ENVIRONMENTAL ASSESSMENT AND REGULATORY IMPACT REVIEW FOR CONTINUING IMPLEMENTATION OF THE CATCH SHARING PLAN FOR PACIFIC HALIBUT IN AREA 2A, 2014-2016

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Abstract: The Northern Pacific Halibut Act of 1982 at 16 U.S.C. 773c provides that the Secretary of Commerce shall have general responsibility to carry out the Halibut Convention between the United States and Canada and that the Secretary shall adopt such regulations as may be necessary to carry out the purposes and objectives of the Convention and the Halibut Act. Section 773c(c) also authorizes the regional fishery management council having authority for the geographic area concerned to develop regulations governing the Pacific halibut catch in U.S. Convention waters that are in addition to, but not in conflict with, regulations of the International Pacific Halibut Commission (IPHC). Accordingly, NMFS adopted in 1995 a long-term catch sharing plan to allocate the total allowable catch (TAC) of Pacific halibut between treaty Indian and non-Indian harvesters, and among non-Indian commercial and sport fisheries in IPHC statistical Area 2A (off Washington, Oregon, and California). In each of the intervening years between 1995 and the present, minor revisions to the Plan have been made to adjust for the changing needs of the fisheries.

This EA analyzes the effects on the environment of the continued implementation of the Catch Sharing Plan in 2014 through 2016, and updates the affected environment sections for all listed species that occur in Area 2A.

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1.0 PURPOSE AND NEED FOR ACTION

1.1 How This Document is Organized

This document is an Environmental Assessment and Regulatory Impact Review (EA/RIR) for the continued implementation of the Pacific Halibut Catch Sharing Plan (Plan) and annual management measures for halibut fishing off the U.S. West Coast for the years 2014-2016.

- Section 1 provides the "Purpose and Need" for this action.
- Section 2 describes the alternatives.
- Section 3 describes the physical, biological, and socio-economic environment of Pacific halibut and of West Coast halibut fisheries that could be affected by the alternatives.
- Section 4 is an analysis of the potential effects of the alternatives considered on the human environment.
- Section 5 addresses the consistency of the preferred alternative with laws other than the National Environmental Policy Act.
- Section 6 contains the RIR/IRFA.
- Section 7 provides the persons and agencies consulted and addresses comments received.
- Section 8 provides a bibliographic reference for this document.
- Appendix A provides the 2014 Plan.
- Appendix B is a report on the 2013 Pacific halibut fisheries in Area 2A.
- Appendix C is a list of prior NEPA analysis completed on the Area 2A halibut fishery and Plan changes.

1.2 Purpose and Need

NMFS' purpose for this action is to understand the effects of the implementation of the Plan and annual management measures during 2014-2016 in light of a changing environment. The need for this action is to address the recent ESA-listing of three rockfish species in Puget Sound.

The Northern Pacific Halibut Act of 1982 at 16 U.S.C. 773c provides that the Secretary of Commerce (Secretary) shall have general responsibility to carry out the Halibut Convention between the United States and Canada and that the Secretary shall adopt such regulations as may be necessary to carry out the purposes and objectives of the Convention and the Halibut Act. The International Pacific Halibut Commission (IPHC) is responsible for drafting annual regulations, conducting the annual halibut survey, and producing stock assessments. The stock assessment produces a range of total allowable catch (TAC) amounts, which are presented to the U.S. and Canadian Commissioners who in consultation with members of the public decide on the final TAC for each management area. Section 773c(c) also authorizes the regional fishery management council having authority for the geographic area concerned to develop regulations governing the Pacific halibut catch in U.S. Convention waters that are in addition to, but not in conflict with, regulations of the IPHC. Accordingly, catch sharing plans to allocate the total allowable catch (TAC) of Pacific halibut between treaty Indian and non-Indian harvesters, and among non-Indian commercial and sport fisheries in IPHC statistical Area 2A (off Washington, Oregon, and California) have been developed each year since 1988 by the Council in accordance with the Halibut Act. In 1995, NMFS implemented a Council-recommended long-term Catch Sharing Plan (Plan) [60 FR 14651, March 20, 1995]. In each of the intervening years between 1995 and the present, minor revisions to the Plan have been made to adjust for the changing needs of the fisheries.

The revisions made to the Plan since 1995 have generally been very minor and have had minor environmental impacts. NMFS issued an EA and FONSI for the initial adoption of the long term Plan in 1995. Since then, in several years NMFS has concluded that the annual changes to the Plan were covered by existing NEPA analysis. NMFS issued EAs and FONSIs for changes to the Plan in 1998, 1999, 2000, 2001, 2002, 2003, 2005. Since 2005, changes to the Plan have been sufficiently minor that NMFS has concluded they were covered by existing NEPA analyses (see appendix C). However, in 2010, three species of rockfish were listed under the Endangered Species Act (ESA) in the Puget Sound/Georgia Basin area. Bocaccio was listed as endangered, canary and yelloweye rockfish were listed as threatened. Because this represents new information about the affected environment for the implementation of the Plan, NMFS is evaluating the effects of this change to the affected environment and the potential effects of continued implementation of the Plan on listed rockfish. Information about the impacts of the fishery on listed rockfish is limited, and new information is likely to be forthcoming in the next several years as monitoring improves. For this reason, and because the proposed action for the ESA section 7 consultation on implementation of the Plan is limited to three years (2014-2016) in duration, the proposed action for this analysis is three years (2014-2016).

1.3 Public Participation

The Council's annual Plan process for considering changes to the Plan is as follows: each year, the states of Washington, Oregon, and California, and the halibut treaty tribes meet with participants in the fishery to review halibut management under the Plan. If any of the states or the tribes wish to propose changes to the Plan, their representatives propose those changes to the Council at its September meeting. The Council adopts alternatives for public review at its September meeting. Following this meeting, the states have public meetings on the range of alternatives. At the November meeting, the Council, with input from the public makes a final recommendation on Plan changes. Following the November Council meeting, NMFS publishes a proposed rule describing the Plan changes and then a final rule implementing the IPHC regulations early the next year. The final rule also contains the sport fishing regulations in Area 2A that are in addition to the IPHC regulations, and approves the Plan.

2.0 ALTERNATIVES, INCLUDING THE PROPOSED ACTION

As discussed above in Section 1.3, the states of Washington, Oregon, and California developed proposed revisions to the Plan for 2014 and the Council adopted proposals for public review at its September 2013 meeting. The Council made its final recommendations on Plan changes at its November meeting and transmitted those changes to NMFS on December 19, 2013. None of the Plan changes recommended by the Council for the 2014 fishery required an EA and are therefore not the focus of this analysis. Rather, this analysis considers the effects of the implementation of the Plan during 2014-2016 in light of the new rockfish listings. The effects of the implementation of the Plan are in part dependent on the amount of the Area 2A TAC set by the IPHC in a particular year. Setting the TAC is not part of this proposed action, however, the Alternatives described here take into account a range of TAC values to capture the likely range of effects of the implementation of the Plan from 2014-2016.

2.1 Alternatives to be Analyzed

Alternative 1 – No Action/Status Quo: the 2013 Plan and implementing regulations as described in the final rule (78 FR 16423, March 15, 2013), implemented for 2014-2016.

Alternative 2 (Preferred) – Continuing implementation of the Plan in 2014 through 2016. This alternative applies the 2014 Plan to a range of TACs from 2004-2014, to provide a potential range of subarea allocations likely to occur over the next three years. As discussed above, NMFS anticipates minor changes to the Plan on an annual basis and anticipates that this Alternative will capture the range of environmental effects that are likely to occur with such changes. More significant changes might require additional NEPA analysis. As in the past, this determination will be made each year as the Council develops its recommendations for changes to the Plan.

3.0 AFFECTED ENVIRONMENT - THE AREA 2A HALIBUT FISHERIES

This section of the document describes the existing fishery and the resources that would be affected by the alternatives. The physical environment is discussed in Section 3.1, the biological characteristics of Pacific halibut and stocks interacting with the Area 2A halibut fishery are discussed in Section 3.2, and the socio-economic or human environment is discussed in Section 3.3.

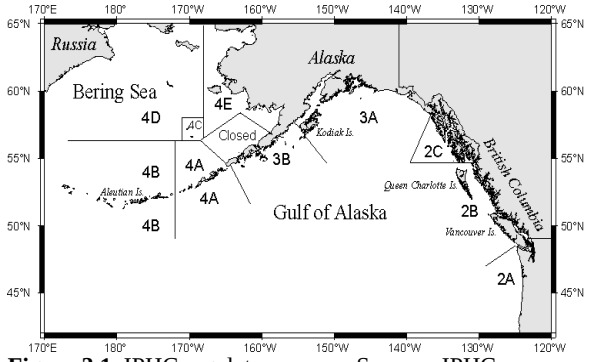

Figure 3.1 IPHC regulatory areas. Source: IPHC

3.1 Physical Environment

California Current System. In the North Pacific Ocean, the large, clockwise-moving North Pacific Gyre circulates cold, sub-arctic surface water eastward across the North Pacific, splitting at the North American continent into the northward-moving Alaska Current and the southward-moving California Current (Figure 3.2). Along the U.S. West Coast, the surface California Current flows southward through the U.S. West Coast EEZ, management Area 2A for Pacific halibut. The California Current is known as an eastern boundary current, meaning that it draws ocean water along the eastern edge of an oceanic current gyre. Along the continental margin and beneath the California Current flows the northward-moving California Undercurrent. Influenced by the California Current system and coastal winds, waters off the U.S. West Coast are subject to

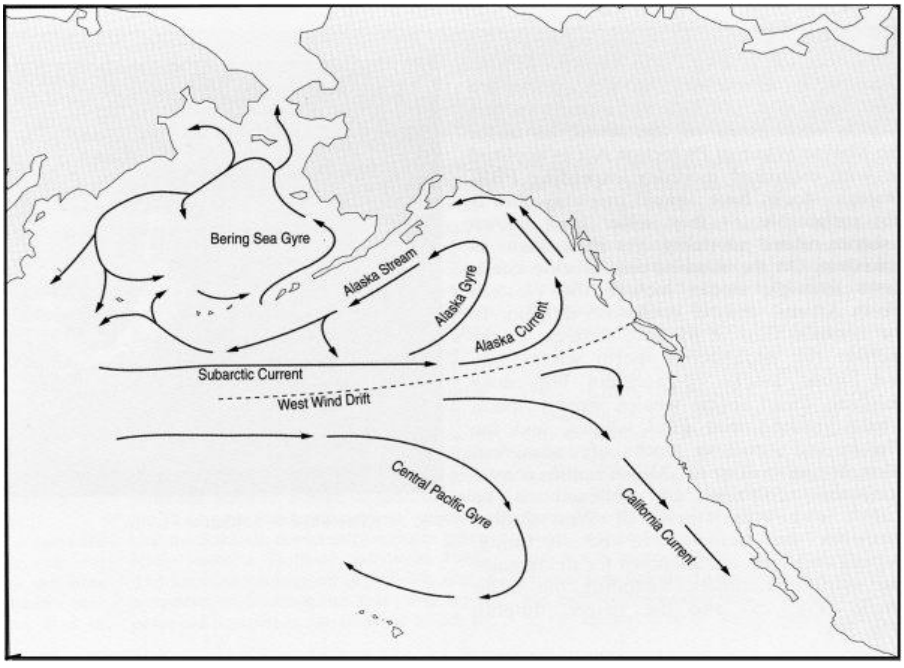

Figure 3.1.1 General circulation and major current systems of the North Pacific Ocean.
Source: NMFS

major nutrient upwelling, particularly off Cape Mendocino (Bakun, 1996). Shoreline topographic features such as Cape Blanco, Point Conception and bathymetric features such as banks, canyons, and other submerged features, often create large-scale current patterns like eddies, jets, and squirts. Currents off Cape Blanco, for example, are known for a current "jet" that drives surface water offshore to be replaced by upwelling sub-surface water (Barth, et al, 2000). One of the better-known current eddies off the West Coast occurs in the Southern California Bight, between Point Conception and Baja California (Longhurst, 1998), wherein the current circles back on itself by moving in a northward and counterclockwise direction just within the Bight. The influence of these lesser current patterns and of the California Current on the physical and biological environment varies seasonally (Lynn and Simpson, 1987) and through larger-scale climate variation, such as El Nino-La Nina or Pacific Decadal Oscillation (Longhurst, 1998).

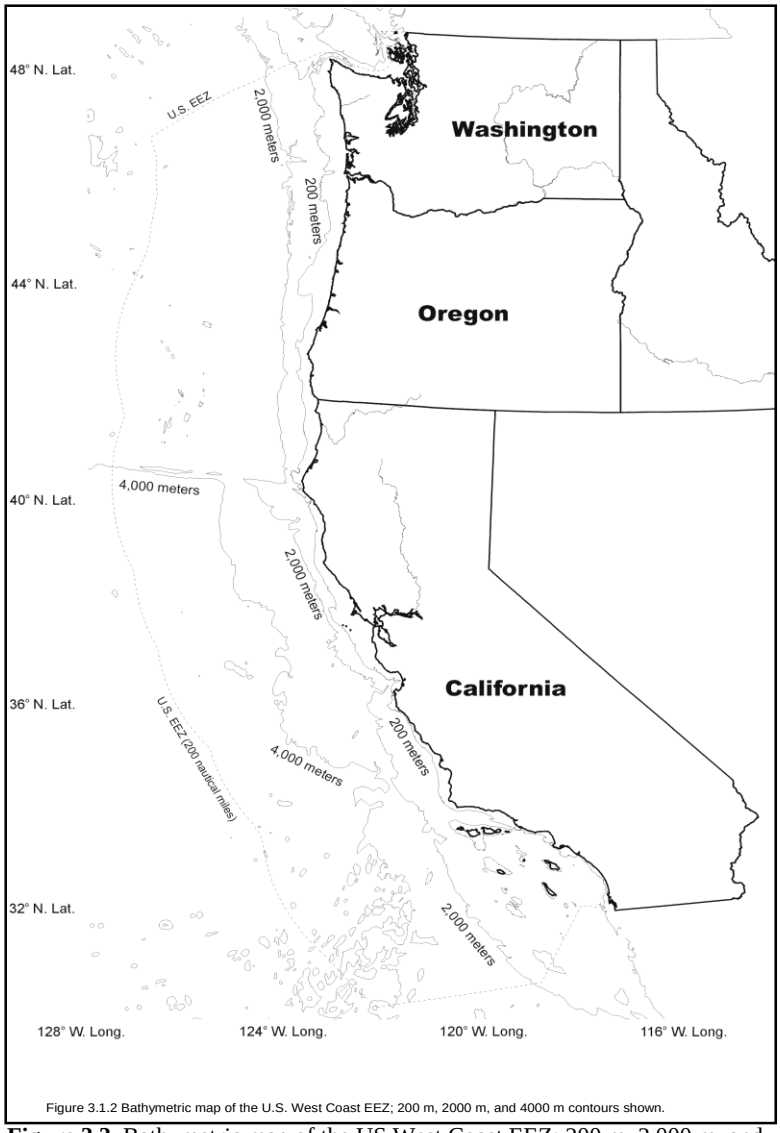

Figure 3.3 Bathymetric map of the US West Coast EEZ; 200 m, 2,000 m, and 4,000 m contours shown.

Topography. Physical topography off the U.S. West Coast is characterized by a relatively narrow continental shelf. The 200 m depth contour shows a shelf break closest to the shoreline off Cape Mendocino, Point Sur, and in the Southern California Bight and widest from central Oregon north to the Canadian border as well as off Monterey Bay. Deep submarine canyons pocket the EEZ, with depths greater than 4,000 m common south of Cape Mendocino. See Figure 3.3.

Climate Shifts. The physical dynamics and biological productivity of the California Current ecosystem have shown a variety of responses to both short- and long-scale changes in climate. These climate shifts may affect recruitment and abundance of Pacific halibut. El Niños and La Niñas are examples of short-scale climate change, six-month to two-year disruptions in oceanic and atmospheric conditions in the Pacific region. An El Niño is a climate event with trends like a slowing in Pacific Ocean equatorial circulation, resulting in warmer sea surface conditions and decreased coastal upwelling. Conversely, La Niñas are short-scale climate events characterized by cooler ocean temperatures (NOAA, 2002.) Long-scale Pacific Ocean climate shifts of two to three decades in duration are often called "Pacific (inter)Decadal Oscillation" or "PDO" in scientific literature. These long-scale climate shift events tend to show relatively cooler ocean temperatures in the Gulf of Alaska and Bering Sea ecosystems and relatively

warmer temperatures in the California Current ecosystem, or a reverse trend of relatively warm temperatures in the north and cooler temperatures in the south (Mantua et al., 1997.)

Periods of warmer or cooler ocean conditions and the event of shifting from warm to cool or vice versa can all have a wide array of effects on marine species abundance. Ocean circulation varies during these different climate events, affecting the degree to which nutrients from the ocean floor mix with surface waters. Periods of higher nutrient mixing tend to have higher phytoplankton (primary) productivity, which can have positive ripple effects throughout the food web. In addition to changes in primary production, climate shifts may affect zooplankton (secondary) production in terms of increasing or decreasing abundance of the zooplankton biomass as a whole or of particular zooplankton species. Again, these changes in secondary production ripple in effect through the food web (Francis et al., 1998.) Upper trophic level species depend on different lower order species for their diets, so a shift in abundance of one type of prey species will often result in a similar shift in an associated predator species. This shifting interdependency affects higher order species, like Pacific halibut, in different ways at different life stages. In other words, some climate conditions may be beneficial to the survival of larvae of a particular species but may have no effect on an adult of that same species.

Public awareness of climate events like PDO, coupled with the relatively dramatic El Nino events may create the perception that climate is the most significant contributor to marine species abundance. In an analysis of marine fish productivity in the Northeast Pacific Ocean, Hollowed, Hare, and Wooster found that links between marine fish recruitment and climate shifts were more clear for conservatively managed species (Hollowed, et al., 2001). For example, population data on Pacific halibut seems to show a link between climate and recruitment. Climatic regimes and weather strongly influence Pacific halibut recruitment in the year of spawning, with recruitment tending to be higher during positive PDO events (Clark and Hare, 2002.)

Habitat. Habitat in Area 2A has been categorized in the Pacific Coast Groundfish Fishery Management Plan (FMP) into seven major habitat types. These habitat categories include all waters from the mean higher high water line, and the upriver extent of saltwater intrusion in river mouths, along the coasts of Washington, Oregon, and California seaward to the boundary of the U.S. EEZ. This approach focuses on ecological relationships among species and between the species and their habitat, reflecting an ecosystem approach in defining habitat. The seven habitat categories are as follows:

1. Estuarine - Those waters, substrates and associated biological communities within bays and estuaries of the EEZ, from mean higher high water level (MHHW, which is the high tide line) or extent of upriver saltwater intrusion to the respective outer boundaries for each bay or estuary as defined in 33 CFR 80.1102 through 80.1395 (Coast Guard lines of demarcation).

2. Rocky Shelf - Those waters, substrates, and associated biological communities living on or within ten meters (5.5 fathoms) overlying rocky areas, including reefs, pinnacles, boulders and cobble, along the continental shelf, excluding canyons, from the high tide line MHHW to the shelf break (~200 meters or 109 fathoms).

3. Nonrocky Shelf - Those waters, substrates, and associated biological communities living on or within ten meters (5.5 fathoms) overlying the substrates of the continental shelf, excluding the rocky shelf and canyon composites, from the high tide line MHHW to the shelf break (~200 meters or 109 fathoms).

4. Canyon - Those waters, substrates, and associated biological communities living within submarine canyons, including the walls, beds, seafloor, and any outcrops or landslide morphology, such as slump scarps and debris fields.

5. Continental Slope/Basin - Those waters, substrates, and biological communities living on or within 20 meters (11 fathoms) overlying the substrates of the continental slope and basin below the shelf break (~200 meters or 109 fathoms) and extending to the westward boundary of the EEZ.

6. Neritic Zone - Those waters and biological communities living in the water column more than ten meters (5.5 fathoms) above the continental shelf.

7. Oceanic Zone - Those waters and biological communities living in the water column more than 20 meters (11 fathoms) above the continental slope and abyssal plain, extending to the westward boundary of the EEZ.

Longline gear in the groundfish fisheries has been shown to have little impact on habitat, and the halibut fishery is shorter in duration and in geographic scope than the groundfish fishery. The longline gear used by the halibut commercial and tribal fisheries may come in contact with the bottom habitat.

3.2 Biological Environment

This section describes the species that may be directly or indirectly affected by the alternatives. They are divided into three groups. First, this section describes Pacific halibut, the species directly subject to the alternatives evaluated in this EA. Second, this section reviews species that may be incidentally affected, because they are caught incidentally in Pacific halibut fisheries (coastal and Puget Sound rockfish, green sturgeon, salmon), or conversely because the fisheries targeting other species but have an incidental catch allowance of Pacific halibut (sablefish and salmon). Finally, this section describes various legally protected species covered by the Endangered Species Act (marine mammals, turtles, eulachon, salmon, listed seabirds), Marine Mammal Protection Act, and the Migratory Bird Treaty Act. With respect to incidentally affected species, this section discusses canary and yelloweye rockfish that live along the coast, which are two of the seven overfished species managed under rebuilding plans through the Pacific Coast Fishery Management Plan. The remaining five overfished species (i.e., cowcod, darkblotched, Pacific ocean perch, petrale sole, and bocaccio) are not discussed here because they are not caught in substantial numbers or do not occur in the same area as the halibut fishery. The Puget Sound rockfish species listed under the ESA (i.e., bocaccio, canary, and yelloweye) have been determined to be separate species from the overfished stocks on the coast, and therefore, are discussed separately in the Protected Species section below with the remaining ESA-listed West Coast species (i.e. marine mammals, sea turtles, salmon, and seabirds).

Pacific Halibut

Pacific halibut (*Hippoglossus stenolepis*) range from Hokkaido, Japan to the Gulf of Anadyr, Russia on the Asiatic Coast and from Nome, Alaska to Santa Barbara, California on the North American (Pacific) Coast. They are among the largest teleost fishes in the world, measuring up to 8 ft (2.4 m). With flat, diamond-shaped bodies, Pacific halibut are able to migrate long distances.

The major spawning grounds for Pacific halibut are in the north Pacific Ocean within the Gulf of Alaska and Bering Sea (IPHC 1998.) During spawning, which generally occurs from November to March, halibut move into deep water, where the eggs are fertilized. As shown in Figure 3.4, the eggs develop into larvae and grow, drifting slowly upward in the water column. During development, the larvae drift great distances with the ocean currents around the northeast Pacific Ocean in a counterclockwise direction (IPHC 1998.) Young fish then settle to the bottom in the shallow feeding areas. Following two to three years in the nursery areas, young halibut generally counter migrate, moving into more southerly and easterly waters, including Area 2A. Because Area 2A includes the southern most range of Pacific halibut and the major spawning grounds are north and west of Area 2A, the population of halibut in Area 2A is significantly smaller than in other areas of its range. Pacific halibut reach maturity at approximately 8 years for males and 12 years for females. The average age of Pacific halibut in the commercial fishery in Area 2A was 11.5 in 2012 (IPHC 2012).

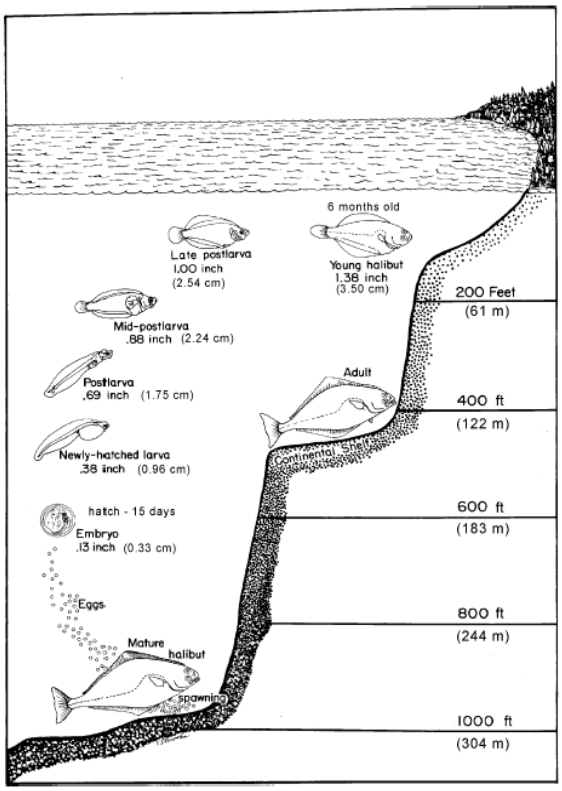

Figure 3.4 Life cycle of Pacific halibut. Source: IPHC

Adult halibut are demersal, living on or near the bottom. They prefer water temperatures ranging from 3 to 8 degrees Celsius and are generally caught between 90 and 900 feet (27 and 274 m), but have been caught as deep as 1,800 ft (549 m) (IPHC 1998.) Adult halibut prey on cod, sablefish, pollock, rockfish, sculpins, flatfish, sand lance, herring, octopus, crab, and clams (IPHC 1998.) Adult halibut are not generally preyed upon by other species due to their size, active nature and bottom dwelling habits.

Other Affected Species

This section discusses sablefish, yelloweye and canary rockfish on the coast, and salmon, because these are the species that have the largest interaction with the halibut fisheries. The Pacific halibut fishery commonly intercepts rockfish and sablefish, as they are found in similar habitat to Pacific halibut and are easily caught with longline gear. Management of overfished rockfish species in halibut fisheries includes no retention of canary and yelloweye rockfish in the sport fishery coastwide and trip limits for the directed halibut fishery.

Sablefish

Sablefish tend to co-occur with Pacific halibut, favoring similar depths and bottom habitat. The Pacific halibut fishery commonly intercepts rockfish and sablefish because they co-occur and are easily caught with longline gear. To account for incidental catch of Pacific halibut in management Area 2A, the sablefish primary fishery has a catch allowance for Pacific halibut during certain years, as described in Section 3.3 Human Environment. For example, in 2013, 21,410 lbs were allocated to longliners in the sablefish primary fishery out of a total Area 2A quota of 990,000 lbs (see Table 3.7).

Sablefish (*Anoplopoma fimbria*) are abundant in the north Pacific, from Honshu Island, Japan, north to the Bering Sea, and southeast to Cedros Island, Baja California. There are at least three genetically distinct populations off the West Coast of North America: one south of Monterey characterized by slower growth rates and smaller average size, one that ranges from Monterey to the U.S./Canada border that is characterized by moderate growth rates and size, and one ranging off British Columbia and Alaska characterized by fast growth rates and large size. Large adults are uncommon south of Point Conception (Hart 1973, Love 1991, McFarlane & Beamish 1983a, McFarlane & Beamish 1983b, NOAA 1990). Adults are found as deep as 1,900 m, but are most abundant between 200 and 1,000 m (Beamish & McFarlane 1988, Kendall & Matarese 1987, Mason et al. 1983). Off southern California, sablefish were abundant to depths of 1,500 m (MBC 1987). Adults and large juveniles commonly occur over sand and mud (McFarlane & Beamish 1983a, NOAA 1990) in deep marine waters. They were also reported on hard-packed mud and clay bottoms near submarine canyons (MBC 1987).

Spawning occurs annually in the late fall through winter in waters greater than 300 m (Hart 1973, NOAA 1990). Sablefish are oviparous with external fertilization (NOAA 1990). Eggs hatch in about 15 days (Mason et al. 1983, NOAA 1990) and are demersal until the yolk sac is absorbed (Mason et al. 1983). After the yolk sac is absorbed, the age-0 juveniles become pelagic. Older juveniles and adults are benthopelagic. Larvae and small juveniles move inshore after spawning and may rear for up to four years (Boehlert & Yoklavich 1985, Mason et al. 1983). Older juveniles and adults inhabit progressively deeper waters. The best estimates indicate that 50% of females are mature at 5-6 years (24 inches), and 50% of males are mature at 5 years (20 inches).

Sablefish larvae prey on copepods and copepod nauplii. Pelagic juveniles feed on small fishes and cephalopods, mainly squids (Hart 1973, Mason et al. 1983). Demersal juveniles eat small demersal fishes, amphipods, and krill (NOAA 1990). Adult sablefish feed on fishes like rockfishes and octopus (Hart 1973, McFarlane & Beamish 1983a). Larvae and pelagic juvenile sablefish are heavily preyed upon by sea birds and pelagic fishes. Juveniles are eaten by Pacific cod, Pacific halibut, lingcod, spiny dogfish, and marine mammals, such as Orca whales (Cailliet et al. 1988, Hart 1973, Love 1991, Mason et al. 1983, NOAA 1990). Sablefish compete with many other co-occurring species for food, mainly Pacific cod and spiny dogfish (Allen 1982).

Salmon

This section discusses salmon stocks in general; salmon species listed under the ESA and addressed in the BiOp are further discussed under the Protected Species section below.

Salmon are targeted with recreational hook and line and commercial troll gear off all three West Coast states. The commercial salmon troll fishery does have incidental catch of Pacific halibut and an allocation of halibut in the Plan. Commercial salmon fisheries also have incidental catch of groundfish, including yellowtail rockfish, canary rockfish, lingcod, and sablefish. Pacific halibut are caught incidentally off Washington and Oregon, while groundfish are caught off all three states. In the commercial troll fishery, Pacific halibut and rockfish may be retained in accordance with annual landing restrictions and halibut may be retained in accordance with the allocation in the Plan.

There are five species of salmon off the Pacific coast: Chinook, coho, chum, pink, and sockeye. Salmon are anadromous, spending from one to several years (depending on the species) in the ocean before returning to the freshwater stream where they were born to spawn. Pacific salmon species die after spawning. While in the ocean, salmon may migrate hundreds to thousands of miles, but generally stay

within 20 miles of shore. Most juvenile salmon whose natal streams lie north of Cape Blanco in southern Oregon migrate northward to British Columbia, the Gulf of Alaska, or Bering Sea. Many Puget Sound Chinook and some coho spend a majority of their ocean phase in or near Puget Sound. Juvenile salmon from drainages south of Cape Blanco tend to migrate in a southwesterly direction. Timing of chinook returning to coastal waters depends on the runs (winter, spring, summer, and fall) inhabiting the area. Few sockeye salmon runs occur in the western United States and little is known about their ocean migration, including listed Snake River and Lake Ozette runs. Migration patterns of Hood Canal summer chum and lower Columbia River chum are largely unknown. Most pink salmon adults return to streams between mid-July and late September and are rarely observed in or south of the Columbia River.

