INITIAL REVIEW DRAFT

Regulatory Impact Review/ Regulatory Flexibility Analysis/Halibut Act Analysis for a Proposed Regulatory Amendment

Non-Tribal Commercial Halibut Regulatory Changes: Vessel Monitoring Systems, Seabird Avoidance Measures, and Catch Reporting

October 2024

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Abstract: This Regulatory Impact Review/Regulatory Flexibility Act Analysis/Northern-Pacific Halibut Act of 1982 Analysis analyzes proposed management measures that would apply to participants in the non-Tribal directed commercial Pacific halibut fishery (DC halibut fishery) in International Pacific Halibut Commission (IPHC) Regulatory Area 2A retaining only halibut and dealers purchasing Pacific halibut (halibut) caught in commercial fisheries. The measures under consideration include: (1) requiring all vessels participating in the DC halibut fishery to carry and operate a vessel monitoring system (VMS) unit; (2) requiring all vessels in the DC halibut fishery using bottom longline gear to use seabird avoidance gear when setting fishing gear; and (3) revising fish receiving ticket requirements to specify landings of halibut from any commercial vessel landing halibut includes both weight (pounds) and number (count) of halibut landed.

List of Acronyms and Abbreviations

Acronym or Abbreviation	Meaning
Area 2A	IPHC Regulatory Area 2A
CSP	Pacific Halibut Catch Sharing Plan
CFR	Code of Federal Regulations
Convention	Convention between the United States and Canada for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea
Council	Pacific Fishery Management Council
DC halibut fishery	non-Tribal directed commercial Pacific halibut fishery
E.O.	Executive Order
EA	Environmental Assessment
EC	Enforcement Consultants
EEZ	Exclusive Economic Zone
EFH	essential fish habitat
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FMP	fishery management plan
FONSI	Finding of No Significant Impact
FR	*Federal Register*
FRFA	Final Regulatory Flexibility Analysis
ft	foot or feet
GMT	Groundfish Management Team
Halibut Act	Northern Pacific Halibut Act of 1982

Acronym or Abbreviation	Meaning
IPHC	International Pacific Halibut Commission
IRFA	Initial Regulatory Flexibility Analysis
lat.	latitude
lb(s)	pound(s)
LOA	length overall
m	meter or meters
Magnuson-Stevens Act/MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEPA	National Environmental Policy Act
NMFS	National Marine Fishery Service
NOAA	National Oceanic and Atmospheric Administration
OA	open access
halibut	Pacific halibut
PPA	Preliminary preferred alternative
PRA	Paperwork Reduction Act
RCA	Rockfish Conservation Area
RFA	Regulatory Flexibility Act
RIR	Regulatory Impact Review
RPA	reasonable and prudent alternative
Secretary	Secretary of Commerce
U.S.	United States
USCG	United States Coast Guard
USFWS	United States Fish and Wildlife Service
VMS	vessel monitoring system
WCGOP	West Coast Groundfish Observer Program

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1. Introduction

This document analyzes proposed management measures that would apply to participants in the non-Tribal directed commercial Pacific halibut fishery (DC halibut fishery) in International Pacific Halibut Commission (IPHC) Regulatory Area 2A (Area 2A, 2A) retaining only Pacific halibut (halibut) and to dealers (used in this document to mean anyone recording landings on a fish ticket) filling out fish tickets for halibut caught in any commercial fishery. The measures under consideration include: (1) requiring all vessels participating in the DC halibut fishery to carry and operate a vessel monitoring system (VMS) unit; (2) requiring all vessels in the DC halibut fishery using bottom longline gear to use seabird avoidance gear when setting fishing gear; and (3) revising fish receiving ticket requirements to specify landings of halibut from any commercial vessel landing halibut includes both weight (pounds) and number (count) of halibut landed.

This document is a draft Regulatory Impact Review/Regulatory Flexibility Act Analysis/Northern-Pacific Halibut Act of 1982 Analysis (RIR/RFAA/Halibut Act). This document provides assessments of the benefits and costs of the alternatives and the distribution of impacts (the RIR), identification of the small entities that may be affected by the alternatives (RFAA), and analysis of how the alternatives align with the Halibut Act. This standardized document produced by the Pacific Fishery Management Council (Council), is intended to help provide the analytical background for decision-making.

NMFS has preliminarily determined that the scope of these types of actions likely fall within one of the National Oceanic and Atmospheric Administration (NOAA) Categorical Exclusion categories listed in Appendix E of the Companion Manual for NOAA Administrative Order 216-6A and that none of the alternatives have the potential to have a substantial effect individually or cumulatively on the human environment. This determination is subject to further review and public comment. If this determination is confirmed when a proposed rule is prepared, the proposed action will be categorically excluded from the need to prepare an Environmental Assessment.

1.1 Problem Statement

Enforcement Consultants (EC) have noted challenges when enforcing management measures pertaining to the groundfish and DC halibut fishery and made recommendations to address these challenges. The Council determined that action may be necessary to ensure the intended benefits of closed area regulations and essential fish habitat are fully realized, reduce the likelihood of seabird bycatch, and monitor catch of halibut. These challenges and the need for action are:

(1) Detecting if vessels only retaining halibut are fishing in closed areas that are intended to protect overfished and rebuilding species, and/or sensitive habitats (e.g. essential fish habitats). For such closed areas, VMS can be used by enforcement to ensure closed area regulations are not being violated and the intended benefits of these closed areas to protect groundfish species and habitat are not diminished.

(2) Identifying violations associated with seabird avoidance gear requirements in the groundfish fishery since vessels participating in the DC fishery and retaining both groundfish and halibut using bottom longline gear are required to follow seabird avoidance measure requirements in the groundfish fishery (deploying streamer lines when setting gear during the day) but vessels participating in the DC fishery using bottom longline gear and only retaining halibut are not required to use seabird avoidance gear. Although no seabird conservation concerns have been identified for the DC halibut fishery, streamer lines can help reduce interactions with seabirds. This action is intended to reduce risks to seabirds by aligning regulations with those in place for groundfish longline vessels, as they use similar gear and fish in similar areas at the same times.

(3) Accurately catch accounting, which is necessary to achieve the goals and objectives outlined in the Catch Sharing Plan (CSP) and to enforce regulations. The Council requested fish tickets in the DC halibut and incidental primary sablefish and salmon troll fisheries include both pounds and number of halibut landed to help managers better track sector catches and manage halibut inseason, as well as better understand how the fisheries are operating and to potentially ease future modifications of regulations as the fishery evolves. Recording pounds and number of fish landed by participants in the DC halibut fishery is not necessary for management at this time since the DC halibut suballocation is managed in pounds. Federal groundfish regulations at 50 CFR 660.213(e)(1) require the weight and number of halibut landed on electronic fish tickets be recorded when sablefish are landed to monitor the incidental ratios and CSP suballocations, therefore no action is needed to achieve the Council's objective. Determining if the halibut incidental landing limits in the salmon troll fishery have been exceeded is challenging since fish tickets may only record weight and not number of halibut. Collection of weight facilitates monitoring of the CSP suballocation for this fishery but does not facilitate enforcement of the incidental ratio.

1.2 Background and History of this Action

In November 2019, the EC recommended adding a requirement for vessels participating in the DC halibut fishery to carry VMS to facilitate enforcement should the DC halibut fishery fishing periods be extended (Agenda Item F.3.a, Supplemental EC Report 1). The IPHC Secretariat was proposing a modification to the DC halibut fishery so that it would be longer than a series of 10-hour fishing periods (November 2019 Council Meeting, Agenda Item F.2, Supplemental IPHC Report 1).

At their September 2022 meeting, the Council considered 2023 fishery regulations for the DC halibut fishery. As part of the discussion, the EC provided a report (Agenda Item E.2.a, Supplemental EC Report 1) which included, among other items, recommendations to require vessels use VMS and seabird avoidance gear (streamer lines) when participating in the DC halibut fishery.

In June 2023, the Council reviewed a scoping report (Agenda Item E.1, Attachment 1) on potential changes to the Pacific halibut catch sharing plan and non-Tribal commercial halibut fishery regulations, which included the EC recommendations on VMS, seabird avoidance measures, and halibut reporting requirements.

At the September 2023 meeting, the Council reviewed additional information (Agenda Item D.1, Attachment 6) on these three items and adopted them for public review (September 2023 Council Meeting Record, Motion 8).

In November 2023, the Council again discussed the three EC recommendations. The Council offered guidance that additional work should be done on the items for review at a future meeting.

In September 2024, the Council reviewed a draft RIR/RFA/Halibut Act document and adopted a range of alternatives. The Council selected a preliminary preferred alternative (PPA) for Action 2 (Seabird Avoidance Measures) only. EC reiterated their support for these three actions (Agenda Item F.2.a, Supplemental EC Report 1).

The Council is anticipated to adopt a final preferred for each Action at the November 2024 Council Meeting.

Vessel Monitoring Systems

VMS units integrate global positioning system (GPS) and communication electronics in a single, tamper-resistant package to automatically determine a vessel's position several times per hour at a set interval. The units can be set to transmit a vessel's location periodically and automatically to an overhead satellite in real

time. A communications service provider receives the transmission and relays it to NOAA Office of Law Enforcement (OLE). The VMS data are monitored and interpreted by NOAA OLE officers in near-real time. If a violation is detected, vessels are intercepted on the water or at the dock (Greg Bush, OLE, personal communication).

