

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON PACIFIC MACKEREL
SPECIFICATIONS AND MANAGEMENT MEASURES FOR 2025-27 - FINAL ACTION

Alex Jensen (Southwest Fishery Science Center) presented results for the 2025 catch-only projection of the 2023 Pacific mackerel benchmark assessment ([Agenda Item G.4 Attachment 1](#)). The catch-only projection follows the methods of the 2023 benchmark but is based on the most recent version of Stock Synthesis. Bridging analyses found consistency among model outputs. Updated catch data from 2008-2023 and catch data for 2024 were used in the catch-only projection, and forecasts began in 2024. The resulting model provided forecasts of biomass for age 1+ fish for July 2025 and July 2026.

The proportion of summary biomass in the catch-only projection informed solely by the stock-recruitment relationship, rather than by information provided by the Acoustic Trawl survey, is 94 percent for July 2025 and 98 percent for July 2026. Incorporation of survey and composition data in an update assessment would better inform estimates of recent recruitment, although this is outside the Terms of Reference for a catch-only projection. A sensitivity analysis showed that setting recruitment beyond 2022 equal to that estimated for recent years resulted in relatively small differences.

The Scientific and Statistical Committee (SSC) found an error in the calculation of the Tier 1 ABC buffers presented in Table 4 of [Attachment 1](#), which was corrected in the presentation to the SSC by Alex Jensen. The corrected table is provided below.

The SSC endorses the catch-only projection as the best scientific information available for use in management. However, using recruitment values from the stock-recruitment curve instead of full demographic information from monitoring data leads to substantially greater uncertainty than is common for catch-only projections used for Council decision-making. The SSC assigned the catch-only projection to Category 2(d), but noted that the level of uncertainty may be more comparable to that of Category 3. The SSC endorses the Overfishing Limits (OFLs) of 12,965 mt for 2025-26 and 14,270 mt for 2026-27, and the associated Age 1+ biomasses on 1 July 2025 and 2026 of 61,737 mt and 67,954 mt. The Harvest Guideline (HG) depends on the catch assumed and the buffer selected by the Council because a choice of the P^* less than 0.4 can result in an ABC value below the current HG. The final Acceptable Biological Catches (ABCs) depend on the Council's risk tolerance as reflected in the choice of P^* . The 2026-27 overfishing limit could be recalculated if the ABC for 2025-26 is less than the HG for that year.

a) Fishing year 2025-2026

Harvest Control Rule Formulas								
OFL = BIOMASS * E_{MSY} * DISTRIBUTION								
ABC _{P-star} = BIOMASS * BUFFER _{P-star} * E_{MSY} * DISTRIBUTION								
HG = (BIOMASS – CUTOFF) * FRACTION * DISTRIBUTION								
Harvest Guideline Parameters								
BIOMASS (ages 1+, mt)	61,737							
P-star	0.45	0.4	0.35	0.3	0.25	0.2	0.15	
ABC Buffer _{Tier 1}	0.8469	0.7153	0.6008	0.4998	0.4099	0.3286	0.2540	
ABC Buffer _{Tier 2}	0.7778	0.6025	0.4627	0.3504	0.2595	0.1858	0.1258	
ABC Buffer _{Tier 3}	0.7778	0.6025	0.4627	0.3504	0.2595	0.1858	0.1258	
EMSY (FRACTION)	0.30							
CUTOFF (mt)	18,200							
DISTRIBUTION (U.S.)	0.70							
Harvest Control Rule Values								
OFL =	12,965							
ABC _{Tier 1} =	10,980	9,274	7,789	6,480	5,314	4,260	3,293	
ABC _{Tier 2} =	10,084	7,811	5,999	4,543	3,364	2,409	1,631	
ABC _{Tier 3} =	10,084	7,811	5,999	4,543	3,364	2,409	1,631	
HG =	9,143							

b) Fishing year 2026-2027

Harvest Guideline Parameters								
BIOMASS (ages 1+, mt)	67,954							
P-star	0.45	0.4	0.35	0.3	0.25	0.2	0.15	
ABC Buffer _{Tier 1}	0.8206	0.6712	0.5453	0.4381	0.3459	0.2659	0.1957	
ABC Buffer _{Tier 2}	0.7778	0.6025	0.4627	0.3504	0.2595	0.1858	0.1258	
ABC Buffer _{Tier 3}	0.7778	0.6025	0.4627	0.3504	0.2595	0.1858	0.1258	
EMSY (FRACTION)	0.30							
CUTOFF (mt)	18,200							
DISTRIBUTION (U.S.)	0.70							
Harvest Control Rule Values (MT)								
OFL =	14,270							
ABC _{Tier 1} =	11,710	9,578	7,782	6,252	4,936	3,794	2,793	
ABC _{Tier 2} =	11,099	8,598	6,603	5,000	3,703	2,651	1,795	
ABC _{Tier 3} =	11,099	8,598	6,603	5,000	3,703	2,651	1,795	
HG =	10,448							

PFMC
04/12/25