DRAFT REPORT

of the

SCIENTIFIC AND STATISTICAL COMMITTEE

to the

NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

December 7th – 9th, 2015

The SSC met from December 7th through 9th at the Hilton Hotel, Anchorage, AK.

Members present were:

Farron Wallace, Chair Chris Anderson Lew Coggins

NOAA Fisheries—AFSC University of Washington U.S. Fish and Wildlife Service

Sherri Dressel Kari Fenske Brad Harris

Alaska Department of Fish and Game Washington Dept. of Fish and Wildlife Alaska Pacific University

Anne Hollowed George Hunt Gordon Kruse

NOAA Fisheries—AFSC University of Washington University of Alaska Fairbanks

Seth Macinko Steve Martell Franz Mueter

University of Rhode Island Intl. Pacific Halibut Commission University of Alaska Fairbanks

Lew Queirolo Matt Reimer Alison Whitman

NOAA Fisheries—Alaska Region University of Alaska Anchorage Oregon Dept. of Fish and Wildlife

Members absent were:

Jennifer Burns Robert Clark Terry Quinn

University of Alaska Anchorage Alaska Department of Fish and Game University of Alaska Fairbanks

Kate Reedy

Idaho State University Pocatello

C-2 BSAI and C-3 GOA specifications and SAFE report

Table 1. SSC recommendations for BSAI groundfish OFLs and ABCs for 2016 and 2017 are shown with the 2015 OFL, ABC, TAC, and Catch amounts in metric tons (2015 catches through November 7th from AKR Catch Accounting include CDQ). None of the SSC recommendations differed from those of the GOA Plan Team.

	-	2015		2015 Catch 2016			2017		
Species	Area	OFL	ABC	TAC	as of 11/7/15	OFL	ABC	OFL	ABC
Pollock	EBS	3,330,000	1,637,000	1,310,000	1,318,833	3,910,000	2,090,000	3,540,000	2,019,000
	AI	36,005	29,659	19,000	916	39,075	32,227	44,455	36,664
	Bogoslof	21,200	15,900	100	733	31,800	23,850	31,906	23,850
Pacific cod	BS	346,000	255,000	240,000	202,626	390,000	255,000	412,000	255,000
	AI	23,400	17,600	9,422	9,060	23,400	17,600	23,400	17,600
Sablefish	BS	1,575	1,333	1,333	209	1,304	1,151	1,241	1,052
	ΑI	2,128	1,802	1,802	431	1,766	1,557	1,681	1,423
Yellowfin sole	BSAI	266,400	248,800	149,000	122,363	228,100	211,700	219,200	203,500
Greenland turbot	BSAI	3,903	3,172	2,648	2,199	4,194	3,462	7,416	6,132
	BS	n/a	2,448	2,448	2,086	n/a	2,673	n/a	4,734
	ΑI	n/a	724	200	113	n/a	789	n/a	1,398
Arrowtooth flounder	BSAI	93,856	80,547	22,000	11,005	94,035	80,701	84,156	72,216
Kamchatka flounder	BSAI	10,500	9,000	6,500	4,961	11,100	9,500	11,700	10,000
Northern rock sole	BSAI	187,600	181,700	69,250	45,350	165,900	161,100	149,400	145,000
Flathead sole	BSAI	79,419	66,130	24,250	10,955	79,562	66,250	77,544	64,580
Alaska plaice	BSAI	54,000	44,900	18,500	14,269	49,000	41,000	46,800	39,100
Other flatfish	BSAI	17,700	13,250	3,620	2,394	17,414	13,061	17,414	13,061
Pacific Ocean perch	BSAI	42,558	34,988	32,021	30,034	40,529	33,320	38,589	31,724
	BS	n/a	8,771	8,021	6,588	n/a	8,353	n/a	7,953
	EAI	n/a	8,312	8,000	7,861	n/a	7,916	n/a	7,537
	CAI	n/a	7,723	7,000	6,777	n/a	7,355	n/a	7,002
	WAI	n/a	10,182	9,000	8,808	n/a	9,696	n/a	9,232
Northern rockfish	BSAI	15,337	12,488	3,250	7,230	14,689	11,960	14,085	11,468
Blackspotted/Rougheye	BSAI	560	453	349	180	693	561	855	694
rockfish	EBS/EAI	n/a	149	149	65	n/a	179	n/a	216
	CAI/WAI	n/a	304	200	115	n/a	382	n/a	478
Shortraker rockfish	BSAI	690	518	250	149	690	518	690	518
Other rockfish	BSAI	1,667	1,250	880	683	1,667	1,250	1,667	1,250
	BS	n/a	695	325	184	n/a	695	n/a	695
	ΑI	n/a	555	555	499	n/a	555	n/a	555
Atka mackerel	BSAI	125,297	106,000	54,500	53,265	104,749	90,340	99,490	85,840
	EAI/BS	n/a	38,492	27,000	26,342	n/a	30,832	n/a	29,296
	CAI	n/a	33,108	17,000	16,669	n/a	27,216	n/a	25,860
	WAI	n/a	34,400	10,500	10,253	n/a	32,292	n/a	30,684
Skates	BSAI	49,575	41,658	25,700	24,886	50,215	42,134	47,674	39,943
Sculpins	BSAI	52,365	39,725	4,700	4,612	52,365	39,725	52,365	39,725
Sharks	BSAI	1,363	1,022	125	96	1,363	1,022	1,363	1,022
Squids	BSAI	2,624	1,970	400	2,360	6,912	5,184	6,912	5,184
Octopuses	BSAI	3,452	2,589	400	370	3,452	2,589	3,452	2,589
Total	BSAI	4,769,174			1,870,168			4,935,455	