VMS became a groundfish fishery requirement for vessels with federal limited entry (LE) groundfish permits, both trawl and fixed gear, in 2004 with the establishment of rockfish conservation areas (RCAs) for protecting overfished rockfish stocks. Requirements were expanded to open access (OA) vessels retaining groundfish in the Exclusive Economic Zone (EEZ; 3nm – 200nm) in 2006. In June 2020, VMS position transmission rates were increased from once every hour to once every 15 minutes for groundfish vessels in order to produce more course, location, and speed data. This was intended to improve NMFS' ability to identify whether vessels are continuously transiting in restricted areas or not[1].

Under current regulations, any vessel registered to a federal LE groundfish permit must have VMS to fish in state waters or the EEZ (50 CFR 660.14(b)(1)). In addition, non-groundfish trawl vessels (vessels that use trawl gear but are not registered to federal LE groundfish permits (e.g., pink shrimp)) must have VMS to fish in the EEZ (50 CFR 660.14(b)(2)), as well as any vessel that uses OA gear to take and retain, or possess groundfish in the EEZ or land groundfish taken in the EEZ (including salmon troll vessels; 50 CFR 660.14(b)(3)). This includes vessels participating in the DC halibut fishery that retain groundfish. West Coast large-mesh swordfish drift gillnet (DGN) fishery participants are also required to use VMS (50 CFR 660.705(o)). All other West Coast commercial fisheries are not subject to VMS requirements including vessels participating in the salmon troll fishery and DC halibut fishery and only retaining halibut (nine to 13 vessels from 2020-2023, see Section 3.3).

In 2003, the depth-based non-trawl Rockfish Conservation Area (RCA) closure was first implemented for non-trawl groundfish (68 FR 11182) and non-Tribal commercial halibut vessels (68 FR 10989) to protect depleted rockfish stocks. In March 2023, the Council recommended modifying existing closed areas and adding new closed areas that apply to the non-trawl groundfish and DC halibut fisheries. These modifications were made effective through Amendment 32 (A32)[2] to the Pacific Coast Groundfish Fishery Management Plan (FMP). Specifically, A32 modified the boundary of the non-trawl rockfish conservation area (RCA) to reduce enforcement complexity and provide additional fishing opportunities. Additional closed areas were implemented to minimize the bycatch of overfished and rebuilding groundfish species and the adverse effects of fishing on EFH. A32 established and closed the Heceta Bank Yelloweye Rockfish Conservation Area (YRCA) to the DC halibut fishery. The final rule also implemented three additional YRCAs, but they are not closed at this time. The additional YRCAs may be closed to DC halibut vessels in the future through a rulemaking process if recommended by the Council and implemented by NMFS. A32 also implemented a new type of Essential Fish Habitat Conservation Area (EFHCA) that prohibits the use of non-trawl bottom contact gear and established five EFHCAs. Taking, retaining, or possessing (except for the purpose of continuous transit) groundfish or Pacific halibut in the new EFHCAs is prohibited.

Enforcement officers (enforcement) have noted difficulties in enforcing and monitoring closed area regulations on vessels that participate in the DC halibut fishery but are not subject to VMS requirements (Greg Bush, OLE, personal communication). Without VMS, enforcement of closed areas can only be accomplished using air and surface patrol assets. Enforcement has acted on closed-area violations between 2020-2023 (NOAA 2021a; NOAA 2022; NOAA 2023; NOAA 2024) on VMS equipped vessels, but without VMS, determining any violations with closed area regulations such as the non-trawl RCA and those established by A32 are contingent on OLE or the Coast Guard being present to see the violation occur. Only

[1] 85 FR 35594
[2] 88 FR 83830

one non-VMS equipped DC halibut fishing vessel has been cited for fishing in a closed area within the past few years (Greg Bush, OLE, personal communication).

Seabird Avoidance Measures

Seabirds are known to dive on baited hooks near the surface when longline gear is deployed. Birds can become entangled with or hooked by the gear and drown. Streamer lines have been shown to deter seabirds from the fishing gear mainline for a distance beyond the stern of the vessel sufficient for the mainline to sink to a depth where bait is no longer accessible to diving or surface foraging birds. As an example, a paper by Melvin et al. (2019) shows that the use of streamer lines in Alaska longline fisheries led to a very substantial reduction in the bycatch of multiple different seabird species including at least three species albatross, northern fulmar, gulls, and shearwaters.

Longline vessels in the Pacific Coast groundfish fishery are required to use streamer lines if greater than 26 ft. LOA when fishing in the EEZ north of 36° N. lat. or must set gear at night (when albatrosses are not active) (see 50 CFR 660.21 and 84 FR 67674). This was as a result of the non-discretionary terms and conditions of the 2012 and 2017 Biological Opinions for the Pacific Coast groundfish fishery which evaluated the effect of the groundfish fishery on ESA-listed short-tailed albatross.

While vessels in the groundfish longline and DC halibut fishery utilize similar gears, the DC halibut fishery is open for a shorter time period (has historically been only open for a series of around three, 10- to 58-hour fishing periods (Table 2)) in a smaller area and was determined by USFWS as not likely to adversely affect threatened or endangered seabirds. The West Coast Groundfish Observer Program (WCGOP) began observing the DC halibut fishery in 2017 and coverage occurs during the entire season (all openers) with a median coverage rate of 8% (NOAA 2023). There were eight observed seabird mortalities in 2017 (seven black-footed albatross and one shearwater) and no observations in 2018, which is expanded out to an estimated 58 mortalities in 2017 and 16 mortalities in 2018[3]. Estimates from 2019 onward have not been published at this time but note that these observations include all DC fishery participants (those that retain groundfish and those that do not) and streamline requirements for vessels retaining groundfish were made effective in January 2020.

There are currently no requirements for vessels only retaining halibut with bottom longline gear during the DC fishery to deploy streamer lines when setting gear. However, DC halibut vessels that also retain groundfish are subject to the seabird mitigation measures for groundfish vessels (50 CFR 660.21). In 2020, the first year after seabird avoidance measures were required for groundfish vessels, enforcement did not issue any citations for violations of seabird avoidance measure requirements in place for groundfish vessels but instead focused on compliance assistance and distributing streamer lines. Since then, enforcement consultants have documented one violation in 2021, six in 2022, and seven in 2023 (NOAA 2021a; NOAA 2022; NOAA 2023; NOAA 2024) on groundfish vessels participating in the DC halibut fishery. The EC have noted that detecting violations of current groundfish fishery requirements during the DC halibut fishery is difficult and requires significant on-the-water time and resources, since requirements are not consistent between vessels using bottom longline gear and retaining only halibut and vessels using bottom longline gear and retaining both groundfish and halibut. These vessels are visually similar and fishing in the same area at the same time. Therefore, the EC recommended that vessels retaining halibut only in the DC halibut fishery have the same seabird avoidance requirements as vessels that retain both halibut and groundfish as it will be easier to enforce the groundfish regulations.

[3] Estimation methods and expansions can be found in NOAA Fisheries, 2021b

Catch Reporting on Fish Tickets

Halibut catch in the Area 2A non-Tribal commercial fisheries, directed or incidental, is managed through the use of landing limits or catch ratios so the fishery remains within its share and to help ensure that retention is allowed throughout the season.

The DC halibut fishery is managed through a series of fishing periods based on the fishery's suballocation and vessel class limits, which is the maximum amount (in pounds) of halibut that may be retained and landed by a vessel during one fishing period. For vessels landing halibut only, IPHC regulations require fish tickets include the landed weight of halibut landed, but do not require the number (count) of halibut landed are recorded. Number of fish is not currently needed for catch accounting purposes. Note that if halibut is landed with sablefish, groundfish regulations at 50 CFR 660.213(e)(1) and 50 CFR 660.313(f)(1) specify that electronic fish tickets must include both pounds and number of halibut landed so this information is collected for vessels participating in the DC halibut fishery and also groundfish fishing. However, it should be noted that Oregon does not currently require electronic fish tickets outside of the Federal requirements associated with sablefish; therefore if halibut is landed with non-sablefish groundfish species in Oregon and recorded on a paper fish ticket, the federal requirement to include counts of halibut does not apply.

The Council has raised that additional catch information may potentially ease future modifications of regulations as the fishery evolves[4] (see Problem Statement), however a specific future use for this data has not been explicitly identified at this time. As noted, there are no management concerns associated with the current reporting requirements for vessels participating in the DC fishery, since only the number of pounds (not count) is required for catch accounting purposes.

Incidental halibut harvest landing restrictions for the Limited Entry Fixed Gear (LEFG) primary sablefish fishery north of Point Chehalis are described in Section 5.8.4 of the halibut CSP and are set annually. Incidental limits are set as a poundage limit ratio, plus a set number of halibut. For example, in 2022 – 2023, the incidental halibut limit for the primary sablefish fishery was 150 pounds (lbs) of halibut for every 1,000 pounds of sablefish, plus two additional halibut (expressed as 2 + 150 lbs per 1,000 lbs). Because federal groundfish regulations at 50 CFR 660.213(e)(1) require the weight and number of halibut landed on electronic fish tickets are recorded when sablefish are landed, both the weight and number of fish landed by these vessels is collected.

