

Assessments conducted by AFSC, by update type and tier, 2009-2013

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The North Pacific Fishery Management Council maintains five fishery management plans (FMPs): Bering Sea/Aleutian Islands King and Tanner Crabs (Crab), Groundfish of the Bering Sea and Aleutian Islands Management Area (BSAI), Groundfish of the Gulf of Alaska (GOA), Salmon Fisheries in the EEZ off the Coast of Alaska (Salmon), Scallop Fishery off Alaska (Scallop), and Fish Resources of the Arctic Management Area (Arctic).

Stock assessment duties for the Crab FMP are divided between the Alaska Department of Fish and Game (ADFG) and Alaska Fisheries Science Center (AFSC). Six crab stocks are assessed by ADFG and four are assessed by AFSC. The AFSC conducts all of the BSAI assessments, and all but one of the GOA assessments. The five salmon assessments and the single scallop assessment are all conducted by ADFG. No Arctic assessments are conducted (the entire fishery is closed).

The tables on the following pages list or summarize the assessments conducted by AFSC during the most recent five-year period (2009-2013). Each assessment is associated with both an update type and a tier. "Update type" is a term used in NMFS' Species Identification System to denote the extent to which an assessment differs from its predecessor. "New" (N) indicates an assessment for a previously unassessed stock or stock complex, "partial update" (P) indicates a very brief assessment in which harvest specifications are adjusted on the basis of updated catch estimates only, "full update" (F) indicates a complete assessment given whatever level of information is available for that stock or stock complex, and "benchmark" (B) indicates an assessment whose methodology has changed substantively since the previous assessment. "Tier" determines the harvest control rules that are used to set the overfishing level and the upper bound on acceptable biological catch, based on the type and amount of information available for the stock or stock complex. Detailed tier descriptions are provided in a separate document. The important thing to note for the purposes of the present document is that the tier system for crab is different from that for groundfish. Tier numbering proceeds from most information (1) to least (5 for crab, 6 for groundfish), and letter designations proceed from highest biomass ("a") to lowest ("c").

Tables 1-3 show each assessment conducted by the AFSC for crab, BSAI groundfish, and GOA groundfish, respectively. Assessment units that have been re-arranged in the last five years are surrounded by a box with shaded contents. Assessment units are sorted in order of the SAFE Report chapter where the assessment is presented, with some minor exceptions in Table 3, where the assessment in Chapter 16 has been moved to show how it fits with related stocks and stock complexes that have been re-arranged in the past five years. Note that Chapter 14 from the GOA SAFE Report is not represented in Table 3, as this corresponds to the single groundfish assessment conducted by ADFG rather than AFSC. Note also that assessment units may not match the titles of SAFE chapters in all cases. Finally, note that, although the sablefish assessment spans the BSAI and GOA FMPs, it is listed along with the GOA assessments due to the fact that the majority of both the biomass and catch occurs in the GOA.

Tables 4 and 5 tabulate the number of assessments corresponding to each update type and tier, by FMP and year. Values are summed within individual FMPs and across FMPs, except that crab and groundfish subtotals are not combined in Table 5 due to the fact that the tier definitions are not comparable.

Table 1. Update type and tier for crab stock assessments conducted by AFSC, 2009-2013.

FMP	SAFE	Assessment unit	Update type					Tier				
			2009	2010	2011	2012	2013	2009	2010	2011	2012	2013
Crab	1	Snow crab - Bering Sea	B	F	F	F	F	3b	3b	3b	3b	3a
Crab	3	Southern Tanner crab - Bering Sea	B	F	F	B	B	4b	4b	4b	3a	3a
Crab	4	Red king crab - Pribilof Islands	B	F	F	F	F	4b	4b	4b	4b	4b
Crab	5	Blue king crab - Pribilof Islands	B	B	B	F	F	4c	4c	4c	4c	4c

Table 2. Update type and tier for BSAI groundfish stock assessments conducted by AFSC, 2009-2013.

