

# UNITED STATES DEPARTMENT OF COMMERCE National Oceanic Atmospheric Administration

National Marine Fisheries Service P.O. Box 21668 Juneau Alaska 99802-1668

September 30, 2016

Glenn Haight, Executive Director Alaska Board of Fisheries 1255 West 8<sup>th</sup> Street P.O. Box 115526 Juneau, Alaska 99811-5526

Dear Mr. Haight:

On January 12, 2016, the Alaska Board of Fisheries (BOF) requested review of a proposal to open Alaska State waters outside of three nautical miles from the Sutwik Island Steller sea lion haulout to vessels using pot gear in the Pacific cod parallel fishery that do not have a Federal fisheries permit. The Sutwik Island Steller sea lion haulout is in the State of Alaska's (State) Chignik Management Area in the Central Gulf of Alaska (GOA).

Existing fishing closure areas in the Central GOA Pacific cod parallel fishery, including those proposed to be opened around Sutwik Island, were implemented as protection measures for the endangered western distinct population segment of Steller sea lions (SSL WDPS) in 2003 (68 FR 204, January 2, 2003; corrected 68 FR 24615, May 8, 2003). The protection measures were implemented to ensure that the groundfish fisheries, as authorized by the Fishery Management Plan for Groundfish of the GOA, and the State parallel fisheries for pollock, Pacific cod, and Atka mackerel, as authorized by the State, were not likely to jeopardize the continued existence of SSL WDPS or adversely modify its designated critical habitat. The proposal to open State waters outside of three nautical miles from the Sutwik Island haulout, to vessels using pot gear in the Pacific cod parallel fishery, would modify the action analyzed in the 2001 and subsequent 2010 Endangered Species Act (ESA) section 7 consultations. Therefore, the National Marine Fisheries Service (NMFS) conducted an ESA section 7 consultation to ensure that the GOA groundfish fisheries, as modified by the proposed change to the area closure around Sutwik Island during the Pacific cod parallel fishery, is not likely to jeopardize the continued existence of the SSL WDPS or adversely modify its designated critical habitat.

NMFS determined that the proposed action may affect, but is not likely to adversely affect, the SSL WDPS or designated SSL critical habitat. Please find the consultation documents enclosed. We appreciate the BOF coordinating with us prior to taking final action on this



proposal. We appreciate the BOF coordinating with us prior to taking final action on this proposal. If you have further questions regarding this matter, please contact Bridget Mansfield at 586-7642 or by email at bridget.mansfeild@noaa.gov.

Sincerely,

James W. Balsiger Administrator, Alaska Region

Sam Cotten, Commissioner, Alaska Department of Fish and Game cc:

Forest Bowers, Alaska Department of Fish and Game

### Enclosures:

Request for Section 7 Consultation on Chignik Management Area Closures Chignik Management Area Letter of Concurrence



# UNITED STATES DEPARTMENT OF COMMERCE National Oceanic Atmospheric Administration

National Marine Fisheries Service P.O. Box 21668 Juneau Alaska 99802-1668

August 12, 2016

MEMORANDUM FOR: Jon Kurland

Assistant Regional Administrator for Protected Resources

FROM: Glenn Merrill

Assistant Regional Administrator for Sustainable Fisheries

SUBJECT: Endangered Species Act (ESA) Section 7 Consultation on the

Effects of Opening Waters in the State of Alaska (State) Chignik Management Area to Pacific Cod Fishing with Pot Gear in the State Parallel (parallel) Fishery on the Endangered Western Distinct Population Segment of Steller sea lions (SSL WDPS)

# Proposed Action and Background

The State of Alaska's (State's) Board of Fisheries (BOF) proposes a change to Steller sea lion (SSL) protection measures that apply to the Pacific cod fishery within State waters (from 0 to 3 nautical miles from shore) in the Chignik Management Area. The Chignik Management Area is in the Central Gulf of Alaska. The action proposed by the BOF would open a portion of area currently closed in State waters to the harvest of Pacific cod with vessels using pot gear during the parallel fishery. The Pacific cod parallel fishery in the Gulf of Alaska (GOA) occurs in State waters adjacent to Federal waters (from 3 to 200 nm) in the GOA management area. The State manages the parallel fishery concurrently with the Federal Pacific cod fishery to allow for seamless management. All catch of Pacific cod in the parallel fishery is deducted from the Federal total allowable catch (TAC).

The State is proposing to open an area of State waters in the Central GOA for vessels using pot gear in the Pacific cod parallel fishery that do not have a Federal fisheries permit (FFP). Because closure areas in the Central GOA Pacific cod parallel fishery were implemented as SSL protection measures in 2003 (68 FR 204, January 2, 2003; corrected 68 FR 24615, May 8, 2003), I am requesting ESA section 7 consultation to ensure that the GOA Pacific cod fishery, as modified by the BOF proposal, is not likely to jeopardize the continued existence of the SSL WDPS or adversely modify its designated critical habitat.

Specifically, the BOF proposes a change to its management of the parallel Pacific cod fishery to allow the harvest of Pacific cod by vessels using pot gear and who do not have an FFP around the Sutwik Island SSL haulout (described in Table 5 at 50 CFR 679) where it overlaps State waters from 20 to 3 nm (see Figure 3).



The proposed action would not modify restrictions in State waters within 3 nm of the Sutwik Island haulout, or in that portion of the 20 nm closure area around haulout that occurs in Federal waters. The proposed action would not modify restrictions that apply to vessels with an FFP that harvest Pacific cod in the parallel Pacific cod fishery within the 20 nm closure area around Sutwik Island. The proposed action would not modify management of hook-and-line, jig, or trawl Pacific fisheries in parallel waters within the action area. Under status quo management, the State permits vessels to use jig gear to harvest Pacific cod in the parallel fishery around Sutwik Island without restriction. Under status quo management, the State prohibits the use of hook-and-line and trawl gear for the harvest of Pacific cod in the parallel fishery within State waters around Sutwik Island.

# ESA consultations and Steller sea lion protection measures

The ESA consultation history for effects of the GOA Pacific cod fisheries on the SSL WDPS is extensive. Most recently, NMFS issued a biological opinion (BiOp) on the authorization of the Alaska groundfish fisheries under the FMP, including the GOA Pacific cod pot fishery, on November 24, 2010 (2010 FMP BiOp). The 2010 FMP BiOp concluded that the groundfish fisheries, as authorized, were likely to jeopardize the continued existence of the SSL WDPS and adversely modify designated critical habitat.

The GOA Pacific cod jig and pot fisheries were not implicated in the jeopardy and adverse modification finding. The jeopardy and adverse modification finding in the 2010 FMP BiOp was based on potential connections between the continued decline of SSL WDPS populations in the western and central Aleutian Islands and the Aleutian Islands Atka mackerel and Pacific cod fisheries. NMFS subsequently modified the SSL protection measures in the Aleutian Islands Atka mackerel and Pacific cod fisheries in 2011 (75 FR 77535, December 13, 2010; corrected 75 FR 81921, December 29, 2010) and 2015 (79 FR 70286, November 25, 2014) to ensure the fisheries were not likely to jeopardize the continued existence of the WDPS or adversely modify its designated critical habitat.

NMFS has implemented protection measures to reduce potential competition for prey between the GOA Pacific cod fishery and SSLs since 1990. No-transit areas were instituted in 1990, trawl closures in 1992, and Pacific cod pot fishery measures in 2001. The following section summarizes SSL protection measures in the GOA Pacific cod fishery, analyzed in the October 19, 2001 BiOp on the Authorization of BSAI and GOA Groundfish Fisheries, 2010 FMP BiOp, proposed (67 FR 56692, September 4, 2002) and final (68 FR 204, January 2, 2003) rules:

### **Harvest Control Rule**

To protect prey abundance for the SSL WDPS, the harvest control rule stipulates the Pacific cod acceptable biological catch be reduced when Pacific cod spawning biomass is estimated to be less than 40 percent of the unfished biomass. Pacific cod fishing would be prohibited in the event the estimated spawning biomass is below 20 percent of the projected unfished biomass.