Incidental halibut harvest landing restrictions for the commercial salmon troll fishery are described in Section 5.7.4 of the halibut CSP and are established in the annual rule establishing the fishery management measures for ocean salmon fisheries (see 89 FR 44553, May 21, 2024). Incidental limits are expressed as a number limit plus a set number of halibut. For example, the incidental halibut limit for the Area 2A salmon troll fishery from 2018-2023 has been 1 halibut for every 2 Chinook, plus 1 additional halibut (expressed as 1 + 1 per each 2). Salmon regulations at 50 CFR 660.404 rely on state data collection and reporting requirements. Washington and Oregon state regulations (WAC 220-352-040 and 635-006-0212) require that fish tickets include the number (count) of halibut landed incidentally in the salmon troll fishery, but it is not explicitly stated in California state regulations. Instead, California state regulations at Title 14 § 197 state 'landings receipts and electronic fish tickets will report number of individual fish, as applicable.' The weight and number of halibut caught incidentally by salmon troll vessels is recorded on Washington and Oregon fish tickets, but only weight may be getting reported on California fish tickets depending on how the regulations are interpreted.

[4] For example, see Groundfish Advisory Subpanel Supplemental Report 1 from the 2024 Council meeting.

Enforcement consultants have noted it is critical for fish tickets to include both the weight and number of halibut to properly monitor if incidental limits for halibut caught in the salmon troll fishery has been exceeded (see September 2024 EC Report). The problem and concerns associated with enforcement of incidental limits as understood at this time is an issue implementing the incidental limits for the salmon troll fishery as set by the annual salmon specifications rule.

There are no problems associated with a lack of information on the number of halibut landed by DC halibut vessels at this time, but the need as currently understood is associated with this information potentially helping with future modifications of regulations as the fishery evolves. However, the direct use of this information has not been specified at this time. In addition, if a specific need for this information is identified in the future, finer scale data may be gathered through the IPHC dockside sampling program and conversion protocols[5].

1.3 Description of Management Area

This section describes the international management agreement governing Pacific halibut and the geographic area where the DC fishery occurs. A description of the domestic management structure of the DC halibut fishery and affected fisheries and other entities is available in Section 3.3.

This action falls under the jurisdiction of the Northern Pacific Halibut Act of 1982 (Halibut Act) (16 U.S. Code § 773). The Halibut Act states, "*The Regional Fishery Management Council having authority for the geographic area concerned may develop regulations governing the United States portion of Convention waters, including limited access regulations, applicable to nationals or vessels of the United States, or both, which are in addition to, and not in conflict with regulations adopted by the Commission."* Therefore, Action 1 and Action 2 would apply to all non-Tribal vessels participating in the non-Tribal Area 2A directed commercial halibut fishery (both state and federal waters, 0 nm – 200 nm), unless otherwise specified (see Action 1, Alternative 1, Sub option a).

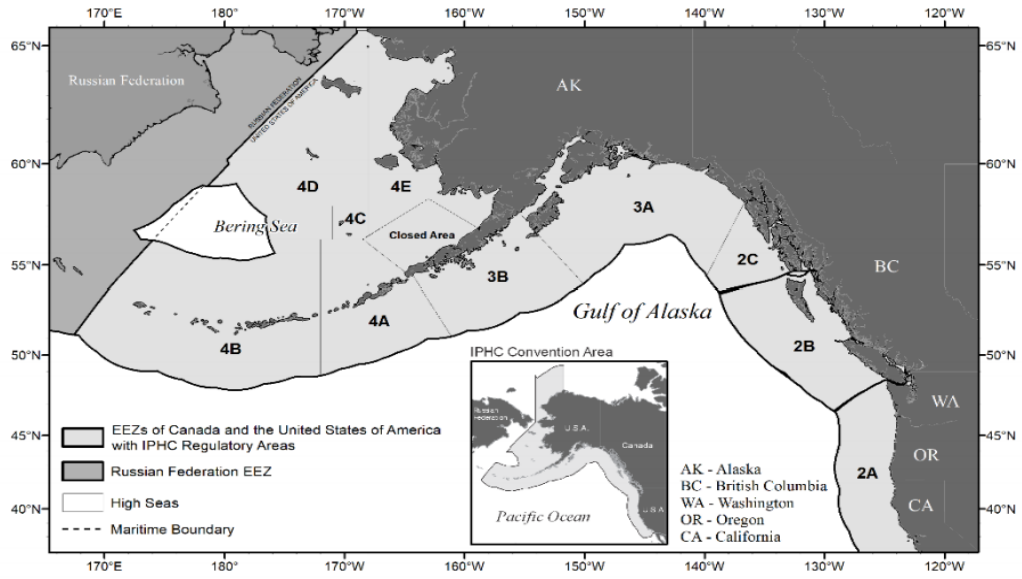
Convention waters is defined as the maritime areas off the west coast of the United States (and Canada) described in article I of the Convention between the United States and Canada for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea, which specifies that this "*includes without distinction areas within and seaward of the territorial sea or internal waters* (i.e. state waters)*."*

The DC halibut fishery is prosecuted in IPHC regulatory Area 2A south of Point Chehalis, WA (46°53.30' N latitude [lat.], see Figure 1) and includes southern Washington, Oregon, and California. Non-Tribal commercial vessels operating in the DC halibut fishery in Area 2A are prohibited from fishing within a groundfish closed area known as the non-trawl RCA[6]. Non-Trawl RCA boundaries are defined by specific latitude and longitude coordinates that approximate depth contours, or the boundaries of the EEZ. The salmon troll fishery occurs within the EEZ off the coast of California, Oregon, and Washington. The primary sablefish fishery is a limited entry fixed gear fishery that occurs north of 36° N latitude. Vessels fishing north of point Chehalis can retain halibut incidentally during the primary season (beginning April 1) through the closure date set by the IPHC (50 CFR 660.231(b)(3)(iv)).[7]

[5] https://www.iphc.int/uploads/2024/02/IPHC-manual-for-sampling-directed-commercial-landings-2024.pdf
[6] 50 CFR 300.63(f)
[7] While the primary sablefish season ends on December 31st, the allowance for halibut retention is usually only permitted through early December as determined annually by the IPHC. The incidental allowance is therefore permitted until that date or when the allocation is reached.

The DC halibut fishery is managed with closed areas designed to protect overfished groundfish species, as described in Section 1.2. Closed areas are stipulated in 50 CFR 300.63(f) and the coordinates are listed in 50 CFR 660.71 through 660.74.

Figure 1. IPHC Regulatory Areas for the Pacific halibut fishery.



2. Description of Alternatives

2.1 Action 1. Vessel Monitoring System

2.1.1 No Action / Status Quo

Under No Action, a requirement would not be added to halibut regulations requiring vessels participating in the DC halibut fishery and only retaining halibut (around 5% of the active vessels, described in Section 3.3) to carry and operate VMS.

If a vessel is participating in the DC fishery and also retaining groundfish under a valid federal LE permit or an OA vessel fishing in the EEZ on the same trip then, consistent with applicable regulations, a VMS unit is required and that vessel is required to adhere to VMS requirements specified at 50 CFR 660.14.

The DC halibut fishery, a federally managed OA fishery, is subject to numerous, discrete closed and/or restricted areas intended to mitigate the catch of rockfish stocks and adverse effects of fishing on essential fish habitat (see Section 1.2). Restricted areas are monitored by NMFS using VMS systems on some vessels; however, vessels participating in DC halibut fishery that only retain halibut are currently not required to carry and operate a VMS unit. Monitoring activity of these vessels in closed areas, much of it remote and often subject to poor visibility, is only possible by air and surface patrol assets. Identifying vessels and determining whether gear was illegally set or fishing occurred in a closed area is extremely difficult to detect due to the large area, limited number of patrol assets, and the vessels' ability to set and recover gear undetected at night or during periods of reduced visibility[8].

2.1.2 Alternative 1

Under Alternative 1, vessels participating in the DC halibut fishery would be required carry and operate a NMFS type-approved VMS[9] and comply with the same activation, notification of VMS interruption, inspection, maintenance, and payment requirements[10] as currently specified in 50 CFR 660.14. Haul out, maintenance, sale of vessel, and emergency exemptions[11], as specified under 50 CFR 660.14(d)(4), would apply to vessels required to carry and operate VMS under Alternative 1. To obtain an exemption, vessels would be required to submit valid exemption reports[12].

Alternative 1 would require a regulatory amendment to 50 CFR 300 Subpart E.

There are three components included for Council consideration that are needed to fully specify the alternative.

Component 1. Applicable waters – Specifies where requirements apply.

A. Applies to applicable vessels when fishing in the EEZ.

[8] see June 2023 EC Report
[9] See https://www.fisheries.noaa.gov/national/enforcement/noaa-fisheries-type-approved-vms-units
[10] 50 CFR 660.14(d)(1) – (2); 50 CFR 660.14(d)(5) – (9)
[11] 50 CFR 660.14(d)(4)(i); 50 CFR 660.14(d)(4)(v); 50 CFR 660.14(d)(4)(vi); 50 CFR 660.14(d)(4)(vii)
[12] 50 CFR 660.14(d)(4)(viii); 50 CFR 660.14(d)(4)(ix)

B. Applies to applicable vessels when fishing in convention waters of IPHC Area 2A (i.e. 0nm-200nm).

Component 2. VMS ping rate requirements – Specifies how often VMS location must be transmitted with Electronic Monitoring System with NMFS type-approved units.

