

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

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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 caught in the DC halibut fishery, salmon troll fishery, and primary sablefish fishery north of Pt. Chehalis. The measures under consideration include: (1) requiring all vessels participating in the DC halibut fishery to carry a vessel monitoring system (VMS) unit; (2) requiring all vessels in the DC halibut fishery using bottom longline gear to use seabird avoidance gear; and (3) revising fish receiving ticket requirements to specify both the pounds and number (count) of Pacific halibut landed by vessels participating in the DC halibut fishery are recorded.

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List of Acronyms and Abbreviations

Acronym or Abbreviation	Meaning
Area 2A	IPHC Regulatory Area 2A
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	<i>Federal Register</i>
FRFA	Final Regulatory Flexibility Analysis
ft	foot or feet
GMT	Groundfish Management Team
Halibut Act	Northern Pacific Halibut Act of 1982
IPHC	International Pacific Halibut Commission
IRFA	Initial Regulatory Flexibility Analysis

Acronym or Abbreviation	Meaning
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
DC halibut fishery	Non-Tribal directed commercial halibut fishery
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 halibut and dealers purchasing Pacific halibut caught in the DC halibut fishery, salmon troll fishery, and primary sablefish fishery north of Pt. Chehalis. 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 deploy seabird avoidance gear; and (3) revising fish receiving ticket requirements to specify both the pounds and number (count) of Pacific halibut landed by vessels participating in the DC halibut fishery are recorded.

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) and the National Marine Fisheries Service (NMFS) West Coast Region to provide the analytical background for decision-making has been modified from its original form.

NMFS has preliminarily determined that the proposed action falls 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 DC halibut fishery. These challenges are (1) detecting if vessels only retaining Pacific halibut are fishing near or in closed areas intended to protect rebuilding species or sensitive habitats since these vessels are not required to carry VMS, which are used by enforcement to monitor where fishing occurs, (2) identifying violations with seabird avoidance gear requirements 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 (deploying streamer lines when setting gear) but vessels participating in the DC fishery using bottom longline gear and only retaining halibut are not, and (3) determining if halibut vessel limits or incidental harvest landing restrictions have been exceeded if fish receiving tickets do not list both pounds and number (count) of halibut landed.

1.2 History of this Action

In November 2019, the EC recommended adding a requirement for vessels participating in the non-Tribal directed commercial 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 derby 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.

The Council is anticipated to adopt a range of alternatives and a preliminary preferred alternative in September 2024 with final action proposed for November 2024.

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 was originally required to monitor groundfish fishing activity, but its use was eventually expanded to enforce closed areas. It first became a 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 not¹.

Under current regulations, any vessel registered to a federal LE groundfish permit must have VMS to fish in state waters or the EEZ. 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, 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. West Coast large-mesh swordfish drift gillnet (DGN) fishery participants are also required to use VMS. If a vessel is participating in the DC halibut fishery and only retaining halibut, they are not subject to current VMS requirements but vessels that are participating in the DC halibut fishery and also retaining groundfish are subject to VMS requirements.

¹ [85 FR 35594](#)

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). Enforcement has acted on numerous closed-area violations between 2020-2023 (NOAA 2021a; NOAA 2022; NOAA 2023; NOAA 2024), but without VMS, enforcement action is contingent on OLE or the Coast Guard being present to see the violation occur.

Seabird Avoidance Measures

In 2011, the first take of short-tailed albatross (*Phoebastria albatrus*) was observed in the sablefish longline fishery. NMFS initiated formal consultation with the United States Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act (ESA). In response, USFWS issued its Biological Opinion (BiOp) on November 12, 2012 (USFWS 2012). Non-discretionary terms and conditions in the BiOp required NMFS to promulgate regulations within two years mandating the use of streamer lines by longline vessels 55 feet length overall (LOA) or greater, patterned on the Alaska streamer line regulations. Seabirds are known to dive on baited hooks near the surface when the longline gear is being 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.

In 2015, the Council's Groundfish Endangered Species Workgroup (Workgroup) reviewed updated short-tailed albatross take estimates and concluded that the threshold in the 2012 BiOp Incidental Take Statement had been exceeded in two of the four years between 2010 and 2013, the most recent period for which estimates were available at that time.² The Workgroup reported this finding along with a recommendation to reinitiate consultation at the June 2015 Council meeting ([Agenda Item D.4.a, Supplemental Groundfish ESA Workgroup Report](#)). The Workgroup also reported an analysis of night setting as an alternative to deploying streamer lines, which was prepared in response to a public comment during the rulemaking process. NMFS subsequently requested the USFWS reinitiate consultation and the USFWS published a new BiOp on May 2, 2017 (USFWS 2017). In 2019, a final rule extending the requirement to use streamer lines to groundfish bottom longline vessels 26-55 feet LOA when fishing in the EEZ north of 36° North latitude was published, with an effective date of early 2020. An allowance for setting gear at night (when albatrosses are not active) as an alternative to deploying streamer lines was also included in the 2019 rule³.