# Area Closure

Numerous areas are closed to Pacific cod harvest in the GOA to protect prey availability in important sea lion foraging areas. Table 1 provides Pacific cod fishery restrictions in the GOA for specific rookeries and haulouts. 1

<sup>&</sup>lt;sup>1</sup> See Table 5 to 50 CFR 679 for a list of all rookery and haul-out sites, by latitude and longitude, throughout the GOA and Bering Sea/Aleutian Islands and associated closures for all gear types. See Table 12 to 50 CFR 679 for a list of 0 to 3 nm "no groundfish fishing/no transit" locations.

Table 1. Area closures in the GOA Pacific cod fishery

Site name	No Fishing Zone for Trawl Gear (nm radius)	No Fishing Zone for Hook and Line Gear (nm radius)	No Fishing Zone for Pot Gear (nm radius)	
Chuginadak <sup>2</sup>	20	10	20	
Samalga	20	10	20	
Ogchul I.	20	10	20	
Polivnoi Rock <sup>3</sup>	20	10	20	
Emerald I. <sup>4, 2</sup>	20	10	20	
Unalaska/Cape Izigan <sup>2</sup>	20	10	20	
Unalaska I./Cape Sedanka <sup>2</sup>	20	10	20	
Old Man Rocks <sup>2</sup>	20	10	20	
Akutan I./Cape Morgan <sup>2</sup>	20	10	20	
Rootok <sup>2</sup>	20	10	20	
Tanginak I. <sup>2</sup>	20	10	20	
Tigalda/Rocks NE <sup>2</sup>	20	10	20	
Aiktak <sup>2</sup>	20	10	20	
Ugamak I. <sup>2</sup>	20	10	20	
Round <sup>2</sup>	20	10	20	
Bird I.	10	=	=	
Caton I.	3	3	3	
South Rocks	10	=	=	
Clubbing Rocks S	10	3	3	
Clubbing Rocks N	10	3	3	
Pinnacle Rock	3	3	3	
Sushilnoi Rocks	10	-	-	
Olga Rocks	10	-	-	
Jude I.	20	-	-	
Sea Lion Rocks (Shumigans)	3	3	3	
Nagai I./Mountain Pt.	3	3	3	
The Whaleback	3	3	3	
Chernabura I.	20	3	3	
Castle Rock	3	3	3	
Atkins I.	20	3	3	
Spitz I.	3	3	3	
Mitrofania	3	3	3	
Kak	20	20	20	
Lighthouse Rocks	20	20	20	
Sutwik I.	20	20	20	
Chowiet I.	20	20	20	
Nagai Rocks	20	20	20	
Chirikof I.	20	20	20	
Puale Bay	10	-	-	
Kodiak/Cape Ikolik	3	3	3	
Takli I.	10	-	-	
Cape Kuliak	10	-	-	

<sup>&</sup>lt;sup>2</sup> Trawl closure around this site is limited to waters east of 170° 0'00" W longitude
<sup>3</sup> Restriction area includes only waters of the Gulf of Alaska area.
<sup>4</sup> See 50 CFR 679.22(a)(7)(i)(C) for exemptions for catcher vessels less than 60 feet (18.3 m) LOA using jig or hook-and-line gear between Bishop Point and Emerald I. closure areas.

Site name	No Fishing Zone for Trawl Gear (nm radius)	No Fishing Zone for Hook and Line Gear (nm radius)	No Fishing Zone for Pot Gear (nm radius)
Cape Gull	10	-	-
Kodiak/Cape Sitkinak	10	-	-
Shakun Rock	10	-	=
Twoheaded I.	10	-	-
Cape Douglas (Shaw I.)	10	-	=
Kodiak/Cape Barnabas	3	3	3
Kodiak/Gull Pt	10, 3	=	=
Latax Rocks	10	-	=
Ushagat I./SW	10	-	=
Ugak I. <sup>5</sup>	10, 3	-	=
Sea Otter I.	10	-	-
Long I.	10	-	-
Sud I.	10	-	-
Kodiak/Cape Chiniak	10	-	-
Sugarloaf I.	20	10	10
Sea Lion Rocks (Marmot)	10	-	-
Marmot I. <sup>6</sup>	15, 20	-	-
Nagahut Rocks	10	-	-
Perl	10	-	-
Gore Pt	10	-	=
Outer (Pye) I.	20	10	10
Steep Pt.	10	-	-
Seal Rocks (Kenai)	10	-	-
Chiswell Islands	10	-	-
Rugged I.	10	-	-
Pt Elrington 7, 8	20	-	=
Perry I. <sup>6</sup>	-	-	=
The Needle <sup>6</sup>	-	-	=
Pt Eleanor <sup>6</sup>	-	-	=
Wooded I. (Fish I.)	20	3	3
Glacier I. <sup>6</sup>	-	-	=
Seal Rocks (Cordova) <sup>7</sup>	20	3	3
Cape Hinchinbrook <sup>7</sup>	20	-	=
Middleton I.	10	-	=
Hook Pt. <sup>7</sup>	20	-	=
Cape St Elias	20	-	-

<sup>&</sup>lt;sup>5</sup> The trawl closure between 0 and 10 nm is effective from January 20 through June 10. Trawl closure between 0 nm and 3 nm is effective September 1 through November 1.

<sup>&</sup>lt;sup>6</sup> The trawl closure between 0 and 15 nm is effective from January 20 through June 10. Trawl closure between 0 nm and 20 nm is effective September 1 through November 1.

<sup>7</sup> Contact the Alaska Department of Fish and Game for fishery restrictions at these sites.

<sup>&</sup>lt;sup>8</sup> The 20 nm closure around this site is effective only in waters outside the State waters of Prince William Sound.

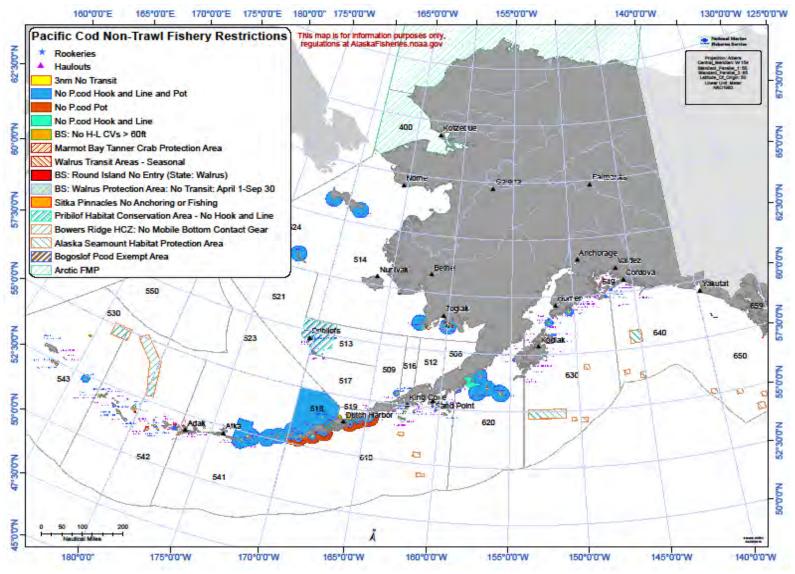


Figure 1. Federal and parallel Pacific cod non-trawl (pot and hook-and-line) fishery restrictions

# **Vessel Monitoring**

Any vessel participating in the GOA Federal or parallel Pacific cod pot fishery is required to have an operable vessel monitoring system (VMS) onboard when the directed Pacific cod pot fishery is open to ensure compliance with the SSL protection area restrictions. NMFS does not require VMS on vessels using jig gear due to the fact they generally are not restricted except within 3 nm of rookeries (no fishing zones in Table 21 to 50 CFR part 679) and in the Seguam foraging and Bogoslof areas (areas outside of the Central GOA). Vessels using jig gear are exempt from most of the closure zones beyond 3 nm of rookeries due to their slow rate of extraction and small number of vessels which prosecute these fisheries. (See 67 FR 956, January 8, 2002).