A. Require a ping rate of four times per hour (i.e. once every 15 minutes).

B. Require a ping rate of one per hour.

Component 3. VMS status requirements – Specifies when VMS must be turned on and transmitting location information.

A. VMS must be on 24 hours a day, throughout the year

B. VMS must be on when fishing during the halibut open fishing period and participating in the DC halibut fishery.

Under Alternative 1, a continuous transit provision would apply. Any vessel may only be in an applicable conservation area (i.e., Non-Trawl RCA, YRCA, EFHCA) for the purposes of continuous transit and all applicable gear must be stowed in accordance with gear/fishery-specific stowage requirements. Continuous transiting means that a fishing vessel crosses a conservation area on a heading as nearly as practicable to a direct route, consistent with navigational safety, while maintaining expeditious headway throughout the transit without loitering or delay.

Under Component 1A, vessels targeting halibut in the DC fishery that are not also retaining groundfish on the same trip in Federal waters would be impacted. Component 1B would implement VMS requirements for all DC vessels in Convention waters. As noted in Section 1.3, under the Halibut Act the Council may develop regulations for the United States portion of the Convention, with Convention waters encompassing 0nm-200nm, meaning this component would require OA groundfish vessels to use a VMS unit in state waters.

Under Component 2A, ping rate requirements would be consistent with groundfish regulatory requirements[13], which may reduce confusion among vessel operators of different types of vessels and enable more accurate position identification than a longer ping-rate interval. Component 2B ping rate requirements would be less costly to industry but still high (discussed further in Section 3.5.1.2) and may be insufficient to show a vessel is not fishing in a closed area or is transiting a closed area when required to do so[14]. Furthermore, hourly VMS ping rates make it difficult for on-the-water enforcement to locate and intercept a vessel after a violation has been identified (Greg Bush, OLE, personal communication).

Under Component 3A, VMS operation requirements would be consistent with groundfish regulatory requirements[15]. Component 3B would enable enforcement to track vessel movements when participating in the non-Tribal directed commercial 2A halibut fishery. This would reduce industry costs associated with paying VMS monthly operation fees when not in use but would still be high relative to ex-vessel revenue for smaller vessels (discussed further in Section 3.5.1.2). Allowing vessels to only have VMS units on when

[13] 50 CFR 660.14
[14] See NOAA Case. No. SW1002974, F/V Risa Lynn
[15] 50 CFR 660.14(d)(3)

actively participating in a fishery has been implemented in other regions[16] and has been verified by service providers as an option that, if included in regulations, can be implemented from a technological perspective (Craig (SkyMate); Bill O'Toole (Woods Hole Group); Chris Fougere (MetOcean), personal communication). A similar approach is used for the Cook Inlet drift gillnet fishery[17].

2.2 Action 2. Seabird Avoidance Measures

2.2.1 No Action / Status Quo

Under No Action, a requirement would not be added that would require vessels participating in the DC halibut fishery using bottom longline gear and only retaining halibut (around six vessels) to follow seabird avoidance measures (deploying streamer lines when setting gear).

Vessels greater than or equal to 26 feet LOA[1] using bottom longline gear and participating in the DC halibut fishery and also engaged in commercial fishing for groundfish (retaining groundfish) in the EEZ, north of 36° N lat. during hours of daylight would continue to be required to adhere to federal seabird avoidance measure requirements for the groundfish fishery specified at 50 CFR 660.21.

2.2.2 Alternative 1 (PPA)

Under Alternative 1, vessels participating in the DC halibut fishery and using bottom longline gear would be required to deploy streamer lines when the rules governing the use of seabird avoidance measures in the Pacific groundfish fishery are met (see 50 CFR 660.21(c)(1) and 50 CFR 660.21(c)(2)) regardless of if they are retaining groundfish or not. This would not apply to vessels only retaining halibut using other allowable hook-and-line gear.

There is one component included for Council consideration that is needed to fully specify the alternative.

Component 1. Applicable waters – Specifies where requirements apply.

A. Applies to applicable vessels when fishing in the EEZ. (PPA)

B. Applies to applicable vessels when fishing in convention waters of IPHC Area 2A (i.e. 0nm-200nm).

Under Component 1A (PPA), vessels targeting halibut in the DC halibut fishery with bottom longline gear and not retaining groundfish on the same trip in the EEZ would be subject to seabird avoidance measure requirements. Component 1B would implement the seabird avoidance measure requirements for all vessels using bottom longline gear in Convention waters. As noted in Section 1.3, under the Halibut Act the Council may develop regulations for the United States portion of the Convention, with Convention waters encompassing both state and federal waters.

Vessels would be required to adhere to the same general requirements outlined in 50 CFR 660.21(c)(1), including having gear onboard that meets the material standards, making gear available to inspection, complying with handling requirements for hooked seabirds, and weather safety exemptions. Vessels

[16] 50 CFR 679.28(f)(6)(x)

[17] See 89 FR 34718. For the Cook Inlet drift gillnet fishery, VMS is required on days when directed fishing for salmon using drift gillnet gear is open in the Cook Inlet EEZ Area; (2) if the vessel has drift gillnet gear on board the vessel or deployed; and (3) if the vessel is operating in the waters of Cook Inlet.

targeting halibut in the DC fishery with bottom longline gear would be exempt from seabird avoidance program requirements if the vessel operator begins and completes deployment of gear between one hour after local sunset and one hour before local sunrise (see 50 CFR 660.21(c)(3)).

2.3 Action 3. Catch Reporting on Fish Tickets

2.3.1 No Action / Status Quo

Under No Action, there would be no changes to fish ticket recording requirements for landings of halibut in the DC halibut, salmon troll, and primary sablefish fisheries.

2.3.2 Alternative 1

Require that fish receiving tickets for landings of halibut from vessels participating in the DC halibut fishery and only landing halibut include both weight (pounds) and number (count).

This would only affect fish tickets from vessels participating in the DC halibut fishery and only landing halibut (around six vessels). Alternative 1 would provide additional information on the catch of halibut in the DC halibut fishery but there are currently no management concerns associated with the current reporting requirements and no specific needs for this data identified at this time.

2.3.3 Alternative 2

Require that fish receiving tickets for landings of halibut from any commercial vessels landing halibut to include both weight (pounds) and number (count) of halibut landed.

Alternative 2 would change Federal fish receiving ticket requirements so that halibut landings from vessels participating in the DC halibut fishery and incidental landings from salmon troll vessels include both the weight and number (count) of halibut landed.

Under current reporting requirements, this is already required for vessels participating in the DC halibut fishery and also landing groundfish, participating in the salmon troll fishery and incidentally landing halibut in Washington and Oregon, and vessels participating in the primary sablefish fishery north of Point Chehalis and incidentally landing halibut.

2.4 Preliminary Preferred Alternatives

The Council selected a PPA for Action 2 (Seabird Avoidance Measures) in September 2024.

Seabird Avoidance Measures – Alternative 1, Component B: Require vessels using bottom longline gear and participating in the DC halibut fishery and only retaining halibut to deploy streamer lines when fishing in the EEZ.

3. Regulatory Impact Review

The President of the United States signed E.O. 12866, "Regulatory Planning and Review," on September 30, 1993. This order established guidelines for promulgating new regulations and reviewing existing regulations. The E.O. covers a variety of regulatory policy considerations and establishes procedural requirements for analysis of the benefits and costs of regulatory actions. The E.O. stresses that in deciding whether and how to regulate, agencies should assess all of the costs and benefits of available regulatory alternatives. Based on this analysis, they should choose those approaches that maximize net benefits to the Nation, unless a statute requires another regulatory approach.

NMFS satisfies the requirements of E.O. 12866 through the preparation of an RIR. The RIR provides a review of the potential economic effects of a proposed regulatory action in order to gauge the net benefits to the Nation associated with the proposed action. The analysis also provides a review of the problem and policy objectives prompting the regulatory proposal and an evaluation of the available alternatives that could be used to solve the problem.

The RIR provides an assessment that can be used by the Office of Management and Budget to determine whether the proposed action could be considered a significant regulatory action under E.O. 12866. E.O. 12866 defines what qualifies as a "significant regulatory action" and requires agencies to provide analyses of the costs and benefits of such action and of potentially effective and reasonably feasible alternatives. An action may be considered significant if it is expected to:

- Have an annual effect on the economy of $200 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or Tribal governments or communities;
- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in E.O. 12866.

3.1 Statement of the Problem

A statement of the problem is available above in Section 1.1 titled "Problem Statement".

3.2 Description of the Management Goals and Objectives

A description of the management goals and objectives can be found in Section 1.1, titled "Problem Statement."

3.3 Description of Fisheries and Other Affected Entities

The DC halibut fishery occurs south of Point Chehalis, WA, and is currently allocated 85 percent of the Area 2A non-Tribal commercial allocation. Hook and line gear is the only allowable gear type for the retention of commercially caught halibut in Area 2A, and bottom longline is the most common gear type utilized. Table 1 shows the percent of total DC halibut fishery landings by gear type as well as the number of vessels using the gear. "Other" gear types include pole gear and other hook and line gears. On average, nearly 98 percent of DC halibut landings are made via bottom longline gear. This fishery requires a permit

to participate, but there is no limit to the number of participants. Most of the landings in this fishery occur off Oregon, followed by Washington, and a small amount is landed in California.