Vessels only retaining halibut were not included in either the 2012 or 2017 BiOps for the Pacific Coast Groundfish Fishery. Although seabirds are present during the DC halibut fishery, this fishery had historically (up until 2020) been only open for a series of 10-hour fishing periods based on the DC fishery allocation and vessel class limits (Table 2). Starting in 2020, the fishery has been open for a series of three-day (58-hour) fishing periods with typically three open periods each year.

Vessels only fishing for halibut with bottom longline gear during the DC fishery are not required to deploy streamer lines when setting gear, but vessels fishing with bottom longline gear over 26 feet LOA that also retain groundfish are (per the 2020 Pacific Coast Groundfish Fishery BiOp). 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 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 is difficult and

² These estimates were based on a ratio estimation method that has since been superseded by statistical modeling approach determined to produce more accurate estimates of annual bycatch. Retrospective analysis shows that the incidental take level in the 2012 BiOp was probably not exceeded during that time period.

³ [84 FR 67674](#)

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.

Catch Reporting on Fish Tickets

Halibut catch in the Area 2A non-Tribal commercial fisheries, directed or incidental, are linked to some sort of landing limit or ratio to manage the fishery so it remains within its quota and to help ensure that retention is allowed throughout the season. Weekly landing limits, vessel limits per period, and catch ratios per trip are the most common management tools for tempering catch.

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 of Pacific halibut that may be retained and landed by a vessel during one fishing period. Fishing period limits are based on vessel class and the number of permits issued to ensure the fishery's suballocation is not exceeded.

Incidental halibut harvest landing restrictions for the commercial salmon and Limited Entry Fixed Gear (LEFG) primary sablefish⁴ fisheries are expressed as either a number limit (salmon troll) or poundage limit ratio (sablefish), 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). 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). There have been concerns raised by enforcement officers that if fish tickets do not include the number of fish in addition to the pounds of fish, enforcement cannot monitor or enforce the number allowance for halibut caught incidentally in the salmon troll fishery or the set number of halibut allowed in the incidental catch allowance for the primary sablefish fishery during offloads.

Current reporting requirements are described in full in Section 2.3.1. In summary, current reporting requirements for fish receiving tickets include:

- landed weight of fish (i.e. Pacific halibut) received
- number (count) of Pacific halibut landed incidentally in the salmon troll fishery
- number and weight of Pacific halibut landed with groundfish (which includes halibut landed in the LEFG primary tier sablefish fishery and in the DC halibut fishery by vessels also fishing for halibut (LEFG or OA)).

There are currently no federal or state regulations that specifically require the number (count) of Pacific halibut landed in the DC halibut fishery by vessels only landing halibut be reported, and therefore reporting requirements would only need to be modified for landings from these vessels. However, there are no management concerns associated with the current reporting requirements, since only the number of pounds (not count) is required for catch accounting purposes for the DC fishery.

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.

⁴ The primary sablefish fishery only occurs north of Point Chehalis, WA

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).

