepwater Flatfish Complex	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.01
Blackspotted and Rougheye Rockfish Complex	0.34	0.59	0.57	0.29	0.34	0.59	0.57	0.29
Big skate	0.2	0.35	0.46	0.41	0.2	0.35	0.46	0.41
Atka mackerel	0.31	0.29	0.15	0.13	0.2	0.19	0.1	0.08
Arrowtooth flounder	0.1	0.12	0.1	0.19	0.08	0.1	0.08	0.15

PSC limits and surveys

Amendment 80 Halibut PSC limit dependent upon survey estimate for halibut from the EBS survey

		EBS shelf trawl survey index (t)	
		Low < 150,000	**High** ≥ 150,000
IPHC setline survey index in Area 4ABCDE (WPUE)	**High** ≥ 11,000	1,745 mt (current limit)	1,745 mt (current limit)
	Medium 8,000 – 10,999	1,396 mt (20% below current)	1,571 mt (10% below current)
	Low 6,000-7,999	1,309 mt (25% below current)	1,396 mt (20% below current)
	Very Low < 6,000	1,134 mt (35% below current)	1,134 mt (35% below current)

PSC limits and surveys:
PSC limits for red king crab, Tanner crab and snow crab established based on formulas in the FMP and in regulation.

For red king crab Zone 1 PSC limit:

When the number of mature female red king crab is …	The zone 1 PSC limit will be …
(A) At or below the threshold of 8.4 million mature crab or the effective spawning biomass is less than or equal to 14.5 million lb (6,577 mt)	32,000 red king crab.
(B) Above the threshold of 8.4 million mature crab and the effective spawning biomass is greater than 14.5 but less than 55 million lb (24,948 mt)	97,000 red king crab.
(C) Above the threshold of 8.4 million mature crab and the effective spawning biomass is equal to or greater than 55 million lb	197,000 red king crab.

Figure 1 to Part 679. Bering Sea and Aleutian Islands statistical and reporting areas
a. Map
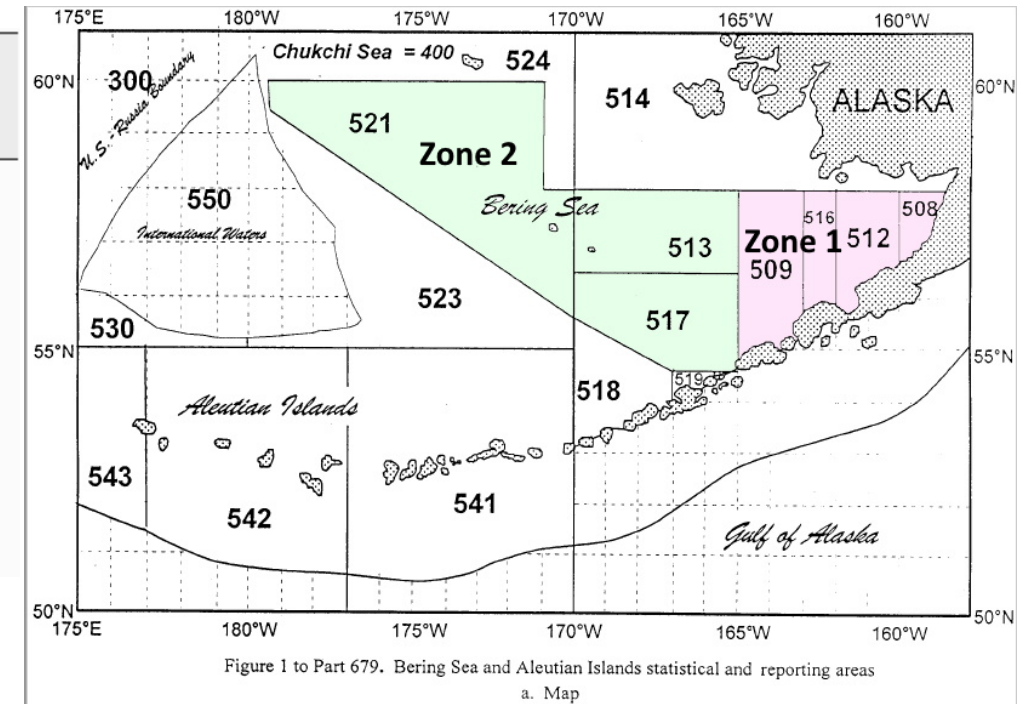
PSC limits and surveys: Tanner crab Zones 1 and 2

Zone 1 ➡

When the total abundance of *C. bairdi* crabs is ...	The PSC limit will be ...
(1) 150 million animals or less	0.5 percent of the total abundance minus 20,000 animals
(2) Over 150 million to 270 million animals	730,000 animals
(3) Over 270 million to 400 million animals	830,000 animals
(4) Over 400 million animals	980,000 animals