Table 1. Number of vessels and percent of DC halibut landings by gear type (2020-2023)

	Bottom Longline		Other Hook-and-Line Gears	
Year	Vessels	Percent of Halibut Landings	Vessels	Percent of Halibut Landings
2020	76	98.6%	8	1.4%
2021	89	98.5%	5	1.5%
2022	79	94.6%	6	5.4%
2023	89	99.6%	4	0.4%
2024	89	99.4%	6	0.6%

The DC halibut fishery is managed through a series of fishing periods based on the fishery's suballocation and fishing period limits, which is the maximum amount of halibut (in pounds) that may be retained and landed by a vessel during one fishing period. Fishing period limits are based on vessel class, projected participation, and projected catch rates, to ensure the fishery's suballocation is not exceeded.

This fishery takes place in the summer months with fishing periods occurring every few weeks, based on the ability to receive and analyze fish ticket data for fishing period limits, and notify the public through inseason rulemaking. Prior to 2020, the DC halibut fishery consisted of 10-hour openings each year, with the number of openings based on DC fishery allocation and vessel class limits. Beginning in 2020 the season structure changed, and the fishery consisting of three to five 58-hour openings each year since (Table 2).

Table 2. Non-Tribal directed commercial halibut seasons (2018-2024)

Year	**Fishing Period**	
	Dates	**Total Hours**
2020	1: June 22-24 (58 hrs) 2: July 6-8 (58 hrs) 3: July 20-22 (58 hrs) 4: Aug. 3-5 (58 hrs) 5: Aug. 17-19 (58 hrs)	290
2021	1: June 22-26 (58 hrs) 2: July 6-8 (58 hrs) 3: July 20-22 (58 hrs)	174
2022	1. June 28-29 (58 hrs) 2. July 6-8 (58 hrs) 3. July 20-22 (58 hrs)	174
2023	1: June 27-29 (58 hrs) 2: July 11-13 (58 hrs) 3: Aug 1-3 (58 hrs)	174
2024	1: June 25-27 (58 hrs) 2: July 9-11 (58 hrs) 3: Aug 6-8 (58 hrs) 4: Aug 27-29 (58 hrs) 5: Sept 24-26 (58 hrs)	290

VMS requirements considered in this action would apply to all vessels fishing in the DC halibut fishery retaining only halibut in either the EEZ (Action 1, Component 1A) or in Convention waters (Action 1, Component 1B). Seabird avoidance measures would apply to vessels fishing only in the DC halibut fishery

using bottom longline gear in the EEZ (Action 2, Component 1A (PPA)) or in Convention waters (Action 2, Component 1B), and would not apply to vessels using other hook-and-line gear.

Table 3 shows the number of vessels, by vessel class, that registered to participate in the DC halibut fishery and how many vessels participated from 2020-2024. The DC halibut fishery is an OA fishery with no limits on participation. The cost to obtain a permit is low ($32 in 2024) and vessels may register and then opt to not participate for a number of reasons, such as the timing constraints and logistics associated with participating in a fishery only open a few days a year or the purchasing of a permit in case other opportunities in a given year are low. Historically, there have been between 148-207 permits issued in the DC halibut fishery, but only a proportion of that actually participated (ranging from a low of 38 percent in 2020 to 61 percent in 2023). Therefore, while it is possible that the universe of participants could be larger (if considering all vessels registered), this analysis considers those actively fishing as the most likely population to be impacted by the alternatives.

Table 3. Number of registered vessels by class versus how many fished (2020-2023)

	2020		2021		2022		2023		2024	
Vessel Class	**Total**	**Fished**	**Total**	**Fished**	**Total**	**Fished**	**Total**	**Fished**	**Total**	**Fished**
A (1-25 ft)	11	*7*	9	*7*	9	4	3	6	6	7
B (26-30 ft)	13		12		15		9		8	
C (31-35 ft)	14	4	17	6	15	8	17	11	29	12
D (36-40 ft)	41	22	41	25	36	23	28	21	36	21
E (41-45 ft)	35	18	32	17	33	16	27	17	31	17
F (46-50 ft)	45	14	33	18	40	15	27	15	31	13
G (51-55 ft)	17	6	17	8	18	9	11	7	11	7
H (55+ ft)	31	8	29	10	36	7	26	13	33	13
TOTAL	207	79	190	91	202	82	148	90	185	90

Note: For the 'fished' category, vessel classes A and B have been combined to meet confidentiality requirements.

For the purposes of analysis, potentially affected vessels are defined based on data from the PacFIN database. One of the key factors in determining who the affected entities are is whether DC vessels have (in recent years) retained groundfish during the DC fishery while fishing in the EEZ and therefore would not be subject to potentially new requirements (VMS and seabird avoidance measures), as those vessels would already be subject to those requirements. Additionally, for the seabird requirements, which are proposed to only apply to vessels greater than 26 ft. LOA, three to eleven registered vessels were in vessel class A (vessels under 26 feet), however the number that actually fished cannot be displayed due to confidentiality concerns (Table 3).

From 2020 – 2024, 42 distinct vessels retained only halibut during the DC fishery with an annual participation of between 9 to 16 vessels. The majority of vessels participating in the DC fishery also retain groundfish and are therefore not considered as the population of vessels subject to the action (Table 4). Of the 42 vessels that landed only halibut, 16 of these vessels had no groundfish landings during any of the halibut season meaning that 26 vessels of the 42 retained groundfish in another DC season and would have been subject to any groundfish requirements. Six of the 16 DC halibut vessels that retained no groundfish participated in multiple years. Ten of these 16 vessels had a previous history (anytime since 2020) of participating in a fishery with VMS requirements (i.e. fishing groundfish outside of the DC season), leaving six vessels with no history of participating in a fishery with any VMS or seabird requirement. That leaves an estimated six vessels (and any new entrants not previously engaged in federal groundfish) that would be subject to Action 1 and/or 2.

Table 4. Number of vessels retaining groundfish and Pacific halibut and Pacific halibut only, 2020-2023

Year	Groundfish and Pacific halibut	Pacific halibut only
2020	70	9
2021	78	13
2022	70	12
2023	78	12
2024	74	16

While six vessels (and any new entrants) are likely the group of vessels subject to the action, it is important to consider that the participation in the fishery varies annually and that the number of vessels actually subject to this action on an annual basis for the DC halibut fishery as a whole would be approximately five percent of active participants (i.e. those that fished in Table 3).

Modifications to fish ticket reporting requirements for halibut (Action 3, Alternative 1) could impact dealers filling out fish receiving tickets for landings of halibut (without groundfish) from the DC halibut fishery or dealers filling out fish tickets for halibut landed in the DC fishery from vessels only landing halibut and halibut landed incidentally in the salmon troll fishery in California (Action 3, Alternative 2) who would now be required to individually count halibut landed.

3.4 Description of the Alternatives

A description of the Alternatives is available in Section 2.

3.5 Analysis of the Expected Effects of Each Selected Alternative Relative to the No Action Alternative

Only data from 2020-2024 was used for this analysis, for all actions and alternatives/components. Prior to 2020, the DC fishery was only open for 10-hour long openers, with the number of openings based on DC fishery allocation and vessel class limits. From 2020 onward, the fishery open periods have been 58-hour

hours (Table 2). Therefore, data from 2020 onward was deemed to be most representative of the current and future operations of the fishery.

3.5.1 Action 1: Vessel Monitoring System

3.5.1.1 Status Quo / No Action

Under No Action, the DC halibut fishery would continue to operate as described in federal regulations. Specifically, vessels participating in the DC halibut fishery and only retaining halibut would not be required to use VMS and would not incur any additional costs to participate in the DC fishery than under current regulations.

Under No Action, enforcement would continue to monitor and enforce closed area regulations as is currently done for the DC halibut fishery. There would be no change to the costs and resources required to patrol waters during the DC halibut fishery. Patrols would continue to use on-the-water and aerial assets to monitor for compliance with a number of rules and regulations governing commercial halibut fishing, including proper gear marking, permitting and vessel documentation, minimum size and possession restrictions, careful release, logbook requirements, early/late fishing, and closed areas.

Under No Action, management costs would remain the same as there would be no changes to the current VMS requirements.

There are no impacts to vessel safety under No Action.

3.5.1.2 Alternative 1

Impacted user groups differ under the two sub-options included under Alternative 1, Component 1. Under Alternative 1, Component 1A, only vessels participating in the DC halibut fishery and fishing in the EEZ would be impacted by the action. Under Alternative 1, Component 1B vessels participating in the DC halibut fishery and fishing in all IPHC Area 2A Convention waters (0nm - 200nm) would be impacted by the action.

The VMS unit is passive and automatic, requiring no reporting effort by the vessel operator. However, there are both fixed and variable costs associated with the installation and operation of new VMS. Estimating the average cost of installing and operating VMS is difficult as the cost depends on a number of factors, including whether vessel operators pay the list price for the VMS unit or negotiated a sale price; the time requirements for installation; the nature of the transmission package they purchase, and the average number of days or months they transmit. Currently, there are eleven NOAA-approved VMS units available for use in the West Coast region.[18] A number of these units are still supported but are not currently manufactured.