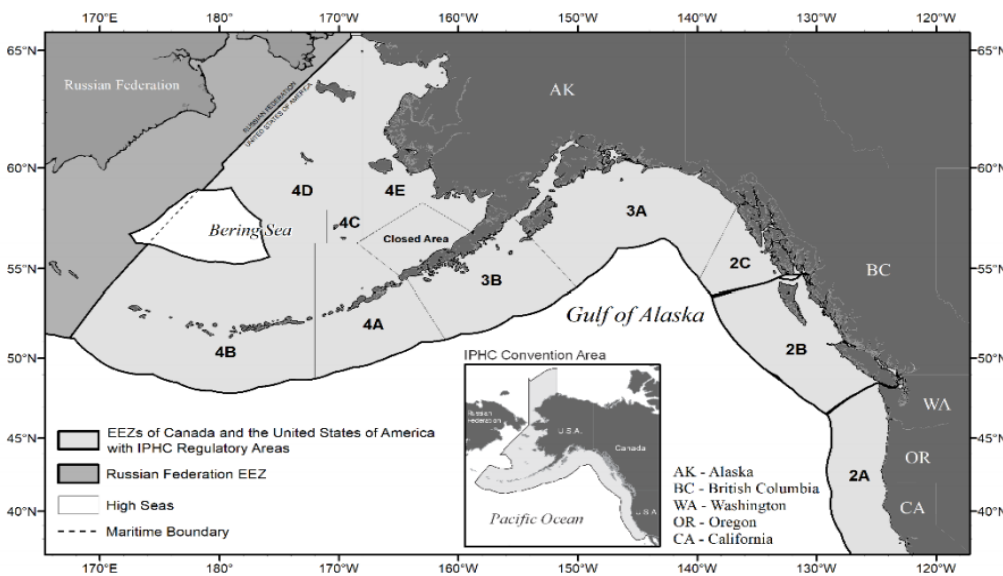
Convention waters is defined as the maritime areas off the west coast of the United States (and Canada) described in article I of the Convention between the United States and Canada for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea, which specifies that this “*includes 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 RCA⁵. Non-Trawl RCA boundaries are defined by specific latitude and longitude coordinates that approximate depth contours, or the boundaries of the EEZ.

Additional conservation areas where it is unlawful to take and retain, possess (except for the purpose of continuous transit) or land halibut are the Tillamook Yelloweye Rockfish Conservation Area (YRCA), Newport YRCA, Florence YRCA, and Heceta Bank YRCA when closures are in effect, and within the Nehalem Bank East, Garibaldi Reef North, Garibaldi Reef South, Arago Reef South, and Bandon High Spot East Essential Fish Habitat Conservation Areas (EFHCA).

The fishery may also be managed with closed areas designed to protect overfished groundfish species. Any such closed areas will be described annually in federal halibut regulations published in the Federal Register and the coordinates will be specifically defined at 50 CFR 660.71 through 660.74.

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



⁵ 50 CFR 300.63(f)

2. Description of Alternatives

The Council agreed to further investigate the topics (action items) in this section at their November 2023 meeting.

2.1 Action 1. Vessel Monitoring System

2.1.1 No Action / Status Quo

Under No Action, vessels participating in the DC halibut fishery and only retaining halibut would continue to not be required to carry 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 federal OA fishery, is subject to numerous closed and/or restricted areas (see Section 1.3). 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 is only possible by on-scene enforcement assets. Identifying vessels and determining whether gear was illegally set 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 visibility⁶.

2.1.2 Alternative 1

Under Alternative 1, vessels participating in the DC halibut fishery would be required carry a NMFS type-approved VMS⁷ and comply with the same activation, notification of VMS interruption, inspection, maintenance, and payment requirements⁸ as currently specified in 50 CFR 660.14. Haul out, maintenance, sale of vessel, and emergency exemptions⁹, 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 reports¹⁰.

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.

⁶ see [June 2023 EC Report](#)

⁷ See <https://www.fisheries.noaa.gov/national/enforcement/noaa-fisheries-type-approved-vms-units>

⁸ [50 CFR 660.14\(d\)\(1\) – \(2\)](#); [50 CFR 660.14\(d\)\(5\) – \(9\)](#)

⁹ [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\(d\)\(4\)\(vii\)](#)

¹⁰ [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 vessels to use a VMS unit in state waters.

Under Component 2A, ping rate requirements would be consistent with groundfish regulatory requirements¹¹, 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 (see Section 3.5.1.2) but may be insufficient to show a vessel is not fishing in a closed area or is transiting a closed area when required to do so¹². 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 requirements¹³. Component 3B would enable enforcement to track vessel movements when participating in the non-Tribal directed commercial 2A halibut fishery but reduce industry costs associated with paying VMS monthly operation fees when not in use. Allowing vessels to only have VMS units on when actively participating in a fishery has been implemented in other regions¹⁴ and has been verified by service providers

¹¹ [50 CFR 660.14](#)

¹² See NOAA Case. No. SW1002974, F/V Risa Lynn

¹³ [50 CFR 660.14\(d\)\(3\)](#)

¹⁴ [50 CFR 679.28\(f\)\(6\)\(x\)](#)

as an option that, if included in regulations, can be implemented from a technological perspective (Craig (SkyMate), personal communication).

2.2 Action 2. Seabird Avoidance Measures

2.2.1 No Action / Status Quo

Under No Action, vessels participating in the DC halibut fishery using bottom longline gear and only retaining halibut would continue to not be required to adhere to seabird avoidance measures (deploying streamer lines when setting gear).