^a The SSC recommendation for "maximum subarea species catch" of Blackspotted/Rougheye rockfish in the WAI portion of the CAI/WAI is 58 mt in 2016 and 73 mt in 2017.

Table 2. SSC recommendations for GOA groundfish OFLs and ABCs for 2016 and 2017, shown with 2015 OFL, ABC, TAC, and catch amounts in metric tons (2014 catches through November 7th, 2015 from AKR catch accounting system). Recommendations are marked in **bold** where SSC recommendations differ from those of the BSAI Plan Team.

	after from those of the B		20	15		20	16	2017		
Species	Area	OFL	ABC TAC		Catch	OFL ABC		OFL	ABC	
	W(61)	-	31,634	31,634	28,730		56,494 ^a		55,657 ^a	
	C(62)	_	97,579	97,579	81,324		124,927 ^a		123,078 ^a	
	C(63)	_	52,594	52,594	52,396		57,183 a		56,336 ^a	
Pollock	WYAK	_	4,719	4,719	250		9,348 a		9,209 ^a	
	Subtotal	256,545	191,309	186,526	162,700	322,858	254,310	289,937	250,544	
	EYAK/SEO	16,833	12,625	12,625	102,700	13,226	9,920	13,226	9,920	
	Total	273,378	203,934	199,151	162,700	336,084	264,230	303,163	260,464	
	W		38,702	27,091	18,038		40,503		34,998	
	C		61,320	45,990	33,372		49,312		42,610	
Pacific cod	Е		2,828	2,121	87		8,785		7,592	
	Total	140,300	102,850	75,202	51,497	116,700	98,600	100,800	85,200	
	W	·	1,474	1,474	1,012		1,272	-	1,163	
	C		4,658	4,658	4,570		4,023		3,678	
Sablefish	WYAK		1,708	1,708	1,802		1,475		1,348	
	SEO		2,682	2,682	2,822		2,317		2,118	
	Total	12,425	10,522	10,522	10,206	10,326	9,087	9,825	8,307	
	W		22,074	13,250	274		20,851		19,159	
Shallow-	C		19,297	19,297	2,959		19,242		17,680	
water	WYAK		2,209	2,209	1		3,177		2,919	
flatfish	EYAK/SEO		625	625	1		1,094	70.220	1,006	
	Total	54,207	44,205	35,381	3,235	54,520	44,364	50,220	40,764	
D	W C		301	301	54		186		187	
Deep- water	WYAK		3,689 5,474	3,689 5,474	183 2		3,495 2,997		3,516 3,015	
flatfish	EYAK/SEO		3,870	3,870	3		2,548		2,563	
Hatrish	Total	15,993	13,334	13,334	242	11,102	9,226	11,168	9,281	
	W	10,,,,	1,258	1,258	76	11,102	1,315	11,100	1,318	
	C		5,816	5,816	1,793		4,445		4,453	
Rex sole	WYAK		772	772	,		766		767	
	EYAK/SEO		1,304	1,304			967		969	
	Total	11,597	9,150	9,150	1,869	9,791	7,493	9,810	7,507	
Arrowtooth flounder	W		30,752	14,500	557		28,183		28,659	
	С		114,170	75,000	17,857		107,981		109,804	
	WYAK		36,771	6,900	37		37,368		37,999	
	EYAK/SEO	226 200	11,228	6,900	22	210 420	12,656	106714	12,870	
	Total	226,390	192,921	103,300	18,473	219,430	186,188	196,714	189,332	
	W		12,767 24,876	8,650	199 1,707		11,027		11,080 20,307	
Flathead	C WYAK		3,535	15,400 3,535	1,707		20,211 2,930		20,307	
sole	EYAK/SEO		3,333 171	3,333 171	1		2,930 852		2,944 856	
-	Total	50,792	41,349	27,756	1,907	42,840	35,020	43,060	35,187	
aw/c/www.		50,792	T1,J+7	41,130	1,907	42,040	55,020	₹2,000	55,107	