Many naturally spawning salmonid populations have declined as a result of reduced freshwater productivity from drought conditions; habitat loss and degradation; inadequate riverine passage and flows because of hydropower, agriculture, logging, and other developments; overfishing; increased predation and competition with hatchery fish; declines in freshwater productivity related to drought; and declines in marine productivity related to climate conditions. While naturally spawning salmon comprise a minority of the harvest, these declines have necessitated reduced harvests throughout the Council management area in Washington, Oregon and California. Chinook or king salmon (*Oncorhynchus tshawytscha*) and coho or silver salmon (*O. kisutch*) are the main species caught in Council-managed ocean salmon fisheries. In odd-numbered years, catches of pink salmon (*O. gorbuscha*) can also be significant, primarily off Washington and Oregon. Chum and sockeye are rarely caught in Council management areas, although these stocks pass through Pacific Coast waters off Washington on their way to inshore areas where they support major fisheries. Chinook and coho caught in Council fisheries originate from rivers ranging from the United States/Canada border to the south near Point Conception, California, with rare occurrences as far south as Los Angeles. California usually records the largest Chinook landings for both commercial and recreational fisheries, although in 2001, Oregon recorded Chinook landings greater than California did. Coho are a prohibited species in California fisheries, and Washington usually records the greatest coho landings for both recreational and commercial fisheries (PFMC, 2002a).

Off the North Washington coast, two of the Council's salmon management groups may be found in the same waters as Pacific halibut, Washington coastal salmon runs and Puget Sound salmon runs. Washington coastal salmon runs consist of all fall, summer, and spring stocks from coastal streams north of the Columbia River through the western Strait of Juan de Fuca. Puget Sound salmon runs consist of all fall, summer, and spring stocks originating from U.S. tributaries to Puget Sound and the eastern Strait of Juan de Fuca. These two management groups include both natural and hatchery stocks. And, salmon originating from both Washington coastal and Puget Sound streams tend to contribute primarily to British Columbia and Southeast Alaska salmon fisheries, with only minor effects on the stocks from U.S. West Coast salmon fisheries. (PFMC, 2000)

Yelloweye Rockfish-along the coast

Yelloweye rockfish along the coast are not listed under the ESA but are managed as an overfished species with a rebuilding plan under the Groundfish FMP. The Pacific halibut fishery commonly intercepts rockfish, as they are found in similar habitat to Pacific halibut and are easily caught with longline gear. They are commonly caught with Pacific halibut and are prohibited in the sport fishery coastwide. Management measures to reduce the incidental catch of yelloweye rockfish in halibut fisheries are discussed in Section 3.3 Human Environment.

Yelloweye rockfish *(Sebastes ruberrimus*) range from the Aleutian Islands, Alaska to northern Baja California; they are common from central California northward to the Gulf of Alaska (Eschmeyer et al.

1983, Hart 1973, Love 1991, Miller & Lea 1972, O'Connell & Funk 1986). Yelloweye rockfish occur in water 25-550 m deep. Yelloweye rockfish are bottom dwelling, generally solitary and sedentary, rocky reef fish, found either on or just over reefs (Eschmeyer et al. 1983, Love 1991, O'Connell & Funk 1986). Boulder areas in deep water (>180 m) are the most densely-populated habitat type, and juveniles prefer shallow-zone broken-rock habitat (O'Connell & Carlile 1993). They also reportedly occur around steep cliffs and offshore pinnacles (Rosenthal et al. 1982). The presence of refuge spaces is an important factor affecting their occurrence (O'Connell & Carlile 1993).

Yelloweye rockfish are ovoviviparous and give birth to live young in June off Washington (Hart 1973). The age of first maturity is estimated at 6 years, and all are estimated to be mature by 8 years (Echeverria 1987). Yelloweye rockfish can grow to 91 cm (Eschmeyer et al. 1983, Hart 1973). Males and females probably grow at the same rates (Love 1991, O'Connell & Funk 1986). The growth rate of yelloweye rockfish levels off at approximately 30 years of age (O'Connell & Funk 1986). Yelloweye rockfish can live to be 114 years old (Love 1991, O'Connell & Funk 1986). Yelloweye rockfish are a large predatory reef fish that usually feeds close to the bottom (Rosenthal et al. 1988). They have a widely varied diet, including fish, crabs, shrimps and snails, rockfish, cods, sand lances and herring (Love 1991). Yelloweyes have been observed underwater capturing smaller rockfish with rapid bursts of speed and agility. Off Oregon the major food items of the yelloweye rockfish include cancroid crabs, cottids, righteye flounders, adult rockfishes, and pandalid shrimps (Steiner 1978).

Canary Rockfish-along the coast

Canary rockfish along the coast are not listed under the ESA but are managed as an overfished species with a rebuilding plan under the Groundfish FMP. The Pacific halibut fishery commonly intercepts rockfish, as they are found in similar habitat to Pacific halibut and are easily caught with longline gear. Canary rockfish is commonly caught with Pacific halibut and is prohibited in halibut sport fishery coastwide. Management measures to reduce the incidental catch of canary rockfish in halibut fisheries are discussed in Section 3.3 Human Environment.

Canary rockfish (*Sebastes pinniger*) are found between Cape Colnett, Baja California, and southeastern Alaska (Boehlert 1980, Boehlert & Kappenman 1980, Hart 1973, Love 1991, Miller & Lea 1972, Richardson & Laroche 1979). There is a major population concentration of canary rockfish off Oregon (Richardson & Laroche 1979). Canary primarily inhabit waters 91-183 m deep (Boehlert & Kappenman 1980). In general, canary rockfish inhabit shallow water when they are young and deep water as adults (Mason 1995). Adult canary rockfish are associated with pinnacles and sharp drop-offs (Love 1991). Canary rockfish tend to be more mobile than yelloweye rockfish and have been known to congregate in schools. Canary rockfish are most abundant above hard bottoms (Boehlert & Kappenman 1980). In the southern part of its range, the canary rockfish seems to be a reef-associated species (Boehlert 1980). In central California, newly settled canary rockfish are first observed at the seaward, sand-rock interface and farther seaward in deeper water (18-24 m).

Canary rockfish are ovoviviparous and have internal fertilization (Boehlert & Kappenman 1980, Richardson & Laroche 1979). Off California, canary rockfish spawn from November-March and from January-March off Oregon and Washington (Hart 1973, Love 1991, Richardson & Laroche 1979). The age of 50% maturity of canary rockfish is 9 years; nearly all are mature by age 13. The maximum length canary rockfish grow to is 76 cm (Boehlert & Kappenman 1980, Hart 1973, Love 1991). Canary rockfish primarily prey on planktonic creatures, such as krill, and occasionally on fish (Love 1991). Canary rockfish feeding increases during the spring-summer upwelling period when euphausiids are the dominant prey and the frequency of empty stomachs is lower (Boehlert et al. 1989).

Protected Species

Protected species fall under four legal mandates: the Endangered Species Act of 1973 (ESA), the Marine Mammal Protection Act of 1972 (MMPA), the Migratory Bird Treaty Act (MBTA), and Executive Order 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds). These laws are explained further in Chapter 5.0.

NMFS prepared a biological opinion (BiOp) for this action. The BiOp evaluates the effects of the halibut fishery and the continued implementation of the Catch Sharing Plan (Plan) for 2014-2016 on listed species. Further, NMFS is working with USFWS to evaluate the effects of the implementation of the Plan on seabirds and other FWS species. The USFWS completed a BiOp on the groundfish fishery (USFWS 2012) and conclusions from that BiOp are used here to discuss possible effects to seabirds due to similarities between halibut and groundfish fishing gear and areas. This section discusses all the species in Table 3.1. The proposed action was determined to have No Effect on eulachon.

The ESA protects species in danger of extinction throughout all or a significant part of their range and mandates the conservation of the ecosystems on which they depend. "Species" is defined by the ESA to mean a species, a subspecies, or—for vertebrates only—a distinct population. Under the ESA, a species is listed as "endangered" if it is in danger of extinction throughout a significant portion of its range and "threatened" if it is likely to become an endangered species within the foreseeable future throughout all, or a significant part, of its range. The following species occur off the West Coast and/or in Puget Sound and are subject to the conservation and management requirements of the ESA:

Table 3.1. West Coast Endangered Species	
MARINE MAMMALS	
Endangered:	Sperm whale (*Physeter macrocephalus*) Humpback whale (*Megaptera novaeangliae*) Blue whale (*Balaenoptera musculus*) Fin whale (*Balaenoptera physalus*) Southern Resident Killer whale (*Orcinus orca)* Sei whale (*Balaenoptera borealis borealis)* North Pacific right whales (*Eubalaena japonica*)
Threatened:	Guadalupe fur seal (*Arctocephalus townsendi*) Southern sea otter (*Enhydra lutris*) California Stock
SEABIRDS	
Endangered:	Short-tail albatross (*Phoebastria (Diomedea) albatrus*) California brown pelican (*Pelecanus occidentalis*) California least tern (*Sterna antillarum browni*)
Threatened:	Marbled murrelet (*Brachyramphs marmoratus*)
SEA TURTLES	
Endangered:	Green turtle (*Chelonia mydas*) Leatherback turtle (*Dermochelys coriacea*) Olive ridly turtle (*Lepidochelys olivacea*)
Threatened:	Loggerhead turtle (*Caretta caretta*)
SALMON	

Endangered:	Chinook salmon (*Oncorhynchus tshawytscha)* Sacramento River Winter; Upper Columbia Spring Sockeye salmon (*Oncorhynchus nerka)* Snake River Steelhead trout (*Oncorhynchus mykiss)* Southern California Coast Coho salmon (*Oncorhynchus kisutch)* Central California Coast
Threatened:	Coho salmon (*Oncorhynchus kisutch)* Lower Columbia River, Southern Oregon/Northern California; Oregon Coast Chinook salmon (*Oncorhynchus tshawytscha*) Snake River Fall, Spring, and Summer; Puget Sound; Lower Columbia; Upper Willamette; Central Valley Spring; California Coastal Chum salmon (*Oncorhynchus keta)* Hood Canal Summer; Columbia River Sockeye salmon (*Oncorhynchus nerka)* Ozette Lake Steelhead trout (*Oncorhynchus mykiss)* Puget Sound, South-Central California, Central California Coast, Southern California Coast, Snake River Basin, Lower Columbia, California Central Valley, Upper Willamette, Upper and Middle Columbia River, Northern California
OTHER	
Endangered:	Puget Sound distinct population segment of bocaccio (*Sebastes paucispinis)*
Threatened:	Puget Sound distinct population segment of canary rockfish (*Sebastes pinniger*) Puget Sound distinct population segment of yelloweye rockfish (*Sebastes ruberrimus*) Southern distinct population segment of eulachon (Columbia river smelt)(*Thaleichthys pacificus*) Southern distinct population segment of North American green sturgeon (*Acipenser medirostris)*

The Federal MMPA guides marine mammal species protection and conservation policy. Under the MMPA, on the West Coast NMFS is responsible for the management of cetaceans and pinnipeds, while the USFWS manages sea otters. Stock assessment reports review new information every year for strategic stocks and every three years for non-strategic stocks. (Strategic stocks are those whose human-caused mortality and injury exceeds the potential biological removal.) Marine mammals, whose abundance falls below the optimum sustainable population, are listed as "depleted" according to the MMPA. The following West Coast species are listed as depleted under the MMPA: Northern fur seal (*Callorhinus ursinus*) Eastern Pacific Stock, and Killer whale (*Orcinus orca*) Eastern North Pacific Southern Resident Stock.

Fisheries that interact with marine mammal species listed as depleted, threatened, or endangered may be subject to management restrictions under the MMPA and ESA. NMFS publishes an annual list of fisheries in the *Federal Register* separating commercial fisheries into one of three categories based on the

level of serious injury and mortality of marine mammals occurring incidentally in that fishery. The categorization of a fishery in the list of fisheries determines whether participants in that fishery are subject to certain provisions of the MMPA, such as registration, observer coverage, and take reduction plan requirements. Pacific halibut fisheries are in Category III, denoting a remote likelihood of, or no known, serious injuries or mortalities to marine mammals.

The USFWS is the primary Federal agency responsible for seabird conservation and management. Four species found off the West Coast are listed under the ESA, listed in the table above. In 2002, the USFWS classified several seabird species that occur off the Pacific Coast as "Species of Conservation Concern." These species include: black-footed albatross (*Phoebastria nigripes*), ashy storm-petrel (*Oceanodroma homochroa*), gull-billed tern (*Sterna nilotica*), elegant tern (*Sterna elegans*), arctic tern (*Sterna paradisaea*), black skimmer (*Rynchops niger*), and Xantus's murrelet (*Synthliboramphus hypoleucus*).

Marine Mammals and Sea Turtles

The waters off Washington, Oregon, and California (WOC) support a wide variety of marine mammals and turtles. The BiOp evaluated the effects of the halibut fishery on marine mammals and sea turtles (Blue Whales, Fin Whales, Humpback Whales, Northern Pacific Right Whales, Sei Whales, Sperm Whales, Southern Resident (SR) Killer Whales, Guadalupe Fur Seals, Green Sea Turtles, Olive Ridley Sea Turtles, Loggerhead Sea Turtles, and Leatherback Sea Turtles).

Fin whales have been detected year round off California (Dohl et al. 1983), Oregon and Washington (Moore et al. 1998). Sperm whales are also found year-round off California (Dohl et al. 1983, Barlow 1995, Forney et al. 1995) and are seen in Washington and Oregon waters every season except winter (Green et al. 1992). The U.S. west coast is an important feeding area in the summer and fall for the eastern North Pacific stock of blue whales (Carretta et al. 2013). In the winter and spring, most of the blue whales from this stock migrate south to the Gulf of California and on the Costa Rica Dome (Carretta et al. 2013). Humpback whales of the California/Oregon/Washington stock feed off the U.S. west coast, with winter migratory destinations in coastal waters of Mexico and Central America (Carretta et al. 2013). In recent years, humpback whales are sighted with increasing frequency in the inside waters of Washington, including Puget Sound (primarily during the fall and spring); however, occurrence in the inside waters remains uncommon. Occurrence of Guadalupe fur seals, sei whales, and North Pacific right whales are rare off Washington, Oregon, and California (Allen and Angliss 2013, Carretta et al. 2013).

The Southern Resident (SR) killer whales regularly occur in the inland waters of Washington and British Columbia, Canada during late spring, summer, and early fall (NMFS 2008). During these seasons, the whales are occasionally observed along the outer coast where they typically travel along the southern coast of Vancouver Island and are occasionally sighted as far west as Tofino and Barkley Sound. The range of Southern Residents throughout the rest of the year is not well known. As the fall progresses, the Southern Residents are seen less frequently in inland waters and they are thought to remain in coastal waters for the winter and spring. Although sightings on the outer coast are extremely limited, researchers have confirmed that they have traveled as far south as central California (NMFS 2008; Hanson et al. 2013) and as for north as southeast Alaska (one sighting occurred in Chatham Strait, AK, J. Ford pers. comm.). In recent years, several sightings or acoustic detections have been obtained off the Washington and Oregon coasts for these whales in the winter and spring (NWFSC unpubl. data, Hanson et al. 2013).

Green sea turtles, loggerhead sea turtles, and olive ridley sea turtles rarely occur in Area 2A. Leatherback sea turtles occur north of central California during summer and fall and are also known to occur in the north Pacific and in waters off central California.

In recent years, humpback whales have been sighted with increasing frequency in the inside waters of Washington, including Puget Sound (primarily during the fall and spring); however, occurrence in the inside waters remains uncommon. Occurrence of Guadalupe fur seals, sei whales, and North Pacific right whales are rare off Washington, Oregon, and California. Humpback whales and sperm whales were sighted during the IPHC survey but did not interact with the survey. There are no reported interactions of halibut fisheries and marine mammals or sea turtles.

Eulachon

Eulachon are found in the eastern north Pacific Ocean from northern California to southwest Alaska and into the southeastern Bering Sea. The southern DPS of eulachon was listed as threatened under the ESA in 2010 (75 FR 13012). The eulachon southern DPS is defined from the Mad River in northern California, north to the Skeena River in British Columbia. Eulachon are an anadromous fish. Adults migrate from the ocean to freshwater creeks and rivers where they spawn from late winter through early summer. The offspring hatch and migrate back to the ocean to forage until maturity. Once juvenile eulachon enter the ocean, they move from shallow nearshore areas to deeper areas over the continental shelf. There is little information available about eulachon movements in nearshore marine areas and the open ocean. Eulachon are rarely encountered by longline gear.

Seabirds

Over a hundred species of seabirds occur in waters off the West coast within the EEZ. These species include: loons, grebes, albatross, fulmars, petrels, shearwaters, storm-petrels, pelicans, cormorants, frigate birds, phalaropes, skuas, jaegers, gulls, kittiwakes, skimmers, terns, guillemots, murrelets, auklets, and puffins. The migratory range of these species includes commercial fishing areas; fishing also occurs near the breeding colonies of many of these species.

No formal analysis has been conducted on the halibut fishery and interactions with sea birds. However, the US Fish and Wildlife Service (USFWS) completed a Biological Opinion (USFWS 2012) on the groundfish fishery on the west coast and due to the similarities between halibut fisheries and groundfish fisheries chapter 4 uses some of the conclusions from that BiOp to discuss possible impacts of the halibut fishery on seabirds.

ESA-listed endangered seabirds that co-occur in Area 2A include short-tailed albatross (*Phoebastria albatrus*), California least tern (*Sterna antillarum browni*), and Marbled murrelet (*Brachyramphus marmoratus*), but of those, only short-tailed albatross is known to interact with the groundfish fishery (USFWS 2012).

Short-tailed albatross are large, pelagic seabirds with long, narrow wings adapted for soaring just above the water surface. At-sea sightings since the 1940s indicate that short-tailed albatross are distributed widely throughout their historic foraging range in the temperate and subarctic North Pacific Ocean. A recent compilation of at-sea seabird survey data and albatross telemetry data across the EEZs of California through Washington found that short-tailed and black-footed albatrosses had similar distributions; both were widely distributed but most abundant north of 36° N (Guy et al., 2012). Juveniles and sub-adults are prevalent off the west coasts of Canada and the U.S. (Environment Canada 2008). In late September, large flocks of short-tailed albatross have been observed over the Bering Sea canyons (Piatt et al. 2006). These are the only known concentrations of this species away from their breeding islands. Short-tailed albatross forage extensively along continental shelf margins, spending the majority

of time within national EEZs, particularly the U.S. (off Alaska), Russia, and Japan, rather than over international waters (Suryan et al. 2007a, Suryan et al. 2007b).

Interactions between seabirds and fishing operations are wide-spread and have led to conservation concerns in many fisheries throughout the world. Abundant food in the form of offal (discarded fish and fish processing waste) and bait attract birds to fishing vessels. Seabirds are often taken by longline gear, like the kind used in Pacific halibut fisheries. Around longline vessels, seabirds forage for offal and bait that has fallen off hooks at or near the water's surface and are attracted to baited hooks near the water's surface during the setting of gear. If a bird becomes hooked while feeding on bait or offal, it can be dragged underwater and drowned.

Vessel operators are not required to document the incidental take of seabirds in logbooks, but sightings forms where fishermen can record sightings of seabirds are provided by port samplers when requested. In lieu of an assessment of the commercial longline halibut fleet, IPHC has conducted seabird research on their stock assessment surveys in Area 2A which charter commercial longline vessels and use similar gear and deployment methods.

Besides entanglement in fishing gear, seabirds may be indirectly affected by commercial fisheries in various ways. Change in prey availability may be linked to directed fishing and the discarding of fish and offal. Vessel traffic may affect seabirds when it occurs in and around important foraging and breeding habitat and increases the likelihood of bird storms. In addition, seabirds may be exposed to at-sea garbage dumping and the diesel and oil discharged into the water associated with commercial fisheries. The California current system supports a diverse array of seabird species. Species found on the west coast include resident species and transitory species (migrating or foraging). All the California Current system seabirds are highly mobile and require an abundant food source to support their high metabolic rates.

ESA-listed seabirds are known to be hooked or entangled in fishing gear. Incidental take of short-tailed albatross is expected to occur from interactions with trawl cables or longline hooks, however take of other listed seabirds is not expected as discussed below. A yearly average of 0.8 short-tailed albatross is anticipated to be taken by all fishing conducted under the PCGFMP. Vessel traffic associated with groundfish fishing activities will occur in areas where California least tern are found. The recovery plan for the least tern does not identify interactions with vessel activity as a threat to the species. Although vessel traffic may directly affect the species, it is not likely to adversely affect them. Marbled murrelet distribution overlaps to some extent with fisheries conducted under the PCGFMP and areas where vessels transit. The effects of vessel transit on foraging and loafing murrelets are not measurable. Murrelets are vulnerable to gillnets which may be used in the open access groundfish fisheries south of 38º north latitude and from line gear used coastwide in the open access and recreational fisheries. There has been no reported mortality of marbled murrelets in west coast groundfish fisheries. Single interactions with marbled murrelet were reported in the groundfish trawl sector in 2001 and 2002 but were listed as "boarded vessel only", meaning the bird was seen on the vessel but did not interact with the gear. Therefore, any impacts to marbled murrelets are expected to be minor. Given that the commercial and tribal halibut fisheries use similar gear and operate in similar areas to the portions of the groundfish fishery that use longline gear, but with much shorter seasons, any impacts to albatross from the halibut fishery are most likely less than impacts from the groundfish fishery. Also, given the very low mortality estimate, it is unlikely that any halibut fishery would have that level of bird mortality in just one year. In addition, there have been no seabird interactions reported in the halibut fishery

Salmon

Many Pacific coast salmon species have been listed as endangered or threatened under the ESA (Table 3.1). Salmon caught in the U.S. West Coast fishery have life cycle ranges that include coastal streams and river systems from central California to Alaska and oceanic waters along the U.S. and Canada seaward into the north central Pacific Ocean, including Canadian territorial waters and the high seas. Some of the more critical portions of these ranges are the freshwater spawning grounds and migration routes. Salmonid species on the west coast have experienced declines in abundance over the last several decades to human induced and natural factors. Given the complexity of the salmon life cycle no single factor is responsible for this decline rather multiple factors have influenced the decline. Water diversions, including dams and diversions for agriculture have decreased accessible habitat; land use activities including logging and urban development have significantly altered fish habitat quantity and quality; and natural environmental conditions including floods and drought have reduced already limited habitat. Finally, salmon are an important species in commercial and recreational fisheries. During periods of decreased habitat availability, the impacts of fishing on native stocks may be heightened. Commercial fishing on unlisted, healthier stock has caused adverse impacts to weaker stocks of salmon, and illegal high seas driftnet fishing in past years may have also been partially responsible for declines in salmon abundance.

Specifically in halibut fisheries, it is likely that salmon are encountered in the commercial and tribal longline halibut fisheries, however, this catch is estimated to be relatively small compared to the salmon population. The Puget Sound tribal commercial fishery reported catch of one salmon in 2012, and salmon catch occurs in halibut recreational fisheries. Estimates of incidental salmon catch in recreational halibut fisheries vary by state due to differences in sampling programs. California had no records of halibut being landed with salmon when the trip was a salmon-targeted trip but does not have records for halibut-directed fishing trips. CDFW staff indicated that the recreational halibut fishery in Northern California occurs in a different area than the recreational salmon fishing areas, and therefore, salmon bycatch in the recreational halibut fishery has likely been minimal. Some salmon bycatch occurs in Washington halibut recreational fisheries, and dockside samplers ask for salmon species information. Bycatch of coho and Chinook salmon was reported by WDFW in the coastal recreational halibut fishery; however, estimates for salmon bycatch in Puget Sound were unavailable. ODFW reported Chinook and coho salmon catch in their recreational halibut fisheries. Salmon may be retained in the halibut recreational fishery in Oregon. There are no data for Washington or Oregon that identify which stocks of coho or Chinook salmon have historically been landed; therefore, there is no way to determine if those fish are ESA-listed or not. Due to the low bycatch rates and because it is unlikely that all of the salmon bycatch is from ESA-listed stocks, impacts to listed salmon species have likely been minor.

Green Sturgeon

NMFS listed the Southern DPS of North American green sturgeon (Southern DPS green sturgeon) as threatened under the ESA in 2006 (71 Fed. Reg. 17757, April 7, 2006). There are at least two DPS however, the northern DPS is not listed under the ESA. The southern DPS consists of populations originating from coastal watershed south of the Eel River, in northern California, with spawning confirmed in the Sacramento River system. Although the geographic distribution of Southern DPS green sturgeon is broad, the available habitat is limited. NMFS identified the reduction of spawning habitat to a limited area of the Sacramento River as the principal factor for the species' decline.

The following information applies to green sturgeon in general. Green sturgeon have a complex anadromous life history. They spend more time in the ocean than any other sturgeon. The majority of green sturgeon are thought to spawn in the Klamath River, but spawning also occurs in the Sacramento

and Rogue rivers. First spawning occurs at 15 years for males and 17 years for females. Female green sturgeon are thought to spawn only every 5 years. Adults migrate into rivers to spawn from April to July with a May to June peak. Eggs are spawned among rocky bottom substrates and juveniles spend 1 to 4 years in freshwater. After green sturgeon enter the ocean, they appear to make northern migrations indicated from very limited tag information. Green sturgeon concentrate in coastal estuaries, particularly the Columbia River estuary and coastal Washington estuaries during the late summer and early fall. Neither feeding nor spawning occurs in association with these concentrations, and there is no information about how much of the population is in these concentrations each year or whether this varies. Productivity is likely reduced because of restriction of spawning to one area in the mainstem Sacramento River and continuing impacts to the remaining spawning habitat. The largest factor in the decline of the Southern DPS of green sturgeon is the reduction of spawning area.

Retention of green sturgeon in fisheries is prohibited along the coast, but some incidental catch has occurred. There are no records of green sturgeon catch in the treaty tribal halibut fisheries in Washington or in the directed non-tribal halibut commercial fishery. There are occasional records of green sturgeon catch in the Washington and Oregon recreational fisheries; however, these catches were minor, 0 to 3 per year, with no encounters occurring in most years. No data are available on the halibut fisheries in California.

Puget Sound rockfish – Canary, yelloweye, and bocaccio

The Puget Sound/Georgia Basin DPSs of yelloweye rockfish and canary rockfish are listed under the ESA as threatened, and bocaccio are listed as endangered (75 Fed. Reg. 22276, April 28, 2010). These DPSs include all yelloweye rockfish, canary rockfish, and bocaccio found in waters of Puget Sound, the Strait of Georgia, and the Strait of Juan de Fuca east of Victoria Sill.

Sub-adult and adult yelloweye rockfish, canary rockfish, and bocaccio typically utilize habitats with moderate to extreme steepness, complex bathymetry, and rock and boulder-cobble complexes (Love et al. 2002). Within Puget Sound proper, each species has been documented in areas of high relief rocky and non-rocky substrates such as sand, mud, and other unconsolidated sediments (Miller and Borton 1980; Washington 1977). Yelloweye rockfish remain near the bottom and have small home ranges, while some canary rockfish and bocaccio have larger home ranges, move long distances, and spend time suspended in the water column (Love et al. 2002). Adults of each species are most commonly found between 131 to 820 feet (40 to 250 m) (Love et al. 2002; Orr et al. 2000).

Life history traits of yelloweye rockfish, canary rockfish, and bocaccio suggest generally low levels of inherent productivity because they are long-lived, mature slowly, and have sporadic episodes of successful reproduction (Drake et al. 2010; Tolimieri and Levin 2005).

Despite some limitations of our knowledge of past abundance and specific current viability parameters, characterizing the viability of yelloweye rockfish, canary rockfish, and bocaccio includes their severely reduced abundance from historic times, which in turn hinders productivity and diversity. Spatial structure for each species has also likely been compromised because of the lack of mature fish of each species distributed throughout their historic range within the DPSs (Drake et al. 2010).

The recreational halibut fishery in Puget Sound, the tribal commercial fishery, and the IPHC research survey may interact with Puget Sound listed rockfish.

3.3 Socio-economic Environment

The socio-economic environment section is divided into sub-sections, describing fishery management and fishery sectors for Pacific halibut. Section 3.3.1 provides an overview of fisheries that catch Pacific halibut as either a target species or incidentally. The subsequent sub-sections, 3.3.2 through 3.3.7, describe, respectively, the tribal fishery, the non-tribal commercial fishery, and the sport fisheries along the West Coast.

3.3.1 Pacific Halibut Fishery Overview

The Pacific halibut fishery is managed by the IPHC. The federal governments of Canada and the United States (US) adopt domestic regulations to manage the portions of the fishery in their respective waters. The IPHC, responsible for the health of the Pacific halibut resource, conducts extensive stock assessments to ensure that the health and size of the population is correctly estimated. The IPHC then decides on total removals of Pacific halibut in all management areas off the US and Canada at their annual meeting. Domestic allocations and consequent management measures are the responsibility of the individual federal governments. For the US in Area 2A, NMFS West Coast Region is responsible for allocation and management with close coordination with the Pacific Fishery Management Council (Council) and the Washington, Oregon, and California state agencies (Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife, and California Department of Fish and Wildlife). The allocation of Pacific halibut within Area 2A is described in the Catch Sharing Plan (Plan) developed by the Council and adopted by NMFS. The allocations in the Plan are described below.