Vessels greater than or equal to 26 feet LOA¹⁵ 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 specified at [50 CFR 660.21](#).

Bottom longline gear is the primary gear used by vessels in the DC halibut fishery (whether retaining only halibut or both halibut and groundfish). It is difficult to monitor and enforce the seabird avoidance gear requirement for bottom longline vessels retaining both groundfish and halibut when they are in the same area and using the same gear as vessels that do not retain groundfish and therefore are not subject to the same requirements. In recent years, enforcement has cited several vessels that were retaining both halibut and groundfish and were in violation of seabird avoidance gear requirements, including six in 2024¹⁶, during the DC halibut fishery despite highlighting the requirements for seabird avoidance measure requirements in a pre-season web-story¹⁷ and email bulletins to those signed up for Pacific halibut emails from NMFS highlighting seabird avoidance gear requirements.

2.2.2 Alternative 1

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 (vessel length, time, gear, area, etc.¹⁸) regardless of if they are retaining groundfish or not. This would not apply to vessels only retaining halibut using other IPHC-approved hook-and-line gear. The enforcement concern associated with this action comes from a discrepancy in the seabird avoidance gear requirements for vessels using bottom longline gear during the DC halibut fishery that are either retaining only halibut or retaining both halibut and groundfish.

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.

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

¹⁵ [50 CFR 660.21\(b\)](#)

¹⁶ See [FY23 Annual Enforcement Report to the Pacific Fishery Management Council](#)

¹⁷ <https://www.fisheries.noaa.gov/feature-story/2024-iphc-area-2a-commercial-pacific-halibut-season-set-open>

¹⁸ [50 CFR 660.21\(c\)\(2\)](#)

Under Component 1A, 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, and complying with handling requirements for hooked seabirds. Vessels 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 sunrise¹⁹.

Alternative 1 would aid enforcement of seabird avoidance requirements during the DC halibut fishery. It would reduce the time spent by OLE attempting to distinguish between vessels that are retaining just halibut and vessels retaining both halibut and groundfish, which cannot be done visually as vessels are using the same gear and fishing in the same area. Although VMS declarations can help enforcement agencies determine if a vessel is retaining groundfish and thus subject to streamer line requirements, they can only detect violations if they observe either the setting of longline gear during a groundfish trip or the landing of groundfish with longline gear when no seabird avoidance gear is onboard. Therefore, VMS alone is not enough to confirm whether seabird avoidance measures have been violated.

2.3 Action 3. Catch Reporting on Fish Tickets

2.3.1 No Action / Status Quo

Under No Action, the current requirements for reporting catch and landings of halibut in the DC halibut, salmon troll, and primary sablefish fisheries on fish receiving tickets would remain in place.

State regulations require fish receiving tickets to include the number of pounds (accurate weight) of species received ([WAC 220-352-040](#); [OR 635-006-0200](#); CA [Title 14 § 197\(b\)\(1\)\(A\)](#)). There are no federal or state regulations that require the number (count) of Pacific halibut landed in the DC fishery be included. For federal catch accounting purposes, only the number of pounds is required and there are no management concerns associated with fish tickets not reporting the number of halibut landed.

For any halibut landed with groundfish, federal regulations at [50 CFR 660.213\(e\)\(1\)](#) and [50 CFR 660.313\(f\)\(1\)](#) currently specify that all fish receivers must provide the actual weight and number of Pacific halibut on appropriate electronic fish ticket forms. This includes halibut landed as a part of the incidental limit for the LEFG primary tier fishery and halibut landed in the DC halibut fishery where vessels retain groundfish (LEFG or OA). Washington state regulations at [WAC 220-352-040](#) specify that the number of individual halibut caught incidentally in the salmon fishery must be expressed in numbers of fish. Oregon state regulations at [635-006-0212](#) specify that the number of individual halibut caught incidentally in the salmon fishery must be expressed in numbers of fish (halibut are not retained in the sablefish fishery occurring in Oregon/south of Point Chehalis). California state regulations at [Title 14 § 197](#) specify that landings receipts and electronic fish tickets will report number of individual fish, as applicable, and is interpreted to mean number of halibut that count towards an incidental limit must be recorded (California Department of Fish and Wildlife (CA DFW) staff, personal communication).

¹⁹ [50 CFR 660.21\(c\)\(3\)](#)

2.3.2 Alternative 1

Under Alternative 1, all fish receiving tickets would be required to report the number of pounds and number (count) of individual halibut landed in the DC halibut, salmon troll, and primary sablefish fishery. Alternative 1 would apply to all fish receivers accepting halibut landings from the DC halibut, salmon troll, and primary sablefish fisheries.

