Catch Only Projection for Darkblotched Rockfish (*Sebastes crameri*) in 2021

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This document provides the second catch-only projection of the 2017 update assessment of darkblotched rockfish (*Sebastes crameri*), with updated catch data through 2020. Updated total catches for years 2002 – 2019 were derived from GEMM reports. Catches from years prior to the end of the data used in the last update were virtually unchanged, and therefore there was no need to rerun the original assessment with updated catch data. Estimated 2020 and projected 2021 and 2022 catches were provided by the Groundfish Management Team (GMT). For years 2023 and beyond, ABC catches were assumed. In the projections, the split of catches among fleets was based upon the split in the final year. Scientific Uncertainty Buffer Fractions are based upon the number of years since the last assessment was conducted in 2017, based upon a Category-1 assessment with P* = 0.45. Those Buffer Fractions, along with previous and updated Catches, OFLs and Depletions and updated Biomass, Spawning output and ABCs are given in Table 1.

Table 1. Catch-only projections through 2032.

Year	OFLs from 2019 Projection (mt)	Updated OFL Projection (mt)	Scientific Uncertainty Buffer Fraction	Updated ABC Projection (mt)	Assumed Catch in 2019 Projection (mt)	Actualized Catch and Projection (mt)	Summary (Age 1+) Biomass (mt)	Spawning Output (million eggs)	Depletion (%) from 2019 Projection	Depletion (%)
2017	671				230	245			40.0%	40.0%
2018	683				343	344			41.8%	41.8%
2019	800				331	416			44.0%	44.0%
2020	853				331	307			46.8%	46.8%
2021	953				884	479			49.7%	49.8%
2022	901				832	458			51.4%	52.1%
2023	856	894	0.917	820	786	820	24944	1916	52.5%	54.1%
2024	822	857	0.913	782	752	782	24783	1946	53.3%	54.9%
2025	798	830	0.909	754	727	754	24595	1965	53.8%	55.4%
2026	781	810	0.904	732	708	732	24392	1975	54.1%	55.7%
2027	769	795	0.900	716	693	716	24182	1978	54.2%	55.8%
2028	760	784	0.896	702	682	702	23969	1977	54.2%	55.8%
2029	752	775	0.892	691	671	691	23759	1971	54.1%	55.6%
2030	747	767	0.887	680	662	680	23555	1964	53.9%	55.4%
2031		761	0.883	672		672	23361	1954		55.1%
2032		755	0.879	664		664	23177	1944		54.9%