Area 2A Fisheries

The Pacific halibut fisheries in Area 2A are allocated a small percentage, less than 4%, of the overall TAC (Table 3.2). The Plan details allocations within the Area 2A TAC. The Plan allocates 35 percent of the Area 2A TAC to Washington treaty Indian tribes in Subarea 2A-1 and 65 percent to non-Indian fisheries in Area 2A. The allocation to non-treaty fisheries is divided into four shares, with the Washington sport fishery (north of the Columbia River) receiving 36.6 percent, the Oregon sport fishery receiving 30.7 percent, the California sport fishery receiving 1 percent and the commercial fishery receiving 31.7 percent (Figure 3.5). The California allocation is new for the 2014 fishery. The commercial fishery is further divided into two sectors: a directed (traditional longline) commercial fishery that is allocated 85 percent of the 31.7 percent (26.95 percent of the non-treaty harvest), and an incidental (troll salmon) commercial fishery that is allocated 15 percent of the 31.7 percent (4.75 percent of the non-treaty harvest). The directed commercial fishery in Area 2A is confined to southern Washington (south of Pt. Chehalis, or 46°53'18" N. lat.), Oregon, and California. When the Area 2A TAC is above 900,000 lb, longline vessels participating in the sablefish primary fishery north of Pt. Chehalis, WA, are permitted to retain some amounts of halibut taken incidentally in that fishery. The allocation is the amount that the Washington sport fishery is above 214,100 lbs provided at least 10,000

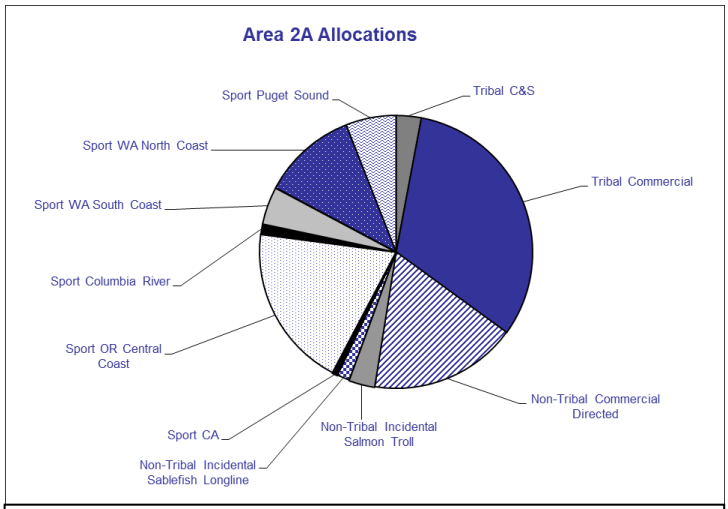

Figure 3.5 2013 Plan allocations.

lbs are available. The Plan also divides the sport fisheries into seven geographic areas, each with separate allocations, seasons, and bag limits. A license from the IPHC is required to participate in the non-treaty commercial Pacific halibut fishery. There are three types of commercial halibut licenses in Area 2A: 1) a direct commercial license, 2) commercial license for incidental halibut catch during the sablefish primary fishery north of Pt. Chehalis, WA and 3) a commercial license for incidental halibut catch during the salmon troll fishery. Fishers may have both a directed commercial license and sablefish fishery/incidental halibut license, but not all three, and the incidental license for the salmon troll fishery may not be combined with any other license for halibut. The number of IPHC licenses issued for Area 2A in recent years are shown in Table 3.5.

The non-treaty directed commercial fishery in Area 2A is confined to south of Point Chehalis, Washington (46°53'18" N. lat.), Oregon, and California. The number of Area 2A licenses issued for the directed commercial fishery have ranged from a low of 147 in 2011 and 2012 to a high of 298 in 2006 (Table 3.5). The directed commercial licenses previously allowed longline vessels to retain halibut caught incidentally north of Point Chehalis during the primary sablefish season when the TAC in Area 2A was above 900,000 lbs. Area 2A licenses issued for the incidental salmon troll fishery have ranged from a low of 132 in 2009 392 in 2005. In Area 2A, 2013 federal regulations permitted the incidental salmon troll fishery to retain 1 halibut (minimum 32" total length) per 3 Chinook, plus 1 extra halibut, with a maximum of 15 incidental halibut landed per trip.

Table 3.2. IPHC TAC for all management areas and Area 2A TAC.

Year	TAC for all IPHC areas (lb)	Area 2A TAC (lb)	% of Total TAC
2004	76,505,000	1,480,000	1.93%
2005	73,820,000	1,330,000	1.80%
2006	69,860,000	1,380,000	1.97%
2007	65,170,000	1,340,000	2.06%
2008	60,400,000	1,220,000	2.01%
2009	54,080,000	950,000	1.75%
2010	50,670,000	810,000	1.6%
2011	41,070,000	910,000	2.22%
2012	33,450,000	989,000	2.95%
2013	31,028,000	990,000	3.19%
2014	27,515,000	960,000	3.5%

The Plan allocations for all fisheries allocated through the plan from 2004-2014 are shown in Table 3.3. Catches by group for 2004-2013 are shown in Table 3.4.

Table 3.3. 2004-2014 Plan allocations (dressed weight in pounds).

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
2A TAC	1,480,000	1,330,000	1,380,000	1,340,000	1,220,000	950,000	810,000	910,000	989,000	990,000	960,000
Allocations											
Tribal	543,000	490,500	508,000	494,000	427,000	332,500	283,500	318,500	346,150	346,500	336,000
Tribal C&S	19,400	38,000	36,000	33,000	30,000	29,000	30,428	25,300	24,500	32,200	28,500
Tribal Commercial	523,600	452,500	472,000	461,000	397,000	303,500	253,072	293,200	321,650	314,300	307,500
Nontribal	937,000	839,500	872,000	846,000	793,000	617,500	526,500	591,500	642,850	643,500	624,000
Commercial	297,029	266,122	276,424	268,182	251,381	195,748	166,901	187,506	203,783	203,990	197,808
Directed	252,475	226,203	234,960	227,955	213,674	166,385	141,865	159,380	173,216	173,390	168,137
Incidental Troll	44,554	39,918	41,464	40,227	37,707	29,362	25,035	28,126	30,568	30,600	29,671
Sable Incidental	70,000	70,000	70,000	70,000	70,000	11,895	0	0	21,173	21,410	14,274
WA Sport	272,942	237,257	249,152	239,636	220,238	214,110	192,699	216,489	214,110	214,110	214,110
Puget Sound	76,220	64,800	68,607	65,562	59,354	57,393	50,542	58,155	57,393	57,393	57,393
North Coast	126,857	115,437	119,244	116,199	109,991	108,030	101,179	108,792	108,030	108,030	108,030
South Coast	61,565	50,146	53,952	50,907	44,700	42,739	35,887	43,500	42,739	42,740	42,739
Columbia River	14,241	13,747	21,170	20,378	18,762	15,735	13,436	15,418	11,895	11,895	11,895
OR/CA Sport	297,029	266,122	276,424	268,182	251,381	195,748	166,901	187,506	203,783	203,990	191,568
Central OR	282,178	251,264	254,310	246,727	231,271	180,088	153,548	172,505	191,780	191,979	185,621
Southern OR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2,339
South of Humbug	8,911	7,984	8,293	8,045	7,541	5,872	5,007	5,625	6,056	6,063	N/A
California Sport	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6,240

Table 3.4. Total catches of halibut in Area 2A 2004-2013 (dressed weight in pounds).

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
TRIBAL INDIAN	558,000	489,000	509,000	468,400	426,879	333,814	276,390	354,216	387,261	342,003
Commercial	520,000	453,000	476,000	468,400	426,879	303,386	251,090	328,916	355,061	313,503
Ceremonial and Subsistence	38,000	36,000	33,000			30,428	25,300	25,300	32,200	28,500
NON-TRIBAL	980,853	822,834	772,049	795,659	759,836	696,093	565,146	594,071	677,199	585,704
COMMERCIAL	357,000	346,000	335,000	294,500	272,236	194,525	161,187	193,883	219,265	215,388
Troll	43,000	42,000	34,000	24,000	16,685	11,310	28,627	25,753	35,255	30,388
Directed	246,000	236,000	236,000	224,500	220,590	177,800	132,560	168,130	179,000	173
Sablefish Incidental	68,000	68,000	65,000	46,000	34,961	5,415	0	0	5,010	12,000
SPORT	623,853	476,834	437,049	501,159	487,600	501,568	403,959	400,188	457,934	363,848
WA Sport	236,629	225,896	227,664	211,070	230,554	265,924	209,612	194,697	225,331	149,941
OR/CA Sport	372,463	235,907	187,666	269,805	239,147	222,906	183,536	194,213	222,059	207,439
WA Inside Waters	49,577	62,370	63,375	45,415	83,304	114,050	71,801	45,856	77,385	95,351
WA North Coast	124,229	108,149	105,805	114,489	106,852	102,782	95,014	103,741	105,479	107,856
WA South Coast	62,823	55,377	58,484	51,166	40,398	39,595	34,554	45,100	42,467	42,085
Columbia River	14,761	15,031	21,719	20,284	17,899	12,738	10,811	11,278	10,544	6,468
Early Season	n/a	n/a	n/a	n/a	n/a	11,266	8,552	8,782	6,499	4,725
Late Season	n/a	n/a	n/a	n/a	n/a	1,472	2,259	2,496	4,045	1,743
OR Central Coast	186,209	235,071	183,689	264,378	225,107	182,960	155,567	170,010	191,535	194,484
Inside 40 fathoms	2,028	5,540	8,419	8,652	11,833	8,227	12,927	24,451	37,413	22,248
Spring (May-June)	145,541	165,238	109,410	133,090	119,656	122,403	112,500	114,752	111,269	145,167
Summer (August- October)	38,640	64,293	65,860	122,636	93,618	52,330	30,140	30,807	42,853	27,069
OR S. of Humbug/CA	45	836	3,977	5,427	14,040	36,704	25,401	24,203	30,524	50,229
TOTAL	1,538,853	1,311,834	1,281,049	1,264,059	1,186,715	1,029,907	841,536	948,287	1,064,460	927,707

Table 3.5. IPHC Licenses issued for Area 2A.

Year	Directed Fishery[1/]	Incidental Catch in Salmon Troll	Charterboat
2003	260[1/]	323	127
2004	215[1/]	344	138
2005	216[1/]	392	148

2006	298	224	140
2007	225	292	142
2008	296	135	139
2009	238	132	140
2010	233	233	140
2011	147	233	140
2012	147	316	141
2013	149	332	127

1/ Includes licenses for vessels retaining halibut caught incidentally in the primary sablefish fishery north of Pt. Chehalis, WA.

3.3.2 Tribal Fisheries

Thirteen western Washington tribes possess treaty fishing rights to halibut, including the four tribes that possess treaty fishing rights to groundfish. The majority of the tribes fish inside Puget Sound. Specific halibut allocations for the treaty Indian tribes began in 1986. The tribes did not harvest their full allocation until 1989, when the tribal fleet had developed to the point that it could harvest the entire Area 2A TAC. In 1993, judicial confirmation of treaty halibut rights occurred and treaty entitlement was established at 50 percent of the harvestable surplus of halibut in the tribes' combined U&A fishing grounds. Tribal allocations are divided into a tribal commercial component and the year-round ceremonial and subsistence (C&S) component. Tribal allocations and catches are shown in Tables 3.4 and 3.5 above. The Tribes manage their allocation jointly based on a management plan.

The tribes' management plan has varied over the years. As an example, in 2013 a sub-TAC of 346,500 lbs (35% of the Area 2A TAC) was allocated to tribal fisheries. The tribes estimated that 32,200 lbs would be used for ceremonial and subsistence (C&S) fisheries and the remaining 314,300 lbs were allocated to the commercial fishery. The tribal management plan contains provisions for both unrestricted fisheries with no landing limits and restricted fisheries with limits as well as a late season fishery or mop-up fishery that can be set up to have no landing limits or with limits, toward the end of the season.

3.3.3 Non-Tribal Commercial Fisheries

The commercial fishery allocations in the Plan have been divided into two components since 1995: a directed commercial fishery (e.g., the traditional longline fishery) and an incidental halibut catch in the salmon troll fishery. The directed commercial fishery is restricted to the area south of Point Chehalis, WA. Table 3.6 below shows the quotas and catches. An allocation for incidental halibut retention in the sablefish fishery comes from the Washington sport allocation and is only available in years when the TAC is above 900,000 lb. Between 2004-2014 only the 2010 and 2011 2A TACs were below that minimum.

Several closed areas limit the geographic area open to the non-tribal commercial fisheries. Since 2003, non-tribal commercial vessels operating in the directed commercial fishery for halibut in Area 2A,

including retention of incidental halibut during the sablefish primary fishery north of Point Chehalis, WA, have been required to fish offshore of a mandatory closed area, known as the Rockfish Conservation Area (RCA), which extends along the coast from the U.S./Canada border south to 40°10' N. lat. The large depth-based RCA was implemented to protect certain overfished groundfish species. Salmon troll vessels that fish for salmon inside the RCA may not fish for groundfish or halibut in the RCA. The RCA boundaries are eastern and western boundary lines created by drawing straight lines between a series of latitude/longitude coordinates. Coordinates for the boundaries approximate specific depth contours. The boundaries have not changed since 2012. In 2014, the boundaries are as follows: Between the U.S./Canada border and 40°10' N. lat the western boundary is defined by a line approximating the 100 fm depth contour. The eastern boundary is defined as follows: Between the U.S./Canada border and 46°16' N. lat., the boundary is the shoreline. Between 46°16' N. lat. and 43°00' N. lat, the boundary is the line approximating the 30 fm depth contour. Between 43°00' N. lat and 42°00' N. lat, the boundary is the line approximating the 20 fm depth contour. Between 42°00' N. lat and 40°10' N. lat the boundary is the 20 fm depth contour. Salmon trollers may fish within the RCA and retain halibut caught incidentally, but may not retain most groundfish species caught within the RCA.

Beginning in 2002, participants in the commercial fishery (both incidental in the sablefish primary fishery and salmon troll fishery) voluntarily began fishing outside of the North Coast Recreational Yelloweye Rockfish Conservation Area (YRCA). Beginning in 2007, participants in the primary sablefish fishery were prohibited from fishing within the North Coast Commercial YRCA, an area that partially overlaps the North Coast Recreational YRCA. In 2007, participants in the salmon troll fishery were prohibited from fishing within the Salmon Troll YRCA, an area within the North Coast Recreational YRCA. In 2009, the Westport Offshore YRCA was added as a closed area for the recreational halibut fishery in the Washington south coast subarea.

The directed commercial fishery for halibut is a longline fishery with the majority of the landings going into Oregon. This fishery is a derby style fishery and is open for ten hours per open period until the quota is taken or there is not enough quota to open the fishery for one more open period. Because of the effort and TAC over the last 7 years, the fishery has been open 1 to 4 days for the season. The typical gear configuration consists of a "skate," which is made up of a mainline, gangions, and hooks. Typical bait is herring, octopus, salmon, or some combination of the three. The gangions are approximately 3 to 4 feet long with a hook attached to the end. The typical gear is set up with a 1,800-foot skate with 100 size 16/0 hooks at an 18-foot spacing (IPHC 1998). Several skates may be connected depending on a number of factors, including size of the fishing ground and the likelihood of snagging on the bottom (IPHC 1998).

The sablefish primary fishery operates from the US/Canada Border to Southern California. This fishery uses mostly longline gear, with some vessels using pot gear. Halibut retention in the sablefish primary fishery is only allowed North of Pt. Chehalis, Washington and only with permits endorsed for and using longline gear. The primary fishery is open April 1-October 31 of each year. The primary fishery is a quota fishery with each vessel assigned to one of three quota levels or tiers, which allocate a specified amount of sablefish. This fishery is managed by the Council under the Pacific Coast Groundfish Fishery Management Plan.

Salmon are targeted with troll gear off all three West Coast states. The ocean commercial salmon fishery is managed under the Salmon Fishery Management Plan and regulations setting seasons and other management measures are developed by the Council and implemented by NMFS on an annual basis. The Council manages commercial fisheries in the Exclusive Economic Zone (3-200 miles offshore), while the states manage commercial fisheries in state waters (0-3 miles). The West Coast salmon fisheries primarily harvest Chinook or king salmon and coho or silver salmon. Pink salmon are landed in odd-

numbered years. The salmon troll fishery has an incidental catch of Pacific halibut and groundfish, including yellowtail rockfish. Halibut are caught incidentally off Washington and Oregon, while groundfish are caught off all three states.

Table 3.6. Non-tribal commercial fishery catch statistics (dressed weight in pounds).

Year	Fishery	Quota	Catch	Days Open
2004	Directed	252,475	246,000	4
	Incidental – Salmon	44,554	42,798	90
	Incidental – Sable	70,000	67,837	184
2005	Directed	226,203	236,000	4
	Incidental – Salmon	39,918	42,110	99
	Incidental – Sable	70,000	68,013	176
2006	Directed	234,960	236,000	3
	Incidental – Salmon	41,464	34,375	199
	Incidental – Sable	70,000	64,624	184
2007	Directed	227,955	224,515	4
	Incidental – Salmon	43,667	23,446	199
	Incidental – Sable	70,000	45,780	184
2008	Directed	213,238	22,590	4
	Incidental – Salmon	37,707	18,960	199
	Incidental - Sablefish	70,000	39,728	184
2009	Directed	166,385	177,800	2
	Incidental – Salmon	29,362	11,310	199
	Incidental - Sablefish	11,895	5,415	184
2010	Directed	141,865	132,560	1
	Incidental – Salmon	25,035	28,627	47
	Incidental - Sablefish	n/a	n/a	n/a
2011	Directed	159,380	168,130	2
	Incidental – Salmon	28,126	25,753	166
	Incidental - Sablefish	n/a	n/a	184
2012	Directed	173,216	179,000	2
	Incidental – Salmon	30,568	35,255	64
	Incidental - Sablefish	21,173	5,010	184
2013	Directed	173,390	173,000	2
	Incidental – Salmon	30,600	30,388	102
	Incidental - Sablefish	21,410	12,000	184

3.3.4 Sport Fishery in Washington

Sport fishing for halibut in Washington is divided into four subareas for management and catch allocation purposes: WA Inside Waters (Puget Sound) subarea, WA North Coast subarea, WA South Coast subarea, and Columbia River subarea (which is shared with Oregon). The WA Inside Waters Subarea includes all waters east of the Sekiu River mouth and includes Puget Sound, most of the Strait of Juan De Fuca, the San Juan Islands area, Hood Canal and Admiralty Inlet. The WA North Coast Subarea is the area west of the Sekiu River mouth and north of the Queets River. The WA South Coast Subarea lies to the south of Queets River and north of Leadbetter Point, WA. The Columbia River subarea lies between Leadbetter Point and Cape Falcon, Oregon, and is shared with Oregon. The allocations for this subarea are derived from both the Washington and Oregon sport allocations.

WA Inside Waters (Puget Sound) Subarea

To recreationally catch halibut in Washington inside waters a catch card is required. The number of catch record cards issued is used as the estimate of the number of individuals who fish for halibut in this area. Starting in late 2006 cards that had a place to record halibut landings became optional. From 2006-2011, an average of 352,354 cards were issued that allowed halibut to be reported and an average of 1,598 cards returned with halibut landings recorded. The estimated catch of halibut in this area is shown in Table 3.7. The vast majority of the halibut catch in inside waters is taken by private boat anglers. Most of the Washington inside waters sport catch of halibut is taken in the Strait of Juan de Fuca. In 2002, provisions were added to the Plan to allow the Puget Sound subarea to be divided into two regions with two seasons, the boundaries of the regions are not specified in the Plan. Since that time, WDFW recommends season dates for the Eastern Region (East of Low Point) and the Western Region (West of Low Point).

Table 3.7. Seasons, restrictions, and catches of halibut in Washington Inside waters.

YEAR	SEASON	BAG LIMIT	SIZE LIMIT	DAYS OPEN	QUOTA (lb)	ACTUAL CATCH (lb)
2003	Eastern Region: 5/8 - 7/18 (Thur - Mon)	1	none	52	63,278	68,300
	Western Region: 5/22 - 8/1 (Thur - Mon)	1	none	52		
2004	Eastern Region: 5/6 - 7/14 (Thur - Mon)	1	none	50	76,220	49,577
	Western Region: 5/27 - 8/14 (Thur - Mon)	1	none	58		
2005	Eastern Region: 4/14 – 6/20 (Thur - Mon)	1	none	50	64,800	62,370
	Western Region: 5/26 – 7/31 (Thur - Mon)	1	none	49		

2006	Eastern Region: 4/9 – 6/18 (Thur - Mon)	1	none	51	68,607	63,376
	Western Region: 5/25 – 8/5 (Thur - Mon)	1	none	53		
2007	Eastern Region: 4/9 – 6/16 (Thur - Mon)	1	none	49	65,562	45,415
	Western Region: 5/24 – 8/3 (Thur - Mon)	1	none	52		
2008	Eastern Region: 4/10 – 6/13 (Thur-Mon)	1	none	65	59,354	83,304
	Western Region: 5/22 – 7/21 (Thur-Mon)	1	none	61		
2009	Eastern Region: 4/23 – 6/5 (Thur-Mon)	1	none	54	57,393	114,050
	Western Region: 5/21-7/3 (Thur-Mon)	1	none	44		
2010	Eastern Region: 5/1-22 (Thur-Sat) 5/28-30 (Fri-Sun)	1	none	13	50,542	71,801
	Western Region: 5/28-30 (Fri-Sun) 6/3-6/19 (Thur-Sat)	1	none	12		
2011	Eastern Region: 5/5-5/29 (Thur-Sat)	1	none	12	58,155	45,856
	Western Region: 5/26-6/18 (Thur-Sat) 5/29 (Sun)	1	none	13		
2012	Eastern Region: 5/3-5/19 (Thu-Sat) 524-5/28 (Thu-Mon) 5/31-6/2 (Thu-Sat)	1	none	17	57,393	77,385
	Western Region: 5/24-5/28 (Thu-Mon) 5/31-6/23 (Thu-Sat)	1	none	17		
2013	Eastern Region: 5/2-5/4 & 5/16-5/18 (Thu-Sat) 5/23-5/26 (Thu-Sun) 5/30-5/31 (Thu-Fri)	1	none	12	57,393	95,351

	Western Region: 5/23-5/26 (Thu-Sun) 5/30-6/1 (Thu-Sat) 6/8 (Sat)	1	none	8		

WA North Coast Subarea

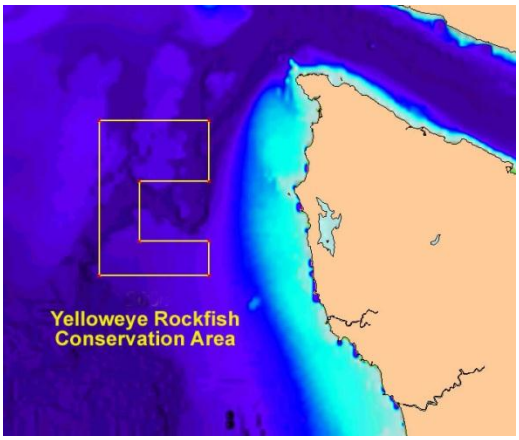

Figure 3.6. The Yelloweye Rockfish Conservation Area (YRCA) is a "C"-shaped area closed to recreational halibut and groundfish fishing off Washington's North Coast.

In 2002, the halibut "hotspot," an area with high interception of halibut in the sport fishery, was extended roughly 4 miles south. Participants in the halibut sport fishery in IPHC Area 2A reported that waters south of the historic halibut hotspot had a high incidence of yelloweye rockfish interception. Because yelloweye rockfish is an overfished species and its retention has been prohibited in WA recreational fisheries since 2002, the mandatory closure for the halibut sport fishery in Area 2A was extended to protect yelloweye rockfish. In 2003, this area was adjusted from a rectangular shaped area to an L-shaped area during January and February and to a C-shaped area for the remainder of the year to further protect yelloweye rockfish. Called the Yelloweye Rockfish Conservation Area, or YRCA, this C-shaped area off the northern Washington coast is designated as a mandatory closed area to recreational halibut and groundfish fishing and is a designated as a voluntary closure for the limited entry fixed gear sablefish fleet and salmon trollers (Figure 3.6). Starting in 2007, Washington's North Coast sport fishery was managed with both an all-depth and a nearshore fishery. The intent of creating a nearshore fishery was to test a fishery in areas with a lower expected halibut catch rate. Once there was not enough quota remaining to open the all-depth fishery for another day, the nearshore fishery was opened for a few more days. This season structure remained from 2008 to 2013. The Council approved changes for the 2014 fishery that removed the nearshore provisions from the Plan because they were seldom used.

Table 3.8. Seasons, restrictions, and catches of halibut in the Washington North Coast area.

YEAR	SEASON	BAG LIMIT	SIZE LIMIT	DAYS OPEN	QUOTA (lb)	ACTUAL CATCH (lb)
2003	5/1 - 5/17 (Tue - Sat) 5/23 - 5/24 6/18 - 6/21 8/9	1	none	20	113,915	109,738
2004	5/11 - 5/20 (Tue - Sat) 5/29 6/15 - 6/19	1	none	14	126,857	124,229
2005	5/10 - 5/18 (Tue - Sat) 6/16, 6/18	1	none	9	115,437	108,149

2006	5/1 – 5/17 (Sun-Thurs), 5/1 – 5/17 (inshore)	1	none	13 17 17	53,952	58,484
2007	5/1 – 5/8 (Sun-Thurs), 5/1 – 5/8 (inshore)	1	none	6 6 6	116,199	114,489
2008	5/1 – 6/17 (Sun, Thurs) 6/23 – 8/30 (nearshore)	1	None	48 70	109,991	106,852
2009	5/3-5/12 (Sun, Tue) 5/17-6/28(Sun) Nearshore: 5/7-6/27 (Thur-Sat), 7/2-9/27 (Thur-Sun)	1	None	43	108,030	102,782
2010	5-13-5/22 (Thu-Sat) 6/3, 6/5. 6/19	1	None	9	101,179	95,014
2011	5/12-21 (Thu-Sat) 6/2,4,16,30	1	None	10	108,792	103,741
2012	5/10, 12, 17, 19, 31, 6/2, 14	1	None	7	108,030	105,479
2013	5/9, 11, 16, 18	1	None	4	108,030	107,856

WA South Coast Subarea

Beginning in 2007 this subarea was divided into a nearshore and primary fishery with separate allocations. In 2013, the nearshore fishery was allocated 10% of the subarea quota or 2,000 lb whichever is less and was open 7 days per week when the primary fishery is open (Table 3.9). The nearshore fishery operates in waters east of a boundary line approximating the 30 fm depth contour. Recreational fishing for halibut is prohibited within two YRCA's off Washington's southern coast: the South Coast Recreational YRCA and the Westport Offshore YRCA. The Westport YRCA was implemented in 2009 for both the halibut and groundfish fisheries. Recreational groundfish and halibut fishing often share the same closed areas because the fisheries overlap therefore using the same closed areas makes for ease of public understanding, and for ease of enforcement.

Table 3.9. Seasons, restrictions, and catches of halibut in the Washington South Coast subarea.

YEAR	SEASON	BAG LIMIT	SIZE LIMIT	DAYS OPEN	QUOTA (lb)	ACTUAL CATCH (lb)
2003	5/1 - 6/26 (Sun-Thurs), 6/27 - 9/30 5/1 - 9/30 (inshore) Total	1	none	41 97 153 153	48,623 available amt. 48,623	 43,253
2004	5/2 - 7/3 (Sun-Thurs), 5/2 - 7/3 (inshore) Total	1	none	45 63 63	61,565 available amt. 61,565	 62,823
2005	5/1 – 5/30 (Sun-Thurs), 5/1 – 5/30, 7/15-9/30 (inshore) Total	1	none	30 108 108	50,146 available amt. (57,034)[3/]	 55,546
2006	5/1 – 5/17 (Sun-Thurs), 5/1 – 5/17 (inshore) Total	1	none	13 17 17	53,952 available amt. 53,952	 58,483
2007	5/1 – 5/8 (Sun-Thurs), 5/1 – 5/8 (inshore) Total	1	none	6 6 6	50,907 available amt. 50,907	 51,166
2008	5/1 – 6/17 (Sun, Thurs) 6/23 – 8/30 (nearshore) Total	1	None	48 70	40,230 4,470 44,700	40,239 158 40,397
2009	5/3-5/12 (Sun, Tue) 5/17-6/28(Sun) Nearshore: 5/7-6/27 (Thur-Sat), 7/2-9/27 (Thur-Sun)	1	None	43	42,739	39,595
2010	5/2-5/23 (Sun & Tue) 5/3-9/30 (Nearshore, 7 days a week)	1	None	158	35,887	34,554
2011	5/1-5/17 (Sun & Tue) 5/3-7/31 (Nearshore, 7 days a week)	1	None	96	46,129	45,100
2012	5/6, 8, 13, 15, 20 5/6-6/8 (Nearshore, 7 days a week)	1	None	36	42,739	42,467
2013	5/5, 7, 12, 14, 19 5/5-5/19 (Nearshore, 7 days a week)	1	None	18	42,740	42,085

3.3.5 Sport Fishery in Columbia River Subarea

This subarea was broken out from the southern Washington subarea in 1995 and includes the area from Leadbetter Point, WA, to Cape Falcon, OR. Table 3.10 shows the catches in this subarea. To date, most of the sport catch in this subarea has been landed in Ilwaco, WA. Between 2002-2004, a minimum size restriction was imposed of 32 in. or greater in length to make the size restriction for this area compatible with those in other subareas in Oregon. In 2005 the minimum size restriction was removed.

