

ATTACHMENT B – ODFW ocean commercial Dungeness crab fishery non-target catch assessment.

Report Date: February 2024

Summary: ODFW assessed non-target species landed on Oregon fish tickets in ocean commercial Dungeness crab fishery as part of the Oregon Dungeness Crab Commission's (ODCC) Fishery Improvement Plan (FIP). ODFW also updated the time series of non-target species documented on observed preseason test trips, originally published in the [Fishery Management Plan](#) in 2022.

FIP Goal/Performance Indicator/Actions:

Goal 2 - Identify the main non-target species and provide information on the status of these species. PI 2.1.3, 2.2.3

Action C - Provide encounter rates and/or catch data (numbers) for out of scope species (non-ETP amphibians, reptiles, birds, mammals, e.g. orange sea pen, pelagic cormorant).

Goal 3 - Demonstrate that the main non-target species are above biological based limits. PI 2.1.1, 2.2.1

Action A - For species that account for 5% or more of the total catch (if any) and have management targets such as an LRP), provide annual stock status information over the past 10-15 years relative to the target.

Action B - For species that account for 5% or more of the total catch (if any) and do not have management targets and all out of scope species, provide available abundance trend information (catch or CPUE data, observer data, abundance surveys, etc).

Goal 4 - Demonstrate that there is a strategy in place that is designed to maintain the main non-target species at sustainable levels. 2.1.2 and 2.2.2

Action A - For species that account for 5% or more of the total catch (if any) describe the strategy used to maintain these species at or above biological based limits or if none, develop and implement such a strategy.

Action B - For species that account for 5% or more of the total catch (if any) provide an objective rationale and evidence for why the above strategy will work based on some direct information the UoA and/or species involved.

Methods: ODFW queried non-target species landed on Oregon fish tickets from the ocean commercial Dungeness crab fishery in the past ten crab seasons (filters included: crab pot and ring gear, all non-Dungeness crab species, ocean Dungeness crab season). The total pounds of each non-target species were summed for each season and divided by the total pounds of all species landed in the fishery by season. This resulted in the percentage of all species landed in fishery for the past ten ocean commercial crab seasons.

In 2022, ODFW published the Oregon Dungeness Crab Fishery Management Plan that includes the agency's policies to minimize bycatch and efforts to assess and monitor the fishery's bycatch rates. For this assessment ODFW updated the time series of non-target species documented on observed preseason test trips, Figure 8 in the FMP.

Results: In the ten most recent crab seasons there have been six different non-target species landed in the ocean commercial Dungeness crab fishery (Table 1). Each species accounts for less than one percent of the total landed catch in the fishery each crab season. From 2010-2023 bycatch sampling indicates that CPUE is

highest for sublegal male crab, followed by female crab, other invertebrates, and fish species at the beginning of the ocean commercial crab season.

Table 1. The percentage of species landed on Oregon landing receipts in the ocean commercial Dungeness crab fishery from 2013-14 through 2022-23.

Species	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Wolf eel	0.00021	0.00000	0.00028	0.00052	0.00033	0.00059	0.00046	0.00142	0.00094	0.00041
Tanner crab	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00000	0.00000
Box crab	0.00805	0.09920	0.00000	0.00000	0.00119	0.00145	0.00000	0.00000	0.01202	0.00264
Red Rock crab	0.00000	0.00000	0.00010	0.00001	0.00002	0.00002	0.00000	0.00002	0.00000	0.00000
Market squid	0.00000	0.00000	0.00000	0.00000	0.00000	0.00002	0.00078	0.00000	0.00000	0.00000
Octopus	0.01286	0.00981	0.00201	0.00394	0.00775	0.01223	0.00462	0.00462	0.00288	0.00221
Dungeness crab	99.97888	99.89099	99.99761	99.99553	99.99070	99.98569	99.99414	99.99391	99.98416	99.99475

Table 2. Coastwide catch-per-unit-effort of crab and non-crab species in a subset of pots sampled during ocean commercial preseason testing trips from October through January of 2010–2023. Due to COVID-19 restrictions during preseason testing trips, data were not collected in 2020 or 2021.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2022	2023
Legal male D. crab	18.05	15.39	16.36	12.94	8.69	16.15	16.90	19.49	18.93	16.92	21.04	22.50
Sub-legal male D. crab	2.29	6.56	5.28	2.10	2.38	5.97	4.48	4.79	6.44	2.99	5.46	5.21
Female D. crab	0.89	1.07	0.66	0.23	0.54	0.12	0.10	0.22	0.22	0.11	0.11	0.30
Other invertebrates	0.04	0.21	0.00	0.21	0.13	0.02	0.00	0.03	0.00	0.01	0.01	0.03
Fish species	0.01	0.01	0.00	0.05	0.13	0.00	0.00	0.00	0.01	0.02	0.03	0.00

Discussion: All non-target species harvested in the ocean commercial Dungeness crab fishery are discarded or landed in very small amounts compared to the targeted Dungeness crab catch. In the past ten crab season all non-target species landed combined account for less than one percent of the targeted Dungeness crab landed each season. ODFW’s bycatch monitoring efforts for the fishery continue to indicate discard rates of non-target species remain very low. Since there are no landed or discarded species that approach 5% or more of the total Dungeness crab fishery’s total landed catch no additional evaluation is needed to fulfill ODCC’s FIP goals 2C, 3A, 3B, 4A and 4B.