(NMFS Reference WCR-2014-1502; USFWS Reference 01EWFW00-2016-F-0121)

Report for U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) on shellfish activities authorized with use of the programmatic ESA/EFH biological opinions (NMFS Reference WCR-2014-1502; USFWS Reference 01EWFW00-2016-F-0121)

Prepared by U.S. Army Corps of Engineers (Corps), Regulatory Branch, Seattle District Date: June 15, 2023

<u>Shellfish Activities</u>: As of May 15, 2023, the Seattle District reports 34,470.65 (active and fallow) of shellfish activities are currently authorized under the programmatic ESA/EFH biological opinions. This value represents a net decrease of approximately 1,561.85 acres from last year's report of 36,033.5 (a cumulative total of authorized acres since October 1, 2016).

<u>Take Limits</u>: We are currently reporting approximately 2,107.87 acres of shellfish activities in Hood Canal summer-run chum (HCSR) critical habitat areas. This is a net decrease of approximately 39.18 acres from last year (2,147.05). The HCSR chum critical habitat acreage limit is 2,412 acres. We have about 304.13 acres remaining in our take limit and are currently reviewing approximately 113.9 acres of activities in HCSR chum critical habitat areas (not authorized as of May 15, 2023). The Seattle District continues to closely monitor the authorizations using the programmatic biological opinions to ensure the acreage does not exceed the incidental take for activities located in HSCR chum critical habitat.

<u>Supporting Information</u>: Attached is a spreadsheet of cumulative total of project authorizations since October 1, 2016, with the following information for each authorization: Corps reference number; applicant name; county; waterbody; mechanical oyster harvest/harrowed per year; fallow acres with native eelgrass returned to cultivation in Puget Sound and Hood Canal; and acres of shellfish activities in HCSR critical habitat (Appendix A). Duplicate data entry fields, such as those where projects were modified or combined under new permit numbers, were removed to prevent double counting of acreage impacts. Projects identified with a letter such as "A" or "B" after the reference number reflect a project that had been modified at the applicant's request. Also attached is Entanglement Report (Appendix B) and Berm and Dike Report (Appendix C).

Summary Tables: Below are tables summarizing NMFS (Tables 1-4) and USFWS (Table 5) incidental take activity / acreages authorized between October 1, 2016, and May 15, 2023. Table 4 includes a summary of loose nets and entanglements. Although the Corps may receive numerous reports of loose gear (e.g., oyster/clam bags, geoduck tubes) in any given year, biological opinion reporting requirements are limited to large cover nets loose and entanglements. Table 6 shows a summary of reported berms and dikes. Upon further review of a project with multiple dikes (NWS-2007-1394-A), we noted one of the existing dikes depicted on the project drawings had not been previously annotated on this report. This oversight was corrected in the current report.

(NMFS Reference WCR-2014-1502; USFWS Reference 01EWFW00-2016-F-0121)

Table 1. NMFS Incidental Take Summary: **Fallow Areas with Native Eelgrass Returned to Shellfish Activities** over 20-year term (acres), cumulatively, between October 1, 2016 and May 15, 2023. Table includes incidental take limit (acres), remaining acres in take limit and net change from previous report. See Appendix A.

Fallow Areas with Native Eelgrass Returned to Shellfish Activities

Waterbody	Maximum acres	Authorized	Remaining in	Change from
	of fallow areas	Activities as of	Take Limit	2022 Report
	with native	May 15, 2023	(acres)	(acres)
	eelgrass	(acres)	, ,	, ,
	returned to	, ,		
	shellfish			
	activities over			
	20-year term			
Puget	2,628	4.89 <sup>1</sup>	2,623.11	Decrease of
Sound/Hood				38.372
Canal				

Table 2. NMFS Incidental Take Summary: **Authorized Activities in Hood Canal Summer-Run Chum Critical Habitat** over 20-year term (acres), cumulatively, between October 1, 2016 and May 15, 2023. Table includes incidental take limit, remaining acres in take limit and net change from previous report. See Appendix A.

**Authorized Activities in Hood Canal Summer-Run Chum Critical Habitat** 

Waterbody	Maximum acres of shellfish activities over 20-year term	Authorized Activities as of May 15, 2023 (acres)	Remaining in Take Limit (acres)	Change from 2022 Report (acres)
Hood Canal summer-run chum critical habitat ( <i>Hood Canal and in Jefferson, Clallam Counties</i> )	2,412	2107.87	304.13	Decrease of 39.18

<sup>&</sup>lt;sup>1</sup>Prior year annual reports depict greater number of fallow eelgrass areas. However, this number has changed in waterbodies such as Willapa Bay, as applicants are using more sophisticated software to accurately depict square footage of their parcels and the cultivation within those parcels. Previously, applicants were relying on county parcel information, which inaccurately depicted the size of the parcels and the cultivation area within those parcels. Using more sophisticated software has resulted in cultivation areas increase in acres (not actual footprint). Therefore, areas of cultivation were inaccurately characterized and are larger than previously reported, resulting in a decrease of area previously characterized as fallow.