^a W/C/WYAK subarea amounts for pollock are apportionments of subarea ACL that allow for regulatory reapportionment

Table 2. continued.		2015					16	2017	
Species	Area	OFL	ABC	TAC	Catch	OFL	ABC	OFL	ABC
	W		2,302	2,302	2,038		2,737		2,709
D 10	C		15,873	15,873	14,196		17,033		16,860
Pacific	WYAK		2,014	2,014	1,980		2,847		2,818
Ocean	W/C/WYAK	23,406	20,189	20,189	18,214	26,313	22,617	26,045	22,387
perch	SEO	954	823 21,012	823 21,012	18,214	2,118	1,820	2,096	1,802
	Total	24,360	21,012	21,012	18,214	28,431	24,437	28,141	24,189
	W		1,226	1,226	978		457		430
Northern	C		3,772	3,772	2,957		3,547		3,338
rockfish ^b	E		1.000	4.000	2025	4.500	4*	4.704	4*
	Total	5,961	4,998	4,998	3,935	4,783	4,004	4,501	3,768
C1 1	W		92	92	49	l I	38		38
Shortraker	C		397	397	254	l I	301		301
rockfish	E	1.764	1,323	834 1,323	264 567	1 715	947	1 715	947
	Total W	1,764	296	296	183	1,715	1,286 173	1,715	1,286 159
	C		3,336	3,336	2,551		4,147		3,791
Dusky	WYAK		1,288	1,288	2,331		275		251
rockfish	EYAK/SEO		189	189	7		91		83
	Total	6,246	5,109	5,109	2,742	5,733	4,686	5,253	4,284
Danielana and	W		115	115	29		105		105
Rougheye and	C		632	632	345		707		705
blackspotted rockfish	Е		375	375	155		516		515
	Total	1,345	1,122	1,122	529	1,596	1,328	1,592	1,325
Demersal shelf rockfish	Total	438	225	225	108	364	231	364	231
	W		235	235	232		291		291
Thornyhead	C		875	875	581		988		988
rockfish	E		731	731	211	2 11 7	682	2 -1 -	682
	Total	2,454	1,841	1,841	1,024	2,615	1,961	2,615	1,961
Other	W/C		1,031	1,031	1,041		1,534		1,534
rockfish	WYAK		580	580	34		574		574
(Other slope) ^b	EYAK/SEO		2,469	200	19		3,665*		3,665*
(Guiler stope)	Total	5,347	4,080	1,811	1,094	7,424	5,773	7,424	5,773
Atka mackerel	Total	6,200	4,700	2,000	1,191	6,200	4,700	6,200	4,700
Big skate	W		731	731	182		908		908
	C		1,257	1,257	1,173		1,850		1,850
	Е		1,267	1,267	55		1,056		1,056
	Total	4,340	3,255	3,255	1,410	5,086	3,814	5,086	3,814
Longnose skate	W		152	152	98		61		61
	C		2,090	2,090	1,055		2,513		2,513
	E	4 201	976	976	311	4 274	632	4 274	632
Other skates	Total Total	4,291 2,980	3,218 2,235	3,218 2,235	1,464 1,476	4,274 2,558	3,206 1,919	4,274 2,558	3,206 1,919
Sculpins	GOA-wide	7,448	5,569	5,569	941	7,338	5,591	7,338	5,591
Sharks	GOA-wide GOA-wide	7,448	5,989	5,989	1,306	6,020	4,514	6,020	4,514
Squids	GOA-wide	1,530	1,148	1,148	408	1,530	1,148	1,530	1,148
Octopuses	GOA-wide GOA-wide	2,009	1,148	1,148	909	6,504	4,878	6,504	4,878
Total	GOA-wide								
Total 870,064 685,597 536,158 287,447 892,964 727,684 815,875 708,629 *Note that the 4 mt of EGOA northern rockfish is excluded from that stock's total as it is managed as part of the EGOA "other								708,629	