## Fishing Seasons

The annual GOA Pacific cod fishery in the Western and Central regulatory areas is divided into two seasons (50 CFR 679.23(d)(3)):

A season - January 1 through June 10 for hook-and-line, pot, and jig gear;
January 20 through June 10 for trawl gear

B season - September 1 through December 31 for hook-and-line and pot gear;
June 10 through December 31 for jig gear;
September 1 through November 1 for trawl gear

The Eastern GOA has no seasonal apportionments.

### **Seasonal Allocations**

To disperse Pacific cod harvests over time and reduce the likelihood of localized depletions, the catch allocations for the GOA Pacific cod fishery are divided into two seasons:

A season - 60 percent B season - 40 percent

All directed fishing allowance and incidental catch of Pacific cod that may occur in other groundfish fisheries before June 10 are managed such that total harvest in the A season is not more than 60 percent of the annual TAC.

## Description of the Gulf of Alaska Pacific Cod Pot Fishery

Thorough descriptions of the Federal and parallel GOA Pacific cod fishery are provided in the 2010 FMP BiOp and the final rule for Amendment 83 (76 FR 74670, December 1, 2011) to the GOA FMP. They are incorporated here by reference. Amendment 83, implemented in 2012, changed the Western and Central GOA Pacific cod TAC allocation from an inshore/offshore allocation to an allocation among harvest sectors (catcher vessels and catcher/processors using trawl, pot, hook-and-line, and jig gear) (76 FR 74670, December 1, 2011). The sector allocations under Amendment 83 further dispersed the GOA Pacific cod harvest in time relative to the action analyzed in the 2010 FMP BiOp.

Amendment 83 further stabilized the GOA Pacific cod fishery by 1) prohibiting federally permitted vessels without properly endorsed licenses from participating in the parallel Pacific

cod fishery and 2) limiting the ability for vessels to reactivate a surrendered FFP to one time in three years. Before Amendment 83, vessels could surrender their FFP and participate in the parallel Pacific cod fishery without being subject to Federal observer coverage, VMS, or recordkeeping and reporting requirements and then have their FFP reactivated an unlimited number of times to re-enter Federal fisheries. Amendment 83 has improved the temporal dispersion of the GOA Pacific cod harvest and the data available for managing the fishery and enforcing SSL protection closure areas.

While the directed fishery for Pacific cod in Federal waters (3 nm to 200 nm) are open, directed fisheries for Pacific cod in State waters, referred to as parallel fisheries, are prosecuted under virtually the same rules as the Federal fisheries, with catch accrued against the Federal TAC. The State also manages separate Guideline Harvest Level (GHL) fisheries for Pacific cod in State waters. Catch from the State GHL fisheries is not deducted from the Federal TAC. The State GHL fisheries are opened when Federal/parallel fisheries are closed. The State GHL fisheries are not allowed to harvest more than 25 percent of the combined acceptable biological catch limits of Western, Central and Eastern GOA Pacific cod (76 FR 11111, March 1, 2011). The proposed action would not modify any aspect of the State GHL fishery.

# Proposed Change to the Gulf of Alaska Pacific Cod Pot Fishery

The proposed action would modify the State's management of the GOA Pacific cod pot parallel fishery relative to the action analyzed in the 2010 FMP BiOp. The proposed action would allow the State to authorize the use of pot gear in State waters more than 3 nm from the Sutwik Island haulout, where it overlaps State waters (Figure 3). This would resulting in additional State waters being open during the GOA Pacific cod pot parallel fishery. The State would undertake this action under its regulations that apply only to State waters. No change would be required or made to Federal regulations under the proposed action. The proposed action would not change the GOA Pacific cod TACs or seasonal TAC apportionments.

#### Action Area

The action area is the GOA management area (Figure 2). This action would solely address management of the Pacific cod pot parallel fishery in a portion of State waters within the State Chignik Management Area, shoreward of GOA Federal reporting area 620, and west of 156° W longitude.

The area affected is within the 20 nm area of SSL critical habitat around the Sutwik Island haulout, which is closed to Pacific cod fishing with pot gear in Federal and parallel fisheries to conserve prey for SSLs (see 68 FR 204, January 2, 2003). The 20 nm closure area around Sutwik Island that does not overlap State waters would not be affected (Figure 3). The 3 nm area closures in State waters around the Sutwik Island and Kak Island haulouts would remain unchanged. Three additional 20 nm Pacific cod pot fishery closure areas of SSL WDPS critical habitat around Lighthouse Rocks, Chowiet Island, and Chirikof Island are adjacent to, but are not included in, the area affected by the proposed action.

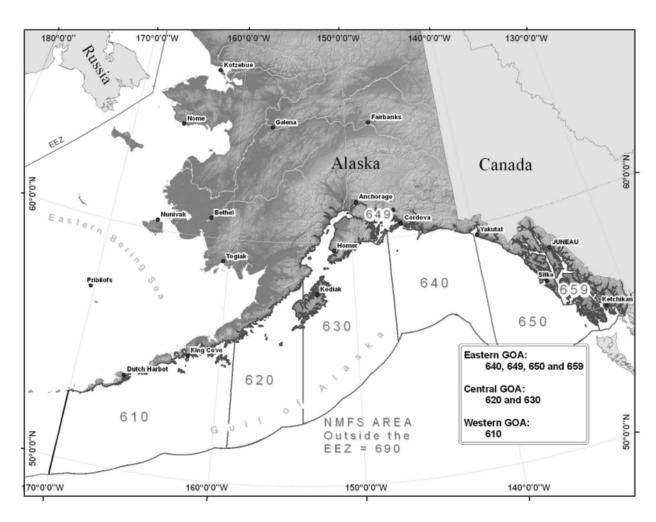


Figure 2. Gulf of Alaska Federal reporting areas

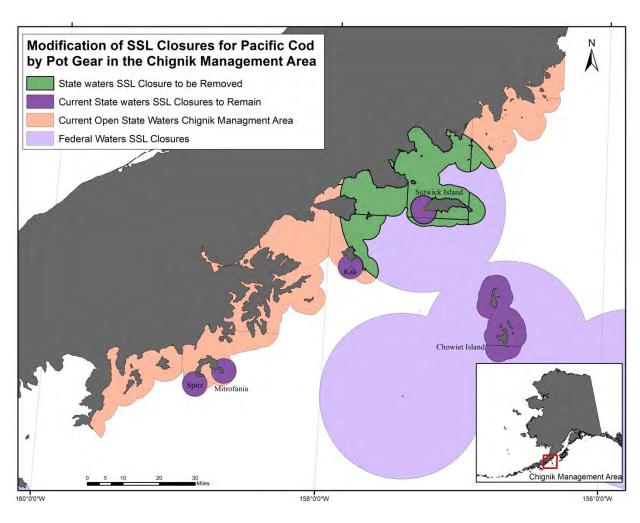


Figure 3. Proposed modification of SSL protection measures for the parallel Pacific cod fishery in the Chignik Management Area (Central GOA)

# Effects of the Proposed Action

The area that would be opened under the proposed action is currently closed to Pacific cod fishing with pot gear during the parallel fishery to conserve prey in nearshore habitats that appear to be important for SSL foraging. Here, we analyze whether, based on the best available information, the proposed action is likely to adversely affect the SSL WDPS.