Table 3.10. Seasons, restrictions, and catches of halibut in the Columbia River subarea.						
YEAR	**SEASON**	**BAG LIMIT**	**SIZE LIMIT**	**DAYS OPEN**	**QUOTA (lb)**	**ACTUAL CATCH (lb)**
2003	5/1 - 9/30	1	32" 1/	153	11,923	10,008
2004	5/1 - 7/25	1	32" 1/	86	14,241	14,761
2005	5/1 - 6/12, 9/15-30	1	none	59	13,747	15,031
2006	5/1 – 5/27 (7 days/wk), 8/4 – 9/3 (Fri-Sun)	1	none	42	21,170	21,720
2007	5/1 – 5/26 (7 days/wk) 8/3 – 8/12, 8/24 - 8/26, 9/1 (Fri-Sun)	1	none	36	20,378	20,601
2008	5/1 – 6/1 (7 days/wk) 8/1, 2, 22, 23, 29	1	None	37	18,762	17,899
2009	5/1-5/29 (Fri-Sun) 8/7-9/27 (Fri-Sun)	1	None	37	15,735	12,738
2010	5/1-6/25 (Thu-Sat) 8/6-9/26 (Fri-Sun)	1	None	48	13,436	10,811
2011	5/5-6/4 (Thu-Sat) 8/5-9/30 (Fri-Sun)	1	None	40	15,418	11,278
2012	5/3-7/14 (Thu-Sat) 8/3-9/30 (Fri-Sun)	1	None	60	11,895	10,544
2013	5/3-7/28 (Fri-Sun) 8/2-9/30 (Fri-Sun)	1	None	52	11,895	10,152
1/ First halibut taken of 32" or greater in length						

3.3.6 Sport Fishery in Oregon

Sport fishing for halibut in Oregon is divided into three subareas for management and catch allocation purposes: Columbia River subarea (which is shared with Washington), Central Coast subarea, and the new Southern Oregon subarea that was created for the 2014 fishery. Oregon fisheries in the Southern Oregon subarea before 2014 are described in the next section. ODFW has been monitoring the sport halibut fishery since 1987. The data from the ODFW sampling program and history of regulations are shown in Table 3.11. Up until 1989, the entire Oregon

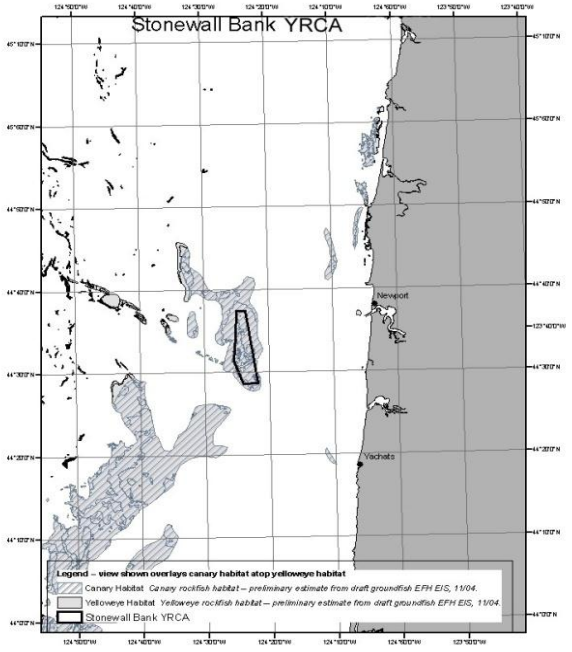

Figure 3.7. The Stonewall Bank Yelloweye Rockfish Conservation Area (YRCA) is closed to recreational halibut fishing off Oregon's Central Coast.

coast was managed as a single unit. Beginning in 1989 (and continuing to date), the area north of Cape Falcon was included in the Columbia River subarea. The 1995 long-term revisions of the Plan defined the major Oregon sport fishery management areas as the Oregon central coast area from Cape Falcon south to the Siuslaw River, and the south coast area from the Siuslaw River to the California border. There were several other changes from 1999 to 2003. Since 2004, there has been one Oregon-only sub-area, the Central Coast, from Cape Falcon to Humbug Mountain. This subarea is divided into a nearshore, spring and summer fishery. The nearshore fishery was previously open 7 days per week from May through October. However, the length of the season has been decreasing in the last several years due to increased effort and the presence of halibut in the area. The nearshore fishery is no longer simply an incidental fishery.

Beginning in 2005, a yelloweye rockfish conservation area (YRCA) near Stonewall Banks was established as an area closed to sport halibut fishing. This area was closed to sport halibut fishing to protect yelloweye rockfish, an overfished groundfish species that is commonly caught with longline gear. However, sport fishing vessels trolling for salmon in this closed area in 2005 were permitted to retain halibut. Beginning in 2006, sport fishing vessels trolling for salmon were no longer permitted to retain halibut caught while fishing in the closed area. In 2007, this area was named the Stonewall Bank YRCA.

Table 3.11. Oregon sport seasons, days open, and catch.

YEAR	SEASON	BAG LIMIT	SIZE LIMIT (inches)	TOTAL DAYS OPEN	QUOTA[1/] (lb)	ACTUAL CATCH (lb)
2003						
North Central Coast	5/1 - 10/31 (7days/wk)[1/]	1	32[2/]	184	19,797	1,110
	5/8-10, 5/15-17, 6/19-21 8/1-2, 8/8-9	1	32[2/]	9	156,835	88,385
	8/22-10/18 (Fri-Sat)	1	32[2/]	22	57,660 (125,815)[4/]	60,751
South Central Coast	5/8-10, 5/15-17, 6/19-21 [3/]	1	32[2/]	9	14,609	14,904
	Total				248,901	165,150
2004	5/1 - 10/31 (7days/wk)[5/]	1(2)[18/]	32[2/]	184	22,574	2,022
Central Coast	5/13-15, 5/20-22, 5/27-29, 6/10-12, 6/25-26, 7/10, 7/24	1	32[2/]	16	194,703	186,209
	8/6-7, 8/20-21, 9/3-4, 9/17-18 (Fri-Sat), 9/24-26, 10/1-3, 10/8-10, 10/15-17, 10/22-24, 10/29-31 (Fri-Sun)					
	Total	1(2)[6/]	32[2/]	26	(73,395)[7/] 282,178	38,144 226,375

Table 3.11. Oregon sport seasons, days open, and catch.						
2005	5/1 - 10/17 (7days/wk)[5/]	1	none	170	(10,101)[9/]	5,540
Central Coast	5/12-14, 5/19-21, 6/2-4, 6/9-11, 6/30-7/2, 7/14-16, 7/28-30 (Thu-Sat)	1	none	21	(165,239)[10/]	165,239
	8/5-7, 8/12-14, 8/19-21, 8/26-28, 9/2-4, 9/9-11, 9/16-18, 9/23-25, 9/30-10/2, 10/7-9, 10/14-16, 10/21-23, 10/28-30 (Fri-Sun)[/]	1	none	39	(69,924)[8/]	64,293
	Total				(245,264)[8/]	235,071
2006	5/1 – 9/21 (7days/wk)[5/]	1	none	144	(10,345)[11/]	8,419
Central Coast	5/11-13, 5/18-20, 5/25-27, 6/1-3, 6/8-10, 6/22-24, 7/6-8 (Thu-Sat)	1	none	21	(183,690)[11/]	183,690
	8/4-6, 8/18-20, 9/1-3, (every other week Fri-Sun), 9/8-10,9/15-17(Fri-Sun)[24/]	1(2)[12/]	none	15	(60,275)[11/]	65,859
	Total				254,310	257,968
2007	5/1 – 9/20 (7days/wk)[5/]	1	none	143	19,738	8,600
Central Coast	5/10-12, 5/17-19, 5/24-26, 5/31-6/2, 6/7-9, 6/21-23, 7/5-7, 7/19-21 (Thu-Sat)	1	none	24	(133,090)[13/]	133,090
	8/3-5 (every other week Fri-Sun), 8/10-12, 8/17-19, 8/24-26, 8/31-9/2, 9/7-9, 9/14-16 (Fri-Sun)[26/]	1(2)[14/]	none	21	(93,899)[13/]	122,636
	Total				246,727	264,326

Table 3.11. Oregon sport seasons, days open, and catch.						
2008	5/1 – 9/28 (7 days/wk)[5/]	1	None	151	18,502	11,610
Central Coast	5/8-10, 15-17, 22-23, 29-31, 6/12-14, 26-28, 7/10-12, 24-26	1	None	23	159,557	119,656[28/]
	8/1-3, 8-10. 15-17, 22-24, 29-31	1		15	93,113[16/]	93,619
	9/13, 14, 20, 21	2[15/]		4		
	9/27	1		1		
	Total				231,271	224,885
2009	5/1-8/9 (7 days/week)[5/]	1	None	101	14,407	8,227
	5/14-16, 21-23. 28-30, 6/4-6. 18-20, 7/2-4			18	124,261	122,403
	8/7-9			3	43,278[17/]	52,330
2010	5/1-7/17 (7 days/week)[5/]			78	12,284	12,927
	5/13-15, 20-22, 6/3-5			9	105,948	112,500
	8/6-7			2	28,765[18/]	30,140
2011	5/1-7/6, 8/13-10/31 (7 days/week) [5/]			147	26,945[19/]	24,451
	5/12-14, 26-28, 6/2-4, 9-11, 23-25			15	115,578	114,752
	8/5-6			2	41,843[19/]	30,807
2012	5/1-6/22 (7 days a week), 9/24-10/31[5/]			122	37,800	37,413
	5/10-12, 17-19, 24-26, 5/31-6/2, 14-16, 29-30			17	120,821[20/]	111,269
	8/3-4, 17-18			4	47,639	42,853
2013	5/2-7-26 (Thu-Sat) [5/]			38	23,038	22,248
	5/9-11, 16-18, 5/30-6/1, 6-8, 20-22			16	120,947	145,167
	8/2-3			2	24,565[21/]	27,069

1/ This season applies to the area inside 30 fathoms.
2/ First halibut taken of 32" or greater in length
3/ Beginning in 2000, the inside-30-fathom fishery was combined for the North Central and South Central Coast subareas. Catch and number of open days reported under North Central subarea.
4/ The balance of halibut remaining from the May all-depth fishery in the North Central and South Central subareas, 68,155 lbs, was added to the August all-depth fishery quota of 57,660 lbs to get a revised quota of 125,815 lbs.
5/ This season applies to the area inside 40 fathoms.
6/ The bag limit changed from 1 fish to 2 fish per person on 9/22/04.
7 The balance of halibut remaining from the Spring all-depth fishery, 8,494 lb, was added to the Summer all-depth fishery quota of 64,901 lb to get a revised quota of 73,395 lb.
8/ The balance of halibut remaining from the Spring all-depth fishery, 8,133 lb, plus 10,000 lb from the inside 40-fm fishery, was added to the Summer all-depth fishery quota of 57,791 lb, and then 6,000 lb was transferred to the Columbia River subarea to get a revised Summer all-depth fishery quota of 69,924 lb. Because 6,000 lb was transferred to the Columbia River subarea, the Central Coast subarea quota is reduced from 251,264 lb to 245,264 lb.
9/ 10,000 lb of halibut quota was transferred from the original 20,101 lb inside 40-fm fishery quota to the Summer all-depth fishery quota to get a revised quota of 10,101 lb.
10/ 8,133 lb of halibut quota was transferred from the original 173,372 lb Spring all-depth fishery quota to the Summer all-depth fishery quota to get a revised quota of 165,239 lb.
11/ The Spring all-depth fishery overage of 8,216 lb was deducted from the amount available to the Summer all-depth fishery, revising the initial quota available to 50,275 lb. On 9/6/06, 10,000 lb was transferred from the inside 40-fm fishery to the Summer all-depth fishery bringing the revised inside 40-fm quota to 10,345 lb and the revised Summer all-depth quota to 60,275 lb.
12/ Beginning 9/8/06, the Summer all-depth fishery opened every Friday-Sunday with a two-fish bag limit because the remaining quota for the combined all-depth and inside 40-fm fishery was 31,267 lb (i.e., greater than 30,000 lb after September 3, as stated in the Plan and regulations).
13/ The Spring all-depth fishery was under its quota of 170,242 lb by 37,152 lb. The initial Summer all-depth season quota of 56,747 lb was revised by the 37,152 lb remaining from the Spring fishery. As a result, 93,899 lb was initially available to the Summer all-depth fishery.
14/ Beginning 8/10/07, the Summer all-depth fishery opened every Friday-Sunday because the remaining quota for the combined all-depth and inside 40-fm fishery was 94,707 lb (i.e., greater than 60,000 lb after August 5, as stated in the Plan and regulations). Beginning 9/14/07, the Summer all-depth fishery was changed from a one-fish to a two-fish bag limit with the intent that the subarea quota be taken by September 30, in accordance with the CSP and regulations.
15/ Beginning 9/13/08 the fishery operated under a 2 fish bag limit because the remaining quota was greater than 60,000 after August 5, as stated in the CSP and regulations.
16/ The remaining quota of 39,921 was added to the pounds available to the Summer all-depth fishery.
17/ The initial Summer all-depth season quota of 41,420 lb was revised by the 1,858 lb remaining from the Spring fishery. As a result, 43,278 lb was initially available to the Summer all-depth fishery.
18/ The original summer quota of 35,316lb was reduced to 28,756lb due to a 6,552 overage in the Spring fishery.
19/ The initial Summer all-depth season quota of 43,126 lbs was revised by the 826 lbs underage from the Spring fishery and the 2,108 lbs overage from the early part of the Nearshore fishery. As a result, 41,843 lbs was initially available to the Summer all-depth fishery. The Summer all-depth fishery was open August 5-6 (Friday-Saturday) and resulted in an estimated catch of 30,807 lbs. The fishery was closed on August 7. The remaining 11,037 lbs were added to the nearshore fishery quota resulting in a revised nearshore quote of 24,837 lbs. (the initial 13,800 lbs. plus the 11,037 from the Summer all-depth rollover). The nearshore fishery is still open at the briefing book deadline and is expected to remain open until October 31.
20/ The spring all depth underage was allocated 5,000 lbs to the inside 40-fathom fishery and 4,552 to the summer all depth fishery. However, because the final inside 40-fathom fishery landed 4,858 lbs over the revised quota this amount was taken from the summer all depth.
21/The nearshore fishery closed with a 790 lb underage which was added to the summer quota, the Spring fishery closed with a 24,220 overage which was subtracted from the Summer quota, leaving 24,565 lb available to the Summer fishery.

3.3.7 Sport Fishery in Southern Oregon (south of Humbug Mountain) and in California

The sport fishery for Pacific halibut in the area south of Humbug Mountain, Oregon and in California is a non-target fishery with incidental catches of Pacific halibut primarily occurring in the Shelter Cove area during groundfish fisheries. Unlike the other sub-areas, the South of Humbug Mt. subarea has had fixed season lengths (May 1-Oct 31, prior to 2004 through Sept 30), regardless of harvest (1999-2013 2A Catch Sharing Plans). Harvests in the South of Humbug Mt. subarea were of little concern to halibut fisheries

managers prior to 2011 since reported harvests were minimal relative to the quota (zero lbs. in most years). However, that changed in 2011, because Oregon landings alone exceeded the quota that year (Table 3.12), and fishery managers `became aware of potentially substantial landings in California waters. In response, the Council created a South of Humbug Workgroup and Policy Committee to analyze the fishery and recommend any changes necessary to keep the area within its quota. Based on the advice of both groups the Council recommended several changes to the recreational fishery in the South of Humbug area beginning in 2014 in order to address a pattern of quota exceedances in this subarea. The Council recommendation would split the existing subarea, which includes portions of both southern Oregon and northern California, into two state-specific subareas. This change will allow each state to use the most effective available management tools to keep the catch within their respective quotas. The existing Oregon/California sport fishery allocation of 31.7 percent of the non-tribal allocation would be split into a 1 percent California sport fishery allocation and a 30.7 percent Oregon sport fishery allocation. The new California subarea would be open to fishing from May-July and September-October, with the month of August closed as a quota management measure. The State of Oregon would monitor and manage the Southern Oregon subarea in season to avoid exceeding the quota.

Table 3.12. South of Humbug, Oregon, and California sport seasons, days open, and catch.						
YEAR	**SEASON**	**BAG LIMIT**	**SIZE LIMIT (inches)**	**TOTAL DAYS OPEN**	**QUOTA (lb)**	**ACTUAL CATCH (lb)**
2003	5/1 - 9/30 (7 days/wk)	1	32	153	7,860	
2004	5/1 - 10/31 (7 days/wk)	1	32	184	8,911	45
2005	5/1 - 10/31 (7 days/wk)	1	None	184	7,984	836
2006	5/1 - 10/31 (7 days/wk)	1	None	184	8,293	3,977
2007	5/1 - 10/31 (7 days/wk)	1	None	184	8,045	5,427
2008	5/1 - 10/31 (7 days/wk)	1	None	184	7,541	14,040
2009	5/1 - 10/31 (7 days/wk)	1	None	184	5,872	36,704
2010	5/1 - 10/31 (7 days/wk)	1	None	184	5,007	25,401
2011	5/1 - 10/31 (7 days/wk)	1	None	184	5,625	24,203
2012	5/1 - 10/31 (7 days/wk)	1	None	184	6,056	30,254
2013	5/1 - 10/31 (7 days/wk)	1	None	184	6,063	50,229

4.0 ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES

This section examines the environmental consequences that could be expected to result from the implementation of each alternative.

Therefore, this section will consider the environmental effects of maintaining the No Action/status quo 2013 Plan and annual management measures and Alternative 2, the continuing implementation of the annual management measures and Plan approximated by applying the 2014 Plan to the range of TACs from 2004-2014.

This section forms the analytic basis for the comparison of issues across the alternatives. The potential of each alternative to affect one or more components of the human environment is discussed in this section; direct and indirect effects of the alternatives are discussed in this analysis. Direct effects are caused by an action and occur at the same time and place as the action, while indirect effects occur later in time and/or further removed in distance from the direct effects (40 CFR 1508.8).

The following items are not included in this analysis because the alternatives do not have an effect on them: ocean and coastal habitats and essential fish habitat, public health or safety, biodiversity and ecosystem function, unique characteristics of the geographic area (e.g., proximity to historic or cultural resources), parklands, prime farmlands, wetlands, wild and scenic rivers, or ecological critical areas, highways, significant cultural, scientific, or historical resources. While the gear used in halibut fisheries does have contact with ocean and coastal habitat and EFH the gear interactions with those habitats are minimal because the fisheries use longline gear, which has limited contact on the ocean floor, are short in duration, limited in geographic scope, and comply with closed areas. The alternatives do not have an effect on the terrestrial resources and unique characteristics because the implementation of the Plan does not impact resources on land. The implementation of the Plan will not affect biodiversity or ecosystem function because the fishery is subject to marine protected areas in state waters and

several types of closed areas in federal waters that help protect vulnerable benthic habitat and protect rockfish, which are bycatch in halibut fisheries. Further, the alternatives will not affect non-target species to a degree that predator –prey relationships are impacted because the bycatch of those species is managed for the sustainability of those species. For example, overfished rockfish bycatch in the halibut fishery is managed through the Council's groundfish process and the bycatch is accounted for in the rebuilding plans, which takes into account the long term sustainability of those species.

To analyze Alternative 2, it is necessary to see the resulting Plan allocations for all subareas given each TAC amount from 2004-2014. Table 4.1 shows the subarea allocations resulting from the TAC amounts from 2004-2014 applied to the 2014 Plan from lowest to highest TAC.

Table 4.1. Alternative 1, 2013 Plan and allocations and Alternative 2 2014 Plan applied to the range of TACs from 2004-2014. For ease of comparison the range of TACs under Alternative 2 have been arranged lowest to highest with the year the TAC was implemented at the top.

2013 TAC with 2013 CSP (Alt 1) and 2014 CSP plan applied to TAC amounts 2004-2014 (Alt 2)													
	Alternative 1		Alternative 2										
Year	2013		2010	2011	2009	2014	2012	2013	2008	2005	2007	2006	2004
2A TAC	990,000		810,000	910,000	950,000	960,000	989,000	990,000	1,220,000	1,330,000	1,340,000	1,380,000	1,480,000
Allocations													
Tribal	346,500		283,500	318,500	332,500	336,000	346,150	346,500	427,000	465,500	469,000	483,000	518,000
Tribal C&S	32,200		28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500	28,500
Tribal Commercial	314,300		255,000	290,000	304,000	307,500	317,650	318,000	398,500	437,000	440,500	454,500	489,500
Nontribal	643,500		526,500	591,500	617,500	624,000	642,850	643,500	793,000	864,500	871,000	897,000	962,000
Commercial	203,990		166,901	187,506	195,748	197,808	203,783	203,990	251,381	274,047	276,107	284,349	304,954
Directed	173,390		141,865	159,380	166,385	168,137	173,216	173,391	213,674	232,940	234,691	241,697	259,211
Incidental Troll	30,600		25,035	28,126	29,362	29,671	30,568	30,598	37,707	41,107	41,416	42,652	45,743
Sable Incidental	21,410		0	0	11,895	14,274	21,173	21,411	70,000	70,000	70,000	70,000	70,000
WA Sport	214,110		192,699	216,489	214,110	214,110	214,110	214,110	220,238	246,407	248,786	258,302	282,092
Puget Sound	57,393		50,542	58,155	57,393	57,393	57,393	57,393	59,354	67,728	68,490	71,535	79,148
North Coast	108,030		101,179	108,792	108,030	108,030	108,030	108,030	109,991	118,365	119,127	122,172	129,785
South Coast	42,740		35,887	43,500	42,739	42,739	42,739	42,739	44,700	53,074	53,835	56,880	64,493
Columbia River	11,895		10,182	12,085	11,895	11,895	11,895	11,895	12,385	14,479	14,669	15,430	17,334
OR/CA Sport	203,990		161,636	181,591	189,573	191,568	197,355	197,555	243,451	265,402	267,397	275,379	295,334
Central OR	191,979		156,544	175,548	183,625	185,621	191,407	191,607	237,258	258,162	260,062	267,664	286,667
Southern OR	6,063		1,972	2,212	2,314	2,339	2,412	2,414	2,989	3,253	3,277	3,373	3,612
California	N/A		5,265	5,915	6,175	6,240	6,429	6,435	7,930	8,645	8,710	8,970	9,620

4.1 Physical Impacts of the Alternatives

Physical impacts generally associated with fishery management actions are effects resulting from changes in the physical structure of the benthic environment because of fishing practices (e.g. gear effects and fish processing discards). Although halibut fishing activity affects the physical environment, neither alternative detailed in this EA is expected to have notable or measurable effects on the physical environment, either individually or cumulatively.

Fishing for halibut is only permitted with hook-and-line gear, which may affect habitat by snagging on rocks, corals and other objects during gear retrieval. Line retrieval may upend smaller rocks and break hard corals, while leaving soft corals unaffected. Invertebrates and other lightweight objects may also be dislodged during fishing for halibut (Johnson, 2002).

Beginning in 2003, non-tribal commercial vessels operating in the directed commercial fishery and vessels retaining halibut incidentally caught in the sablefish primary fishery north of Point Chehalis, WA, were required to fish outside of a mandatory closed area, known as the Rockfish Conservation Area (RCA), that extends along the coast from the U.S./Canada border south to 40°10' N.lat. This closed area will continue under either alternative. Therefore, the RCA will continue to provide protection to overfished species habitat because it restricts the use of gear that may cause damage to habitat. Several new closed areas have been created since the first long-

term Plan was implemented in 1995, and it is anticipated that more could be created to address any new overfished species or to address protection of listed rockfish in Puget Sound. If new closed areas are implemented, the effects of hook-and-line gear on habitat within the newly closed area will decrease because fishing would not occur in those areas, decreasing the gear interactions with habitat. Although the effects of longline (or any prohibited gear) gear on habitat outside of the closed area should increase as fishing would be concentrated in those areas, the shift in fishing effort will be dispersed throughout the remaining open areas. However, this fishing dispersement may not be as effective if the future closed areas as so large or are in prime fishing locations such that the remaining fishing areas are decreased or not in areas where fishing is likely to occur.

Because both the directed commercial and tribal commercial fisheries are short in duration, limited in geographic scope, and because the directed commercial, and incidental sablefish and salmon troll fisheries (if retaining halibut) must comply with closed areas, impacts to the physical environment will be minimal and any impacts have been minimized to the extent practicable. The directed commercial fishery has been open 1-4 days in the last 5 years and the tribal commercial fishery has been steadily decreasing the number of open days over the last 5 years and was open only 4 days in 2013.

There is no meaningful difference between the physical effects of the two alternatives. At the lower end of the range in Alternative 2, the Plan allocations and resulting number of fishing days for the commercial, recreational, and tribal, fisheries would be less than at the higher end of the range. However, because the differences in the Plan allocations between Alternative 1 and Alternative 2 are not substantially different there would no change to general fishing practices, gears used in any of the fisheries, and the impacts to the physical environment.

4.2 Biological Impacts of the Alternatives

The biological impacts generally associated with fishery management actions are effects resulting from: 1) harvest of fish stocks that may result in changes in food availability to predators, changes in population structure of target fish stocks, and changes in community structure; 2) entanglement and/or entrapment of non-target organisms in active or inactive fishing gear; and 3) major shifts in the abundance and composition of the marine community as a result of fishing pressure.

In this section, the alternatives are examined for their potential effects on the biological environment. The primary areas where implementation of the Plan and the annual management measures affect the environment are the effects of shifting allowable halibut fishing areas and the speed at which halibut quotas are attained on: 1) the portion of the Pacific halibut stock occurring in Area 2A; 2) overfished groundfish stocks, particularly yelloweye and canary rockfish; 3) threatened and endangered species; and 4) seabirds.

Table 4.2 Effects of the Alternatives on the Biological Environment				
	Effects on Area 2A Pacific Halibut	**Effects on Yelloweye and/or Canary Rockfish on the WA, OR, CA coast**	**Effects on Threatened and Endangered Species in Area 2A (marine mammals, Puget Sound rockfish, green sturgeon, sea turtles)**	**Effects on Seabirds**
Alternative 1 (Status quo/No Action) Maintain 2013 Plan, resulting allocations, and management measures.	Distribution of halibut catch within Area 2A does not have a meaningful effect on the overall halibut population because Area 2A is at the southern end of the range of Pacific halibut and TAC for Area 2A is a very small proportion of the coastwide TAC. Also, there are no halibut spawning or nursery grounds in Area 2A.	Recreational fishing for groundfish would continue to be prohibited in closed areas. Retention of yelloweye and canary rockfish would continue to be prohibited coastwide. Bycatch of yelloweye and canary in the halibut fishery is taken into account through the implementation of the 2013-2014 groundfish regulations, consistent with rebuilding plans, which take into account the long term rebuilding of the species.	Status quo fishery is not expected to have a significant effect on marine mammals, sea turtles, and salmon. Status quo fishery may negatively impact Puget sound rockfish, Puget Sound and lower Columbia River Chinook, and green sturgeon since these are bycatch in the fishery.	Status quo would not alter the intensity of halibut fishing or the effects of the halibut fishery on seabirds. Seabirds may be impacted by longline gear, however, no seabird interactions have been reported in halibut fisheries.
Alternative 2 Continuing implementation of the Plan, examining a range of TACs from 2004-2014 with 2014 Plan applied.	Subarea quotas would be smaller or larger than for status quo depending on the Area 2A TAC, correspondingly, seasons and catch of halibut in subareas would be smaller or larger. Catch off California coast will likely be somewhat lower than in past years due to the August closure, but will likely be closer to the subarea quota than in past years. In terms of the status and health of the overall Pacific halibut population, no appreciable difference from Alternative 1.	No measureable difference from Alternative 1. If new conservation areas are designated for the protection of any species, overfished or listed, they would be implemented reducing the effects on those species.	No measureable difference from Alternative 1 because impacts from TAC and Plan/allocation changes are not substantially different from 2013 impacts	No measureable difference from Alternative 1 because impacts from TAC and Plan/allocation changes are not substantially different from 2013 impacts

4.2.1 Alternative 1 and Alternative 2

Effects of the Alternatives on the Halibut Population within Area 2A

The halibut population in Area 2A is a small portion of the overall halibut stock off northern North America. Annual halibut harvest amounts are set by the IPHC, which has a long history of conservative halibut management and the Plan is implemented in accordance with those harvest amounts. Area 2A halibut are thought to be adults who have migrated from more northern spawning and nursery grounds. Because the halibut population in Area 2A is mostly adults who are not spawning in the area, fishing in Area 2A, within the amount of the Area 2A TAC set by the IPHC, has little effect on the overall population. This means there is little difference to the overall halibut population due to fishing effort changes in Area 2A subareas between Alternative 1 and Alternative 2.

The Plans subarea allocations and resulting number of fishing days and intensity of fishing varies with the amount of the annual TAC. As described above, the TAC is set by the IPHC and is not part of the proposed action. The subarea allocations described under Alternative 2 are intended to capture the potential range of allocations within Area 2A that are likely to occur over the next several years with the continued implementation of the Plan (Table 4.1). The subarea allocations at the low end of range would allow for less fishing days than allocations at the higher end of the range. However, the difference in the number of open days would have little or no impact on the halibut stock because the allocations would be managed consistent with the overall TAC, which is a sustainable harvest level for the entire stock. Halibut retention in the sablefish primary fishery is allowed only when Area 2A TAC is at least 900,000 lbs; this opportunity would be allowed in 2 of the 10 TAC levels considered under Alternative 2. In those years, halibut caught in the sablefish primary fishery would have to be discarded rather than landed. Prohibition of retention does not substantially decrease the catch of halibut in the sablefish primary fishery because halibut are still encountered; it simply restricts the ability to land the halibut that are caught. The current discard mortality rate for halibut used by the NMFS Northwest Fisheries Science Center is 16% (Jannot et al 2013) for the longline sablefish primary fishery. This mortality rate applies every year regardless of whether there is a Plan allocation for this fishery. Halibut and sablefish co-occur, and fishing intensity may be greater when retention of halibut is allowed. However, because the Plan would continue to allocate halibut using the most recent TAC, the halibut resource would not be negatively impacted by the continued implementation of the Plan. Neither alternative will have any effect on the amount of halibut taken in Area 2A, as they do not affect the amount of the TAC. While the allocations to the subareas are slightly different under the two alternatives, their effects on the halibut population are expected to be very similar. Halibut in Area 2A are very mobile therefore differences in the distribution of the catch within Area 2A are not expected to have different effects on the halibut population.

Effects of the Alternatives on Overfished Yelloweye and Canary Rockfish Stocks along the coast

On September 21, 2004 (69 FR 56550), NMFS published a proposed rule to implement the Pacific coast groundfish harvest specifications and management measures for 2005-2006. This rule implemented large depth-based closures along the coast to protect rockfish called Rockfish Conservation Areas (RCA). Different RCAs apply to the commercial and recreational groundfish fisheries and are also used by halibut fisheries. The commercial halibut fishery must comply with the commercial RCA used in the groundfish commercial fishery. The recreational halibut fishery must comply with the same recreational Yelloweye Rockfish Conservation Areas (YRCA) used in the recreational groundfish fisheries in each state. However, the recreational halibut fishery does not use the groundfish recreational RCA that runs along the coast because state regulations

allow halibut fishing within the boundaries of the groundfish recreational RCA. Finally, the taking and retaining of canary and yelloweye rockfish is prohibited in the recreational halibut fishery coastwide.