FMP	SAFE	Assessment unit	Update type					Tier				
			2009	2010	2011	2012	2013	2009	2010	2011	2012	2013
BSAI	1	BS walleye pollock	F	B	F	F	F	1b	1a	1a	1a	1a
BSAI	1A	AI walleye pollock	F	F	F	F	F	3b	3b	3b	3b	3b
BSAI	1B	Bogoslof walleye pollock	F	P	F	F	F	5	5	5	5	5
BSAI		BSAI Pacific cod	B	B	B	F		3b	3b	3a	3a	
BSAI	2	BS Pacific cod					N					3a
BSAI	2A	AI Pacific cod					N					5
BSAI	4	BSAI yellowfin sole	F	F	B	F	F	1a	1a	1a	1a	1a
BSAI	5	BSAI Greenland turbot	F	F	F	B	F	3a	3a	3a	3b	3b
BSAI		BSAI arrowtooth flounder complex	F					3a				
BSAI	6	BSAI arrowtooth flounder		N	F	F	P		3a	3a	3a	3a
BSAI	7	BSAI Kamchatka flounder		N	F	F	B		5	5	5	3a
BSAI	8	BSAI northern rock sole	F	F	F	F	P	1a	1a	1a	1a	1a
BSAI	9	BSAI flathead sole	F	F	F	F	P	3a	3a	3a	3a	3a
BSAI	10	BSAI Alaska plaice	B	F	F	F	P	3a	3a	3a	3a	3a
BSAI	11	BSAI other flatfish	F	F	F	F	F	5	5	5	5	5
BSAI	12	BSAI Pacific ocean perch	P	F	P	F	P	3a	3a	3a	3a	3a
BSAI	13	BSAI northern rockfish	P	F	P	F	P	3a	3a	3a	3a	3a
BSAI	14	BSAI blackspotted and rougheye rockfish	P	F	P	F	P	3b	3b	3a	3b	3b
BSAI	15	BSAI shortraker rockfish	P	F	P	F	P	5	5	5	5	5
BSAI	16	BSAI other rockfish	P	F	P	F	P	5	5	5	5	5
BSAI	17	BSAI Atka mackerel	F	F	F	F	B	3a	3a	3a	3b	3a
BSAI	18	BSAI Alaska skate	F	F	F	B	P	3a	3a	3a	3a	3a
BSAI	18	BSAI other skates	F	F	F	F	P	5	5	5	5	5
BSAI	19	BSAI sculpins	F	F	P	F	P	5	5	5	5	5
BSAI	20	BSAI sharks	F	F	P	F	P	6	6	6	6	6
BSAI	21	BSAI squid	F	F	P	F	P	6	6	6	6	6
BSAI	22	BSAI giant Pacific octopus	F	F	F	F	P	5	5	6	6	6

Table 3. Update type and tier for GOA groundfish stock assessments conducted by AFSC, 2009-2013.