Table 5 displays unit purchase cost and monthly plan rates for 15-min (Alternative 1, Component 2A) and 1-hour (Alternative 1, Component 2B) ping rates for a selection of currently manufactured NMFS-approved VMS units. It also shows the total costs for the first year (12-month period) with the requirement to have the unit on year-round (Alternative 1, Component 3A) or only during the months of the DC halibut fishing season (Alternative 1, Component 3B), assuming three, three-day openers. Installation costs were not available, as they vary greatly based on a number of factors, including dealer cost, installation time required,

[18]See https://www.fisheries.noaa.gov/national/enforcement/noaa-fisheries-type-approved-vms-units#fisheries-of-the-west-coast-of-the-united-states

and distance a technician must travel (Craig (SkyMate) and Chris (MetOcean), personal communication). Purchase cost may also vary from what is displayed depending on the dealer the unit is purchased from.

Table 5. A selection of type-approved NMFS Vessel Monitoring System (VMS) purchase and monthly plan costs.

Unit	Nautic Alert, Insight X3	Skymate m1600 VMS[1]	Woods Hole Group – Triton Advanced[2]	Average
Unit Purchase Cost	$2,499.00	$3,000.00	$2,399.00	$2,632.67
Monthly cost w/ 15-min ping rate	$109.99	$45.00	$79.00	$78.00
Year-1 costs w/ 15/min ping rate plan, year round operations (Alt 1, 2A & Alt 1, 3A)	$3,818.88	$3,540.00	$3,347.00	$3,568.63
Year-1 costs w/ 15-min ping rate plan, operating only when fishing season open* (Alt 1, 2A & Alt 1, 3B)	$2,828.97	$3,135.00	$2,636.00	$2,866.66
Monthly cost w/ hourly ping rate	$39.99	$30.00	$62.00	$44.00
Year-1 costs with hourly ping rate plan, year round operations (Alt 1, 2B & Alt 1, 3A)	$2,978.88	$3,360.00	$3,143.00	$3,160.63
Year-1 costs w/ hourly ping rate, operating only when fishing season open* (Alt 1, 2B & Alt 1, 3B)	$2,618.97	$3,090.00	$2,585.00	$2,764.66

*Assumes three, three-day fishing periods a year (one a month in June, July, and August). Service providers have indicated costs could be variable if there is a monthly downturn rate.

1. Purchase cost may vary depending on the dealer. 15-min ping rate cost is assuming purchase of the gold plan (20,000 characters) and 1-hour ping rate cost is assuming purchase of the silver plan (10,000 characters). One location ping requires 20 characters.

2. Plans are offered at 24 or 96 positions a day. Assumes purchase of 96 positions for 15-min ping rate requirement and 24 positions for hourly ping rate requirement.

Note: The Skymate I1500, Thorium TST A2.0, and Thorium LEO A2.0 VMS are included on the NMFS Type-Approved list but are no longer manufactured so have been omitted. Additional type-approved units include the Addvalue iFleetONE, MetOcean OmniCom,VMS and Global, and Sailor VMS Gold and Gold Plus. Costs for these units are not available at this time.

The cost to operate a VMS unit is high, regardless of the combination of options selected. Under the lowest-cost combination of Components under Alternative 1 (hourly ping rates, only on during the DC halibut fishery, 2B & 3B), the average cost (not including installation costs) would be around $2,765 during the first year and around $130 in subsequent years. Under the highest-cost combination (15-min ping rates, operating year-round, 2A & 3A), the average cost would be around $3,570 in the first year and about $940 in subsequent years.

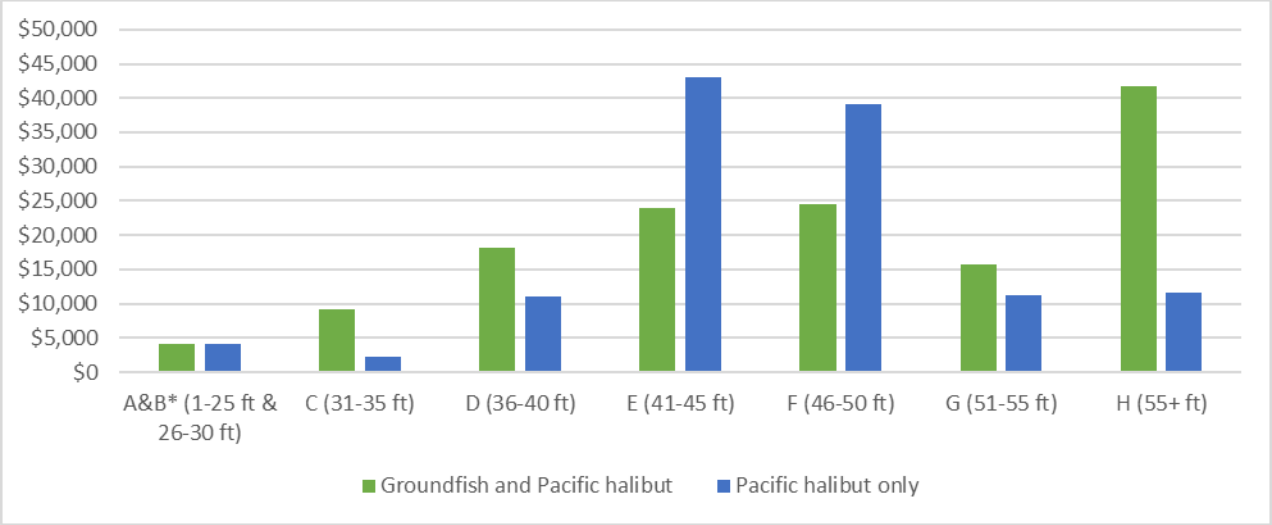
The vessel owner and operator would be responsible for all costs associated with the purchase, installation, and maintenance of the VMS unit, and for all charges levied by the mobile communications service provider. However, federal funds may be available to qualified vessel owners or operators for reimbursement of the cost of purchasing type-approved VMS units. The VMS Reimbursement Program, which is funded by NOAA and administered by the Pacific States Marine Fisheries Commission, could potentially aid eligible users up to $3,100 of initial capital/start-up cost. However, this program is not exclusive to the west coast region and the availability of funds are not guaranteed.

As noted in Section 3.3, this alternative would primarily only impact vessels that have historically only retained halibut. Vessels that retain only halibut in one year may retain groundfish in another year or have a history of retaining groundfish in a previous year and therefore potentially still have a VMS unit installed. Only six vessels that participated in the fishery from 2020-2023 did not participate in a fishery that required VMS in either another year during that time period or previously. Although the economic impact may be high on these vessels due to the unit and installation costs, the economic impact on other vessels may be lower as it would just be associated with the monthly fee of operating the VMS unit either year-round (Alternative 1, Component 3A) or when participating in the DC fishery (Alternative 1, Component 3B).

Additionally, new entrants who have not previously been involved in federal groundfish fisheries (or other fisheries with VMS requirements) will need to cover both the initial and ongoing costs of a VMS unit, which should be carefully considered. The DC halibut fishery is often seen as an ideal starting fishery for new entrants due to its relatively low start-up costs, including a low permit fee ($32 in 2024). However, the additional expenses of purchasing and operating a VMS unit might discourage potential newcomers from pursuing fishing as a viable occupation.

Figure 2 shows the average ex-vessel revenue (in 2023$) received from halibut landings in the DC fishery when halibut was landed with groundfish and when only halibut were landed, from 2020-2023. Note that the average revenue for class A and B are combined as in Table 3. For vessels only landing halibut, revenue was highest for vessel classes E and F and higher than for vessels also landing groundfish (Figure 2). These were the vessel classes with the second and third highest number of registered vessels that actively participated in these years (see Table 2). For all other vessel classes, vessels landing only halibut received a lower ex-vessel revenue from halibut than vessels landing halibut and groundfish.

Figure 2. Average ex-vessel revenue (2020-2023) for halibut when landed with groundfish and when only halibut are landed (in $2023) by vessel class.



*Vessel classes A and B have been combined to meet confidentiality requirements.

On the surface, it would make sense that larger vessels would have a larger revenue given that they would be allocated higher limits (for most fishing periods). However, Figure 2 shows that this is not the case and that there is not a clear correlation between vessel size and revenue. Ultimately, vessels that would be affected by the VMS alternatives could see varying levels of impacts. Purchasing and operating a VMS unit, regardless of ping rate and operational requirements (Component 1 and Component 2) may exceed or be close to the annual revenue for vessels in classes A, B and C in the year when the VMS unit is purchased, with year 1 total costs not including installation costs ranging from $2,764.66 - $3,568.63 (Table 5). On the other hand, for the two vessel classes with the highest average annual halibut revenue (class E and F), year 1 costs would be less than 10 percent of their average revenue. Levels of net profit from DC halibut trips are not available at this time due to lack of information on costs to participate. However, the purchasing of the VMS unit would be a one-time cost, and future costs would only be associated with the monthly fee.

Once a vessel has a VMS unit installed, a permit holder could consider retaining groundfish in future years which may help offset costs, however this would involve other upfront costs and be an additional barrier to entry for a potential new participant. If one does opt to do so, the degree of that offset would depend on any other investments that would be needed (permits, gear, etc.) to participate in the groundfish fishery and additional inherent fishing costs (fuel, time, crew salaries, etc.). At the lowest end, this most likely would require a groundfish OA permit. Table 6 shows average trip revenue (in $2023) from 2020-2023 for vessels that retained both groundfish and halibut and vessels that only retained halibut. The increase in ex-vessel revenue for vessels that also retained groundfish varies by vessel class, with vessel class C earning around $800 more per trip and vessel class H seeing an increase in over $18,000 per trip. Most vessel classes (B, D, F, and G) have an increase in per-trip ex-vessel revenue of around $1,500 - $2,000. The increase in per trip revenues could offset the purchase cost of VMS (not taking into account potential differences in monthly costs) in one to four trips. Furthermore, these average revenues do not account for other fishing revenue sources that these vessels might participate in that do not require VMS (e.g., nearshore groundfish) so the number of trips or landings may be an overestimation. However, this also does not take into account other costs associated with groundfish fishing, so the number of trips or landings to account for the VMS costs could also be an underestimation.