For purposes of the ESA, "effects of the action" means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action (50 CFR 402.02). The applicable standard to find that a proposed action is "not likely to adversely affect" listed species or critical habitat is that all of the effects of the action are expected to be insignificant, discountable, or completely beneficial. Insignificant effects relate to the size of the impact and are those that one would not be able to meaningfully measure, detect, or evaluate, and should never reach the scale where take occurs. Discountable effects are those that are extremely unlikely to occur. Beneficial effects are contemporaneous positive effects without any adverse effects to the species.

### **Current Harvest**

Current harvest of Pacific cod by pot vessels in the proposed area is limited due to its remoteness. Based on recent effort (2013 through 2015) in the parallel fishery, the nearest active fishing grounds to the area proposed to be opened are about 50 nm to the west. Vessels without FFPs that fish in those adjacent areas are relatively small (generally less than 60 ft length overall (LOA)) and deliver to western GOA processors. The two nearest ports to the proposed action area that receive Pacific cod are Sand Point and Kodiak, approximately 125 nm west and 350 nm east from Sutwik Island, respectively. Transit time for delivery trips to those ports from the area proposed to be opened is between 24 and 48 hours. Because processors require Pacific cod to be delivered no more than three days from harvest, the extended delivery time results in actual fishing operations of only 1-2 days, thereby limiting potential catch. Consequently, most of the non-FFP Pacific cod pot vessels that deliver to Kodiak or Sand Point processors do not fish in the Central GOA west of 156° W longitude.

NMFS assumes that any Pacific cod harvest in the area proposed to be opened would be harvested by vessels that do not have an FFP and that have participated in the parallel fishery in the Central GOA west of 156° W longitude with pot gear since 2013. Harvest records from 2013 through 2016 show that four vessels meet those criteria, and only one of those vessels fished more than one year from 2013 through 2016.

The Pacific cod harvest by non-FFP pot vessels from 2013 through 2015 is provided below in Table 1 as a baseline harvest level from which to determine and evaluate the potential change in harvest under the proposed action. For the period from 2013 through 2015 the maximum number of trips per year by any non-FFP vessel in parallel Pacific cod pot fishery the Central GOA west of 156° W longitude was five, with an average harvest of 25 metric tons (mt or tons) of Pacific cod per trip. The total harvest of Pacific cod per year for all non-FFP pot vessels in the parallel fishery during that period and in the action area was less than 300 tons per year.

Six additional non-FFP vessels participated in the parallel fishery in the Central GOA west of 156° W longitude with pot gear prior to 2013. However, these vessels have not fished in the action area since 2011. As explained below, the sector split implemented under Amendment 83 in 2012 changed the participation and temporal extent of the parallel Pacific cod pot fishery. Therefore, this analysis is limited to the years after 2012 when the pot cod sector was allocated its own TAC. Prior to the sector split, all Pacific cod pot and hook-and-line vessels competed in a race to harvest the shared GOA Pacific cod TAC before the trawl "A" season began on January 20. Before Amendment 83 was implemented, the trawl harvest opening resulted in the Pacific cod TAC being taken quickly, closing the area to all gear for Pacific cod.

Since the implementation of Amendment 83, the Pacific cod pot harvest has been prosecuted at a more moderate and consistent pace. Amendment 83 also prohibited vessels without properly endorsed LLP licenses from participating in the parallel Pacific cod fishery, and limited the ability for vessels to reactivate a surrendered FFP to one time in three years. The number of vessels that fish for Pacific cod in State waters during the parallel fishery has declined since the implementation of Amendment 83 and the amount of observer coverage and vessel location monitoring in the parallel fishery has increased.

Harvest under the State's GHL fisheries opens after the closure of the parallel fishery. Harvest may continue through August. Vessels participating in the GHL fisheries are allowed to fish in the SSL WDPS closed areas, with the exception of the 3 nm no-transit zones. For comparative purposes, harvest in the GHL Pacific cod pot fishery in the Chignik area from 2013 through 2015 is shown in Table 2. Vessels that fish in the GHL Pacific cod fishery in this area represent a fleet that does not fish in the parallel fishery.

Table 2. Central GOA Pacific cod pot harvest: west of 156° W longitude (2013-2015)

Vessel Permit Type	Mgt Area	Fishery	Year	Harvest (t)	Number of vessels	% Harvest Taken in SSL No-Fishing Zones***
			2013	150-300*	1-4*	0
	Chignik	Parallel	2014	150-300*	1-4*	0
Non-FFP			2015	150-300*	1-4*	0
Non-FFF			2013	4,356	19	91
	Chignik	GHL	2014	4,575	12	90
			2015	5,124	17	82
EED and	EED and		2013	197	3	0
FFP and Chi	Chignik	Parallel	2014	864	4	0
Non-FFF			2015	527	6	0

<sup>\*</sup>For reasons of confidentiality, the exact harvest and number of vessels cannot be reported.

Pacific cod pot and non-pot harvests (2013 through 2015) for the Central GOA and the Central GOA west of 156° W longitude are presented in Table 3. In Federal waters for those years, the average Pacific cod harvest by non-pot gear is greater than the average pot gear harvest. However, in the State waters parallel and GHL fisheries, Pacific cod harvest by non-pot gear is lower than that of pot gear.

Table 3. Central GOA Pacific cod harvest: non-pot vs pot gear: 3-year avg (2013-2015)

	Central	GOA Harve All Areas	est (t) -	Central GOA Harvest (t) – West of 156° W longitude			
	Non-Pot *	Pot	Total	Non-Pot*	Pot	Total	
Federal and State waters (excluding GHL)	25,318	10,757	26,393	3,709	1,213	4,922	
FFP and Non-FFP Parallel Fishery Only	2,667	2,921	5,588	59	529***	588	
Non-FFP Only	252**	1,027	1,279	3**	300***	303	

<sup>\*</sup> Non- pot gear comprises hook-and-line, jig, non-pelagic trawl, and pelagic trawl.

<sup>\*\*</sup> Includes the non-FFP vessels in the 2013-2015 Chignik parallel fishery reported in the rows above.

<sup>\*\*\*</sup> GHL fisheries are not restricted from fishing in areas closed to other fishing for SSL protection.

<sup>\*\*</sup> Non-pot gear for "Non-FFP Only" comprises hook-and-line and jig.

<sup>\*\*\*</sup> Upper estimate of non-FFP harvest in the Chignik parallel fishery.

### Effects of the Expected Temporal Distribution of Catch on the SSL WDPS

NMFS expects the overall temporal distribution of the GOA Pacific cod pot fishery to be unchanged relative to the status quo. No net change under the proposed action is expected for the total duration of the GOA Federal and parallel fisheries for Pacific cod with pot gear. As noted above, the fishery is broken into two seasons with approximately 5-6 total weeks of active harvest. The "A" season allocation is generally harvested within 5-6 weeks of the January 1 start for hook and line, pot, and jig gear. The "B" season allocation is not always achieved. No change to the seasonal TAC would occur under this proposal.

## Effects of the Expected Spatial Distribution of Catch on the SSL WDPS

The proposed action would open 651 nm² (green shaded area in Figure 3), or 65.1%, of the total 1,000 nm² area closed for SSL WDPS protection in the state waters Chignik Management Area to non-FFP vessels fishing for Pacific cod with pot gear (light and dark purple and green shaded areas in Figure 3). For comparison, the 651 nm² affected by the proposed action represents 4.6% of the total 14,118 nm² closed to Pacific cod fishing with pot gear in the GOA (see blue areas in Figure 1) and 1.6% of the total SSL critical habitat area (41,590 nm²) in the BSAI and GOA. The proposed action would not modify any other SSL area closures in Table 1.

The proposed action may result in slight changes to the spatial distribution of Pacific cod harvest. The proposed action would allow only vessels without an FFP to fish in the area proposed to be open during the Pacific cod pot parallel fishery. The closure would remain in effect for vessels operating in the parallel fishery while holding an FFP, because those vessels must comply with all Federal regulations (50 CFR 679.22 (b)(2)(iii)) and this action does not propose a change to the Federal regulations. As noted above, this action is expected to affect approximately four non-FFP pot vessels that harvested Pacific cod in the Central GOA parallel fishery west of 156° W longitude from 2013 through 2015.

