



NOAA
FISHERIES

Buffer in Gag vs. GAJ projections

SSC Meeting
July 8th, 2022

SEFSC

Gag projections

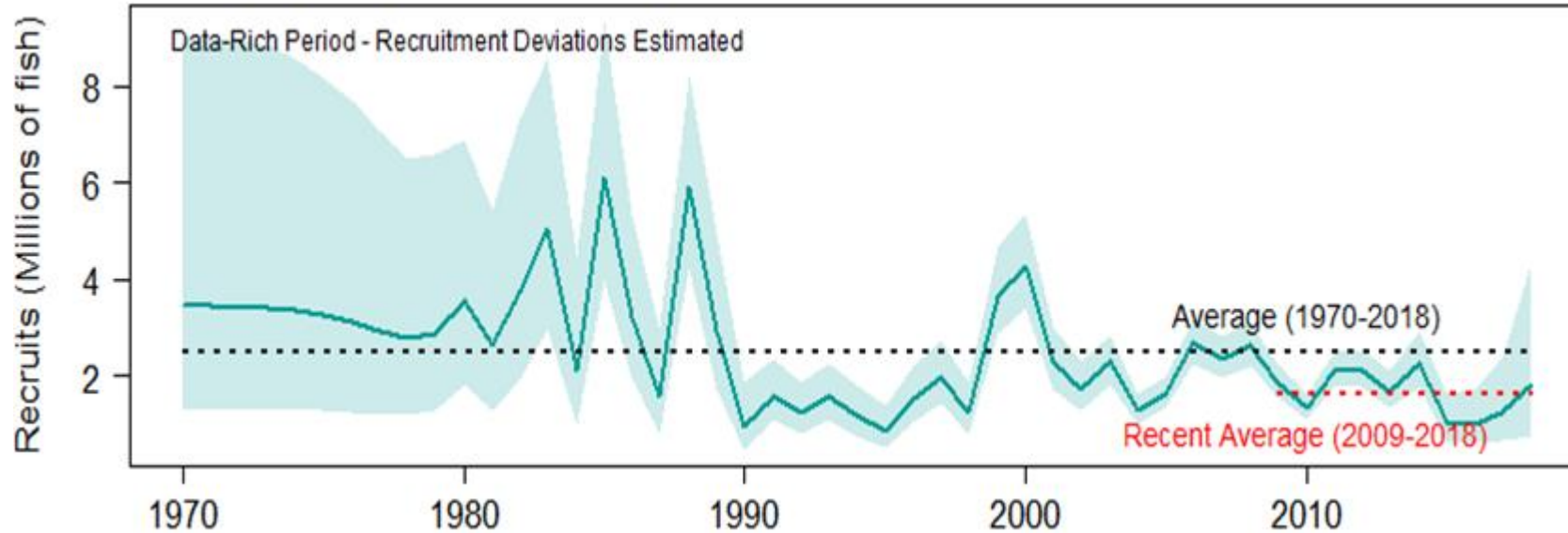
- The stock-recruit curve was used for both the benchmarks and the recruits.
- Time to rebuild is longer in all scenarios

SRFS RUN – Fspr40

Year	R	F	F/ MFMT	SSB	SSB/ SSBF _{msy}	SSB/ MSST	Yield	SSB/ SSB0
2017	2,898	0.342	3.48	1,694	0.07	0.14	-	0.03
2018	1,517	0.446	4.54	1,726	0.07	0.14	-	0.03
2019	2,159	0.375	3.82	1,709	0.07	0.14	-	0.03
2020	3,557	0.331	3.36	1,840	0.07	0.15	1.88	0.03
2021	3,764	0.388	3.95	2,019	0.08	0.16	2.07	0.03
2022	3,146	0.481	4.89	1,519	0.06	0.12	1.91	0.02
2023	2,843	0.098	1.00	1,307	0.05	0.10	0.42	0.02
2024	3,748	0.098	1.00	2,005	0.08	0.16	0.63	0.03
2025	4,620	0.098	1.00	2,933	0.12	0.23	0.85	0.04
2026	5,274	0.098	1.00	3,892	0.16	0.31	1.03	0.06
2027	5,740	0.098	1.00	4,792	0.19	0.38	1.25	0.07

F=Fspr40	0.098			Year rebuilt	2043	
OFL	mp gw			Frebuild	0.081	
				Tmin(12 yrs)*1 Generation (8 yrs)	mp gw	
2023	0.418690			2023	0.347245	17%
2024	0.627031			2024	0.525875	16%
2025	0.843887			2025	0.714315	15%
2026	1.030735			2026	0.880281	15%
2027	1.248507			2027	1.075449	14%
Year rebuilt	2047			Year rebuilt	2042	
Frebuild	0.091			Frebuild	0.074	
Tmin(12 yrs)*2	mp gw	Diff from OFL		F=75%Fspr40	mp gw	
2023	0.387812	7%		2023	0.314410	25%
2024	0.583607	7%		2024	0.478577	24%
2025	0.788588	7%		2025	0.652825	23%
2026	0.966907	6%		2026	0.807812	22%
2027	1.175539	6%		2027	0.990818	21%

GAJ projections



- Low recent average recruitment assumed for the projections.
- Shorter time to rebuild caused rebuild yields to be lower than fishing at F_{OFL} .

Nov_GAJ_base_OFL									
Yr	R	F	F_FSPR30	SSB	SSB_SSBSPR30	SSB_MSSTSPR30	SSB_SSB0	SPR	OFL_mp
2022	1650.66	0.24	1.00	2471	0.42	0.85	0.10	0.29	2.102
2023	1650.66	0.24	1.00	2652	0.45	0.91	0.11	0.30	2.236
2024	1650.66	0.24	1.00	2813	0.48	0.96	0.12	0.30	2.343
2025	1650.66	0.24	1.00	2930	0.50	1.00	0.12	0.30	2.419
2026	1650.66	0.24	1.00	3017	0.52	1.03	0.13	0.30	2.472
2027	1650.66	0.24	1.00	3078	0.53	1.05	0.13	0.30	2.507
2028	1650.66	0.24	1.00	3121	0.53	1.07	0.13	0.30	2.531
2029	1650.66	0.24	1.00	3145	0.54	1.08	0.13	0.30	2.544
2030	1650.66	0.24	1.00	3160	0.54	1.08	0.13	0.30	2.552