<sup>&</sup>lt;sup>2</sup>Cultivation areas in previous permitting efforts were inaccurately depicted as "continuing operations," and were reported incorrectly as being covered under the Shellfish Aquaculture Activities in Washington State programmatic. The areas have been identified and removed from the 2022 annual report, resulting in a decrease in acres from previous reporting years. The areas identified are pursuing individual ESA consultation and have not been issued a Corps permit.

(NMFS Reference WCR-2014-1502; USFWS Reference 01EWFW00-2016-F-0121)

Table 3. NMFS Incidental Take Summary: **Annual Mechanical Oyster Harvest or Harrow Authorized** as of May 15, 2023, in acres per year. Table includes remaining acres in take limit, and net change from previous report. See Appendix A.

Annual Mechanical Oyster Harvest or Harrow Authorized (acres/year)

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Waterbody	Maximum	Annual	Remaining in	Change from
	mechanical	Mechanical	Take Limit	2022 Report
	oyster harvest or	Oyster Harvest	(acres/year)	(acres/year)
	harrowing	/ Harrow		
	(acres/year)	(acres/year)		
Willapa Bay	18,367	8,402.32 <sup>3</sup>	9,964.68	Decrease of 3,736.18
Grays Harbor	2,763	867.722	1,895.28	Decrease of 463.31

Table 4. NMFS Incidental Take Summary: **Reports of Entanglements or Loose Nets** over 20-year term, between October 1, 2016 and May 15, 2023. Table includes maximum entanglements for specific species and report of loose nets and other species entanglements for all waters (i.e., Puget Sound, Hood Canal, Willapa Bay, and Grays Harbor). See Appendix B.

Reports of Entanglements or Loose Nets

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Metric	Maximum	Cumulative	Remaining in	Change from
	Entanglements	Total	Take Limit	2022 Report
	over 20-year	(entanglements	(entanglements	(entanglements
	term	or reports)	or reports)	or reports)
Entanglements of PS Chinook, HCSR chum, green sturgeon or canary rockfish (entanglements)	5	0	5	No Change
Monitor and report incidents of loose nets, and any entangled fish (reports)	N/A	44	N/A	No Change

<sup>&</sup>lt;sup>3</sup> The annual mechanical harvest or harrow metric is measured in acres per year and includes authorized acres since October 1, 2016, as updated in any recent authorizations.

<sup>&</sup>lt;sup>4</sup> Loose nets or other species entanglements reported in Henderson Inlet and Squamish Harbor (project specific), and Hood Canal (non-project specific), reported originally in 2018.

(NMFS Reference WCR-2014-1502; USFWS Reference 01EWFW00-2016-F-0121)

Table 5. USFWS Incidental Take Summary: **Incidental Take for Bull Trout** over 20-year term, cumulatively, between October 1, 2016 and May 15, 2023.

#### **Incidental Take for Bull Trout**

Waterbody	Maximum bull	Number of bull	Remaining in	Change from
	trout take over 20-year term (individuals harmed)	trout harmed (individuals harmed)	Take Limit (individuals harmed)	2022 Report (individuals harmed)
North Puget	6	0	6	No Change
South Puget Sound	2	0	2	No Change
Grays Harbor	2	0	2	No Change
Willapa Bay	2	0	2	No Change
Hood Canal	2	0	2	No Change

Table 6. Current **Report of Dikes and Berms** as of May 15, 2023, with comparison to prior reports (cumulative totals).

Report of Dikes and Berms

Report Date	Count	Total Length (linear feet)
October 1, 2017	18	6,921.32
April 9, 2018	20	13,381.30
April 2, 2019	21	14,593.30
April 2, 2020	21	14,593.30
April 2, 2021	21	14,593.30
April 1, 2022	22	14,796.50
May 15, 2023	22	14,796.50

# **Appendices**

Appendix A: Commercial Aquaculture Activity Report dated May 15, 2023

Appendix B: Entanglement Report dated May 23, 2023

Appendix C: Berm-Dike Report dated May 23, 2023