Under Alternative 1, recreational halibut fisheries would be prohibited from taking and retaining yelloweye and canary rockfish along the coast. Alternative 1 would neither increase nor decrease opportunities for canary and/or yelloweye rockfish interception and discard over interception rates expected from implementing the halibut regulations. The RCA would continue to protect rockfish along the coast, including canary and yelloweye and other overfished groundfish species, from commercial halibut fisheries interception in depths where they commonly occur. Under Alternative 2, recreational fishing for halibut would be as described for Alternative 1.

Under Alternative 2, at the higher end of the TAC range, more fishing days would be permitted than at the lower end of the range because the change in subarea allocations. Lower allocations could allow halibut anglers to achieve their halibut quota at a faster rate. If the halibut quota is attained at a faster rate, anglers may spend less time operating in waters where overfished groundfish species are vulnerable to incidental catch in the halibut fishery. Thus, there may be some modest reduction in incidental yelloweye and canary rockfish catch at the lower subarea allocations under Alternative 2 if the Area 2A TAC is at the lower end of the range in one or more of the years covered by the proposed action.

Neither alternative is expected to have much, if any, effect on groundfish species, including yelloweye and canary rockfish, because in addition to prohibiting retention of these species and complying with closed areas, bycatch of these species in halibut fisheries is managed consistent with the groundfish FMP, rebuilding plans for the overfished species, and the species specific Annual Catch Limit (ACL). Therefore, while the number of fishing days for the halibut fishery may change according to the Plan under different allocation amounts, any impacts on groundfish would be taken into account through the groundfish management process and would be within the parameters of the applicable rebuilding plans and ACLs for the rockfish species impacted.

Effects of the Alternatives on Threatened and Endangered Species

Sea turtles, eulachon, marine mammals
Green sea turtles, loggerhead sea turtles, and olive ridley sea turtles rarely occur in the Area 2A and therefore are not likely to be encountered by halibut fishing. In the eastern North Pacific, green sea turtles commonly occur off the southwest coast of the U.S., which is further south than halibut fisheries generally operate. Recreational fishing for halibut operates as far south as northern California, the commercial fishery operates mainly in Oregon, and tribal commercial fisheries operate only in Washington. Leatherback sea turtles occur north of central California during the summer and fall, but there are no records of interactions with halibut fisheries.

While eulachon are found in areas where halibut fishing occurs, they are primarily impacted by trawl gear which is not a gear used in any halibut fisheries along the coast and no bycatch of eulachon has been reported in the halibut fisheries, therefore no impacts are anticipated to eulachon from halibut fisheries.

The marine mammals discussed here occur along the coast, but no interactions between vessels operating in the directed commercial, tribal, or recreational fishery have been reported. Because the directed commercial fishery uses longline gear with which there are no records of marine mammal interaction and has been open for only 1-4 days per year for the last several years, no effects are expected to marine mammals. Similarly, the tribal fishery open days have been

decreasing over the last 5 years with the fishery being open 5 days in 2013. Based on bycatch records, there are no documented interactions of marine mammals or sea turtles with vessels or gear from the halibut fishery.

There is no meaningful difference between the effects to listed species of the two alternatives. Neither alternative is expected to have any measureable effect on listed marine mammals, eulachon, or sea turtles because the vessel traffic, fishing effort, gear presence, and schedule of the halibut fishery is anticipated to continue under either alternative similarly to past levels over the broad expanse of the West Coast and inland waters of Washington.

Green sturgeon

Uncertainty exists regarding the number of green sturgeon captured in the Pacific halibut fisheries in the past, because consistent methods of monitoring green sturgeon catch have not been implemented in most of the fisheries. Bycatch monitoring for green sturgeon has varied by fishery sector and area, but it has been the most consistent in the recreational fisheries. The available data show occasional encounters of 1 to 3 green sturgeon a year (ODFW pers. comm), with no green sturgeon encounters in most years. All of the documented encounters were in the recreational fishery. It is uncertain at this time if catches of green sturgeon occurred in the tribal fisheries and the non-treaty directed commercial fishery because of a lack of encounters or a lack of consistent monitoring for green sturgeon encounters. However, based on the gear types used in the fisheries (e.g., longline, troll, hook-and-line), the limited spatial overlap with green sturgeon, and the limited fishing seasons, we would expect bycatch of green sturgeon encounters in these fisheries to be similar to or less than what has been recorded for the recreational fisheries. As Alternative 1 is the 2013 status quo fishery, impacts to green sturgeon under Alternative 1 would be expected to be the same as these past levels.

Under Alternative 2, the higher allocations at higher potential TAC levels would result in more fishing days than at the lower allocations. Lower allocations could allow halibut anglers to achieve their halibut quota at a faster rate. If the halibut quota is attained at a faster rate, anglers may spend less time operating in waters where green sturgeon occur and are vulnerable to incidental catch in the halibut fishery. Thus, there may be some modest reduction in incidental green sturgeon catch at the lower end of the range under Alternative 2. However, the range of allocations described under Alternative 2 is not significantly different from the range of allocations that has occurred during the time when past bycatch monitoring has occurred; therefore, the impact on green sturgeon is not expected to be significantly different from that described above under either alternative.

Puget Sound rockfish

The sport and tribal fisheries in Puget Sound impact Puget Sound yelloweye, canary, and bocaccio rockfish. The recreational and non-treaty directed commercial fisheries on the coast will not have an effect on these species because they do not operate in the area where these species reside and therefore, interactions between these species and any fisheries operating on the coast is unlikely.

Halibut recreational fishing uses gear and bait that catch yelloweye and canary rockfish and bocaccio. Historically, many anglers would target halibut and rockfish at the same time, however, current regulations prohibit retention of yelloweye and canary coastwide in the halibut fishery, and bocaccio is prohibited in the halibut sport fishery in Washington. Even though retention is not allowed some unintentional catch may occur. WDFW has estimated that anglers targeting halibut have caught some yelloweye and canary rockfish. There is some uncertainty regarding these estimates because they are based on dockside interviews with a subset of

fishermen and does not include anglers whose trips originated from a marina. Additionally, identification of rockfish by species is poor with only 5 percent of anglers able to identify bocaccio, 12 percent able to identify canary, and 31 percent able to identify yelloweye (Sawchuck 2012). WDFW estimates that between 2003 and 2013, 0 to 7 yelloweye were caught, 0 to 5 canary, and 0 bocaccio were caught. Washington state regulations require all rockfish be released however the mortality rate of released rockfish is relatively high. WDFW estimates that listed rockfish bycatch from anglers targeting halibut is low relative to fishers target salmon or bottomfish due to the short halibut season.

There has been little systematic bycatch data recording in the tribal halibut fisheries. However, given the fishing gear, timing, and areas fished it is anticipated that these species may be encountered by the tribal fishery in Puget Sound. Yelloweye rockfish are primarily associated with the bottom, which makes them susceptible to longline baits compared to some other rockfish species, such as canary rockfish and bocaccio. Canary rockfish are semi-pelagic rockfish, meaning that some fish spend time suspended in the water column and can move long distances. These factors likely make them less susceptible to longline baits that are deployed at or very near the bottom. Bocaccio are semi-pelagic rockfish, meaning they can spend time suspended in the water column and also move long distances. These factors likely make them less susceptible to longline baits that are deployed at or very near the bottom.

Under Alternative 2, the higher allocations under the higher TACs in the range would likely result in more fishing days than at the lower allocations. Lower allocations could allow halibut anglers to achieve their halibut quota at a faster rate. If the halibut quota is attained at a faster rate, anglers may spend less time operating in waters where ESA-listed groundfish species are vulnerable to incidental catch in the halibut fishery. Thus, there may be some modest reduction in incidental yelloweye and canary rockfish catch at the lower end of the range under Alternative 2.

The Plan allocates a portion of the 2A TAC to the tribes, but any further management is based on a tribal agreement that is outside of the Plan. Under both alternatives, vessel traffic, fishing effort, gear presence, and schedule of the halibut fishery is anticipated to continue similar to past levels over the broad expanse of the West Coast and inland waters of Washington and therefore, the effects from Alternative 1 are similar to past effects and the effects of Alternative 2. Bycatch estimates for the 3 listed species were very low compared to the populations and would have a small impact on each species' abundance.

Canary were determined to be less susceptible to longline baits set at or near the bottom because of their semi-pelagic life history. Yelloweye rockfish were determined to be consistently caught in previous Canadian and WDFW research surveys; however, they have been rarely caught in the most recent surveys. Yelloweye are primarily associated with the bottom, which makes them susceptible to longline baits compared to canary and bocaccio. No bycatch of bocaccio was reported in the Canadian and WDFW surveys conducted in Puget Sound. Bocaccio are semi-pelagic making them less susceptible to longline baits deployed at or near the bottom. Given each species susceptibility and bycatch estimates, the halibut fishery would have a small impact on each species' abundance.

Salmon

Halibut bottom longline gear rarely catches salmonids (NMFS, 1999). Therefore, neither of the alternatives is expected to have any measurable effects on threatened or endangered salmon stocks. All 5 species of salmon off the Pacific coast, Chinook, coho, chum, pink, and sockeye occur in Area 2A. Neither alternative provides for changes in halibut fishing gear or in the

intensity of the non-treaty commercial, tribal, or recreational fisheries. The timing of any fisheries that encounter salmon is also not expected to measurably change under either alternative.

The salmon troll fishery has an allocation for incidental harvest of halibut that is anticipated to continue under either alternative and any impacts to listed salmon species from that fishery are covered under the BiOps for the salmon fishery. The allocation of halibut to the salmon troll fishery does not have an effect on any salmon stocks because changes in the allocation of halibut to this fishery do not affect fishing effort for salmon only the amount of incidental halibut that may be retained. Any listed salmon that are caught in the salmon troll fishery are managed through the Council's salmon management process and would not be affected by the continued implementation of the Plan.

Salmon are much more far-ranging than rockfish; thus, they are less likely to be affected by minor shifts in areas of fishing effort concentration that would occur across the range of Plan allocations. Similar to halibut, salmon will be protected from harvest while they are migrating through the Yelloweye Rockfish Conservation Areas along the coast but will become available to harvest as soon as they leave that area.

Effects of the Alternatives on Seabirds

No formal analysis has been conducted on the halibut fishery and interactions with sea birds. However, the US Fish and Wildlife Service (USFWS) completed a Biological Opinion on the groundfish fishery on the West Coast and due to the similarities between halibut fisheries and groundfish fisheries we use some of the analysis from that BiOp here to discuss possible impacts of the halibut fishery on seabirds.

ESA-listed endangered seabirds that co-occur in Area 2A include short-tailed albatross (*Phoebastria albatrus*), California least tern (*Sterna antillarum browni*), and Marbled murrelet (*Brachyramphus marmoratus*), but of those, only short-tailed albatross is known to interact with the groundfish fishery (USFWS 2012). For that reason, the remainder of this discussion is devoted to short-tailed albatross. The US Fish and Wildlife Service (USFWS) issued a Biological Opinion on the Pacific Coast groundfish fishery and its impacts on seabirds and terrestrial listed species managed by USFWS (USFWS 2012). This BiOp concluded that the impacts of the groundfish fishery on albatross are relatively low. This BiOp evaluated longline and trawl groundfish gear, however trawl gear is not used in the halibut fishery. Given that the commercial and tribal halibut fisheries use similar gear and operate in similar areas to the longline groundfish fishery but with much shorter seasons, the impacts to albatross from the halibut fishery is most likely less than impacts from the groundfish fishery. Additionally, under either Alternative impacts to seabirds are most likely very low because even at the upper end of the Alternative 2 TAC range the commercial and tribal fisheries would be less intense than the groundfish fishery that use longline gear. It is anticipated that with continued implementation of the Catch Sharing Plan halibut fishery will continue to operate in the areas it previously and currently operates in and with similar gear and timing. There have been no seabird interactions reported in the halibut fishery. Therefore, because neither alternative alters the intensity of the recreational or commercial halibut fisheries, and because the impacts will be less than the minor impacts associated with the groundfish fishery, the continued implementation of the Plan will have little effect on seabirds.

4.3 Socio-Economic Impacts of the Alternatives

The socio-economic impacts generally associated with fishery management actions are effects resulting from: 1) changes in harvest availability and processing opportunities that may result in unstable income opportunities; 2) changes to access privileges associated with license limitation and individual quota systems; 3) fishing season timing or structure restrictions that may improve or reduce the safety of fishing activity; and 4) fishing season timing or structure restrictions that may or may not take into account the social and cultural needs of fishery participants. Of these elements, proposed revisions to the Plan under Alternative 1 and the range of changes seen under Alternative 2 and implementing halibut regulations would not affect access privileges, fishery participant safety, and socio-cultural needs of participants. Effects resulting from changes in harvest availability and processing opportunities are discussed below.

In this section, the range of Plan allocations under Alternative 2 and the continued implementation of the Plan and annual management measures are examined for their potential socio-economic effects. The primary areas where the allocations and Plan revisions could affect fishing industries and communities are: 1) on harvest and income opportunities and 2) on the costs to vessels participating in the fishery. In addition to these industry and community effects, alternative Plan revisions could affect the management of the fishery and enforcement of regulatory measures. Table 4.2 details these effects in a matrix format.

Table 4.2 Effects of the Alternatives on the Socio-Economic Environment

	Effects on Harvest and Income Opportunities	**Effects on Cost of Participating in Fishery**	**Effects on Management and Enforcement**
Alternative 1 (Status quo/No Action) Maintain 2013 Plan, resulting allocations, and management measures.	None. This alternative has been in place since 2013; harvest and income opportunities would not change.	None. This alternative has been in place since 2013; cost to participants would not change.	None. This alternative has been in place since 2013; effects on management and enforcement would not change.
Alternative 2 Continuing implementation of the Plan and annual management measures, examining a range of TACs from 2004-2014.	Not substantially different than Alternative 1. At lower allocations, income and harvest opportunities would be slightly reduced compared to the higher end of the range. The Plan changes over this time have a slight effect on harvest income but are marginal compared to any changes in TAC.	Cost to fishery participants of materials, fuel, etc. could be slightly different than under Alternative 1. At higher allocations, it would be marginally more costly to participate than Alt. 1 because more fishing days would be allowed, increasing operating costs. Costs would be marginally less at lower allocations.	Not substantially different from Alternative 1 because Plan changes and the range of allocations would not require change from Status Quo in enforcement or management.

4.3.1 Alternative 1 and Alternative 2

Effects on Fishery Participant Harvest and Income Opportunities

In 2013, 608 vessels were issued IPHC licenses to retain halibut. IPHC issues licenses for the directed commercial fishery in Area 2A (149 licenses in 2013); incidental halibut caught in the salmon troll fishery (332 licenses in 2013); and the charterboat fleet (127 licenses in 2013). No vessel may participate in more than one of these three fisheries per year.

The number of charterboats in Northern California, Oregon, and Washington that were involved in groundfish trips including halibut during 2010 was 161 (NMFS 2012). Of the 161 charterboat vessels, 89 vessels fished in either the Columbia River or Central Oregon fisheries. This suggests that 60 percent of the IPHC charterboat license holders may have been affected by the 2013 regulations.

In 2010, charterboat vessels undertook about 5500 directed halibut trips. The highest charterboat rate found on the internet was $285 per angler trip. Using this rate suggests that charterboat halibut rate revenues were on the order of $1.6 million. This estimate does not include revenues associated with halibut caught in conjunction with salmon, bottomfish, or other recreational trips. According to Pacific Marine Fisheries Commission PacFIN data, commercial vessels including tribal vessels landed halibut with a value of $7.1 million. 2013 data, essentially complete through November 2013, shows commercial landings, worth $5.9 million.

Alternative 1 has been in place since 2013. Therefore, there would be no change in the effects on fishery participant harvest or income opportunities.

Under Alternative 2, the impact to harvest and income opportunities comes from changes in the allocation. The Plan changes implemented each year are not substantially different from year to year and therefore, have little effect on harvest and income opportunities. Annual subarea allocations under Alternative 2 that are greater than Alternative 1 would provide more harvest and income opportunities, while lower allocations would provide slightly less harvest and income opportunities. Again, the subarea allocations would vary because of the amount of the Area 2A TAC, which is not part of this action.

The major effect of halibut management on small entities will be from the TAC decisions made by IPHC, as stated above this is not part of the proposed action. As discussed above, changes that are anticipated under Alternative 2 are very minor, as has been the case in the past several years, and such changes are not expected to result in more than minor changes to the effects of implementation on the Plan on small entities. There are no large entities involved in the halibut fisheries; therefore, implementation of the Plan will not have a disproportionate negative effect on small entities versus large entities.

Effects on Cost of Participating in the Fishery

Alternative 1 (No Action) is the Plan and implementing regulations in place in 2013. The costs of operating in the fishery include crew (if used), materials, fuel, and any fees paid to a processor. The IPHC licenses required to participate in halibut fisheries are free and are anticipated to remain this way.

Cost to fishery participants of crew, materials, fuel, etc. could be slightly different under some of the allocations under Alternative 2 compared to Alternative 1. At the higher end of the range, it would be marginally more costly to participate than under Alternative 1 because more fishing days would be allowed, increasing operating costs. Costs at the lower end of the range would be marginally less than Alternative 1 because the TAC under Alternative 1 (990,000 lbs, Alt 1) is only slighty higher than the lowest TAC of the range (810,000 lbs) (Table 4.1).

Effects on Management and Enforcement

Alternative 1 and Alternative 2 both involve implementing the Plan through annual regulations that NMFS adopts through the rulemaking process. Alternative 2 is intended to include minor

changes to the Plan, which could include minor changes to management measures. The halibut regulations for Area 2A are enforced by federal and state enforcement personnel, and this would continue to occur regardless of the alternatives selected.

4.4 Cumulative Effects

A cumulative effects analysis is required by the Council on Environmental Quality (CEQ) (40 CFR part 1508.7). The purpose of a cumulative effects analysis is to consider the combined effects of many actions on the human environment over time that would be missed if each action were evaluated separately. CEQ guidelines recognize that it is not practical to analyze the cumulative effects of an action from every conceivable perspective, but rather, the intent is to focus on those effects that are truly meaningful. A formal cumulative impact assessment is not necessarily required as part of an EA under NEPA as long as the significance of cumulative impacts has been considered (U.S. EPA 1999). The following addresses the significance of the expected cumulative impacts as they relate to the halibut fishery.

In Chapter 3 (Description of the Affected Environment), the resources affected by the proposed action are identified and are carried forward here for the cumulative effects analysis. Those resources are:

- Physical environment
- Biological Environment, including:
    - Pacific halibut
    - Sablefish
    - Yelloweye and canary rockfish
    - Threatened and endangered species
    - Seabirds
- Socioeconomic Environment

4.4.1 Geographical and Temporal Boundaries

The analysis of impacts focuses on the annual implementation of the Plan in Area 2A. The core geographic scope for each of the resources is Area 2A which includes the state coastal and Federal waters off Washington, Oregon, and California. For socioeconomic issues, the core geographic boundaries are defined as those fishing communities directly involved in the harvest or processing of the managed resources, which occur in Washington, Oregon, and California.

The temporal scope of past and present actions for the potentially affected resources is focused on actions that have occurred after the implementation of the Plan, focusing on the 2014-2016 timeframe. The temporal scope of future actions for all affected resources extends into the foreseeable future up to 10 years.

4.4.2 Actions Other than the Proposed Action

4.4.2.1 Past, Present, and Reasonably Foreseeable Future Actions

Fishery-related Actions

The management of the annual halibut Area 2A TAC through the Plan has resulted in the sustainable management of halibut and other affected species. To the degree with which this regulatory regime is effectively implemented, the cumulative impacts of past, present, and reasonably foreseeable future Federal fishery management actions on the affected resources should generally be associated with sustainable long-term outcomes.

The past, present, and reasonably foreseeable future actions include the annual review of the Plan by Washington, Oregon, California, and tribal managers, and minor changes to the Plan. Each year since the Plan was implemented in 1995, there have been minor changes to respond to the needs of the fisheries. This review and implementation process is anticipated to continue into the foreseeable future.

The IPHC conducts an annual stock assessment survey to assess the health of the halibut stock in all its regulatory areas. This survey provides the IPHC with the necessary information to conduct stock assessments and aid in the sustainable management of halibut along the coast from California to Alaska. It is anticipated that this survey will continue.

Of the past, proposed, and reasonably foreseeable future actions that are expected to also affect Area 2A, the most notable is any action that would substantially change the allocations in the Plan. The Council does not have anything scheduled on this topic. However, given recent increases in halibut catches in some areas the Council could examine changes to the Plan in the future. More than minor changes to the Plan are not included in the Alternatives considered here, and would likely require additional NEPA analysis.

Further, action to implement Pacific Coast groundfish fishery management measures occur every other year. Although halibut is not included in the Pacific Coast groundfish complex for management purposes, it has a life history similar to other large flatfish managed within this complex and is caught as bycatch in commercial and recreational groundfish fisheries. Fishing for halibut, both commercial and recreational, occurs in the same waters and affects the same habitats as fishing for Pacific Coast groundfish. The effects of the 2013-2014 groundfish specifications and management measures have been described and analyzed by Council staff in an Environmental Impact Statement, September 2012 (PFMC 2012). Actions considered in this EA on Pacific halibut management are not expected to have effects on the environment that, when considered in combination with groundfish specifications and management measures, measurably alter the effects of the groundfish specifications and management measures. The preferred alternative is intended to minimize the direct and incidental take of groundfish in the recreational fishery for halibut, while allowing anglers access to the annual halibut quota.

PFMC and NMFS continue to work together on various actions. All of these actions are expected to increase benefits from the fishery and are not expected to appreciably interact with the action considered here, except as noted in the following list. Details on trawl actions are available on the PFMC website (http://www.pcouncil.org/groundfish/fishery-management-plan/trailing-actions/). The main actions are as follows:

Gear Issues (under PFMC consideration, deliberations delayed) -- Gear issues include multiple gears on a trip, gear modifications to increase efficiency, and restrictions on areas in which gears may be used. Consideration on this issue has been delayed until June 2014. To date, none of the issues effect halibut; however, halibut are bycatch in trawl fisheries, so impacts to halibut must be taken into account when those decisions are made.

Rockfish Conservation Area Rule – The Council approved several changes to the trawl RCA to open up previously closed areas. An Environmental Assessment is being conducted in conjunction with this action. It is not anticipated that this action will have impacts on halibut.

Non-fishing Actions

Non-fishing activities that introduce chemical pollutants, sewage, changes in water temperature, salinity, dissolved oxygen, and suspended sediment into the marine environment pose a risk to all of the identified affected resources. Human-induced non-fishing activities tend to be localized in nearshore areas and marine project areas where they occur. Examples of these activities include, but are not limited to, agriculture, port maintenance, coastal development, marine transportation, marine mining, dredging, and the disposal of dredged material. Wherever these activities co-occur, they are likely to work additively or synergistically to decrease habitat quality and may indirectly constrain the sustainability of the managed resources, non-target species, and protected resources. Decreased habitat suitability would tend to reduce the tolerance of these species to the impacts of fishing effort. Mitigation of this outcome through regulations that would reduce fishing effort could then negatively impact human communities. The overall impact to the affected species and their habitats on a population level is unknown, but likely neutral to low negative, since a large portion of these species have a limited or minor exposure to these local non-fishing perturbations.

NMFS reviews these types of effects through the review processes required by Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, for certain activities that are regulated by Federal, state, and local authorities. The jurisdiction of these activities is in "waters of the U.S." and includes both river and marine habitats.

For many of the proposed non-fishing activities to be permitted under other Federal agencies (such as offshore energy facilities, etc.), those agencies would conduct examinations of potential impacts on the affected resources. While the Magnuson-Stevens Act (50 CFR 600.930) does not have jurisdiction over the halibut fishery, it does impose an obligation for other Federal agencies to consult with the Secretary of Commerce on actions that may adversely affect EFH. The Pacific Fishery Management Council is engaged in this review process by making comments and recommendations on any Federal or state action that may affect habitat, including EFH, for their managed species and by commenting on actions likely to substantially affect habitat, including EFH.

In addition, under the Fish and Wildlife Coordination Act (Section 662), “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the U.S., or by any public or private agency under Federal permit or license, such department or agency first shall consult with the U.S. Fish and Wildlife Service (USFWS), Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular state wherein the” activity is taking place. This act provides another avenue for review of actions by other Federal and state agencies that may impact resources that NMFS manages in the reasonably foreseeable future. In addition, NMFS and the USFWS share responsibility for implementing the ESA. ESA requires NMFS to designate "critical habitat" for any species it lists under the ESA (i.e., areas that contain physical or biological features essential to conservation, which may require special management considerations or protection) and to develop and implement recovery plans for threatened and endangered species. The ESA provides another avenue for NMFS to review actions by other entities that may impact endangered and protected resources whose management units are under NMFS’ jurisdiction.

The effects of climate on the biota of the California Current ecosystem have been recognized for some time. The El Niño/Southern Oscillation (ENSO) is widely recognized to be the dominant mode of interannual variability in the equatorial Pacific, with impacts throughout the rest of the Pacific basin and the globe. During the negative (El Niño) phase of the ENSO cycle, jet stream

winds are typically diverted northward, often resulting in increased exposure of the west coast of the U.S. to subtropical weather systems. The impacts of these events to the coastal ocean generally include reduced upwelling winds, deepening of the thermocline, intrusion of offshore (subtropical) waters, dramatic declines in primary and secondary production, poor recruitment, reduced growth and survival of many resident species (such as salmon and groundfish), and northward extensions in the range of many tropical species. Concurrently, top predators such as seabirds and pinnipeds often exhibit reproductive failure. In addition to interannual variability in ocean conditions, the North Pacific seems to exhibit substantial interdecadal variability, which is referred to as the Pacific (inter) Decadal Oscillation (PDO).

Within the California Current itself, Mendelssohn, et al. (2003) described long-term warming trends in the upper 50 to 75 m of the water column. Recent paleoecological studies from marine sediments have indicated that the 20th century warming trend in the California Current has exceeded natural variability in ocean temperatures over the last 1,400 years. Statistical analyses of past climate data have improved our understanding of how climate has affected North Pacific ecosystems and associated marine species productivities. Our ability to predict future impacts on the ecosystem stemming from climate forcing events remains poor at best.

4.4.3 Summary of the Cumulative Effects of the Alternatives

This section summarizes the preceding analyses of environmental consequences.

Physical environment
Alternative 1 would have negligible effects on the physical environment because while longline gear may impact bottom habitat by dragging or snagging on the bottom, the impacts will be minimal due to the short duration and limited geographic scope of the fishery. The directed commercial and tribal fisheries are only open 1-4 days per year. Further, the tribal fishery operates only in Washington and the majority of the directed commercial fishery operates in waters off the Oregon coast. Because the gear, areas, and timing are not anticipated to change under Alternative 2, the effects to the physical environment are likely to also be negligible.

Pacific halibut
Alternative 1 would have negligible effects on halibut because the continuing implementation of the Plan and distribution of halibut catch within Area 2A does not have a meaningful effect on the overall halibut population. This is because Area 2A is at the southern end of the range of Pacific halibut, and the TAC for Area 2A is a very small proportion of the coastwide TAC. Also, there are no halibut spawning or nursery grounds in Area 2A, so individuals caught here are not likely to contribute to the overall population. Because the Plan changes and distribution of catch are not anticipated to change under Alternative 2, the effects to Pacific halibut are likely to also be negligible.

Overfished yelloweye and canary rockfish
Alternative 1 would have negligible effects on yelloweye and canary because bycatch of these species in halibut fisheries is accounted for through the Groundfish FMP, which manages these species consistent with their rebuilding plans and for meeting long-term sustainability goals. Halibut fisheries also comply with closed areas along the coast designed to minimize the bycatch of yelloweye and canary rockfish. Because the management of yelloweye and canary under the groundfish FMP, and closed areas that apply to halibut, are not anticipated to change under Alternative 2, the effects to yellloweye and canary rockfish are likely to also be negligible.

Threatened and endangered species

Alternative 1 would have low negative effects on Puget Sound Chinook, lower Columbia River Chinook, Puget Sound bocaccio, yelloweye and canary rockfish, and green sturgeon because it is likely these species are caught as bycatch in the halibut fishery. The impacts are low because the bycatch of these species is expected to be minor compared to the overall population levels. For the remaining listed species in the action area, Alternative 1 would have negligible effects on marine mammals, sea turtles, eulachon, and the remaining listed salmon species because these species rarely interact with halibut fisheries and this is unlikely to change. Because the gear, areas, and timing are not anticipated to change in a manner that would affect the species caught as bycatch in any halibut fishery under Alternative 2, the effects to threatened and endangered species are likely to also be low negative or negligible depending on the species.

Seabirds
Alternative 1 would have negligible effects on seabirds because no seabird interactions have been reported in the halibut fishery and this alternative would not alter the intensity, gear used, structure, or timing of the fishery. Because the gear, areas, and timing are not anticipated to change under Alternative 2, the effects to seabirds are likely to also be negligible.

Socioeconomics
The primary socioeconomic issue for the halibut fishery is changes in the annual TAC, which is not part of this action. Allocations under Alternative 1 may have a slight effect on harvest income but are marginal compared to any changes in TAC. Therefore, Alternative 1 would have negligible effects on costs associated with participation in this fishery because the implementation of the Plan does not affect the TAC. Because the allocations under Alternative 2 are not substantially different from the allocations under Alternative 1, the effects on costs and income are likely to also be negligible.

Table 4.3: Summary of the Environmental Consequences of the Alternatives.

	Alt. 1	**Alt. 2**
Physical environment	negligible	Same as Alt 1
Pacific Halibut	negligible	Same as Alt 1
Yelloweye and Canary rockfish	negligible	Same as Alt 1
Threatened and Endangered Species	Negligible (marine mammals, eulachon, sea turtles, salmon) and low negative (Puget Sound Chinook, lower Columbia river Chinook, rockfish and green sturgeon)	Same as Alt 1
Seabirds	negligible	Same as Alt 1
Socioeconomics	negligible	Same as Alt 1

Therefore, when this proposed action is considered in conjunction with all the other pressures placed on fisheries by past, present, and reasonably foreseeable future actions, it is not expected to result in any significant impacts, positive or negative. Based on the information and analyses presented in this document, there are no significant cumulative effects associated with the action proposed.