Note that federal regulations already require that halibut landed with groundfish must have the actual weight and number of halibut on the fish ticket, therefore number of halibut caught in the primary sablefish fishery north of Point Chehalis, which uses a poundage ratio plus number of fish for the incidental limit, or halibut landed in the DC halibut fishery with groundfish are already required to be reported. State regulations already require the number of incidental halibut caught in the salmon fishery, which uses a number of fish catch ratio incidental limit, to be reported²⁰.

Alternative 1 would therefore only require a modification to fish receiving tickets to require that the number (count) of halibut landed in the DC halibut fishery be recorded. This would only affect fish receiving tickets in the DC halibut fishery in which no groundfish were landed.

2.4 Preliminary Preferred Alternatives

To be updated after September 2024.

2.5 Alternatives Considered but not Analyzed Further

Placeholder.

²⁰ Federal regulations at [50 CFR 660.213\(e\)\(1\)](#) and [50 CFR 660.313\(f\)\(1\)](#); Washington state regulations at [WAC 220-352-040](#); Oregon state regulations at [635-006-0212](#); California state regulations [Title 14 § 197](#)

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 Pacific halibut in Area 2A. In the DC halibut fishery, bottom longline is the most common gear type utilized in the fishery. 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. 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)

Year	Bottom Longline		Other Hook-and-Line Gears	
	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%

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 of Pacific halibut that may be retained and landed by a vessel during one fishing period. Fishing period limits are based on vessel class and the number of permits issued 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. From 2018- 2019, 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 has consisted of three 58-hour openings each year since then, with the exception of 2020, which had five 58-hour openings (Table 2).

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

Year	Fishing Period	
	Dates	Total Hours
2018	1: June 27 (10 hrs)	30
	2: July 11 (10 hrs)	
	3: July 25 (10 hrs)	
2019	1: June 26 (10 hrs)	30
	2: July 10 (10 hrs)	
	3: July 24 (10 hrs)	
2020	1: June 22-24 (58 hrs)	290
	2: July 6-8 (58 hrs)	
	3: July 20-22 (58 hrs)	
	4: Aug. 3-5 (58 hrs)	
	5: Aug. 17-19 (58 hrs)	
2021	1: June 22-26 (58 hrs)	174
	2: July 6-8 (58 hrs)	
	3: July 20-22 (58 hrs)	
2022	1. June 28-29 (58 hrs)	174
	2. July 6-8 (58 hrs)	
	3. July 20-22 (58 hrs)	
2023	1: June 27-29 (58 hrs)	174
	2: July 11-13 (58 hrs)	
	3: Aug 1-3 (58 hrs)	
2024	1: June 25-27 (58 hrs)	174
	2: July 9-11 (58 hrs)	
	3: Aug 6-8 (58 hrs)	

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) or in Convention waters (Action 2, Component 1B), and would not apply to vessels using other IPHC-approved hook-and-line gear.

For the purposes of analysis, potentially affected vessels are defined based on data from the PacFIN database. Table 3 shows the number of vessels, by vessel class, that registered to participate in the non-Tribal directed commercial halibut fishery and how many vessels participated from 2020-2023. 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 in 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. 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. In all years, vessel class D (36 to 50 ft LOA) had the largest number of registered participants that actually fished.

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

Vessel Class	2020		2021		2022		2023	
	Total	Fished	Total	Fished	Total	Fished	Total	Fished
A (1-25 ft)	11		9		9		3	
B (26-30 ft)	13	7	12	7	15	4	9	5
C (31-35 ft)	14	4	17	6	15	8	17	11
D (36-40 ft)	41	22	41	25	36	23	28	21
E (41-45 ft)	35	18	32	17	33	16	27	17
F (46-50 ft)	45	14	33	18	40	15	27	15
G (51-55 ft)	17	6	17	8	18	9	11	7
H (55+ ft)	31	8	29	10	36	7	26	13
TOTAL	207	79	190	91	202	82	148	89