Zone 2 ➡

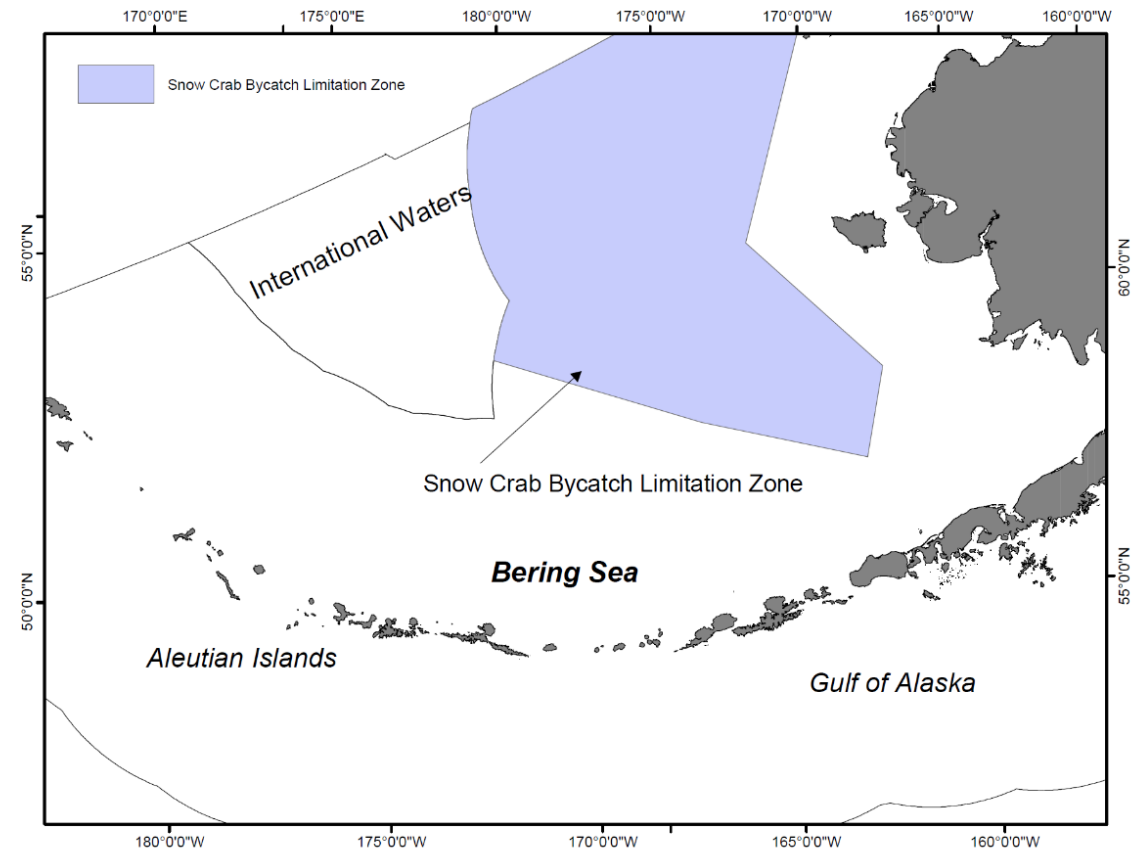| When the total abundance of C. bairdi crabs is ...	The PSC limit will be ...
(1) 175 million animals or less	1.2 percent of the total abundance minus 30,000 animals
(2) Over 175 million to 290 million animals	2,070,000 animals
(3) Over 290 million to 400 million animals	2,520,000 animals
(4) Over 400 million animals	2,970,000 animals

PSC limits and surveys: Snow Crab PSC limit

- ***C. opilio.*** The PSC limit of *C. opilio* is based on **total abundance of *C. opilio* as indicated by the NMFS annual bottom trawl survey** = 0.1133 percent of the total abundance, minus 150,000 *C. opilio* crabs, unless;

  - minimum PSC limit will be 4.350 million animals; or

  - maximum PSC limit will be 12.850 million animals.

- The 'survey estimate' is taken from the snow crab assessment of total survey biomass

C. Opilio Bycatch Limitation Zone (COBLZ)

Snow Crab Bycatch Limitation Zone

International Waters

Snow Crab Bycatch Limitation Zone

Bering Sea

Aleutian Islands

Gulf of Alaska

Additional management considerations

- Depending on the response for setting ABCs to data loss the following additional considerations may arise should more conservative ABCs be set to accommodate additional uncertainty:

  - Cod: already a choke species

  - BS/RE could limit POP fishery

  - Other rockfish could limit Kamchatka/arrowtooth/turbot/sablefish fishery

  - Turbot ABC precluded directed fishery in 2025; can also impact CDQ pollock fishing

  - All CDQ species have the ability to limit CDQ pollock

Summary of survey considerations

- Stock assessments
  - Impact of data loss on assessment uncertainty and frequency

- PSC limits
  - BSAI Crab PSC and A80 Halibut PSC limits tied to survey information

- Catch constraints
  - Potential for more conservative ABCs under higher uncertainty-> impact of lower quotas on multiple fisheries (directed and choke species)