5.0 OTHER APPLICABLE LAW

5.1 Endangered Species Act

Section 7(a)(2) of the Endangered Species Act, as amended, requires that federal agencies "shall, in consultation with and with the assistance of the Secretary [of Commerce or Interior], insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered species, or result in the destruction or adverse modification of habitat of such species...." Based on this section of the law (Section 7), action agencies consult with NMFS (for marine species) or FWS (for terrestrial and freshwater species) in cases where a "major construction activity" (which is considered equivalent to the "major federal action" standard under NEPA) could "jeopardize the continued existence" of an endangered species. For fishery management actions in federal waters, NMFS is both the action and consulting agency (although different divisions fulfill these two roles).

NMFS initiated consultation on August 16, 2013, on the continued implementation of the Plan for Area 2A and the annual management measures for 2014-2016. In the biological opinion the Regional Administrator determined that the implementation of the Catch Sharing Plan for 2014-2016 is not likely to jeopardize the continued existence of Puget Sound yelloweye rockfish, Puget Sound canary rockfish, Puget Sound bocaccio, Puget Sound Chinook, Lower Columbia River Chinook, and green sturgeon. It is not expected to result in the destruction or adverse modification of critical habitat for green sturgeon or result in the destruction or adverse modification of proposed critical habitat for Puget Sound yelloweye rockfish, canary rockfish, bocaccio. In addition, the opinion concluded that the implementation of the Plan is not likely to adversely affect marine mammals, the remaining listed salmon species and sea turtles, and is not likely to adversely affect critical habitat for Southern resident killer whales, stellar sea lions, leatherback sea turtles, any listed salmonids, and humpback whales. Further, the Regional Administrator determined that implementation of the Catch Sharing Plan will have no effect on southern eulachon, this determination was made in a letter dated March 12, 2014.

Protected species listed under the ESA are discussed at section 3.2 of this document, with the effects of the alternatives to the actions considered in this document discussed at 4.2.

5.2 Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) of 1972 and the ESA are the principle federal laws guiding marine mammal species protection and conservation policy in the United States. Under the MMPA, NMFS is responsible for the management and conservation of 153 stocks of whales, dolphins, porpoise, seals, sea lions, and fur seals while the FWS is responsible for walrus, sea otters, and the West Indian manatee.

Section 118 of the MMPA requires that NMFS publish, at least annually, a list of fisheries placing all U.S. commercial fisheries into one of three categories describing the level of incidental serious injury and mortality of marine mammals in each fishery, with Category I having the highest level of injury and mortality. Definitions of the fishery classification criteria for Categories I, II, and III fisheries are found in the implementing regulations for Section 118 of the MMPA (50 CFR part 229.) Pacific halibut fisheries in Area 2A are considered Category III fisheries, which means that the annual mortality and serious injury of a marine mammal stock by the fishery is less than or equal to 1% of the potential biological removal (PBR) level.

Under the MMPA, marine mammals whose abundance falls below the optimum sustainable population level (usually regarded as 60% of carrying capacity or maximum population size) can be listed as "depleted." Populations or species listed as threatened or endangered under the ESA are automatically considered depleted under the MMPA. Species listed as threatened or

endangered under the ESA are listed in Table 3.1 and discussed in Section 3.2; species listed as depleted under the MMPA are discussed in Section 3.2.

Based on its Category III status, to the extent incidental take of these protected species are occurring in the Pacific halibut fisheries in Area 2A these are well under their annual PBR levels. Neither alternative discussed above, is likely to affect the incidental mortality levels of species protected under the MMPA.

5.3 Migratory Bird Treaty Act and EO 13186

The Migratory Bird Treaty Act (MBTA) of 1918 was enacted to end the commercial trade of migratory birds and their feathers that, by the early years of the 20th century, had diminished populations of many native bird species. The Act states that it is unlawful to take, kill, or possess migratory birds and their parts (including eggs, nests, and feathers) and is a shared agreement between the United States, Canada, Japan, Mexico, and Russia to protect a common migratory bird resource. The Migratory Bird Treaty Act prohibits the directed take of seabirds. Seabirds are discussed in more detail in Section 3.2, with the effects of the alternatives on seabirds discussed in Section 4.

Effects on seabirds are expected to be minor under either alternative because seabirds there are no records of seabird interactions and halibut fisheries. Neither alternative is expected to increase the existing level of effect on seabirds of Area 2A Pacific halibut fisheries. NMFS has begun informal discussions with USFWS regarding seabirds and all other USFWS managed species.

5.4 Paperwork Reduction Act

Neither alternative contains a collection of information and are, therefore, not subject to the requirements of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq.

5.5 Coastal Zone Management Act

Section 307(c)(1) of the Federal Coastal Zone Management Act (CZMA) of 1972 requires all federal activities that directly affect the coastal zone be consistent with approved state coastal zone management programs to the maximum extent practicable.

The proposed action is consistent to the maximum extent practicable with applicable enforceable policies of State coastal zone management programs. This determination has been submitted to the responsible state agencies for review under section 307(c)(1) of the CZMA by forwarding a copy of this EA to each of the relevant state agencies.

5.6 EO 12898 (Environmental Justice)

EO 12898 obligates Federal agencies to identify and address "disproportionately high adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations in the United States" as part of any overall environmental impact analysis associated with an action. NOAA guidance, NAO 216-6, at Section 7.02, states that "consideration of EO 12898 should be specifically included in the NEPA documentation for decision-making purposes." Agencies should also encourage public participation, especially by affected communities during scoping, as part of a broader strategy to address environmental

justice issues. The proposed action will not result in disproportionate adverse impacts to low income and minority communities.

5.7 EO 13132 (Federalism)

Executive Order 13132 enumerates eight "fundamental federalism principles." The first of these principles states "Federalism is rooted in the belief that issues that are not national in scope or significance are most appropriately addressed by the level of government closest to the people." In this spirit, the Executive Order directs agencies to consider the implications of policies that may limit the scope of or preempt states' legal authority. Preemptive action having such "federalism implications" is subject to a consultation process with the states; such actions should not create unfunded mandates for the states; and any final rule published must be accompanied by a "federalism summary impact statement."

The Council and IPHC processes offer many opportunities for states (through their agencies, Council appointees, consultations, and meetings) to participate in the formulation of management measures. This process encourages states to institute complementary measures to manage fisheries under their jurisdiction that may affect federally managed stocks.

Neither alternative would have federalism implications subject to EO 13132.

5.8 EO 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 on 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 Magnuson-Stevens Fishery Conservation and Management Act 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 U.S. government formally recognizes that thirteen Washington Tribes have treaty rights to fish for Pacific halibut. In general terms, the quantification of those rights is 50 percent of the harvestable surplus of Pacific halibut available in the tribes' usual and accustomed (U and A) fishing areas (described at 50 CFR 300.64). Each of the treaty tribes has the discretion to administer their fisheries and to establish their own policies to achieve program objectives. Accordingly, tribal allocations and regulations, including the proposed changes to the Plan, have been developed in consultation with the affected tribe(s) and, insofar as possible, with tribal consensus. For 2014, the treaty tribes made no proposed revisions to the Plan.

6.0 REGULATORY FLEXIBILITY ACT AND EO 12866 (Regulatory Impact Review)

In order to comply with Executive Order (EO) 12866 and the Regulatory Flexibility Act (RFA), this document also serves as a Regulatory Impact Review (RIR). The RIR and Initial Regulatory Flexibility Analysis (IRFA) have many aspects in common with each other and with EAs. Much of the information required for the RIR and IRFA analyses has been provided above in the EA. Table 6.1 identifies where previous discussions relevant to the EA and IRFA/RIR may be found in this document. The following RIR and IRFA was completed for the 2014 Halibut annual management measures and Catch Sharing Plan.

Table 6.1 Regulatory Impact Review and Regulatory Flexibility Analysis

RIR Elements of Analysis	Corresponding Sections in EA	IRFA Elements of Analysis	Corresponding Sections in EA
Description of management objectives	1.2	Description of why actions are being considered	1.2
Description of the Fishery	3.0	Statement of the objectives of, and legal basis for actions	1.2
Statement of the Problem	1.2	Description of projected reporting, recordkeeping and other compliance requirements of the proposed action	4.3
Description of each selected alternative	2.0	Identification of all relevant Federal rules	5.0
An economic analysis of the expected effects of each selected alternative relative to status quo	4.3		

6.1 Regulatory Impact Review

The RIR is designed to determine whether the proposed action could be considered a "significant regulatory action" according to E.O. 12866. E.O. 12866 tests whether or not an action would be a "significant regulatory action", and identifies the expected outcomes of the proposed management alternatives. An action may be considered "significant" if it is expected to: 1) Have an annual effect on the economy of $100 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 action taken or planned by another agency; 3) Materially alter the budgetary impact of entitlement, 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. Based on the economic analyses found in Section 4.3, this action is not significant under E.O. 12866.

NMFS Guidance on RFA

NMFS has provided guidance as to how the regulatory flexibility analysis relates to other analyses and other applicable law. (source: "Operational Guidelines, Fishery Management Plan Process" National Marine Fisheries Service, Silver Spring MD, March 1, 1995, Appendix I.2.d.)

"The RFA requires that the agency identify and consider alternatives that minimize the impacts of a regulation on small entities, but it does not require that the agency select the alternative with the least net cost. Section 606 of the RFA clearly states that the requirements of a regulatory flexibility analysis do not alter standards otherwise applicable by law. Executive Order 12866 requires that agencies provide an assessment of the potential costs and benefits of a "significant" action, including an explanation of the manner in which the regulatory action is consistent with a statutory mandate and, to the extent permitted by law, promotes the President's priorities and avoids undue interference with State, local, and tribal governments in the exercise of their governmental function (section 6(a)(3)(B)(ii)). However, the Executive Order also requires agencies to adhere to the requirements of the RFA and other applicable law (section 6(a)(3)). In short, when either the regulatory flexibility analysis or the RIR conflict with a statutory mandate (e.g., the Magnuson Act), the resulting decision must conform to the *statute."*

6.2 Initial Regulatory Flexibility Analysis

When an agency proposes regulations, the RFA requires the agency to prepare and make available for public comment an Initial Regulatory Flexibility Analysis (IRFA) that describes the impact on small businesses, non-profit enterprises, local governments, and other small entities. The IRFA is to aid the agency in considering all reasonable regulatory alternatives that would minimize the economic impact on affected small entities. To ensure a broad consideration of impacts on small entities, NMFS has prepared this IRFA without first making the threshold determination whether this proposed action could be certified as not having a significant economic impact on a substantial number of small entities. NMFS must determine such certification to be appropriate if established by information received in the public comment period.

1) A description of the reasons why the action by the agency is being considered. Since 1995, the Council has annually reviewed its Pacific halibut Area 2A Catch Sharing Plan (Plan) to determine whether there are changes needed to the Plan's fishery management directives for the upcoming fishing year. As described above in Sections 1.2 and 1.3, options for revising the Plan are developed in public meetings conducted by the states of Washington, Oregon, and California, and then reviewed and finalized as recommended changes from the Council. The Council first considers changes to the Plan at its

September meeting, then finalizes those changes at its November meeting. Council recommendations are reviewed and aired by NMFS in the Federal Register, making them available for public review and comment. The action considered in this EA/RIR/IRFA is being considered because of a fundamental change in the effected environment due to the ESA listing of several rockfish species in Puget Sound. Further, this action is being considered to analyze the ongoing implementation of the Council's Catch Sharing Plan (Plan) and annual management measures. The preferred alternative is to continue the annual implementation of the Plan and the annual management measures. The preferred alternative is intended to equitably allocate halibut to tribal, commercial, and recreational users while ensuring the long term sustainable yield of the stock.

Requirements of an IRFA

The Regulatory Flexibility Act (5 U.S.C. 603) states that:
(b) Each initial regulatory flexibility analysis required under this section shall contain--

(1) a description of the reasons why action by the agency is being considered:
(2) a succinct statement of the objectives of, and legal basis for, the proposed rule;
(3) a description of and, where feasible, and estimate of the number of small entities to which the proposed rule will apply;
(4) a description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;
(5) an identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule.

(c) Each initial regulatory flexibility analysis shall also contain a description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities. Consistent with the stated objectives of applicable statutes, the analysis shall discuss significant alternatives such as--

(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;
(2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities;
(3) the use of performance rather than design standards; and
(4) an exemption from coverage of the rule, or any part thereof, for such small entities.

2) A succinct statement of the objectives of, and legal basis for, the proposed rule.

The Northern Pacific Halibut Act of 1982 at 16 U.S.C. 773c provides that the Secretary of Commerce (Secretary) shall have general responsibility to carry out the Halibut Convention between the United States and Canada and that the Secretary shall adopt such regulations as may be necessary to carry out the purposes and objectives of the Convention and the Halibut Act. Section 773c(c) also authorizes the regional fishery management council having authority for the geographic area concerned to develop regulations governing the Pacific halibut catch in U.S. Convention waters that are in addition to, but not in conflict with, regulations of the International Pacific Halibut Commission (IPHC). Accordingly, catch sharing plans to allocate the total allowable catch (TAC) of Pacific halibut between treaty Indian and non-Indian harvesters, and among non-Indian commercial and sport fisheries in IPHC statistical Area 2A (off Washington, Oregon, and California) have been developed each year since 1988 by the Council in accordance with the Halibut Act. In 1995, NMFS implemented a Council-recommended long-term Catch Sharing Plan (Plan) [60 FR 14651, March 20, 1995]. In each of the intervening years between 1995 and the present, minor revisions to the Plan have been made to adjust for the changing needs of the fisheries

3) A description of and, where feasible, and estimate of the number of small entities to which the proposed rule will apply;

Under the RFA, the term small entities includes small businesses, small organizations, and small governmental jurisdictions.

> Small businesses. The SBA has established size criteria for all major industry sectors in the US, including fish harvesting and fish processing businesses. A business involved in fish harvesting is a small business if it is independently owned and operated and not dominant in its field of operation (including its affiliates) and if it has combined annual receipts, not in excess of $19.0 million for all its affiliated operations worldwide. A seafood processor is a small business if it is independently owned and operated, not dominant in its field of operation, and employs 500 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. A business involved in both the harvesting and processing of seafood products is a small business if it meets the $4.0 million criterion for fish harvesting operations. A wholesale business servicing the fishing industry is a small business if it employs 100 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. For marinas and charter/party boats, a small business is one with annual receipts, not in excess of $7.0 million.
>
> Small organizations. The RFA defines a small organization as any nonprofit enterprise that is independently owned and operated and is not dominant in its field.
>
> Small governmental jurisdictions. The RFA defines small governmental jurisdictions as governments of cities, counties, towns, townships, villages, school districts, or special districts with populations of less than 50,000.

In determining the potential universe of entities subject to this rule, we must consider those entities to which this rule applies. Although many small and large nonprofit enterprises track fisheries management issues on the West Coast, the proposed changes to the Plan, codified regulations and annual management measures will not directly affect those enterprises. Similarly, although many fishing communities are small governmental jurisdictions, no direct regulations for those governmental jurisdictions will result from this proposed rule. However, this rule directly affects charterboat operations, and participants in the non-treaty directed commercial fishery off the coast of Washington, Oregon, and California.

Specific data on the economics of halibut charter operations is unavailable. However, in January 2004, the Pacific States Marine Fisheries Commission (PSMFC) completed a report on the overall West Coast charterboat fleet. In surveying charterboat vessels concerning their operations in 2000, the PSMFC estimated that there were about 315 charterboat vessels in operation off Washington and Oregon. In 2000, IPHC licensed 130 vessels to fish in the halibut sport charter fishery. Comparing the total charterboat fleet to

the 130 and 142 IPHC licenses in 2000 and 2007, respectively, approximately 41 to 45 percent of the charterboat fleet could participate in the halibut fishery. The PSMFC has developed preliminary estimates of the annual revenues earned by this fleet and they vary by size class of the vessels and home state. Small charterboat vessels range from 15 to 30 feet and typically carry 5 to 6 passengers. Medium charterboat vessels range from 31 to 49 feet in length and typically carry 19 to 20 passengers. (Neither state has large vessels of greater than 49 feet in their fleet.) Average annual revenues from all types of recreational fishing, whalewatching and other activities ranged from $7,000 for small Oregon vessels to $131,000 for medium Washington vessels. These data confirm that charterboat vessels qualify as small entities under the Regulatory Flexibility Act.

Commercial harvest vessels in West Coast fisheries are generally considered "small vessels" unless they are associated with a catcher-processor company or affiliated with a large shorebased processing company. Catcher-processors cannot target halibut or keep halibut as bycatch. NOAA is unaware that any "large" seafood processing companies are affiliated with any of the IPHC permit holders.

This analysis continues the main conclusions developed in previous analyses that charterboats and the non-treaty directed commercial fishing vessels are small businesses (See 77 FR 5477 (Feb 3, 2012 and 76 FR 2876 (Jan 18, 2011). In 2013 (The most recent data available), the IPHC issues licenses for: the directed commercial fishery in Area 2A (149 licenses in 2013); incidental halibut caught in the salmon troll fishery (332 licenses in 2013); and the charterboat fleet (127 licenses in 2013). No vessel may participate in more than one of these three fisheries per year. A similar situation may occur for charterboat vessels, The number of charter boats in Northern California, Oregon, and Washington that were involved in groundfish trips including halibut during 2010 was 161 (FEIS Table 3-31). Of these, 89 vessels fished in either the Columbia River or Central Oregon fisheries. This suggests that 60 percent of the IPHC charterboat license holders may be affected by these regulations.

4) A description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record.

There are no projected reporting, recordkeeping or other compliance requirements associated with this final rule.

5) An identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule.

No duplicative requirements have been identified.

6) A description of any alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimizes the significant economic impacts of the proposed rule on small entities.

There were no significant alternatives to the propose rule that would minimize any significant impact on small entities.

7.0 COMPLIANCE WITH THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

7.1 Person and Agencies Consulted

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7.2 Finding of No Significant Impact

Finding of No Significant Impact for the Environmental Assessment regarding

CONTINUING IMPLEMENTATION OF THE CATCH SHARING PLAN FOR PACIFIC HALIBUT IN AREA 2A, 2014-2016

March 2014

The National Oceanic and Atmospheric Administration Administrative Order 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality regulations at 40 C.F.R. §1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to jeopardize the sustainability of any target species that may be affected by the action?

Response: The proposed action would not jeopardize the sustainability of Pacific halibut because the Catch Sharing Plan (Plan) allocations do not affect the overall Total Allowable Catch (TAC) of halibut. The TAC is determined through the International Pacific Halibut Commission (IPHC) process and is based on the most recent halibut stock assessment information. This determination is supported by the information presented in section 4.2.1.

2) Can the proposed action reasonably be expected to jeopardize the sustainability of any non-target species?

Response: The proposed action would not jeopardize the sustainability of any non-target species affected by the action because incidental catch of non-target species is regulated

either through state and Federal regulations for sport fisheries or through Federal regulations for groundfish and salmon fisheries that incidentally take halibut. Yelloweye and canary are two overfished species that are caught in halibut fisheries. These species are managed through the Council's groundfish process consistent with rebuilding plans that take into account any bycatch of these species in halibut fisheries. Also, retention of these species is prohibited in the sport fishery coastwide, and closed areas in both state and Federal waters provide protection to habitat where these species are most abundant. For salmon and sablefish bycatch, regulations are in place to limit the incidental take of salmon and groundfish in halibut directed fisheries.

3) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in FMPs?

Response: The proposed action would not cause substantial damage to the ocean, coastal habitats, or essential fish habitat because of the gear, limited geographic scope, and limited duration of the fisheries coupled with the closed areas already in use for both the recreational and commercial fisheries.

The halibut fishery primarily uses longline gear. This gear does contact the seafloor but current measures limit amount of time and the area that this gear is in contact with ocean and coastal habitats and EFH. Further, halibut fisheries must comply with the groundfish closed areas for both the recreational and commercial fisheries. These closed areas are designed to protect rockfish and their habitat. Washington, Oregon, and California also have areas within state waters that are closed to halibut fishing (see sections 3.3.3-3.3.6). Finally, the directed commercial and tribal fisheries are open only a few days per year resulting in limited gear contact with bottom habitat. Therefore, impacts to habitat from this gear have been minimized to the extent practicable.

4) Can the proposed action be reasonably expected to have a substantial adverse impact on public health or safety?

Response: The proposed action would have no impact on public health or safety. Since impacts on public health or safety are not expected, they were not further evaluated in the EA.

5) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?

Response: The proposed action is not expected to adversely affect endangered or threatened species or marine mammals. The effects of the fishery on marine mammals and sea turtles are minor because these species are either not likely to occur in the same areas as the halibut fishery or not likely to interact with the fishery, there are no recorded interactions of the halibut fishery with any marine mammal or sea turtle species. No effects are expected on eulachon because eulachon are too small to be encountered by halibut gear. Salmon are expected to be caught in halibut fisheries but in small numbers, and many of the fish caught are likely from unlisted stocks. Therefore, effects to listed salmon are expected to be minimal. Puget Sound rockfish and green sturgeon are likely

taken as bycatch in halibut fisheries, but the impact to these species is likely to be minor because the amount of bycatch is expected to be small over the duration of the proposed action. NMFS is in consultation with the US Fish and Wildlife Service (USFWS) to determine the effects of the Area 2A Catch Sharing Plan on listed seabirds. However, at this time impacts to seabirds are expected to be minor based on the USFWS BiOp on the groundfish fishery, which concluded that the continued implementation of the sablefish fishery, that uses similar gear and areas as the halibut fishery, was not likely to result in jeopardy to short-tailed albatross. (see section 4.2).

6) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: The proposed action would have no impact on biodiversity and/or ecosystem function within the affected area. No impacts are anticipated because the proposed action makes minor changes to the halibut fishery that do not alter the level of fishing effort or the geographic distribution of effort compared to No Action. Additionally, halibut fisheries do not use trawl gear and therefore, have minimal bycatch or impact on benthic habitat. The proposed action will not have significant impacts on predator-prey relationships because the halibut fishery is managed to ensure sustainability of the halibut stock and does not affect other species in a manner that would change any predator-prey relationship (see section 4.1).

7) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: This action would have no significant interrelated social or economic impacts because there are no significant natural or physical environmental effects. A summary of the socioeconomic and environmental impacts of the alternatives can be found in section 4.7 of the EA.

8) Are the effects on the quality of the human environment likely to be highly controversial?

Response: No, the effects on the human environment from this action are not expected to be controversial. No scientific controversy is anticipated because the Plan and the annual management measures are developed through the Council process with public input through Council meetings and state-sponsored meetings and outreach. NMFS and the Council do not determine the TAC but apply the Plan allocations to the TAC after it has been approved by the IPHC. Therefore, any scientific controversy would likely be handled at the IPHC level during deliberations on the stock assessment or the survey, both of which are conducted by the IPHC. In 2013, the IPHC established new scientific and management review boards with the goal of providing more public input and transparency into the scientific and management processes (see section 4).

9) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?

Response: There will be no impacts on unique areas, such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecological critical areas. This activity would occur in the marine environment and has no direct effect on the biophysical component of the terrestrial environment (see section 4.0).

10) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: The effects on the human environment from the proposed action are neither unique nor unknown. No impacts are anticipated that are highly uncertain or involve unique or unknown risks because the proposed action is the ongoing implementation of the Plan and annual management measures and Plan changes over the last 10 years have been mostly minor adjustments to respond to the needs of the fishery and this is expected to continue. Additionally, the CSP has been in place since 1996, and changes since then have been minor. There were no uncertain effects or unique or unknown risks identified during the development of alternatives for the proposed action, nor did any surface during preparation of the required environmental documentation (see section 4.0).

11) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: The proposed action is not anticipated to have cumulatively significant impacts. This action is not anticipated to set a precedent for future actions because the continued implementation of the Plan and any future changes will continue to be evaluated each year by the Council and any changes made in previous years can be revised for future years (see section 4.4).

12) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources?

Response: No impacts to districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places are expected to occur. Additionally, no impacts are expected that may cause loss or destruction of significant cultural, scientific, or historical resources. The changes to the Plan are developed in collaboration with tribal managers, and the Plan is implemented within the TAC amounts that are designed for long-term sustainability of the halibut resource (see section 4.1).

13) Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

Response: Activities under the proposed action will not involve the transport of non-indigenous species and therefore, this issue is not discussed in the EA. The fishing vessels participating in the proposed action would not increase the risk of introduction through ballast water or hull fouling. Disposition of the catch does not include any translocation of living marine resources, nor use of any nonindigenous species as bait.

14) Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

Response: This action would not set a precedent for future actions because the changes to the Plan for 2014 and the continued implementation of the Plan are evaluated each year by the Council and any changes done in previous years can be revised for future years (see section 3.3).

15) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

Response: This action would not threaten any Federal, state, or local law or requirement for the protection of the environment. The Plan and annual management measures are developed in cooperation with tribal and state managers, and the NMFS Office of Law Enforcement.

Chapter 6 of the EA describes potentially applicable cross-cutting mandates and the proposed action would be implemented to comply with these laws and executive orders for the protection of the environment.

16) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: The proposed action is not expected to result in adverse effects or in cumulative adverse impacts. Halibut fisheries are managed in a sustainable manner consistent with the Halibut Act and other applicable law, and are evaluated every year through the IPHC stock assessment and the Council's review of the Plan. Therefore, any expected impacts to halibut may be addressed on an annual basis through changes to the Plan. Any affects to the non-target species from implementation of the Plan discussed in this EA (sablefish, yelloweye and canary rockfish, and salmon) are expected to be negligible because these species are managed through separate processes which account for bycatch in the halibut fisheries and are not anticipated to be affected by Plan implementation. Any effects to seabirds are expected to be negligible because there have been no reported interactions between halibut fisheries and seabirds. There are no cumulative effects that would create further impacts to any listed species (see section 4.4).

DETERMINATION

In view of the information presented in this document and the analysis contained in the 2014 final EA, it is hereby determined that the proposed action will not significantly impact the quality of the human environment. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

_____ _____

Deputy Regional Administrator, NOAA Fisheries,
West Coast Region Date

7.3 Comments received on the Environmental Assessment

NMFS received one comment on the EA. This comment addressed the Catch Sharing Plan allocation for incidental take of halibut in the salmon troll fishery and recommended the allocation for the directed commercial halibut fishery be decreased and the incidental allocation to the salmon troll fishery be increased. The proposed action does not address allocations in the Catch Sharing Plan but rather focuses on the ongoing implementation of the Catch Sharing Plan; therefore, this comment is not addressed here.

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Appendix A
2014 Catch Sharing Plan

2014 PACIFIC HALIBUT CATCH SHARING PLAN FOR AREA 2A

(a) FRAMEWORK

This Plan constitutes a framework that shall be applied to the annual Area 2A total allowable catch (TAC) approved by the International Pacific Halibut Commission (IPHC) each January. The framework shall be implemented in both IPHC regulations and domestic regulations (implemented by NMFS) as published in the *Federal Register*.

(b) ALLOCATIONS

This Plan allocates 35 percent of the Area 2A TAC to U.S. treaty Indian tribes in the State of Washington in subarea 2A-1, and 65 percent to non-Indian fisheries in Area 2A. The allocation to non-Indian fisheries is divided into four shares, with the Washington sport fishery (north of the Columbia River) receiving 36.6 percent, the Oregon sport fishery receiving 30.7 percent, the California sport fishery receiving 1.0 percent, and the commercial fishery receiving 31.7 percent. Allocations within the non-Indian commercial and sport fisheries are described in sections (e) and (f) of this Plan. These allocations may be changed if new information becomes available that indicates a change is necessary and/or the Pacific Fishery Management Council takes action to reconsider its allocation recommendations. Such changes will be made after appropriate rulemaking is completed and published in the *Federal Register*.

(c) SUBQUOTAS

The allocations in this Plan are distributed as subquotas to ensure that any overage or underage by any one group will not affect achievement of an allocation set aside for another group. The specific allocative measures in the treaty Indian, non-Indian commercial, and non-Indian sport fisheries in Area 2A are described in paragraphs (d) through (f) of this Plan.

(d) TREATY INDIAN FISHERIES

Thirty-five percent of the Area 2A TAC is allocated to 13 treaty Indian tribes in subarea 2A-1, which includes that portion of Area 2A north of Point Chehalis, WA (46°53.30' N. lat.) and east of 125°44.00' W. long. The treaty Indian allocation is to provide for a tribal commercial fishery and a ceremonial and subsistence fishery. These two fisheries are managed separately; any overages in the commercial fishery do not affect the ceremonial and subsistence fishery. The commercial fishery is managed to achieve an established subquota, while the ceremonial and subsistence fishery is managed for a year-round season. The tribes will estimate the ceremonial and subsistence harvest expectations in January of each year, and the remainder of the allocation will be for the tribal commercial fishery.

(1) The tribal ceremonial and subsistence fishery begins on January 1 and continues through December 31. No size or bag limits will apply to the ceremonial and subsistence fishery, except that when the tribal commercial fishery is closed, treaty Indians may take and retain not more than two halibut per day per person for subsistence purposes. Ceremonial fisheries shall be managed by tribal regulations promulgated inseason to meet the needs of specific ceremonial events. Halibut taken for ceremonial and subsistence purposes may not be offered for sale or sold.

(2) The tribal commercial fishery season dates will be set within the season dates determined by the IPHC and implemented in IPHC regulations. The tribal commercial fishery will close when the subquota is taken. Any halibut sold by treaty Indians during the commercial fishing season must comply with IPHC regulations on size limits for the non-Indian fishery.

(e) NON-INDIAN COMMERCIAL FISHERIES

The non-Indian commercial fishery is allocated 31.7 percent of the non-Indian share of the Area 2A TAC for a directed halibut fishery and an incidental catch fishery during the salmon troll fishery. The non-Indian commercial allocation is approximately 20.6 percent of the Area 2A TAC. Incidental catch of halibut in the primary directed sablefish fishery north of Point Chehalis, WA will be authorized if the Washington sport allocation exceeds 224,110 lb (101.7 mt) as described in section (e)(3) of this Plan. The structuring and management of these three fisheries is as follows.

(1) Incidental halibut catch in the salmon troll fishery.