If all four vessels shift their parallel Pacific cod pot fishing effort into the proposed open area, NMFS estimates that a maximum of 1,000 t (5 trips \* 4 vessels \* 25 t per trip) may be harvested in the proposed open area based on the 2013 to 2015 data. However, the 2013 through 2015 harvest of 150-300 t shown in Table 1 represents a more realistic expected harvest estimate for the proposed opened area as it incorporates more realistic operating logistics. The 300 t estimate also may be high, since these vessels typically fish close to the Western GOA line to conserve fuel costs. Fishing in the proposed opened area would require vessels to incur longer transit times and higher fuel costs, possibly reducing the number or duration of trips to this area.

A further increase over the estimated harvest of 300 t is possible under a provision in Amendment 83 which allows a floating processor to operate in the area under a Community Quota Exemption (CQE). If a floating processor were to exercise this option due to the proposed action, it may attract additional non-FFP vessels to fish in the area. However, the CQE floating processor has a regulatory processing limit of 1,000 t per year. At this time, no operators have expressed interest in operating a CQE floating processor.

Harvest levels in the State GHL Pacific cod pot fishery in the Chignik Management Area are expected to be similar to those reported in Table 1. That fishery is prosecuted during a different time period from the Federal and parallel Pacific cod pot fisheries, and GHL vessels are not required to abide by the SSL protection measures. Thus, vessels in the GHL fishery are not

affected by the proposed action. Likewise, Pacific cod harvest in Federal waters is expected to be similar to harvest for the 2013 through 2015 period, because the proposed action would not affect those vessels.

In summary, NMFS estimates that implementation of the proposed action would likely result in approximately four vessels harvesting no more than 300 t of Pacific cod per year in the newly opened area in the parallel Pacific cod fishery over 5-6 weeks in January and February. The net effect of the proposed action is an estimated shift in the spatial distribution of approximately 0.8% of the combined, annual Federal and parallel Pacific cod harvest in the Central GOA.

# Effect of the Action on SSL WDPS

There have been no reports in the List of Fisheries of direct, incidental or intentional takes of SSLs in the Pacific cod pot fishery off Alaska. Therefore, NMFS concludes that opening the proposed area to fishing for Pacific cod with pot gear during the parallel fishery is not likely to result in any direct incidental takes of SSLs.

Two SSL WDPS haulouts are in the area that would be opened under the proposed action at Sutwik and Kak Islands. SSL counts from the most recent surveys (NMFS 2015) at the Sutwik and Kak Island locations are summarized in Table 4.

Table 4. SSL counts at Sutwik and Kak Island haulouts 2013 through 2015

YEAR	2013		2014		2015	
ILAK	Sutwick	Kak	Sutwik	Kak	Sutwik	Kak
NON-PUPS	298	210	Not Su	rveyed	262	194
PUPS	19	0	Not Surveyed		36	0

The annual rate of change in SSL WDPS abundance in the Central GOA increased from 2000 through 2012 (NMFS 2014) and continued through 2015 (NMFS 2015) as seen in Table 5, although not at the higher rates of the adjacent Western and Eastern GOA areas. The reasons for those differences are presently unknown.

Table 5. SSL WDPS Annual Rates of Change from 2000 (% yr<sup>-1</sup>)

YEAR/	2013			2014			2015		
AREA	WGOA	CGOA	EGOA	WGOA	CGOA	EGOA	WGOA	CGOA	EGOA
NON- PUPS	3.60	1.97	4.98	4.09	2.61	5.22	3.95	2.68	5.07
PUPS	3.58	1.93	4.34	3.27	2.14	4.44	3.28	2.82	4.31

Through this analysis NMFS has shown that a small number of non-FFP vessels may harvest approximately 300 t of Pacific cod each year from January through February in the area proposed to be opened to pot gear in the parallel fishery. Under the proposed action, all vessels, whether with an FFP or not, would be prohibited from fishing for Pacific cod with pot gear

within 3 nm from the Sutwik Island haulout. All vessels with an FFP would be prohibited from fishing for Pacific cod with pot gear within 20 nm from the Sutwik Island haulout during the Federal/parallel Pacific cod pot fishery.

NMFS projects the potential for a shift in the spatial distribution of less than 1 percent (0.8%) of the Central GOA Pacific cod harvest under the proposed action with no change to the overall Pacific cod TAC or temporal dispersion of the harvest.

The 2010 BiOp discusses the impacts of prey availability to SSL that may arise from competition between fisheries and SSL and states, "Competition occurs if the fisheries reduce the availability of prey to the extent that sea lion condition, growth, reproduction, or survival is diminished, and population recovery is impeded." Prey encountered by an individual foraging SSL in part determine its net gain in energy and nutrients that affects its condition, growth, reproduction, and survival. Connors and Munro (2008) have shown that the winter Pacific cod trawl fishery in their Bering Sea study area does not result in localized depletion of Pacific cod at the scale of the fishery removal. Thus, although the fishing removals may have an immediate localized effect on fish abundance, the effect may be obscured by characteristic rapid fish movement (less than one week) over a geographic scale greater than the fishery removal. Qualitative inference from the study area to other areas, including the area proposed to be opened under this action, requires consideration of similarities in fishing pressure and Pacific cod behavior and movement. Although additional information is needed on the size and duration of prey density decreases that impact SSL foraging success on a local scale, it is a reasonable assumption based on the findings of Connors and Munro (2008) that the slow pace and very low level of expected harvest under this action would not result in localized depletion of Pacific cod.

Because the effects of this action are limited to a potential spatial redistribution of less than 1 percent of the Central GOA Pacific cod harvest by a small number of non-FFP vessels, NMFS concludes that the effects of the proposed action on the SSL WDPS would not be able to be meaningfully measured, detected, or evaluated and, therefore, would be insignificant. This conclusion is further supported for the following reasons:

- Amendment 83 to the GOA FMP resulted in further temporal distribution of harvest and reduced the number of participants fishing in State waters during the parallel Pacific cod fishery relative to the regime that existed when NMFS implemented the SSL protection measures, including the 20 nm closure to pot gear around Sutwik Island.
- SSL abundance at Sutwik Island increased from 2002 through 2015 concurrent with GHL Pacific cod harvests inside SSL critical habitat west of 156° W (Table 2). The GHL harvests inside SSL critical habitat are more than 10 times the harvest expected to occur in State waters within the 3 nm to 20 nm closure around the Sutwik Island haulout under the proposed action.
- Localized depletion of Pacific cod is not expected to occur as a result of the action due to the slow pace and low level of harvest by a limited number of vessels using pot gear.
- NMFS implemented area closures for Pacific cod fishing with pot gear at 39 of the 78 SSL rookery and haulout sites in the GOA (Table 1). Greater area closures may not

correspond with greater SSL population increases. A cursory examination of a Central GOA site with no area closures for any gear type (e.g., Caton Island) shows an increasing abundance of SSLs whereas only one animal has been counted over the last 12 years at a site with 20 nm closures for all gear types (e.g., Samalga) (Fritz et al. 2016). NMFS has not conducted a robust analysis of the efficacy of the closure areas on SSL abundance and notes that the proposed action would modify one of the 39 area closures in the GOA for only a few vessels fishing in the parallel Pacific cod pot fishery (Table 6).