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

One of the key factors in determining who the affected entities are is whether or not DC vessels have (in recent years) retained groundfish during the DC fishery and therefore would be subject to potentially new requirements (VMS and seabird avoidance measures). From 2020 – 2023, 32 distinct vessels retained only Pacific halibut during the DC fishery with an annual participation of between 9 to 13 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 32 vessels that landed only halibut, 15 of these vessels had no groundfish landings during any of the halibut season meaning that 17 vessels of the 32 retained groundfish in another DC season and would have been subject to any groundfish requirements. Only four of the 15 DC halibut vessels that retained no groundfish participated in multiple years. Eight of these 15 vessels had a previous history of participating in a fishery with VMS requirements (i.e. fishing

groundfish outside of the DC season²¹), leaving seven vessels with no history of participating in a fishery with any VMS or seabird requirement. It is these seven 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	Number permitted	Groundfish and Pacific halibut	Pacific halibut only
2020	207	70	9
2021	190	78	13
2022	202	70	12
2023	148	78	12

Modifications to fish ticket reporting requirements for halibut (Action 3, Alternative 1) could impact dealers receiving halibut (without groundfish) from the DC halibut fishery who would now be required to individually count halibut landed. From 2020-2023, 9-11 dealers received landings from vessels participating in the DC halibut fishery and only landing halibut, and therefore would potentially be impacted by this action. Because federal regulations already require dealers receiving incidental halibut caught by the groundfish fisheries to report both weight and number of fish, and state regulations require actual weights of landed fish and the number of incidentally caught halibut to be reported this action would have no effect on dealers accepting halibut caught in the salmon troll or primary sablefish fishery and therefore they have not been included in this analysis.

3.4 Description of the Alternatives

A description of the Alternatives is available in Section 1.

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.

No Action would fail to improve the ability of enforcement to monitor and enforce closed area regulations, which is especially difficult during the short DC halibut fishery openings due to a number of reasons. This includes the number of enforcement officers present, number of other regulations enforcement is monitoring for compliance, and potential for bad weather to obscure the effectiveness of monitoring vessel

²¹ Previous participation in a highly migratory species (HMS) fishery with a VMS requirement has not been cross-checked at this time.

activity visually. There would be no change to the costs and resources required to patrol waters during the DC halibut fishery. Patrols focus on ensuring 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 with this action alternative.

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.²² 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 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, 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.

²²See <https://www.fisheries.noaa.gov/national/enforcement/noaa-fisheries-type-approved-vms-units#fisheries-of-the-west-coast-of-the-united-states>

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

Unit	Nautic Alert, Insight X3	Skymate m1600 VMS¹	Woods Hole Group – Triton Advanced²	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, but a deactivation/reactivation approach could also be implemented.

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.

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 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,

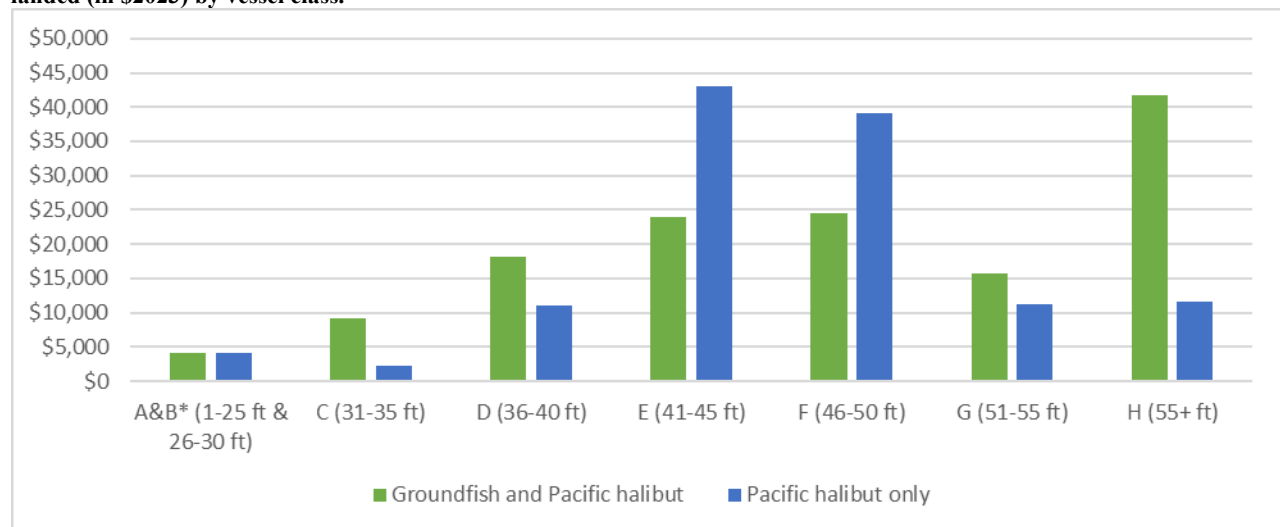
which is funded by NOAA and administered by the Pacific States Marine Fisheries Commission, could potentially aid eligible users up to \$3,100 of initial capital/start-up cost.