* Note that the 4 mt of EGOA northern rockfish is excluded from that stock's total as it is managed as part of the EGOA "other rockfish" category.

Stock Structure workgroup report

The SSC received a summary on the Stock Structure /Spatial management workgroup Report from Diana Stram (Council staff). The workgroup was formed and met twice since October in order to meet the Council's request that a small group comprised of Plan Team, Council staff, NMFS RO, and SSC members discuss outstanding issues of stock structure/spatial management and make recommendations for moving forward in this cycle with BSAI blackspotted/rougheye rockfish and provide clarifications of the Council's policy adopted October 2013. The SSC further recommends that the GOA skate also move forward on the time schedule set by the workgroup. The SSC notes that there is already action moving forward to set MRA's for big and longnose that should resolve current concern level. The workgroup discussed and made recommendations to address issues raised in the 2014 Joint Plan Team minutes (attached). The SSC recommends that the Council adopt all workgroup recommendations that will help clarify and address outstanding issues.

The workgroup recommendations include:

- 1. That the Council clarify that this policy applies equally to both spatial structure/management and stock structure issues. The workgroup recommends that the Council rename the policy as the "Stock Structure and Spatial Management policy."
- 2. That the Joint Plan Teams revise their spatial management and stock structure policy "with the understanding that the list of alternative tools/options to be included under Step 2 of the Council process should always include separate harvest specifications at the TAC level, the ABC level, the OFL level, or all three"
- 3. In cases of little or no concern, where no action needs to be taken to incorporate "This includes situations where information is insufficient to determine a level of concern, which may motivate additional research."
- 4. The Council amend Step 2 of its policy to include "This suite of tools should always include separate harvest specifications at the TAC level, the ABC level, the OFL level, or all three."
- 5. The workgroup clarifies "that, from the perspective of stock structure/spatial management issues, the differences in spatial management between FMP's reflect reasonable responses to available information."
- 6. The Council adopt workgroup timeframe for instituting spatial stock structure changes that are in conjunction with Step 2 of the Council's policy, with the understanding that a somewhat longer time frame may be necessary for actions involving rulemaking.
- 7. The Council clarify that degree of concern is a function of both the strength of evidence of stock structure and the extent to which the fishery is impacting that structure.

Additionally the SSC support workgroup recommendations that the Council provide clarification on the following points in order to move forward in 2016 for BSAI BS/RE:

- Who should propose additional management tools and what is the role of the public in identifying them?
- Who will evaluate the suite of tools?
- What is (or, is there) a continued role for the workgroup in this process?