Table 6. Count of GOA rookery and haulout sites with area closures (20 nm, 10, nm, 3 nm, and none) for Pacific cod fishing with pot gear

SSL SITES - Closure Area	STATUS QUO – Number of SSL Sites	PROPOSED ACTION – Number of SSL Sites (FFP/non-FFP)
20 nm	21	21/20
10 nm	2	2
3 nm	16	16/17
None	39	39

### Determination

Because the proposed action is likely to result in insignificant effects on the GOA Pacific cod fishery and, therefore, in insignificant effects on the SSL WDPS and designated critical habitat, we conclude that the proposed action is not likely to adversely affect the SSL WDPS. We request your concurrence with this determination.

#### References

- Connors, M. E. and P. Munro. 2008. Effects of commercial fishing on local abundance of Pacific cod (*Gadus microcephalus*) in the Bering Sea. Fish Bull 106(3):281-292.
- Fritz, L., K. Sweeney, M. Lynn, T. Gellatt, J. Gilpatrick, and R. Towell. 2016. Counts of Alaska Steller sea lion adult and juvenile (non-pup) conducted on rookeries and haul-outs in Alaska Aleutian Islands, Bering Sea, and others from 1904-01-01 to 2015-07-18. (NCEI Accession 0128190). Version 2.4. NOAA Centers for Environmental Information. Dataset. doi: 10.7289/V54f1NP1[accessed August 9, 2016].
- NMFS. 2010. Endangered Species Act Section 7 Consultation Biological Opinion:
  Authorization of groundfish fisheries under the Fishery Management Plan for groundfish of the Bering Sea and Aleutian Islands Management Area; Authorization of groundfish fisheries under the Fishery Management Plan for Groundfish of the Gulf of Alaska; State of Alaska parallel groundfish fisheries. NOAA/NMFS/Alaska Region.
  Available at:
  <a href="http://alaskafisheries.noaa.gov/protectedresources/stellers/esa/biop/final/1210.htm">http://alaskafisheries.noaa.gov/protectedresources/stellers/esa/biop/final/1210.htm</a>
- NMFS. 2014. Endangered Species Act Section 7 Consultation Biological Opinion:
  Authorization of groundfish fisheries under the Proposed Revised Steller Sea Lion
  Protection Measures. NOAA/NMFS/Alaska Region. Available at:
  <a href="http://alaskafisheries.noaa.gov/protectedresources/stellers/esa/biop/2014/final0414.pdf">http://alaskafisheries.noaa.gov/protectedresources/stellers/esa/biop/2014/final0414.pdf</a>
- NMFS. 2015. Results of Steller Sea Lion Surveys in Alaska, June-July 2015 Memorandum for Douglas DeMaster, Director, Alaska Fisheries Science Center John Bengtson, Director, Marine Mammal Laboratory (MML) James Balsiger, Director, Alaska Region Jon Kurland and Lisa Rotterman, Alaska Region Protected Resources from Lowell Fritz, Kathryn Sweeney, Rod Towell and Thomas Gelatt Marine Mammal Laboratory, Alaska Ecosystem Program, December 28, 2015. Available at: <a href="http://www.afsc.noaa.gov/NMML/PDF/SSL">http://www.afsc.noaa.gov/NMML/PDF/SSL</a> Aerial Survey 2015.pdf

September 23, 2016

MEMORANDUM FOR: Glenn Merrill

Administrator for Sustainable Fisheries

FROM: Jon Kurland

Assistant Regional Administrator for Protected Resources

Af for JK

SUBJECT: Chignik Management Area Letter of Concurrence,

NMFS #AKR-2016-9586

The National Marine Fisheries Service (NMFS) Alaska Region Protected Resources Division (PRD) has completed informal consultation under section 7(a)(2) of the Endangered Species Act (ESA) regarding the proposed change to Steller sea lion (*Eumetopias jubatus*) protective measures that apply to the Pacific cod fishery within Alaska State waters (from 0 to 3 nautical miles from shore) in the Chignik Management Area. The NMFS Sustainable Fisheries Division (SFD) requested, on behalf of the State of Alaska's Board of Fisheries (BOF), written concurrence that the proposed action may affect, but is not likely to adversely affect, the endangered western Distinct Population Segment (WDPS) of Steller sea lion (SSL) or Steller sea lion critical habitat. Based on our analysis of the information you provided to us, and additional literature cited below, NMFS PRD concurs with your determination. A complete administrative record of this consultation is on file in this office.

### **Consultation History**

The ESA consultation history for effects of the Gulf of Alaska (GOA) Pacific cod fisheries on the WDPS of SSL is extensive. Most recently, NMFS issued a biological opinion (Opinion) on the authorization of the Alaska groundfish fisheries under the Fisheries Management Plan (FMP), including the GOA Pacific cod pot fishery, on November 24, 2010 (NMFS 2010). The 2010 FMP Opinion concluded that the groundfish fisheries, as authorized, were likely to jeopardize the continued existence of the WDPS SSL and adversely modify designated critical habitat.

The GOA Pacific cod jig and pot fisheries were not implicated in the jeopardy and adverse modification finding. The jeopardy and adverse modification finding in the 2010 FMP Opinion was based on potential connections between the continued decline of WDPS SSL populations in the western and central Aleutian Islands and the Aleutian Islands Atka mackerel and Pacific cod



fisheries. NMFS subsequently modified the SSL protection measures in the Aleutian Islands Atka mackerel and Pacific cod fisheries in 2011 (75 FR 77535, December 13, 2010; corrected 75 FR 81921, December 29, 2010) and 2015 (79 FR 70286, November 25, 2014) to ensure the fisheries were not likely to jeopardize the continued existence of the WDPS or adversely modify its designated critical habitat.

PRD received your request for consultation on proposed changes to SSL protectives measures near Sutwick Island on August 12, 2016. PRD requested additional information about the SSL haul outs by email on August 31, 2016, which SFD provided on August 31, 2016. Finally, PRD requested additional information about Pacific cod catch allocation by email on September 19, 2016, which SFD provided on September 19, 2016.

# **Description of the Proposed Action**

The State of Alaska's BOF proposes a change to SSL protection measures that apply to the Pacific cod fishery in State waters (from 0 to 3 nautical miles from shore) in the Chignik Management Area, located in the Central GOA. The proposed action would open a portion of a currently closed area in State waters to the harvest of Pacific cod to vessels using pot gear during the parallel fishery. The Pacific cod parallel fishery in the GOA occurs in State waters adjacent to Federal waters (from 3 to 200 nm) in the Central GOA management area. The State manages the parallel fishery concurrently with the Federal Pacific cod fishery to allow for seamless management. All catch of Pacific cod in the parallel fishery is deducted from the Federal total allowable catch (TAC).

The State is proposing to open an area of State waters in the Central GOA for vessels using pot gear in the Pacific cod parallel fishery that do not have a Federal Fisheries Permit (FFP). Because closure areas in the Central GOA Pacific cod parallel fishery were implemented as SSL protection measures in 2003 (68 FR 204, January 2, 2003; corrected 68 FR 24615, May 8, 2003), SFD is requesting written concurrence that the proposed action (as modified by the BOF proposal) may affect, but is not likely to adversely affect, WDPS SSL or its designated critical habitat.

The proposed action would not modify restrictions in State waters within 3 nm of the Sutwik Island haulout, or in that portion of the 20 nm closure area around the haulout that occurs in Federal waters. Nor would it modify restrictions that apply to vessels with an FFP that harvest Pacific cod in the parallel Pacific cod fishery within the 20 nm closure area around Sutwik Island. Nor would it modify management of hook-and-line, jig, or trawl Pacific fisheries in parallel waters within the action area. Under the proposed action, State permitted vessels that use jig gear to harvest Pacific cod in the parallel fishery around Sutwik Island would continue harvest without restriction. In addition, the use of hook-and-line and trawl gear for the harvest of Pacific cod in the parallel fishery within State waters around Sutwik Island would continue to be prohibited.