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 seven 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 entry point for beginners 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 show 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 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 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 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.

In addition, once a vessel has a VMS unit installed, a permit holder could consider retaining groundfish in future years, which may help offset costs. However, the degree of that offset would depend on any other investments that would be needed (permits, gear, etc.) to participate in that groundfish fishery. At the lowest end, this most likely would only require the new groundfish OA permit. 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) which may minimize the overall impact of the cost to a vessel's portfolio. 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. Again, this does not take into account other costs associated with groundfish fishing, so it could take more trips or landings to account for the VMS installation and costs.

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 costs would remain unchanged under any sub option, but efforts could be more focused on patrolling for compliance with other rules and regulations (Greg Bush, OLE, personal communication). For example, instead of focusing on monitoring vessel position relative to closed areas during the short season openings, officers could focus on ensuring vessels are not fishing prior to the start or after the close of the fishery.

As noted in Section 1.2, VMS assists in the enforcing and monitoring closed area regulations. Requiring VMS on all vessels participating in the DC halibut fishery, regardless of what species are being retained, would assist in ensuring the benefits of applicable RCAs are not undermined. There could also be efficiency in enforcing closed areas - such as the recently implemented bottom contact EFHCAs and YRCAs off of Oregon through Amendment 32 to the groundfish FMP. These areas were designated to minimize impacts to habitat and yelloweye rockfish to bottom contact gear - including halibut bottom longline gear. Given the size of the closures, without VMS, it would require on-the-water enforcement to observe if any vessels

were fishing in the area. If vessels were non-compliant and fishing in the areas, it could result in impacts to sensitive habitats or species of concern.

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, vessels participating in the DC halibut fishery and only retaining halibut would not be required to deploy streamer lines when setting longline gear.

No Action would fail to improve the ability of enforcement officers to monitor and enforce seabird avoidance measure requirements in place for vessels participating in the DC halibut fishery and also retaining groundfish, and enforcement would continue to be faced with the challenges of trying to determine if a vessel is only retaining halibut or retaining halibut and groundfish before determining if streamer line requirements have been violated.

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.

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

3.5.2.2 Alternative 1

Individual streamer lines, as of July 2024, cost \$207.95 per line (LFS inc., personal communication). 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 lines²³. 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 2020-2023, 148-207 vessels, across all vessel classes, registered to participate in the DC halibut fishery, but of those 79-91 actively fished (Table 2) and would have been subject to streamer line requirements, if imposed. However, this number would likely be lower, as it includes vessels in class A (vessels < 26 ft LOA) which would not be subject to streamer line requirement since, in line with current groundfish regulations, streamer lines would not be required for vessels less than 26ft LOA under Alternative 1. Additionally, the few vessels using other hook-and-line gears to fish halibut would not be subject to the requirements as seabird avoidance measures 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

²³ 50 CFR 660.21(c)(2)(ii)

have streamer lines. As noted in Section 3.3, this leaves around seven vessels (and any new entrants not previously engaged in federal groundfish) that would need to purchase 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 or additional time spent deploying streamer lines. However, any increase in overall operating costs due to indirect effects are anticipated to be minimal. 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 entanglement rarely, if ever, occurs (Georgon Lapham and Harrison Ibach, personal communication).

Some vessels may decide to only operate at night to avoid streamer line requirements. 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 three days, three times a year, this could result in a loss of fishing opportunity.

Under Alternative 1, enforcement costs would likely be reduced 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. Under Alternative 1, Component 1, 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 an inconsistency between who is required to deploy streamer lines when setting gear and who is not. Furthermore, 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 than 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 may have indirect benefits to seabirds through mitigating any potential for engagement. Although the length of the fishery and time boats are on the water is short (174 hours a year in recent years, Table 2), there is still an opportunity for interactions to occur. Although information on recent takes is not available at this time, NOAA Fisheries 2021b provided estimates of seabird mortality in the DC halibut fishery in 2017 and 2018 based on the limited observer program coverage in those years. There were eight takes observed in 2017 (seven black-footed albatross and one shearwater) and no observations in 2018.²⁴ Therefore, streamer lines could reduce any potential impact DC halibut vessels have on seabirds.

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 comply with seabird avoidance measures.