Fifteen percent of the non-Indian commercial fishery allocation is allocated to the salmon troll fishery in Area 2A as an incidental catch during salmon fisheries. The quota for this incidental catch fishery is approximately 3.1 percent of the Area 2A TAC. The primary management objective for this fishery is to harvest the troll quota as an incidental catch during the April-June salmon troll fishery. The secondary management objective is to harvest the remaining troll quota as an incidental catch during the remainder of the salmon troll fishery.

(i) The Council will recommend landing restrictions at its spring public meeting each year to control the amount of halibut caught incidentally in the troll fishery. The landing restrictions will be based on the number of incidental harvest license applications submitted to the IPHC, halibut catch rates, the amount of allocation, and other pertinent factors, and may include catch or landing ratios, landing limits, or other means to control the rate of halibut harvest. NMFS will publish the landing restrictions annually in the *Federal Register*, along with the salmon management measures.

(ii) Inseason adjustments to the incidental halibut catch fishery.

(A) NMFS may make inseason adjustments to the landing restrictions, if requested by the Council Chairman, as necessary to assure that the incidental harvest rate is appropriate for salmon and halibut availability, does not encourage target fishing on halibut, and does not increase the likelihood of exceeding the quota for this fishery. In determining whether to make such inseason adjustments, NMFS will consult with the applicable state representative(s), a representative of the Council's Salmon Advisory Sub-Panel, and Council staff.

(B) Notice and effectiveness of inseason adjustments will be made by NMFS in accordance with paragraph (f)(5) of this Plan.

(iii) If the overall quota for the non-Indian, incidental commercial troll fishery has not been harvested by salmon trollers during the April-June fishery, additional landings of halibut caught incidentally during salmon troll fisheries will be allowed in July and will continue until the amount of halibut that was initially available as quota for the troll fishery is taken or until the end of the season date for commercial halibut fishing determined by the IPHC and implemented in IPHC regulation. Landing restrictions implemented for the April-June salmon troll fishery will apply for as long as this fishery is open. Notice of the July opening of this fishery will be announced on the NMFS hotline (206) 526-6667 or (800) 662-9825. Halibut retention in the salmon troll fishery will be allowed after June only if the opening has been announced on the NMFS hotline.

(iv) A salmon troller may participate in this fishery or in the directed commercial fishery targeting halibut, but not in both.

(v) Under the Pacific Coast groundfish regulations at 50 CFR 660.330, fishing with salmon troll gear is prohibited within the Salmon Troll Yelloweye Rockfish Conservation Area (YRCA). The Salmon Troll YRCA is an area off the northern Washington coast and is defined by straight lines connecting latitude and longitude coordinates. Coordinates for the Salmon Troll YRCA are specified in groundfish regulations at 50 CFR 660.70(c) and in salmon regulations at 50 CFR 660.405(c).

(2) Directed fishery targeting halibut.

Eighty-five percent of the non-Indian commercial fishery allocation is allocated to the directed fishery targeting halibut (e.g., longline fishery) in southern Washington, Oregon, and California. The allocation for this directed catch fishery is approximately 17.5 percent of the Area 2A TAC. This fishery is confined to the area south of Subarea 2A-1 (south of Point Chehalis, WA; 46°53.30' N. lat.). This 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. The commercial fishery opening date(s), duration, and vessel trip limits, as necessary to ensure that the quota for the non-Indian commercial fisheries is not exceeded, will be determined by the IPHC and implemented in IPHC regulations. If the IPHC determines that poundage remaining in the quota for the non-Indian commercial fisheries is insufficient to allow an additional day of directed halibut fishing, the remaining halibut will be made available for incidental catch of halibut in the fall salmon troll fisheries (independent of the incidental harvest allocation).

(3) Incidental catch in the sablefish fishery north of Point Chehalis.

If the Area 2A TAC is greater than 900,000 lb (408.2 mt), the primary directed sablefish fishery north of Point Chehalis will be allocated the Washington sport allocation that is in excess of 214,110 lb (97.1 mt), provided a minimum of 10,000 lb (4.5 mt) is available (i.e., the Washington sport allocation is 224,110 lb (101.7 mt) or greater). If the amount above 214,110 lb (97.1 mt) is less than 10,000 lb (4.5 mt), then the excess will be allocated to the Washington sport subareas according to section (f) of this Plan. The amount of halibut allocated to the sablefish fishery will be shared as follows: up to 70,000 lb of halibut to the primary sablefish fishery north of Pt. Chehalis. Any remaining allocation will be distributed to the Washington sport fishery among the four subareas according to the sharing described in the Plan, Section (f)(1).

The Council will recommend landing restrictions at its spring public meeting each year to control the amount of halibut caught incidentally in this fishery. The landing restrictions will be based on the amount of the allocation and other pertinent factors, and may include catch or landing ratios, landing limits, or other means to control the rate of halibut landings. NMFS will publish the landing restrictions annually in the Federal Register.

Under Pacific Coast groundfish regulations at 50 CFR 660.230, fishing with limited entry fixed gear is prohibited within the North Coast Commercial Yelloweye Rockfish Conservation Area (YRCA) and the Non-Trawl Rockfish Conservation Area (RCA). The North Coast Commercial Yelloweye Rockfish Conservation Area YRCA is an area off the northern Washington coast, overlapping the northern part of North Coast Recreational YRCA. The Non-Trawl RCA is an area off the Washington coast. These closed areas are defined by straight lines connecting latitude and longitude coordinates. Coordinates for the North Coast Commercial YRCA are specified in groundfish regulations at 50 CFR 660.70(b). Coordinates for the Non-Trawl RCA are specified in groundfish regulations at 50 CFR 660.73.

(4) Commercial license restrictions/declarations.

Commercial fishers must choose either (1) to operate in the directed commercial fishery in Area 2A and/or retain halibut caught incidentally in the primary directed sablefish fishery north of Point Chehalis, WA or (2) to retain halibut caught incidentally during the salmon troll fishery. Unless otherwise required by IPHC regulations, commercial fishers must obtain an individual vessel license for each commercial fishery: (1) to operate in the directed commercial fishery in Area 2A; or (2) to retain halibut caught incidentally in the primary sablefish fishery north of Point Chehalis, WA; or (3) to retain halibut caught incidentally during the salmon troll fishery. Commercial fishers wishing to operate in both the directed commercial fishery in Area 2A and/or retain halibut caught incidentally in the primary directed sablefish fishery north of Point Chehalis, WA may not obtain a vessel license to retain halibut caught incidentally during the salmon troll season. Commercial fishers operating in the directed halibut fishery must send their vessel license application to the IPHC postmarked no later than April 30, or the first weekday in May, if April 30 falls on a weekend, in order to obtain a vessel license to fish for halibut in Area 2A. Unless otherwise required by IPHC regulations, commercial fishers operating in the primary sablefish fishery north of Point Chehalis, WA who seek to retain incidentally caught halibut must send their vessel license application to the IPHC postmarked no later than March 15, or the first weekday following March 15, if March 15 falls on a weekend, in order to obtain a vessel license to retain incidentally caught halibut in Area 2A. Unless otherwise required by IPHC regulations, commercial fishers operating in the salmon troll fishery who seek to retain incidentally caught halibut must send their vessel license application to the IPHC postmarked no later than March 15, or the first weekday following March 15, if March 15 falls on a weekend, in order to obtain a vessel license to retain incidentally caught halibut in Area 2A. Fishing vessels licensed by IPHC to fish commercially in Area 2A are prohibited from operating in the sport fisheries in Area 2A.

(f) SPORT FISHERIES

The non-Indian sport fisheries are allocated 68.3 percent of the non-Indian share, which is approximately 44.4 percent of the Area 2A TAC. The allocation is further divided as subquotas among seven geographic subareas.

(1) Subarea management. The sport fishery is divided into seven sport fishery subareas, each having separate allocations and management measures as follows.

(i) Washington inside waters (Puget Sound) subarea.

This sport fishery subarea is allocated 23.5 percent of the first 130,845 lb (59.4 mt) allocated to the Washington sport fishery, and 32 percent of the Washington sport allocation between 130,845 lb (59.4 mt) and 224,110 lb (101.7 mt) (except as provided in section (e)(3) of this Plan). This subarea is defined as all U.S. waters east of the mouth of the Sekiu River, as defined by a line extending from 48°17.30' N. lat., 124°23.70' W. long. north to 48°24.10' N. lat., 124°23.70' W. long., including Puget Sound. The structuring objective for this subarea is to provide a stable sport fishing opportunity and maximize the season length. To that end, the Puget Sound subarea may be divided into two regions with separate

seasons to achieve a fair harvest opportunity within the subarea. Due to inability to monitor the catch in this area inseason, fixed seasons, which may vary and apply to different regions within the subarea, will be established preseason based on projected catch per day and number of days to achievement of the quota. Inseason adjustments may be made, and estimates of actual catch will be made postseason. The fishery will open in April or May and continue until a date~~s~~ established preseason (and published in the sport fishery regulations) when the quota is predicted to be taken, or until September 30, whichever is earlier. The Washington Department of Fish and Wildlife will develop recommendations to NMFS on the opening date and weekly structure of the fishery each year. The daily bag limit is one fish per person, with no size limit.

(ii) Washington north coast subarea.

This sport fishery subarea is allocated 62.2 percent of the first 130,845 lb (59.4 mt) allocated to the Washington sport fishery, and 32 percent of the Washington sport allocation between 130,845 lb (59.4 mt) and 224,110 lb (101.7 mt) (except as provided in section (e)(3) of this Plan). This subarea is defined as all U.S. waters west of the mouth of the Sekiu River, as defined above in paragraph (f)(1)(i), and north of the Queets River (47°31.70' N. lat.). The management objective for this subarea is to provide a quality recreational fishing opportunity during May and June. The fishery will open on the first Thursday between May 9 and 15, and continue 2 days per week (Thursday and Saturday) in May for two weeks, with a quota management closure scheduled for the third week. If sufficient quota remains, the fishery will reopen on the following Thursday or Saturday. Any openings after the quota management closure will be scheduled to allow adequate public notice of any inseason action before each opening.

No sport fishing for halibut is allowed after September 30. If the fishery is closed prior to September 30, and there is insufficient quota remaining to reopen for another fishing day, then any remaining quota may be transferred inseason to another Washington coastal subarea by NMFS via an update to the recreational halibut hotline. The daily bag limit in all fisheries is one halibut per person with no size limit.

Recreational fishing for groundfish and halibut is prohibited within the North Coast Recreational Yelloweye Rockfish Conservation Area (YRCA). The North Coast Recreational YRCA is a C-shaped area off the northern Washington coast and is defined by straight lines connecting latitude and longitude coordinates. Coordinates for the North Coast Recreational YRCA are specified in groundfish regulations at 50 CFR 660.70(a) and will be described annually in federal halibut regulations published in the *Federal Register*.

(iii) Washington south coast subarea.

This sport fishery is allocated 12.3 percent of the first 130,845 lb (59.4 mt) allocated to the Washington sport fishery, and 32 percent of the Washington sport allocation between 130,845 lb (59.4 mt) and 224,110 lb (101.7 mt) (except as provided in section (e)(3) of this Plan. This subarea is defined as waters south of the Queets River (47°31.70' N. lat.) and north of Leadbetter Point (46°38.17' N. lat.). The structuring objective for this subarea is to maximize the season length, while maintaining a quality fishing experience. The south coast subarea quota will be allocated as follows: 10% or 2,000 pounds, whichever is less, will be set aside for the nearshore fishery with the remaining amount allocated to the primary fishery. During days open to the primary fishery and seaward of the 30-fm line lingcod may be taken, retained and possessed, when allowed by groundfish regulations. The fishery will open on the first Sunday in May. The primary fishery will be open two days per week, Sunday and Tuesday, in all areas, except where prohibited, and will remain open for three consecutive Sundays and Tuesdays before a management closure the following week to tally the catch. If the primary quota is projected to be obtained sooner than expected the management closure may occur earlier. If there is sufficient quota remaining following the management closure the fishery would continue two days per week, Sunday and/or Tuesday, until the quota for the primary fishery season is reached or September 30, whichever is earlier. If there is insufficient quota remaining to reopen the primary fishery for another fishing day, the remaining primary fishery quota will be added to the nearshore quota. The nearshore fishery takes place, in the area from 47°31.70' N. lat. south to 46°58.00' N. lat. and east of a boundary line approximating the 30 fathom depth contour as defined by the following coordinates:

47°31.70´ N.lat, 124°37.03´ W. long;
47°25.67´ N. lat, 124°34.79´ W. long;
47°12.82´ N. lat, 124°29.12´ W. long;
46°58.00´ N. lat, 124°24.24´ W. long.

During the primary season the nearshore fishery will be open seven days per week. Subsequent to the closure of the primary fishery, the nearshore fishery will continue seven days per week until the remaining quota is projected to be taken. If the fishery is closed prior to September 30, and there is insufficient quota remaining to reopen the nearshore areas for another fishing day, then any remaining quota may be transferred inseason to another Washington coastal subarea by NMFS via an update to the recreational halibut hotline. The daily bag limit is one halibut per person, with no size limit.

Recreational fishing for groundfish and halibut is prohibited within two YRCA's off Washington's southern coast. The South Coast Recreational YRCA and the Westport Offshore YRCA are defined by straight lines connecting latitude and longitude coordinates. Coordinates for these Recreational YRCAs are specified in groundfish regulations at 50 CFR 660.70 (d) and (e) and will be described annually in federal halibut regulations published in the *Federal Register*.

(iv) Columbia River subarea.

This sport fishery subarea is allocated 2.0 percent of the first 130,845 lb (59.4 mt) allocated to the Washington sport fishery, and 4.0 percent of the Washington sport allocation between 130,845 lb (59.4 mt) and 224,110 lb (101.7 mt) (except as provided in section (e)(3) of this Plan). This subarea is also allocated an amount equal to the contribution from the Washington sport allocation from the Oregon sport allocation. This subarea is defined as waters south of Leadbetter Point, WA (46°38.17' N. lat.) and north of Cape Falcon, OR (45°46.00' N. lat.). The Columbia River subarea seasons are as follows:

a. A nearshore fishery is allocated 10 percent or 1,500 pounds of the Columbia River subarea allocation, whichever is less, to allow incidental halibut retention on groundfish trips in the area shoreward of the boundary line approximating the 30 fathom (55 m) depth contour extending from Leadbetter Point, WA (46°38.17' N. lat., 124°15.88' W. long.) to the Washington-Oregon border (46°16.00' N. lat., 124°15.88' W. long.) and from there, connecting to the boundary line approximating the 40 fathom (73 m) depth contour in Oregon. Coordinates will be specifically defined at 50 CFR 660.71 through 660.74. The nearshore fishery will be open Monday through Wednesday following the opening of the early season all-depth fishery, until the nearshore allocation is taken or September 30, whichever is earlier. Taking, retaining, possessing or landing halibut on groundfish trips is only allowed in the nearshore area on days not open to all-depth Pacific halibut fisheries. The daily bag limit is one halibut per person, with no size limit.

b. The remaining Columbia River subarea allocation will be allocated such that 80 percent is reserved for an early season all-depth fishery beginning in May and 20 percent reserved for a late season all-depth fishery beginning in August. The early season all-depth fishery will open on the first Thursday in May or May 1 if it is a Friday, Saturday or Sunday, 4 days per week, Thursday through Sunday until the early season portion of the subarea allocation is taken. The fishery will reopen for the late season all-depth fishery on the first Thursday in August and continue 4 days per week, Thursday-Sunday until the remainder of the subarea quota has been taken, or until September 30, whichever is earlier. The early and late seasons will run continuously, unless closed due to quota attainment. Any remaining early season all depth quota will automatically be available to the late season all-depth fishery. Subsequent to the closure, if there is insufficient quota remaining in the Columbia River subarea for another fishing day, then

any remaining quota may be transferred inseason to another Washington and/or Oregon subarea by NMFS via an update to the recreational halibut hotline. Any remaining quota would be transferred to each state in proportion to its contribution. The daily bag limit is one halibut per person, with no size limit. No groundfish may be taken and retained, possessed or landed, except sablefish and Pacific cod when allowed by groundfish regulations, if halibut are on board the vessel.

(v) Oregon central coast subarea.

This subarea extends from Cape Falcon (45°46.00' N. lat.) to Humbug Mountain, Oregon (42°40.50' N. lat.) and is allocated the Oregon sport allocation minus any amount of pounds needed to contribute to the Oregon portion of the Columbia River subarea quota. If the overall 2A TAC is 700,000 pounds (317.5 mt) or greater, the structuring objectives for this subarea are to provide two periods of fishing opportunity in Spring and in Summer in productive deeper water areas along the coast, and provide a period of fishing opportunity in the summer for nearshore waters. If the overall 2A TAC is less than 700,000 pounds (317.5 mt), the structuring objectives for this subarea are to provide a period of fishing opportunity beginning in Spring in productive deeper water areas along the coast, and provide a period of fishing opportunity in nearshore waters. Any poundage remaining unharvested in the Spring all-depth subquota will be added to either the Summer all-depth sub-quota or the nearshore subquota based on need, determined via joint consultation between IPHC, NMFS and ODFW. If the 2A TAC exceeds 700,000 pounds, any poundage that is not needed to extend the inside 40-fathom (73 m) fishery through October 31 will be added to the Summer all-depth season if it can be used, and any poundage remaining unharvested from the Summer all-depth fishery will be added to the inside 40-fathom (73 m) fishery subquota, if it can be used. If inseason it is determined via joint consultation between IPHC, NMFS and ODFW, that the combined all-depth and inside 40-fathom (73 m) fisheries will not harvest the entire quota to the subarea, quota may be transferred inseason to another subarea south of Leadbetter Point, WA by NMFS via an update to the recreational halibut hotline. The daily bag limit is one halibut per person, unless otherwise specified, with no size limit. During days open to all-depth halibut fishing, no groundfish may be taken and retained, possessed or landed, except sablefish and Pacific cod when allowed by groundfish regulations, if halibut are on board the vessel.

Recreational fishing for groundfish and halibut is prohibited within the Stonewall Bank YRCA. The Stonewall Bank YRCA is an area off central Oregon, near Stonewall Bank, and is defined by straight lines connecting latitude and longitude coordinates. Coordinates for the Stonewall Bank YRCA are specified in groundfish regulations at 50 CFR 660.70 (f) and will be described annually in federal halibut regulations published in the *Federal Register*.

ODFW will sponsor a public input process shortly after the IPHC annual meeting to develop recommendations to NMFS on the open dates for each season each year. The three seasons for this subarea are as follows.

A. The first season (nearshore fishery) opens July 1, 7 days per week, only in waters inside the 40-fathom (73 m) curve. The fishery continues until the subquota is taken, or until October 31, whichever is earlier and is allocated 12 percent of the subarea quota if the 2A TAC is above 700,000 pounds (317.5 mt) or greater or 25 percent of the subarea quota if the 2A TAC is less than 700,000 pounds (317.5 mt). Any overage in the all-depth fisheries would not affect achievement of allocation set aside for the inside 40-fathom (73 m) curve fishery.

B. The second season (Spring fishery) is an all-depth fishery with two potential openings and is allocated 61 percent of the subarea quota if the TAC is 700,000 pounds (317.5 mt) or greater, or 73 percent of the subarea quota if the subarea if the 2A TAC is less than 700,000 pounds (317.5 mt). Fixed season dates will be established preseason for the first Spring opening and will not be modified inseason except if the combined Oregon all-depth Spring and Summer season total quotas are estimated to be achieved. Recent year catch rates will be used as a guideline for estimating the catch rate for the Spring fishery each year. The number of fixed season days established will be based on the projected catch per day with the intent of not exceeding the subarea subquota for this season. The first opening will be structured for 2 days per week (Friday and Saturday) if the season is for 4 or fewer fishing days. The fishery will be structured for 3 days per week (Thursday through Saturday) if the season is for 5 or more fishing days. The fixed season dates will occur in consecutive weeks starting the second Thursday in May (if the season is 5 or more fishing days) or second Friday in May (if the season is 4 or fewer fishing days), with possible exceptions to avoid adverse tidal conditions. If, following the "fixed" dates, quota for this season remains unharvested, a second opening will be held. If it is determined appropriate through joint consultation between IPHC, NMFS and ODFW, fishing may be allowed on one or more additional days. Notice of the opening(s) will be announced by NMFS via an update to the recreational halibut hotline. The fishery will be open every other week on Thursday through Saturday except that week(s) may be skipped to avoid adverse tidal conditions. The potential open Thursdays through Saturdays will be identified preseason. The fishery will continue until there is insufficient quota for an additional day of fishing or July 31, whichever is earlier if the 2A TAC is 700,000 pounds (317.5 mt) or greater. If the 2A TAC is less than 700,000 pounds (317.5 mt) the fishery will continue until there is insufficient quota for an additional day of fishing or October 31, whichever is earlier.

C. The last season (summer fishery) is an all-depth fishery that begins on the first Friday in August and is allocated 25 percent of the subarea quota if the 2A TAC is 700,000 pounds (317.5 mt) or greater. If the 2A TAC is less than 700,000 pounds (317.5 mt) then 0 percent of the subarea quota will be allocated to this season. The fishery will be structured to be open every other week on Friday and Saturday except that week(s) may be skipped to avoid adverse tidal conditions. The fishery will continue until there is insufficient quota remaining to reopen for another fishing day or October 31, whichever is earlier. The potential open Fridays and Saturdays will be identified preseason. If after the first scheduled open period, the remaining Cape Falcon to Humbug Mountain entire season quota (combined all-depth and inside 40-fathom (73 m) quotas) is 60,000 lb (27.2 mt) or more, the fishery will re-open on every Friday and Saturday (versus every other Friday and Saturday), if determined to be appropriate through joint consultation between IPHC, NMFS, and ODFW. The inseason action will be announced by NMFS via an update to the recreational halibut hotline. If after the Labor Day weekend, the remaining Cape Falcon to Humbug Mountain entire season quota (combined all-depth and inside 40-fathom (73 m) quotas) is 30,000 lb (13.6 mt) or more and the fishery is not already open every Friday and Saturday, the fishery will re-open on every Friday and Saturday (versus every other Friday and Saturday), if determined to be appropriate through joint consultation between IPHC, NMFS, and ODFW. After the Labor Day weekend, the IPHC, NMFS, and ODFW will consult to determine whether increasing the Oregon Central Coast bag limit to two fish is warranted with the intent that the quota for the subarea is taken by September 30. If the quota is not taken by September 30, the season will remain open, maintaining the bag limit in effect at that time, through October 31 or quota attainment, whichever is earlier. The inseason action will be announced by NMFS via an update to the recreational halibut hotline.

(vi) Southern Oregon Subarea

This sport fishery is allocated 2.0 percent of the Oregon Central Coast Subarea allocation. This area is defined as the area south of Humbug Mountain, OR (42° 40.50' N. lat.) to the Oregon/California Border (42° 00.00' N. lat.). This fishery will open May 1, seven days per week until the subquota is taken or October 31, whichever is earlier. The daily bag limit is one halibut per person with no size limit.

(vii) California subarea.

This sport fishery subarea is allocated 1.0 percent of the non-Indian allocation. This area is defined as the area south of the Oregon/California Border (42° 00.00' N. lat.), including all California waters. The structuring objective for this subarea

is to provide anglers the opportunity to fish in a fixed season that is open from May 1 through July 31 and September 1 through October 31. The daily bag limit is one halibut per person, with no size limit. Due to inability to monitor the catch in this area inseason, a fixed season will be established preseason by NMFS based on projected seasonal catch; no inseason adjustments will be made, and estimates of actual catch will be made post season.

(2) Port of landing management. All sport fishing in Area 2A will be managed on a "port of landing" basis, whereby any halibut landed into a port will count toward the quota for the subarea in which that port is located, and the regulations governing the subarea of landing apply, regardless of the specific area of catch.

(3) Possession limits. The sport possession limit on land in Washington is two daily bag limits, regardless of condition, but only one daily bag limit may be possessed on the vessel. The sport possession limit on land in Oregon is three daily bag limits, regardless of condition, but only one daily bag limit may be possessed on the vessel. The sport possession limit on land in California and on the vessel is one daily bag limit, regardless of condition.

(4) Ban on sport vessels in the commercial fishery. Vessels operating in the sport fishery for halibut in Area 2A are prohibited from operating in the commercial halibut fishery in Area 2A. Sport fishers and charterboat operators must determine, prior to May 1 of each year, whether they will operate in the commercial halibut fisheries in Area 2A which requires a commercial fishing license from the IPHC. Sport fishing for halibut in Area 2A is prohibited from a vessel licensed to fish commercially for halibut in Area 2A.

(5) Flexible inseason management provisions.

(i) The Regional Administrator, NMFS Northwest Region, after consultation with the Chairman of the Pacific Fishery Management Council, the IPHC Executive Director, and the Fisheries Director(s) of the affected state(s), or their designees, is authorized to modify regulations during the season after making the following determinations.

(A) The action is necessary to allow allocation objectives to be met.

(B) The action will not result in exceeding the catch limit for the area.

(C) If any of the sport fishery subareas north of Cape Falcon, OR are not projected to utilize their respective quotas by September 30, NMFS may take inseason action to transfer any projected unused quota to another Washington sport subarea.

(D) If any of the sport fishery subareas south of Leadbetter Point, WA are not projected to utilize their respective quotas by their season

ending dates, NMFS may take inseason action to transfer any projected unused quota to another Oregon sport subarea.

(ii) Flexible inseason management provisions include, but are not limited to, the following:

(A) Modification of sport fishing periods;

(B) Modification of sport fishing bag limits;

(C) Modification of sport fishing size limits;

(D) Modification of sport fishing days per calendar week; and

(E) Modification of subarea quotas.

(iii) Notice procedures.

(A) Inseason actions taken by NMFS will be published in the *Federal Register*.

(B) Actual notice of inseason management actions will be provided by a telephone hotline administered by the Northwest Region, NMFS, at 206-526-6667 or 800-662-9825 (May through October) and by U.S. Coast Guard broadcasts. These broadcasts are announced on Channel 16 VHF-FM and 2182 kHz at frequent intervals. The announcements designate the channel or frequency over which the notice to mariners will be immediately broadcast. Since provisions of these regulations may be altered by inseason actions, sport fishermen should monitor either the telephone hotline or U.S. Coast Guard broadcasts for current information for the area in which they are fishing.

(iv) Effective dates.

(A) Inseason actions will be effective on the date specified in the Federal Register notice or at the time that the action is filed for public inspection with the Office of the Federal Register, whichever is later.

(B) If time allows, NMFS will invite public comment prior to the effective date of any inseason action filed with the *Federal Register*. If the Regional Administrator determines, for good cause, that an inseason action must be filed without affording a prior opportunity for public comment, public comments will be

received for a period of 15 days after of the action in the *Federal Register*.

(C) Inseason actions will remain in effect until the stated expiration date or until rescinded, modified, or superseded. However, no inseason action has any effect beyond the end of the calendar year in which it is issued.

(v) Availability of data. The Regional Administrator will compile, in aggregate form, all data and other information relevant to the action being taken and will make them available for public review during normal office hours at the Northwest Regional Office, NMFS, Sustainable Fisheries Division, 7600 Sand Point Way NE, Seattle, WA.

(6) Sport fishery closure provisions.

The IPHC shall determine and announce closing dates to the public for any subarea in which a subquota is estimated to have been taken. When the IPHC has determined that a subquota has been taken, and has announced a date on which the season will close, no person shall sport fish for halibut in that area after that date for the rest of the year, unless a reopening of that area for sport halibut fishing is scheduled by NMFS as an inseason action, or announced by the IPHC.

(g) PROCEDURES FOR IMPLEMENTATION

Each year, NMFS will publish a proposed rule with any regulatory modifications necessary to implement the Plan for the following year, with a request for public comments. The comment period will extend until after the IPHC annual meeting, so that the public will have the opportunity to consider the final Area 2A TAC before submitting comments. After the Area 2A TAC is known, and after NMFS reviews public comments, NMFS will implement final rules governing the sport fisheries. The final ratio of halibut to Chinook to be allowed as incidental catch in the salmon troll fishery will be published with the annual salmon management measures.

Sources:

77 FR 16740 (March 22, 2012)
76 FR 14300 (March 16, 2011)
75 FR 13024 (March 18, 2010)
74 FR 11681 (March 19, 2009)
73 FR 12280 (March 7, 2008)
72 FR 11792 (March 14, 2007)
71 FR 10850 (March 3, 2006)
70 FR 20304 (April 19, 2005)
69 FR 24524 (May 4, 2004)
68 FR 10989 (March 7, 2003)
67 FR 12885 (March 20, 2002)
66 FR 15801 (March 21, 2001)
65 FR 14909 (March 20, 2000)
64 FR 13519 (March 19, 1999)
63 FR 13000 (March 17, 1998)
62 FR 12759 (March 18, 1997)
61 FR 11337 (March 20, 1996)
60 FR 14651 (March 20, 1995)
59 FR 22522 (May 2, 1994)
58 FR 17791 (April 6, 1993)

Appendix B
NMFS Report on 2013 Halibut fisheries. This report was presented at the 2014 Annual IPHC meeting January 2014.

REPORT ON THE 2013 PACIFIC HALIBUT FISHERIES IN AREA 2A
(12/27/2013)

The 2013 Area 2A total allowable catch (TAC) of 990,000 lbs set by the International Pacific Halibut Commission (IPHC) was allocated as follows:

Treaty Tribes	346,500 lbs (35%)
Non-Tribal Total	643,500 lbs (65%)
Non-Tribal Commercial	225,400 lbs
Washington Sport	214,110 lbs
Oregon/California Sport	203,990 lbs

All weights in this report are net weight (gutted, head-off, and without ice and slime.) The structure of each fishery and the resulting harvests are described below. Refer to the table at the end of this report for the catches by the tribal, commercial and recreational fisheries.

NON-TRIBAL COMMERCIAL FISHERIES

A quota of 225,400 lbs (31.7% of the non-tribal share + 21,410 lbs for incidental halibut catch in the sablefish primary fishery) was allocated to two fishery components: 1) a directed longline fishery targeting on halibut south of Point Chehalis, WA; and 2) an incidental catch fishery during the salmon troll fisheries off Washington, Oregon, and California. An additional 21,410 lbs were allocated to an incidental catch fishery in the sablefish primary fishery for vessels using longline gear north of Point Chehalis, WA. This allowance for the sablefish primary fishery is only available in years when the overall Area 2A TAC exceeds 900,000 lbs and is taken from the portion of the Washington sport allocation that is above 214,110, as long as the amount is at least 10,000 lbs.