#### Action Area

The action area is defined in the ESA regulations (50 CFR 402.02) as the area within which all direct and indirect effects of the project will occur. NMFS defines the action area for this project as the Central GOA management area (Figure 1; Central GOA is delineated by reporting areas 620 and 630). While the proposed action solely addresses management of the Pacific cod pot parallel fishery in a portion of State waters within the State Chignik Management Area, shoreward of GOA Federal reporting area 620, and west of 156° W longitude (Figure 2), the fishing that would occur in the newly opened areas would be deducted from the Federal TAC, creating an indirect effect of a lower available TAC for other areas in the Central GOA reporting areas. The lower TAC in other areas could mean less fishing in these areas and would have no negative impacts on (and perhaps could even be beneficial to) SLLs in these areas of the Central GOA management area.

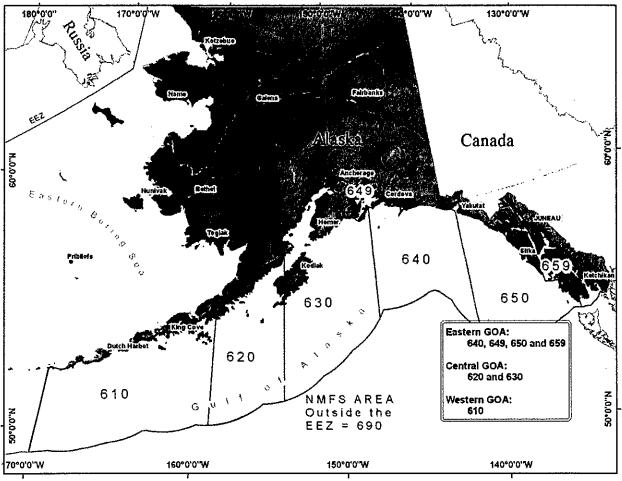


Figure 1. Gulf of Alaska Federal reporting areas. The action area is the Central Gulf of Alaska, comprised of management area 620 and 630 (NMFS 2016a).

The area directly affected by the proposed action is in the 20 nm area of SSL critical habitat around the Sutwik Island haulout that overlaps with State waters (see Figure 2; green shaded

area), which was previously closed to Pacific cod fishing with pot gear in Federal and parallel fisheries to conserve prey for SSLs (see 68 FR 204, January 2, 2003), but which would now be opened under the proposed action.

The 20 nm closure area around Sutwik Island that does not overlap State waters would not be affected, nor would the three additional 20 nm Pacific cod pot fishery closure areas of WDPS SSL critical habitat around Lighthouse Rocks, Chowiet Island, and Chirikof Island. These fishery closure areas are adjacent to, but are not included in, the area affected by the proposed action (see Figure 2; light purple shaded area). The 3 nm area closures in State waters around the Sutwik Island and Kak Island haulouts would remain unchanged (Figure 2; dark purple shaded area).

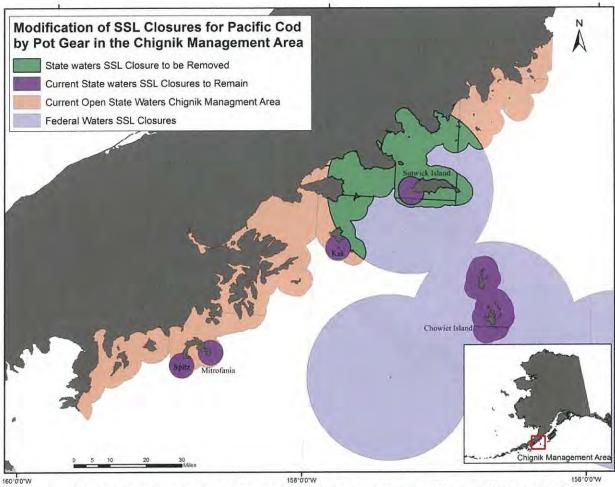


Figure 2. Project location is the state waters of the parallel Pacific cod fishery in the Chignik Management Area (Central Gulf of Alaska). The green area on this map shows waters were modification of Steller sea lion protections are proposed to allow Pacific cod pot gear for the parallel fishery (NMFS 2016a).

## **Mitigation Measures**

Several mitigation measures are already in place to reduce potential impacts of fisheries on the WDPS SSL. These include harvest control rules to protect prey abundance, no transit areas, electronic vessel monitoring, seasonal allocations to reduce the likelihood of localized depletions, and fishery area closures near important sea lion foraging areas. The proposed action relates directly to a change in fishery area closure; for more information on the other existing mitigation measures, refer to the consultation initiation letter (NMFS 2016a). No additional mitigation measures will be implemented with this action.

# **Listed Species and Critical Habitat**

Endangered WDPS SSL and several SLL critical habitat rookeries and haulouts occur within the action area. The proposed action would solely affect endangered SSLs and SSL critical habitat near Sutwick and Kak Islands (all other ESA-listed species in the action area were no effect determinations).

# WDPS Steller Sea Lions

The SSL was listed as a threatened species under the ESA on November 26, 1990 (55 FR 49204). In 1997, NMFS reclassified SSLs into two Distinct Population Segments (DPS) based on genetic studies and other information (62 FR 24345); at that time the eastern DPS (EDPS) was listed as threatened and the WDPS was listed as endangered. On November 4, 2013, the EDPS was removed from the endangered species list (78 FR 66139).

SSLs are found throughout the action area (Central GOA), where they are generally increasing in abundance. From 2000 through 2015 the annual rate of change in abundance of WDPS SSL has continually increased in Central GOA (NMFS 2016a). As of 2015, the annual rate of change was increasing at 2.68% for non-pups, and 2.82% for pups in Central GOA (NMFS 2015a). SSLs are found on Sutwik, Kak, and other neighboring islands. There are no indications that numbers at these haulouts are diminishing (NMFS 2015a).

SSLs are opportunistic predators, feeding primarily on a wide variety of fishes and cephalopods, including Atka mackerel (*Pleurogrammus monopterygius*), walleye pollock (*Theragra chalcogramma*), Pacific herring (*Clupea pallasi*), capelin (*Mallotus villosus*), Pacific cod (*Gadus macrocephalus*), Pacific sand lance (*Ammodytes hexapterus*), and salmon (*Oncorhynchus* spp.) (Pitcher 1981, Merrick et al. 1997). The foraging strategy of SSLs is strongly influenced by seasonality of SSL reproductive activities on rookeries, and the ephemeral nature of many prey species. SSLs are generalist predators that eat a variety of fishes and cephalopods (Pitcher 1981, Calkins and Goodwin 1988, NMFS 2008b), and occasionally other marine mammals and birds (Pitcher and Fay 1982, NMFS 2008b).

Winter is a critical period for SSLs, particularly females and juveniles (NMFS 2001, 2003, 2008a, 2010). NMFS has concluded that the winter, in particular, requires catch limitations as it is a particularly sensitive period for SSLs. Not only are juveniles learning to forage and find resources as this time, but their energy demands are very high due to their large growth rate over the first few years of life. For females with pups, their energy demands are about double their requirements without a pup (Winship et al. 2002, Winship and Trites 2003), which makes them potentially susceptible to a reduction in available prey. Under these conditions, a pregnant and nursing female may be more likely to abort the growing fetus which was implanted the previous summer.