²⁴ Estimation methods and expansions can be found in NOAA Fisheries, 2021b

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 Pacific halibut fishing. Additional outreach efforts may also help to improve compliance with seabird avoidance measures and reduce the time enforcement spends identifying violations of and issuing citations for seabird avoidance measure requirements. This increased outreach may be beneficial under either Alternative 1 or No Action.

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

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 how Pacific halibut caught in the DC halibut fishery, salmon troll fishery, and primary sablefish fishery north of Point Chehalis are reported on fish tickets. There would be no modifications to fish receiving tickets and no impact on the time required to weigh or count halibut landings.

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

3.5.3.2 Alternative 1

Alternative 1 would only impact dealers accepting 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, however, some dealers receiving landings from the DC halibut fishery 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).

Alternative 1 would not impact dealers accepting halibut caught in the DC halibut fishery by vessels that are also retaining groundfish or halibut caught incidentally in the salmon troll and primary sablefish fishery. State regulations require fish receiving tickets to include the pounds of fish landed and federal groundfish, (LEFG and OA) regulations already require the number of Pacific halibut be recorded on fish tickets. Washington and Oregon state regulations explicitly require individual halibut caught incidentally in the salmon fishery must be expressed in numbers of fish. Although not explicitly stated in California regulations, reporting number of fish is required in California to ensure the salmon troll incidental limit is not exceeded (CA DFW staff, personal communication).

Alternative 1 would not result in any management efficiencies or accuracy as the DC halibut fishery is not managed by numbers of fish, but rather period limits in net 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.

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

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 monitoring. Impacts to whales and protected species are anticipated to be neutral.

Under Alternative 1, there would be both one-time and monthly costs to the industry for purchasing 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 both 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 revenue for vessels in classes A, B and C in that year and provide no direct benefit to the participant. However, there may be equity benefits among participants in the DC halibut fishery since individuals that retain groundfish and are required to carry VMS and both groups are required to comply with the same closed-area regulations during the DC halibut fishery. Furthermore, requiring all participants in the DC halibut fishery to conduct business the same way will likely improve compliance.

Enforcement would benefit from Alternative 1, as officers would be able to rely on VMS data to help monitor compliance with closed area regulations. 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 the vessels' ability to set and recover gear undetected at night or during periods of reduced visibility.

Impacts to whales and protected species are anticipated to be neutral.

3.6.2 Action 2: Seabird Avoidance Measures

Under No Action, there would be no new 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. Enforcement would continue to use on-the-water and in-air monitoring to determine if a violation of seabird avoidance measure requirements has occurred. Impacts to whales and protected species are anticipated to be neutral, although impacts to seabirds may be slightly negative compared to Alternative 1 as bottom longline gear is known to be attracted to the baited hooks and can potentially become entangled and drown. The DC halibut fishery only occurs for a few days a year (Table 2), so the time for any entanglement to potential occur is limited but, as noted in Section 3.5.2.2, takes of seabirds have been previously recorded.

Under Alternative 1, there would be a one-time cost to the industry members that fish using bottom longline gear for the purchasing of streamer lines. There would also be costs associated with replacing streamer lines as they wear out. Additional costs may include lost opportunity costs due to time spent deploying streamer lines or untangling it from fishing gear, but this is not anticipated to be significantly different than under No Action since deploying streamer lines takes around five minutes (Georgon Lapham and Harrison Ibach, personal communication).

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. Furthermore, requiring all participants in the DC halibut fishery to conduct business the same way will likely improve compliance. Impacts to whales and protected species

are anticipated to be neutral, although impacts to seabirds may be slightly positive under Alternative 1 compared to No Action.

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 the DC halibut fishery, salmon troll fishery, and primary sablefish fishery north of Point Chehalis are reported. There would be no additional costs incurred on industry. Enforcement officers would continue to monitor offloads and ensure incidental catch limits have not been exceeded. 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. There would be no impact to whales or protected species.

Under Alternative 1, fish receiving tickets for landings of halibut caught in the DC halibut fishery by vessels only landing halibut would be required include the number (count) of halibut landed in addition to the pounds. 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 result in additional data on the number (count) of halibut landed in the DC fishery, but this information is not required for catch accounting purposes so it would not serve any direct benefit to management at this time. 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. There would be no change to how halibut caught in the DC halibut fishery by vessels also catching groundfish, in the salmon troll fishery, or in primary sablefish fishery on are recorded on fish receiving tickets. There would be no impact to whales or protected species.

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

To be added after Council final action.

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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6.3 Persons (and Agencies) Consulted

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