Incidental halibut catch in the salmon troll fishery

A quota of 30,600 lbs of Pacific halibut (15% of the non-tribal commercial fishery allocation) was allocated to the non-tribal commercial salmon troll fishery in Area 2A as incidental catch during salmon troll fisheries. During the development of the 2013 Catch Sharing Plan (CSP) the management objective for this fishery was changed from May-June to April-June. This change was made in anticipation of the 2014 pre-May salmon fisheries not for the 2013 fisheries. Therefore, in 2013 halibut retention was allowed beginning May 1, even though the CSP had already been amended to reflect the April-June timing.

If any of the allocation for this fishery remains after June 30, the fishery may continue to retain incidentally caught halibut in the salmon troll fisheries until the quota is taken. The final catch ratio established preseason by the Council at the April 2013 meeting was one halibut (minimum 32 inches) per three Chinook landed by a salmon troller, except that one halibut could be landed without meeting the ratio requirement, and no more than 15 halibut could be landed per open period. Fishing with salmon troll gear is prohibited within the Salmon Troll Yelloweye Rockfish Conservation Area (YRCA) off the northern Washington Coast. Additionally, the "C-shaped" North Coast Recreational YRCA off Washington is designated as an area to be avoided (a voluntary closure) by salmon trollers.

- Halibut retention was permitted in the salmon troll fisheries began on May 1, 2013, with the following ratio: 1 halibut per each 3 Chinook, except that 1 halibut may be landed without meeting the ratio requirement, and no more than 15 halibut may be possessed or landed per trip.
- Beginning August 1, 2013, the ratio was changed to 1 halibut per each 3 Chinook, expect that 1 halibut may be landed without meeting the ratio requirement, and no more than 5 halibut may be possessed or landed per trip. The goal of this change was to extend the opportunity through the summer.
- As of August 10, 2013, 30,388 lbs were landed.
- The fishery closed on August 8 in the area north of Cape Falcon, Oregon, and on August 10 in the area south of Cape Falcon, Oregon.

Directed fishery targeting on halibut

A quota of 173,390 lbs (85% of the non-tribal commercial fishery allocation) was allocated to the directed longline fishery targeting on halibut in southern Washington, Oregon, and California. The fishery was confined to the area south of Subarea 2A-1 (south of Point Chehalis, WA; 46°53.30' N. lat.). In addition, there are closed areas along the coast defined by depth contours. Between the U.S./Canada border and 40°10' N. lat the western boundary is defined by a line approximating the 100 fm depth contour. The eastern boundary is defined as follows: Between the U.S./Canada border and 46°16' N. lat., the boundary is the shoreline. Between 46°16' N. lat. and 43°00' N. lat, the boundary is the line approximating the 30 fm depth contour. Between 43°00' N. lat and 42°00' N. lat the boundary is the line approximating the 20 fm depth contour. Between 42°00' N. lat and 40°10' N. lat the boundary is the 20 fm depth contour.

One-day fishing periods of 10 hours in duration were scheduled every other week by the IPHC starting June 26, 2013. A 32 inch minimum size limit with the head on was in effect for all openings. Vessel landing limits per fishing period based on vessel length were imposed by IPHC during all openings as shown in the following table. Vessels choosing to operate in this fishery could not land halibut in the incidental catch salmon troll fishery, nor operate in the recreational fishery.

2013 fishing period limits (dressed weight, head-off without ice and slime in pounds) by vessel size.

Vessel Class/Size	June 26 Opening	July 10 Opening
A 0 - 25 ft.	755 lbs	250 lbs
B 26 - 30 ft.	945 lbs	315 lbs
C 31 - 35 ft.	1,510 lbs	505 lbs
D 36 - 40 ft.	4,165 lbs	1,390 lbs
E 41 - 45 ft.	4,480 lbs	1,495 lbs
F 46 - 50 ft.	5,365 lbs	1,790 lbs
G 51 - 55 ft.	5,985 lbs	1,995 lbs

Vessel Class/Size	June 26 Opening	July 10 Opening
H 56+ ft.	9,000 lbs	3,000 lbs

- The June 26 directed commercial fishery resulted in a catch of about 118,000 lbs, leaving approximately 55,390 lbs.
- The July 10 directed commercial opening resulted in an approximate catch of 55,000 lbs. The fishery closed following the July 10 opening.

Incidental halibut catch in the sablefish primary longline fishery north of Point Chehalis, WA

A quota of 21,410 lbs was allocated to the limited entry sablefish primary fishery in Area 2A as an incidental catch during the sablefish primary fishery north of Point Chehalis, WA. The sablefish primary season is open from April 1 to October 31, although incidental halibut retention was not permitted until May 1. Vessels with a groundfish limited entry permit endorsed for both longline gear and with a sablefish tier were permitted to retain up to 75 lbs (dressed weight) of halibut per 1,000 lbs (dressed weight) of sablefish and up to 2 additional halibut in excess of the landing limit ratio. The fishery is confined to an area seaward of a boundary line approximating the 100-fm depth contour. Fishing is also prohibited in the North Coast Commercial YRCA, an area off the northern Washington coast. In addition, the "C-shaped" North Coast Recreational YRCA off Washington is designated as an area to be avoided (a voluntary closure) by commercial longline sablefish fishermen.

- This fishery closed on October 31 with an estimated catch of 12,000 lbs.

SPORT FISHERIES (Non-tribal)

418,100 lbs (68.3% of non-tribal share, minus 21,410 lbs allocated to the sablefish primary fishery from the Washington sport allocation) was allocated between sport fisheries in the Washington area (36.6%) and Oregon/California (31.7%). The allocations were further subdivided as quotas among six geographic subareas as described below. Unless otherwise noted the daily bag limit in all subareas was one halibut of any size, per person, per day.

Washington Inside Waters Subarea (Puget Sound and Straits of Juan de Fuca).

This area was allocated 57,393 lbs (23.5% of the first 130,845 lbs allocated to the Washington sport fishery, and 32% of the Washington sport allocation between 130,845 and 224,110 lbs). Due to inability to monitor the catch in this area inseason, a fixed season was established preseason based on projected catch per day and number of days to achieve the sub-quota. The Puget Sound eastern sub-area, east of Low Point, was open for two 3-day periods on May 2-4 and May 16-18 (Thursday-Saturday), one 4-day period on May 23-26, Thursday-Sunday, and one 2-day period on May 30-31 (Thursday-Friday). The fishing season in western Puget Sound (west of 123°49.50' W. long., Low Point) is open May 23-26, Thursday-Sunday, and May 30-June 1, Thursday-Saturday and one day on Saturday June 8.

- The estimates for total catch in this area are not yet available.

Northern Washington Coastal Waters Subarea (landings in Neah Bay and La Push).

The coastal area off Cape Flattery to Queets River was allocated 108,030 lbs (62.2% of the first 130,845 lbs allocated to the Washington sport fishery, and 32% of the Washington sport

allocation between 130,945 lbs and 224,110 lbs). The fishery was open for four days (May 9, 11, 16, 18, 2013). The "C-shaped" North Coast Recreational YRCA, southwest of Cape Flattery, was closed to sport halibut fishing.

- The estimated total catch for this area is 107,856 lbs, leaving 174 lbs.

Washington South Coast Subarea (landings in Westport)
The area from the Queets River to Leadbetter Point was allocated 42,740 lbs (12.3% of the first 130,845 lbs allocated to the Washington sport fishery and 32% of the Washington sport allocation between 130,845 and 224,110 lbs). This subarea operates with a primary fishery and a nearshore fishery. The primary fishery was open May 5, 7, 12, 14, 19, and closed after the 19th. The nearshore fishery was open every day between May 5 and 19, 2013.

The nearshore fishery occurs in waters between the Queets River and 47°25.00' N. lat. south to 46°58.00' N. lat., and east of 124°30.00' W. long. The south coast subarea quota was allocated as follows: 2,000 lbs to the nearshore fishery and the remaining lbs (40,740 lbs) to the primary fishery.

- The estimated total catch for this area is 42,085 lbs, leaving 653 lbs.

Columbia River Subarea (Leadbetter Point to Cape Falcon)
This sport fishery subarea was allocated 11,895 lbs, consisting of 2.0% of the first 130,845 lbs allocated to the Washington sport fishery, and 4.0% of the Washington sport allocation between 130,845 lbs and 224,110 lbs, minus 21,410, (which is the amount allocated to incidental take in the sablefish primary fishery), and an equal amount from the Oregon/California sport allocation.

The fishery opened May 3 and closed September 30, 2013.

- The early fishery was open May 3 to July 28 with an estimated catch of 4,725 lbs.
- Catch during the early season resulted in underage of 4,791 lbs, which was added to the late season quota, for a revised late season quota of 7,170 lbs.
- The late season fishery opened August 2 and continued until September 30.
- Through September 30 the estimated late season total catch is 1,743 lbs.

Oregon Central Coast Subarea (Cape Falcon to Humbug Mountain).
This sport fishery subarea was allocated 191,979 lbs (97% of the Oregon/California sport allocation.

Three seasons were set for this subarea: 1) a restricted depth (inside 40-fm) fishery commenced on May 2 and continued 3 days a week (Thursday-Saturday) until July 26; 2) a fixed Spring season in all depths that was open on May 9-11, 16-18, May 30-June 1, 6-8, 20-22, and; 3) a Summer season in all depths that was open on August 2-3.

- The inside 40-fathom fishery closed on July 26 with an estimated total catch of 22,248 lbs. This was a 790 lbs underage which was added to the summer quota.
- The fixed Spring all-depth season closed on June 22 with an estimated total catch of 145,167 lbs. This resulted in an overage of 24,220 lbs which was deducted from the summer quota.
- The initial Summer all-depth season quota of 47,995 lbs, was revised by the 790 lbs nearshore underage and the 24,220 lbs spring overage resulting in a revised summer quota of 24,565 lbs.
- The Summer all-depth fishery was open August 2-3, and resulted in an estimated catch of

27,069 lbs. This was a 2,504 lbs overage.
- The summer fishery closed on August 3rd.

South of Humbug Mountain, Oregon and off the California Coast Subarea
This sport fishery was allocated 6,063 lbs (3.0% of the Oregon/California quota). This area had a pre-set season of 7 days per week from May 1 to October 31.

- This season is scheduled to remain open through October 31. No total catch estimates are available for this fishery.

TRIBAL FISHERIES
346,500 lbs (35% of the Area 2A TAC) was allocated to tribal fisheries. The tribes estimated that 32,200 lbs would be used for ceremonial and subsistence (C&S) fisheries and the remaining 314,300 lbs were allocated to the commercial fishery. The 2013 management plan was based on a court-order, to use the 2000 season plan, updated to reflect the current allocation and management measures. It contains provisions for both unrestricted fisheries with no landing limits and restricted fisheries with limits as well as a late season or mop-up fishery that can be set up to have no landing limits or with limits, toward the end of the season.

The unrestricted fishery began at noon on March 23 and lasted 48 hours. The unrestricted fishery landed 221,463 lbs in 309 landings.

The restricted fishery had two openers with each tribe choosing to participate in one or the other. The first began at noon on April 3 and lasted 36 hours. This fishery was managed with a landing limit of 500 lbs/vessel/day. A makeup restricted fishery was setup on April 15 for 36 hours and with a landing limit of 500 lbs/vessel/day for those tribes that did not participate in the earlier opener. There was a total of 74,667 lbs taken in 259 landings during both restricted fisheries.

The first late season fishery (mop-up fishery) took place at noon on May 8 and continued for 12 hours. This late season fishery had a landing limit of 150 lbs. The fishery landed 5,783 lbs in 54 landings. A second late season fishery took place on June 6 for 12 hours with a landing limit of 200 lbs. The fishery landed 3,572 lbs in 25 landings. A third late season fishery opened on July 13 and continued for 12 hours with a 200 lb landing limit. This fishery landed 471 lbs in 7 landings.

The remaining 8,344 lbs of halibut was allocated by mutual agreement of the halibut tribes to the Quinault Indian Nation to harvest in a special fishery for the 2013 canoe journey that Quinault was hosting this year. The special fishery landed 7,547 lbs in 3 landings.

In all, Treaty tribal fisheries harvested 313,503 lbs in 657 landings. This was an underage of 797 lbs below the commercial allocation. The C&S fishery will continue through December 31 and tribal estimates of catch will be reported by the tribes in January 2014.

Fishery	Dates Held	Pounds Landed	# of Landings
Unrestricted	March 23-25 (48 hr.)	221,463 lbs	309 landings
Restricted, 500 lbs/vessel/day	April 3-4 and April 15-16 (36 hr.)	74,667 lbs	259 landings

Late Season (Mop Up)	May 8, June 6, July 13 (12 hr.)	9,826 lbs	86 landings
Special Fishery	July 22-Aug. 3	7,547 lbs	3 landings
Total		313,503 lbs	657 landings

2013 Area 2A TAC and Catch (in pounds)		(Preliminary data as of 12/27/2013)				
	Quota	Inseason Revised Quota		Catch		% of Quota Taken
TRIBAL INDIAN	346,500			313,503		90.5
Commercial	314,300			313,503		99.7
Ceremonial and Subsistence	32,200				*	0.0
NON-TRIBAL	643,500			585,704		91.0
COMMERCIAL	225,400			215,388		95.6
Troll	30,600			30,388		99.3
Sablefish incidental	21,410			12,000		56.0
Directed	173,390			173,000		99.8
SPORT	418,100			363,848		87.0
WA Sport	214,110			149,941		70.0
OR/CA Sport	203,990			207,439		101.7
WA Inside Waters	57,393				*	0.0
WA North Coast	108,030			107,856		99.8
WA South Coast	42,740			42,085		98.5
Columbia River	11,895			6,468		54.4
Early Season	9,516			4,725		49.7
Late Season	2,379	7,170		1,743		24.3
OR Central Coast	191,979			194,484		101.3
Inside 40 fathoms	23,038			22,248		96.6
Spring (May-June)	120,947			145,167		120.0
Summer (August- October)	47,995	24,565		27,069		110.2
OR S. of Humbug/CA	6,063			12,955	%	213.7
TOTAL	990,000			899,207		90.8
* Complete data not available						
% Estimate of Oregon catch only, California catch estimate not yet available.						

Appendix C

List of past NEPA analysis completed each year for Area 2A Catch Sharing Plan changes.

CE *[fishery year]*	***EA*** *[fishery year]*	***Memo to file*** *[fishery year]*	***Notes***
2013			**CE:** • Adjust the season for halibut retention in the salmon troll fishery; • Adjust the season structure in the Columbia River subareas spring fishery; • Adjust allocation percentages in the Oregon Central Coast subarea nearshore, spring, and summer fisheries.
2012			**CE:** • Adjust the season structure in the Washington South Coast subarea; • Adjust the Oregon contribution to the Columbia River subarea and the subarea allocation split between the spring and summer fisheries; • Adjust allocation percentages in the Oregon Central Coast subarea spring and nearshore fisheries and; • Adjust Oregon Central Coast subarea language regarding the movement of quota from the spring fishery to the summer and nearshore fisheries within the Oregon Central Coast subarea.
2011			**CE:** • Adjust the Oregon Central Coast subarea spring and summer fishery subquota percentages. • Specify that the definitions of closed areas set forth in the groundfish regulations will apply to the non-Indian directed halibut commercial fishery. • Update all references to groundfish regulation coordinates and direct readers to groundfish regulations for depth contour coordinates • Modify codified regulations at 50 CFR 300.63 in paragraph (e), replace the description of the groundfish RCA with specific reference to the closed areas and depth contours in the groundfish regulations. • In the codified regulations at 50 CFR 300.63 remove coordinates and insert reference groundfish regulation coordinates. • In the codified regulations at 50 CFR 300.63 update all references to the groundfish regulations to reflect changes made as a result of the groundfish regulation restructure occurring through the Trawl Individual Quota program. • In the codified regulations at 50 CFR 300.64 add "receipt and possession" to the list of management measures that treaty Indian fishers must comply with.
2010			**CE:** • Adjust Washington South Coast Subarea primary season • Specify that the Washington South Coast subarea nearshore area

CE *[fishery year]*	***EA*** *[fishery year]*	***Memo to file*** *[fishery year]*	***Notes***
			will be open seven days per week. • Revise the northern and western boundaries of the Washington nearshore area. • Specify that in the Washington South Coast subarea seaward of the 30-fm line, on days when the primary fishery is open, retention of lingcod is allowed. • Change the open days in the Oregon Central Coast subarea all depth fishery from three days per week to two days per week.
		2009	**Memo to the file:** • Remove the provision to divide the Washington North Coast subarea quota between May and June; • Set the Washington North Coast subarea as a 2-day per week fishery; Thursday and Saturday; • Revise the June re-opening date in the Washington North Coast subarea to the first Thursday in June; • Clarify that the nearshore set-aside in the Washington South Coast subarea is 10 percent of the subquota, or 2,000 pounds, whichever is less; • Set the Washington South Coast subarea to open the first Sunday in May and continue to be open on Sundays and Tuesdays in May, except that beginning on the third week in May the fishery would be open on Sunday only until the quota for the primary season is reached; • Set the nearshore fishery in the Washington South Coast subarea as a 4-day per week fishery, open Thursday, Friday, Saturday and Sunday, during and after the primary season; • Specify that in addition to the South Coast YRCA, recreational fishing for groundfish and halibut will be prohibited in the Westport Offshore YRCA; • Set the Columbia River subarea spring fishery as a 3-day per week fishery, open Thursday, Friday and Saturday, until 70 percent of the subarea allocation is taken or until the third Sunday in July, whichever is earlier; • Specify that in the Oregon Central Coast subarea Pacific cod may be retained with a halibut on the vessel during the all-depth openings; • Add the Nooksack tribe to the definition of "Treaty Indian tribes"; • Add the Nooksack tribal fishing area boundaries federal regulations; • Add the Westport YRCA to the federal regulations as an area prohibited to recreational halibut fishing.
		2008[1]	**Memo to the file for:** • Washington North Coast Subarea Sport Fishery o For the June fishery: a) revise the opening date; b) specify that the Saturday offshore opener is contingent upon available quota; and c) provide flexibility in the date that the late June fishery reopens. • Washington South Coast Subarea Sport Fishery o For the primary season: a) in 2008 retain the opening date of May 1. Beginning in 2009, open the fishery on May 1, if it is a Sunday; otherwise, open on the first Sunday following May 1; and b) decrease the number of days the fishery will be open from 5 to 2 days per week (Sunday and Tuesday).

CE *[fishery year]*	***EA*** *[fishery year]*	***Memo to file*** *[fishery year]*	***Notes***
			○ For the nearshore fishery: a) revise the set aside from 5 percent to 10 percent of the South Coast quota, which would be used to provide a northern nearshore fishery after the offshore fishery has closed; and b) decrease the number of days the nearshore-only fishery would be open from 7 to 4 days per week (Friday-Sunday and Tuesday). • NMFS editorial changes to clean-up outdated language ○ In section (b) Allocations, remove language referring to the 25,000 lb tribal allocation resulting from the U.S. v. Washington case. This paragraph required 25,000 lb dressed weight of halibut to be transferred from the non-treaty Area 2A halibut allocation to the treaty allocation in Area 2A-1 each year for eight years from 2000-2007, for a total transfer of 200,000 lb. Because this total transfer of 200,000 pounds is complete, this language is no longer necessary in the CSP. ○ In section (f) Sport Fisheries, the number of sport subareas is revised from seven to six. In 2004, the Oregon Central Coast, previously two subareas- North Central and South Central, joined into one Central Coast subarea. Since 2004, there have been six sport subareas instead of seven. ○ In section (f) of the CSP and in 50 CFR 300.63 (c)(2)(v) of the regulations, language regarding flexible inseason management for sport fisheries is revised. As mentioned in the other areas of the CSP, unused quota can be moved inseason both north of Cape Falcon, OR, and south of Leadbetter Point, WA, to modify quota in Area 2A sport fisheries. Therefore, the phrase "north of Cape Falcon, OR" is removed from the phrase "modification of subarea quotas" so that this language is consistent with practice and with other language in the CSP allowing all sport subarea quotas to be revised inseason.
2007			**CE for:** • For the Washington North Coast subarea June sport fishery: constrain the fishery to two specific nearshore areas on the first Tuesday and Thursday following June 17; reopen the fishery in the entire north coast subarea for one day on the first Saturday following June 17; if sufficient quota remains, reopen the entire subarea for one day on the first Thursday following on June 24, otherwise, reopen the nearshore areas on the first Thursday following June 24 for up to four days per week (Thursday-Sunday) until the quota is taken. • For the Washington South Coast subarea sport fishery, set aside 5% of the South Coast quota for the nearshore fishery once the primary fishery has closed and set the nearshore fishery as a two day per week fishery, open Fridays and Saturdays. • CE noted that 2007-2008 groundfish FEIS covered changes to the CSP to implement additional closed areas (Yelloweye Rockfish Conservation Areas, or YRCAs) off the coast of Washington affecting commercial and sport halibut fisheries. • CE noted NMFS technical edits.
2006			**CE for:** • For non-treaty commercial fisheries, change to annual domestic Area 2A halibut management measures to revise the eastern, inshore boundary of a

CE *[fishery year]*	***EA*** *[fishery year]*	***Memo to file*** *[fishery year]*	***Notes***
			closed area from 27-fm to 30-fm. The original area closure to non-treaty commercial halibut fishing was previously analyzed in the EA for 2003 (January 2003) and found to have no significant impact. The proposed area closure to non-treaty commercial halibut fishing was also analyzed in the EIS for the 2004 Pacific coast groundfish fishery (December 2003). • For Washington sport fisheries: revise the process by which the public is notified of inseason shifts of halibut quota between Washington sport subareas; revise the process by which the public is notified of Puget Sound subarea fishing dates, and; make minor revisions to season start dates in the Washington North Coast and South Coast subareas. • For Oregon sport fisheries: combine the North Central and South Central Coast subareas; revise the process by which "additional fishing days" are set for the Spring and Summer fisheries once the initial fixed fishing days have occurred in the Spring fishery and if the quota has not been achieved; extend the season duration south of Humbug Mountain to October 31; clarify Federal halibut season regulations so that they provide better protection for overfished groundfish species by stating that halibut possession is prohibited in waters closed to halibut fishing for the protection of groundfish, make halibut nearshore fishing area regulations consistent with Council recommendations for groundfish nearshore fishing area regulations.
2005	*2005*		**CE for:** • For the Washington South Coast subarea sport fishery, close to fishing in all depths when there is insufficient quota remaining for an additional fishing day, yet allow the fishery in the nearshore area to remain open if there is any additional quota that may be used in that subarea. • For the Columbia River subarea sport fishery, increase Oregon's contribution to the subarea quota so that it equals Washington's contribution, by weight (a shifting of 0.16% of the Area 2A quota). • For the Oregon Central Coast subarea sport fishery, add Thursdays to the Friday-Saturday pre-set open dates for the Oregon Central Coast Spring fishery; add Sundays to the Friday-Saturday open dates for the Oregon Central Coast Summer fishery; allow the Oregon Central Coast Summer fishery to be opened for additional dates if 60,000 lb remains in the combined nearshore and all-depth Central Coast quota after the first scheduled Summer fishery opening. • For Oregon sport fishery subareas, simplify inseason process used to transfer quota between subareas. **EA for:** • Implementation of a new Yelloweye Rockfish Conservation Area off the central Oregon. • Prohibition of groundfish retention in Oregon sport fisheries for halibut. • Elimination of the minimum length requirement for halibut in sport fisheries south of Leadbetter Point, Washington.
2004			**CE for:** • For non-treaty commercial fisheries, change to annual domestic Area 2A halibut management measures to revise the eastern, inshore boundary of a closed area from 27-fm to 30-fm. The original area closure to non-treaty commercial halibut fishing was previously analyzed in the EA for 2003 (January 2003) and found to have no significant impact. The proposed area closure to non-treaty commercial halibut fishing was also analyzed in

CE *[fishery year]*	***EA*** *[fishery year]*	***Memo to file*** *[fishery year]*	***Notes***
			the EIS for the 2004 Pacific coast groundfish fishery (December 2003). • For Washington sport fisheries: revise the process by which the public is notified of inseason shifts of halibut quota between Washington sport subareas; revise the process by which the public is notified of Puget Sound subarea fishing dates, and; make minor revisions to season start dates in the Washington North Coast and South Coast subareas. • For Oregon sport fisheries: combine the North Central and South Central Coast subareas; revise the process by which "additional fishing days" are set for the Spring and Summer fisheries once the initial fixed fishing days have occurred in the Spring fishery and if the quota has not been achieved; extend the season duration south of Humbug Mountain to October 31; clarify Federal halibut season regulations so that they provide better protection for overfished groundfish species by stating that halibut possession is prohibited in waters closed to halibut fishing for the protection of groundfish, make halibut nearshore fishing area regulations consistent with Council recommendations for groundfish nearshore fishing area regulations.
2003	*2003*		**CE for:** • For non-treaty commercial fisheries, in years when halibut quota is available to the primary longline sablefish fishery north of Point Chehalis, Washington (46°53'18" N. lat.,) set aside 70,000 lb of halibut. • For the Oregon North Central and South Central sport fishery sub-areas, the season end date would extend from September 30 to October 31; where the fishing seasons are referred to as "May" or "May-June" and "August" or "August-September," the CSP would be amended to refer to those seasons as "Spring" and "Summer," respectively; and revise language to allow flexible quota transfers pre- and inseason to ensure the same number of all-depth fishing days in the north central and south central subareas. • For Washington and Oregon sport fisheries, revise CSP language on Washington flexible inseason management provisions such that transfers of unused quota may be made inseason from any one sport fishery to any other sport fishery, regardless of whether the transfer is made to the subarea projected to have the fewest number of sport fishing days in the calendar year; and revise CSP language on Oregon flexible inseason management provisions to allow transfer of unused quota between Oregon sport fisheries similar to the flexibility provided for Washington sport fisheries. **EA for:** • Divide the Washington North Coast sub-area sport quota such that 78 percent of the quota for that sub-area is available to a May fishery and 22 percent is available for a late June fishery. • Revise the YRCA closed area within the Washington North Coast sport fishery sub-area. • Require non-treaty commercial vessels operating in the directed commercial fishery for halibut to fish offshore of 100 fm.
	2002		**EA for:** • For Washington sport fisheries, separate the Puget Sound sub-area into two regions with two separate season start dates. • For Oregon sport fisheries, allow anglers to retain up to two halibut on land.

CE *[fishery year]*	***EA*** *[fishery year]*	***Memo to file*** *[fishery year]*	***Notes***
	2001		**EA 1 for:** • Incidental halibut retention in the sablefish fishery N. of Pt. Chehalis, WA. Discussed a regulatory framework to provide a process for setting incidental halibut harvest levels. **EA 2 for**: • For the non-treaty commercial fishery, set a halibut sub-quota for the salmon troll fishery that is distinct from the directed commercial fishery sub-quota. The salmon troll fishery would be permitted to retain halibut taken incidentally in that fishery, beginning May 1 until the sub-quota is estimated to have been achieved. The directed commercial fishery would no longer have access to the salmon troll fishery sub-quota in July. • For the Washington South Coast sport fishery, revise the season guidance to remove the 1,000 lb nearshore halibut set-aside. Nearshore fishing for halibut would be permitted during the all-depth season. If the all-depth season closes with halibut remaining in its quota, nearshore fishing would also be permitted after the all-depth season. • For the Washington South Coast sport fishery, eliminate the closed "hot spot."
	2000		**EA for:** • For Washington sport fishery, changed the boundary line between the Puget Sound and North Coast sport fishery subareas. • Court-ordered change to allocation between treaty and non-treaty fisheries. *NOTE: The following were actions mentioned in the EA as "inconsequential" and, therefore, were not analyzed.* • *For the Washington South Coast subarea sport fishery, revise the management structure to allow the opening of the closed "hot spot" inseason, effective via announcement on the halibut hotline.* • *For the Oregon North Central and South Central subarea sport fisheries, revise the sport fishery structure to combine the sub-quotas and season for the inside 30-fathom fisheries from these two sub-areas.*
	1999		*NOTE: draft EA, 11/2/98, in GFAR, but final dated 1/99 not in GFAR* **EA for:** • For Oregon sport fisheries south of Cape Falcon, revise the sport season structure so that the nearshore fisheries (inside the 30-fathom depth contour) open on May 1 and continue until their subquotas are taken, or September 30, whichever occurs first. • For OR/CA sport fisheries, move the boundary of the southernmost OR/CA subarea from the OR/CA border north to Humbug Mountain, OR, and increase the subarea quota allocation from 2.6 % to 3.0 % of the OR/CA recreational allocation. • For sport fisheries from the Columbia River south, set the daily possession and bag limit for halibut sport fisheries from Leadbetter Point, Washington to the Oregon - California border at the first Pacific halibut caught that is 32 inches or longer in length. • For commercial fisheries, confirm the commercial season catch division by clarifying catch sharing language within the commercial portion of the CSP. *NOTE: The following were actions mentioned in the EA as "inconsequential" and, therefore, were not analyzed*

CE *[fishery year]*	***EA*** *[fishery year]*	***Memo to file*** *[fishery year]*	***Notes***
			• *For the Washington south coast subarea sport fishery, modify the season structuring intent to specify a goal of maximizing the season length while "maintaining a quality fishing experience." Allow the nearshore fishery (east of 124°40'00" W. long. and north of 47°00'00" N. lat.) to fish 7 days a week whenever the halibut season is open.* • *For the Washington south coast subarea sport fishery, modify the boundaries and reduce the size of a sport fishing closed "hot spot" within the subarea to better reflect the location and size of this zone of halibut concentration.*
	1998		**EA for:** first implemented CSP changes that set an incidental halibut allowance for participants in the primary sablefish fishery when the Area 2A TAC exceeds 900,000 lb.
	1995		*long-term CSP implemented (60 FR 14651, March 20, 1995)* **EA for:** allocations between non-treaty commercial & sport fisheries

* Information in this table earlier than 2000 is not comprehensive.