Table 6. Average trip revenue ($2023) by vessel class (2020-2023) on DC halibut trips that retained groundfish and halibut versus those that only retained halibut.

Vessel Class	Groundfish and Pacific halibut retained	Only Pacific halibut retained
A (1-25 ft)	$4,129.84	*
B (26-30 ft)	$2,773.39	$1,170.16
C (31-35 ft)	$4,090.91	$3,309.86
D (36-40 ft)	$7,559.06	$5,743.56
E (41-45 ft)	$12,865.84	$9,310.27
F (46-50 ft)	$12,803.36	$11,034.15
G (51-55 ft)	$10,705.09	$8,865.31
H (55+ ft)	$27,101.62	$8,736.66

*indicates confidential data.

Under Alternative 1, enforcement would continue to monitor for compliance with fishing regulations and the total resources allocated to monitoring for compliance with fishing regulations for the DC halibut and other fisheries during DC halibut openers would not likely be reduced. However, effort could shift from monitoring for compliance with closed area regulations and be more focused on patrolling for compliance with other regulations (Greg Bush, OLE, personal communication).

As noted in Section 1.2, VMS assists in enforcing and monitoring closed area regulations. A32 to the Groundfish FMP reduced the size of the non-trawl RCA and implemented new, small YRCAs and EFHCAs closed areas off of Oregon. These areas were designated to minimize impacts to habitat and yelloweye rockfish from bottom contact gear - including halibut bottom longline gear. Without VMS, on-the-water enforcement must be present to observe if any vessels are fishing in a restricted area. Larger areas like the non-trawl RCA are much easier to enforce with VMS rather than trying to cover hundreds of miles with enforcement assets, whereas smaller vessels like the YRCAs and EFHCAs are only a few square nautical miles and easier to monitor visually. If vessels are non-compliant and fishing in an area closed out of concern for sensitive species or habitats, it may reduce the assumed benefits the supporting analysis for A32 concluded these areas would provide. However, this impact would be reduced due to the limited number of vessels participating in this fishery without VMS. In the past few years, OLE has cited one non-VMS equipped vessel fishing in a closed area during the DC halibut fishery and approximately one violation per year on vessels participating in the DC halibut fishery and equipped with VMS (Greg Bush, OLE, personal communication).

Under Alternative 1, management costs would be associated with the initial implementation of the action. There would likely also need to be outreach initially and ongoing for vessels newly required to carry VMS.

There are no impacts to vessel safety with this action alternative.

3.5.2 Action 2: Seabird Avoidance Measures

3.5.2.1 Status Quo / No Action

Under No Action, the DC halibut fishery would continue to operate as described in federal regulations. Specifically, there would be no requirement that vessels participating in the DC halibut fishery that do not retain groundfish must deploy streamer lines when setting longline gear.

Mortality of seabirds by longline gear used during the DC halibut fishery has been documented by available observer data (see Section 1.2) and there would be no reduction in the potential for entanglement with seabirds and gear used by vessels only targeting halibut during the DC halibut fishery under No Action.

No Action would not change how enforcement officers monitor and enforce seabird avoidance measure requirements in place for groundfish vessels during the DC halibut fishery. Under No Action, enforcement must observe whether or not seabird avoidance gear was deployed when setting fishing gear and then follow-up to determine if any groundfish were landed. Enforcement has noted it is difficult and time consuming to monitor and enforce the seabird avoidance gear requirement for groundfish bottom longline vessels during DC halibut fishing periods, as it is unclear which vessels may be retaining groundfish.

Current outreach for seabird avoidance gear requirements for groundfish vessels participating in the DC halibut fishery include a pre-season web-story[19] and email bulletins to those signed up for Pacific halibut emails from NMFS highlighting seabird avoidance gear requirements. Additional outreach efforts, such as emails sent directly to all permit holders, may also help to improve compliance with seabird avoidance measures and reduce the time enforcement spends enforcing seabird avoidance requirements. This increased outreach may be beneficial under either No Action or Alternative 1.

Under No Action, management costs would remain the same as there would be no changes to the current streamer line requirements for DC halibut vessels.

[19] See https://www.fisheries.noaa.gov/feature-story/2024-iphc-area-2a-commercial-pacific-halibut-season-set-open

There are no impacts to vessel safety with this alternative

3.5.2.2 Alternative 1 (PPA)

The direct financial cost under Alternative 1 would be the cost of streamer lines. Individual streamer lines, as of July 2024, cost $207.95 per line (LFS inc., personal communication). Streamer lines are durable despite being subject to the marine environment and, if stored properly, can last for many years (Harrison Ibach, personal communication). In the past, the USFWS Coastal Program was granted funds to distribute streamer lines to small longline vessels in Washington, Oregon, and Northern California, with Oregon Sea Grant coordinating the distribution. Although funding and streamer lines available from the original grant are no longer available, Oregon Sea Grant has indicated they are planning to inquire with USFWS about any additional, future support to aid in the distribution of free streamer lines (Amanda Gladics, Oregon Sea Grant, personal communication).

From 2020-2024, around six additional vessels would have been subject to streamer line requirements proposed under Alternative 1. Current groundfish regulations require vessels greater than or equal to 26 ft LOA to use at least one streamer line, and vessels greater than or equal to 55 feet to use paired streamer lines (50 CFR 660.21(c)(2)(ii)(B)). Therefore, this number would likely be lower, as it includes vessels in class A and B (vessels < 26 ft LOA). Additionally, the few vessels using other hook-and-line gear types to fish halibut would not be subject to the requirements as seabird avoidance measures would only apply to bottom longline gear. It also may include vessels that participated in the groundfish fishery in a different year after the streamer lines requirement for groundfish permitted vessels was implemented (2020 onward) and therefore may already have streamer lines. As noted in Section 3.3, this leaves around six vessels (and any new entrants not previously engaged in federal groundfish) that would need streamer lines.

The average price-per-pound (2020-2023) for halibut across vessel classes B-H was around $6 per pound. Therefore, a vessel in classes B-C would have to land around 35 pounds of halibut to offset the purchase of one streamer line, and vessels in class H would have to land around 70 pounds of halibut to offset the price of two streamer lines if funding is not available. Average annual landings from 2020-2023 were around 500 pounds (class B) – 8,070 pounds (class F).

Streamer lines may also result in additional, indirect costs. Vessels under 40 feet may need to have additional structures or poles added in order to ensure the streamer line meets the correct height requirement when deployed. Streamer lines may occasionally get entangled in fishing gear either due to inexperience in the use of streamer lines or windy conditions. Indirect costs could also be associated with the additional time spent deploying streamer lines instead of actively fishing. However, any increase in overall operating costs due to indirect effects are anticipated to be minimal. Some members of the groundfish industry who are currently required to deploy streamer lines have noted that streamer lines are quick to deploy and retract (one to five minutes) and initially after streamer lines are required, the fleet may experience more difficulties in deploying them correctly, however, over time, deployment difficulty is expected to dissipate (Georgon Lapham and Harrison Ibach, personal communication). Some groundfish industry members have noted entanglement rarely, if ever, occurs but others have shared that entanglement can become an issue, particularly when weather conditions are not ideal.

Some vessels may decide to choose the proposed alternative to only operate at night instead of following streamer line requirements since, under Alternative 1, there would be an exemption to streamer line requirements when night setting (deploying gear between civil dusk and civil dawn). However, given that the DC halibut fishery is typically only open for approximately three days, three to five times a year, this could result in a loss of fishing opportunity and create potential safety issues.

Under Alternative 1, since there may be a reduction in the time and resources spent determining if vessels not deploying streamer lines are required to do so and issuing citations for violations, enforcement resources could be reallocated to other priorities. Under Alternative 1, Component 1 (PPA), all vessels participating in the DC halibut fishery using bottom longline gear would be required to use streamer lines when fishing in the EEZ, so there would no longer be a difference between who is required to deploy streamer lines when setting gear and who is not. Enforcement would not have to spend time trying to determine if a vessel is retaining both halibut and groundfish or just halibut to determine if a violation has occurred. Under Alternative 1, Component 2, vessels participating in the DC halibut fishery and retaining only halibut would be required to use streamer lines in Convention waters (0nm – 200nm), which would be different from requirements for vessels also fishing for groundfish. This may result in confusion when enforcing seabird avoidance measure requirements in state waters under Alternative 1, Component 2.

Requiring vessels to deploy streamer lines when setting gear during daylight hours may also have some benefits to seabirds through mitigating any potential for engagement and mortality. The degree of impact will be limited due to the number of affected vessels subject to this action and the corresponding fishing effort of those affected vessels.

Under Alternative 1, management costs would be associated with the initial implementation of the action. There would likely also need to be initial and ongoing outreach to vessels required to comply with seabird avoidance measures. As noted in Section 2.2.1, current outreach efforts regarding seabird avoidance measure requirements include a pre-season web-story on the NMFS webpage and email bulletins to those signed up to receive NMFS emails regarding commercial halibut fishing. Additional outreach efforts, such as emails sent directly to all permit holders, may also help to improve compliance with seabird avoidance measures and reduce the time enforcement spends enforcing seabird avoidance requirements. This increased outreach may be beneficial under either Alternative 1 or No Action.