			Update type					Tier				
FMP	SAFE	Assessment unit	2009	2010	2011	2012	2013	2009	2010	2011	2012	2013
GOA	1	W/C/WYK walleye pollock	F	F	F	B	F	3b	3b	3b	3b	3a
GOA	1	SEO walleye pollock	F	P	F	F	F	5	5	5	5	5
GOA	2	GOA Pacific cod	B	B	B	B	B	3a	3a	3a	3a	3a
Both	3	Alaska sablefish	F	B	F	F	F	3b	3b	3b	3b	3b
GOA		GOA shallow-water flatfish	F	P				4	4			
GOA	4	GOA northern rock sole			N	B	P			3a	3a	3a
GOA	4	GOA southern rock sole			N	B	P			3a	3a	3a
GOA	4	GOA other shallow-water flatfish			N	P	P			5	5	5
GOA	5	GOA Dover sole	F	P			B	3a	3a			3a
GOA	5	GOA other deep-water flatfish	F	P			F	6	6			6
GOA		GOA deep-water flatfish			N	P				5	5	
GOA	6	GOA rex sole	F	P	F	P	P	5	5	5	5	5
GOA	7	GOA arrowtooth flounder	F	P	F	P	F	3a	3a	3a	3a	3a
GOA	8	GOA flathead sole	F	P	F	P	B	3a	3a	3a	3a	3a
GOA	9	GOA Pacific ocean perch	F	P	F	P	F	3a	3a	3a	3a	3a
GOA	10	W/C northern rockfish	F	P	B	P	F	3a	3a	3a	3a	3a
GOA		GOA other pelagic shelf rockfish	F	P				5	5			
GOA		GOA shortraker and other slope rockfish	F	P				4	4			
GOA	11	GOA shortraker rockfish			N	P	P			5	5	5
GOA	16	GOA other rockfish			N	P	P			5	4	4
GOA	12	GOA dusky rockfish	F	P	B	P	F	3a	3a	3a	3a	3a
GOA	13	GOA rougheye and blackspotted rockfish	F	P	F	P	P	3a	3a	3a	3a	3a
GOA	15	GOA shortspine thornyhead rockfish	F	P	F	P	P	5	5	5	5	5
GOA	17	GOA Atka mackerel	F	P	F	P	P	6	6	6	6	6
GOA	18	GOA skates	F	F	F	P	P	5	5	5	5	5
GOA	19	GOA sculpins	F	F	F	P	P	5	5	5	5	5
GOA	20	GOA sharks	F	F	F	P	P	6	6	5	6	6
GOA	21	GOA squids	F	F	F	P	P	6	6	6	6	6
GOA	22	GOA giant Pacific octopus	F	F	F	F	F	6	6	6	6	6

Table 4. Counts of crab and groundfish assessments conducted by AFSC, by update type, 2009-2013.

FMP	Update type	2009	2010	2011	2012	2013
Crab	N	0	0	0	0	0
Crab	P	0	0	0	0	0
Crab	F	0	3	3	3	3
Crab	B	4	1	1	1	1
Crab	Subtotal	4	4	4	4	4
BSAI	N	0	2	0	0	2
BSAI	P	5	1	8	0	15
BSAI	F	16	19	14	22	6
BSAI	B	2	2	2	2	2
BSAI	Subtotal	23	24	24	24	25
GOA	N	0	0	6	0	0
GOA	P	0	15	0	17	13
GOA	F	22	6	15	3	9
GOA	B	1	2	3	4	3
GOA	Subtotal	23	23	24	24	25
All	N	0	2	6	0	2
All	P	5	16	8	17	28
All	F	38	28	32	28	18
All	B	7	5	6	7	6
All	Total	50	51	52	52	54

Table 5. Counts of crab and groundfish assessments conducted by AFSC, by tier, 2009-2013.

FMP	Tier	2009	2010	2011	2012	2013
Crab	3a	0	0	0	1	2
Crab	3b	1	1	1	1	0
Crab	4a	2	2	2	1	1
Crab	4c	1	1	1	1	1
Crab	Total	4	4	4	4	4

FMP	Tier	2009	2010	2011	2012	2013
BSAI	1a	2	3	3	3	3
BSAI	1b	1	0	0	0	0
BSAI	3a	8	8	10	7	9
BSAI	3b	3	3	1	4	3
BSAI	4	0	0	0	0	0
BSAI	5	7	8	7	7	7
BSAI	6	2	2	3	3	3
BSAI	Subtotal	23	24	24	24	25
GOA	1a	0	0	0	0	0
GOA	1b	0	0	0	0	0
GOA	3a	8	8	9	9	11
GOA	3b	2	2	2	2	1
GOA	4	3	3	1	2	2
GOA	5	6	6	10	8	7
GOA	6	5	5	3	4	5
GOA	Subtotal	24	24	25	25	26
BSAI&GOA	1a	2	3	3	3	3
BSAI&GOA	1b	1	0	0	0	0
BSAI&GOA	3a	16	16	19	16	20
BSAI&GOA	3b	5	5	3	6	4
BSAI&GOA	4	3	3	1	2	2
BSAI&GOA	5	13	14	17	15	14
BSAI&GOA	6	7	7	6	7	8
BSAI&GOA	Total	47	48	49	49	51