There are potential impacts to vessel safety with this action alternative as steamer line deployment and night setting complicates setting gear and could create safety issues, especially for inexperienced operators. Regulations that parallel the rough weather exemption as specified in 50 CFR 660.21(c)(2)(iv) would be developed for vessels newly required to deploy streamer lines under Alternative 1 to reduce safety risks.

3.5.3 Action 3: Catch Reporting on Fish Tickets

3.5.3.1 Status Quo / No Action

Under No Action, there would be no change to the fish ticket reporting requirements for halibut caught in the DC halibut fishery, salmon troll fishery, and primary sablefish fishery north of Point Chehalis. There would be no impact on the time required to weigh or count halibut landings. There would be no change to how enforcement currently monitors and enforces incidental halibut limits in the salmon troll or primary sablefish fishery north of Point Chehalis. There are no impacts to vessel safety under No Action.

3.5.3.2 Alternative 1

Alternative 1 would only modify fish ticket recording requirements for halibut caught in the DC fishery by vessels not also landing groundfish. As noted in Section 3.3, from 2020-2023, nine to eleven dealers received landings from vessels participating in the DC halibut fishery and only landing halibut and therefore would potentially be impacted by this action. Requiring dealers to count fish under Alternative 1 could increase offload time, but some dealers receiving landings from DC halibut fishery participants already count individual fish so would not need to change their current operations and have noted that halibut offloads take an hour or less (Susan Chambers, West Coast Seafood Processors Association, personal communication).

Compared with No Action, Alternative 1 would not provide any benefit for management as the DC halibut fishery is not managed using numbers of fish, but rather suballocations and fishing period limits in weight. There would be no direct benefits to enforcement of the fishery either given that enforcement can determine if vessels are within their vessel limits under current regulations. Alternative 1 may result in additional information on the catch of halibut by the DC halibut fishery, as the number of fish caught by the fishery would now be known in addition to the pounds landed, but no explicit need for this information has been identified at this time. As noted in Section 1.2, if a need for this information is identified, finer scale data may be gathered through the IPHC dockside sampling program and conversion protocols.

There are no impacts to vessel safety with this action alternative.

3.5.3.3 Alternative 2

Alternative 2 would only modify fish ticket recording requirements for halibut caught in the DC fishery by vessels not also landing groundfish and for halibut landed incidentally in the salmon troll fishery in California. Similar to Alternative 1, requiring dealers to count the number of individual halibut may increase offload times,

As with Alternative 1, compared to No Action, Alternative 2 would not provide any benefit to management as the DC halibut fishery is not managed by numbers of fish, but rather suballocations and fishing period limits in weight. There would be no direct benefits to enforcement of the fishery given that enforcement can determine if vessels are within their vessel limits under current regulations. Alternative 1 may result in additional information on the catch of halibut by the DC halibut fishery, as the number of fish caught by the fishery would now be known in addition to the pounds landed, but no explicit need for this information has been identified at this time. As noted in Section 1.2, if a need for this information is identified finer scale data may be gathered through the IPHC dockside sampling program and conversion protocols.

For the salmon troll fishery, Alternative 2 would only impact reporting requirements for landings in California compared to No Action. The enforcement benefits under Alternative 2 compared to No Action, as understood at this time, would be an increased ability to enforce the incidental landing limit, which is a ratio of number of halibut to Chinook plus a set number of halibut.

3.6 Summation of the Alternatives with Respect to Net Benefit to the Nation

3.6.1 Action 1: Vessel Monitoring System

Under No Action, there would be no new VMS requirements for vessels participating in the DC halibut fishery and retaining only halibut, resulting in no additional costs to the industry. Enforcement would continue to be required to monitor compliance with closed-area regulations using on-the-water and in-air assets, which may be difficult during poor weather conditions or times of limited enforcement coverage.

Under Alternative 1, there would be both one-time and monthly costs to the industry for purchasing, installing, and operating VMS. Cost impacts would vary, as some vessels may only be subject to the monthly costs (either for a few months (Action 1, Alternative 1, Component 3B) or 12 months of the fishing year (Action 1, Alternative 1, Component 3A), depending on the option selected) associated with operating the VMS if they previously have participated in a fishery that required the use of VMS, or the cost to purchase, install, and operate a VMS unit if they have not. For vessels that need to purchase a VMS unit, costs may exceed or be close to the annual net revenue from halibut for vessels in classes A, B and C in the first year it is required and provide no direct benefit to the participant. This may deter new entrants from entering the fishery.

Enforcement may benefit from Alternative 1, as officers would be able to rely on VMS data to help monitor compliance with closed area regulations (Greg Bush, OLE, personal communication). VMS data would help enforcement determine if gear was set in a closed area which is currently difficult due to the limited number of patrol assets and a the ability to set and recover gear undetected at night or during periods of reduced visibility.

Alternative 1 may provide benefits to overfished and rebuilding groundfish species and sensitive habitat. The DC halibut fishery is subject to closed areas designated to minimize impacts to habitat and overfished and rebuilding groundfish stocks by bottom longline gear. If vessels are non-compliant and fishing in these areas, it may go undetected under No Action and undermine the benefits these closed areas are intended to provide. However, the potential negative impacts under No Action would be correlated to the number of violations incurred by vessels participating in the DC halibut fishery that are not already subject to VMS requirements (six in recent years). In recent years, only one violation has been cited.

3.6.2 Action 2: Seabird Avoidance Measures

Under No Action, there would be no seabird avoidance measure requirements for vessels participating in the DC halibut fishery using bottom longline gear and retaining only halibut, resulting in no additional costs to the industry.

Under Alternative 1 (PPA), there would be a one-time cost to the industry members that fish using bottom longline gear associated with the purchase of streamer lines. There would also be costs associated with replacing streamer lines as they wear out. Additional costs may include some minimal lost opportunity costs due to time spent deploying streamer lines or untangling it from fishing gear, which would be expected lessen over time as vessel operators become more familiar with deployment.

Alternative 1 may reduce the chance seabirds interact with and become entangled in fishing gear used by vessels participating in the DC halibut fishery and only retaining halibut. Enforcement would benefit from Alternative 1, as they would no longer need to spend time determining what a vessel is retaining (halibut only or both halibut and groundfish) to determine if streamer line requirements apply to that vessel.

3.6.3 Action 3: Catch Reporting on Fish Tickets

Under No Action, there would be no change to how landings of halibut caught in commercial fisheries is reported on fish tickets. Industry would not incur any new or additional costs. There would be no impact on management, as pounds of halibut landed is all that is required for catch accounting purposes and is already being reported.

Under Alternative 1, fish receiving tickets for landings of halibut caught in the DC halibut fishery by vessels only landing halibut would be required to include the number (count) of halibut landed in addition to the weight. This could result in an increase in the time required for a halibut offload to occur, but it is not anticipated to be a large impact (see Section 3.5.3.2). Alternative 1 would have no benefit to management or enforcement, as only weight is required to ensure suballocations and fishing period limits are not exceeded. There is no explicit need for the number (count) of halibut landed in the DC fishery at this time.

Under Alternative 2, fish receiving tickets for landings of halibut caught in the DC halibut fishery and incidentally in the salmon troll fishery in California would now be required to include the number (count) of halibut landed in addition to weight. This could result in an increase in the time required for an offload to occur, but it is not anticipated to be a large impact (see Section 3.5.3.2). As noted under Alternative 1, Alternative 2 would have no benefit to management or enforcement, as only weight is required to ensure suballocations and fishing period limits are not exceeded. There is no explicit need for the number (count)

of halibut landed in the DC fishery at this time. The enforcement benefit, as understood at this time, would be an increase in enforcements' ability to monitor the incidental landing limit in the salmon troll fishery, which is a ratio of number of halibut to Chinook plus a set number of halibut.

3.7 Determination of Significant Impact

As noted above, under E.O. 12866, a regulation is a "significant regulatory action" if it is likely to: (1) have an annual effect on the economy of $200 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order. A determination of significance will occur after final action.

4. Regulatory Flexibility Analysis

See Agenda Item G.2 Supplemental Attachment 2.

5. Other Applicable Laws

5.1 Executive Order 13175 Consultation and Coordination with Indian Tribal Governments

Executive Order 13175 is intended to ensure regular and meaningful consultation and collaboration with Tribal officials in the development of Federal policies that have Tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes.

The Secretary of Commerce recognizes the sovereign status and co-manager role of Indian tribes over shared Federal and Tribal fishery resources. At Section 302(b)(5), the MSA reserves a seat on the Council for a representative of an Indian tribe with Federally recognized fishing rights from California, Oregon, Washington, or Idaho.

The proposed actions and other alternatives were developed through the Council process and would not regulate Tribal fisheries as this action is for the non-Tribal commercial fisheries. Based on the enclosed analysis, the proposed action is not likely to affect the Tribal fishery operations. Through the Tribal representative on the Council and Tribal comments submitted to NMFS and the Council (if and when submitted), the Tribes have a role in developing the proposed action and analyzing effects of the alternatives; therefore, at this time, this action is consistent with EO 13175.

6. Preparers and Persons Consulted

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PFMC
10/22/2024