Information on SSL biology and habitat (including critical habitat) is available at: http://alaskafisheries.noaa.gov/pr/steller-sea-lions

#### Fisheries Interactions

Fisheries interactions can impact SSLs. Between 2009-2013, there were incidental serious injuries and mortalities of WDPS SSLs observed in the following fisheries: Bering Sea/Aleutian Islands Atka mackerel trawl, Bering Sea/Aleutian Islands flatfish trawl, Bering Sea/Aleutian Islands Pacific cod trawl, Bering Sea/Aleutian Islands pollock trawl, Gulf of Alaska Pacific cod longline, Gulf of Alaska Pacific cod trawl, Gulf of Alaska sablefish, and longline. In addition, observers monitoring the Prince William Sound salmon drift gillnet fishery in 1990 and 1991 recorded two SSL mortalities in 1991, which extrapolated to 29 (95% CI: 1-108) kills for the entire fishery (Wynne et al. 1992). The combined average annual mortality estimate in observed fisheries is 31 (CV = 0.87) WDPS SSL (NMFS 2015b). Entanglement or other interactions with fishing gear is also a source of SSL injury and mortality. From 2009 to 2013, there were six confirmed fishery-related SSL strandings in the range of the WDPS (NMFS 2015b). Fisheryrelated strandings during 2009-2013 result in an estimated annual mortality of 1.2 WDPS SSL. This estimate is considered a minimum because not all entangled animals strand and not all stranded animals are found or reported (NMFS 2015b). Based on observer data (31) and stranding data (1.2), the minimum estimated mortality rate of WDPS SSLs incidental to all commercial and recreational fisheries is 32 (NMFS 2015b). However, there are no reported SSL serious injuries or mortalities in Alaskan Pacific cod pot fisheries and no confirmed strandings related to this fishery.

#### Subsistence Harvest

SSLs are subject to subsistence harvest in some areas. The mean annual subsistence take by Alaska Natives (harvested plus struck-and-lost) from the WDPS from 2004 through 2008, combined with the mean take over the 2008-2011 and 2013 years from St. Paul, was 199 WDPS SSLs/year (NMFS 2015b).

### Other Anthropogenic Interactions

Another source of mortality data is represented in reports from the NMFS stranding database of WDPS SSLs entangled in marine debris or affected by other types of human interaction. From 2009 to 2013, nine animals possessed circumferential neck entanglements from packing bands or from unknown marine debris, one animal was shot with an arrow, and one animal was

entangled in an aquaculture facility net. The mean annual mortality and serious injury from other sources of human interactions for 2009-2013 is 2.2 individuals. However, this is a minimum estimate because not all mortalities caused by other types of human interactions are discovered and reported (NMFS 2015b).

Mortalities may occasionally occur incidental to marine mammal research activities authorized under MMPA permits issued to a variety of government, academic, and other research organizations. However, between 2008-2012 there were zero reported mortalities resulting from research on WDPS SSLs (NMFS 2015b)

## Steller Sea Lion Critical Habitat

NMFS designated critical habitat for SSLs on August 27, 1993 (58 FR 45269). In Alaska, designated critical habitat includes the following areas as described at 50 CFR §226.202 (Figure 3):

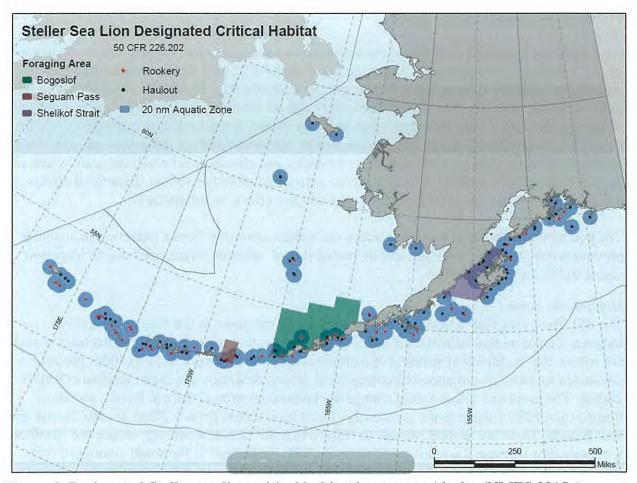


Figure 3. Designated Steller sea lion critical habitat in western Alaska (NMFS 2015a).

- 1. Terrestrial zones that extend 3,000 feet (0.9 km) landward from each major haulout and major rookery.
- 2. Air zones that extend 3,000 feet (0.9 km) above the terrestrial zone of each major haulout and major rookery in Alaska.
- 3. Aquatic zones that extend 3,000 feet (0.9 km) seaward of each major haulout and major rookery in Alaska that is east of 144 o W longitude.
- 4. Aquatic zones that extend 20 nm (37 km) seaward of each major haulout and major rookery in Alaska that is west of 144° W longitude.
- 5. Three special aquatic foraging areas: the Shelikof Strait area, the Bogoslof area, and the Seguam Pass area, as specified at 50 CFR §226.202(c).

The proposed action would overlap with designated aquatic zones from 3-20nm offshore from Sutwick and Kak Islands.

#### Effects of the Action

For purposes of the ESA, "effects of the action" means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action (50 CFR 402.02). The applicable standard to find that a proposed action is "not likely to adversely affect" listed species or critical habitat is that all of the effects of the action are expected to be insignificant, discountable, or completely beneficial. Insignificant effects relate to the size of the impact and are those that one would not be able to meaningfully measure, detect, or evaluate, and should never reach the scale where take occurs. Discountable effects are those that are extremely unlikely to occur. Beneficial effects are contemporaneous positive effects without any adverse effects to the species.

The potential effects of the proposed action are habitat alteration from a reduction in available prey for endangered WDPS SSLs and increased risk of fisheries interactions due to increased vessel traffic and fishing effort.

### Habitat Alteration

The SSL Recovery Plan notes that the SSL protection measures in the Alaska groundfish fisheries should be maintained until it can be determined that reducing those protections would not reduce the likelihood of survival or increase the time to recovery. This includes protections developed to avoid disturbance and competition around rookeries and major haulouts (NMFS 2008a). The proposed action would change the protections around Sutwik Island, and allow limited (non-FFP) fishing in the previously closed state waters from 3-20nm around Sutwik and Kak Islands. There are several reasons to believe that this action would not reduce the likelihood for survival or increase the recovery horizon for SSL, including: 1) the small amount of prey removal relative to the TAC; 2) the limited fishing effort 3) the expectation of no anticipated local depletions; 4) the increasing abundance of SSL in this area; and 5) the increasing SSL trends in other areas with and without fishing restrictions.

The amount of prey removal anticipated to occur in the area that would be opened by this action is small relative to the TAC. NMFS projects the potential for a shift in the spatial distribution of less than 1 percent (0.8%) of the Central GOA Pacific cod harvest under the proposed action, with no change to the overall Pacific cod TAC or temporal dispersion of the harvest.

The anticipated fishing effort will be low. Fishing is already occurring through the separate State-managed Guideline Harvest Level (GHL) fishery in this area, and the action would only introduce a low level of harvest (approximately 300 tons) by a limited number of vessels (estimated 4 vessels) using pot gear from January through February each year. Under the proposed action, the GHL harvests inside SSL critical habitat are more than ten times the harvest expected to occur in parallel fishery State waters within the 3 nm to 20 nm closure around the Sutwik Island haulout. Therefore, the action would not represent a substantial change relative to the GHL fishing effort already occurring in this area.

Localized depletions are not expected. Conners and Munro (2008) have shown that the winter Pacific cod trawl fishery in their Bering Sea study area does not result in localized depletion of Pacific cod at the scale of the fishery removal. Although the fishing removals may have an immediate localized effect on fish abundance, the effect may be obscured by characteristic rapid fish movement (less than one week) over a geographic scale greater than the fishery removal. Qualitative inference from the study area to other areas, including the action area, requires consideration of similarities in fishing pressure and Pacific cod behavior and movement. Although additional information is needed on the size and duration of prey density decreases that impact SSL foraging success on a local scale, it is reasonable to assume that, based on these findings, the slow pace and very low level of expected harvest under this action would not result in localized depletion of Pacific cod in the action area (Conners and Munro 2008, NMFS 2015a).

The current SSL abundance trend in this area increasing. SSL abundances at Sutwik and Kak Island haulouts increased from 2002 through 2015 concurrent with GHL Pacific cod harvests inside SSL critical habitat west of 156° W. Further, the Sutwik and Kak Island haulouts are historically smaller than the adjacent Aghiyuk and Chirikof Island haulouts, which will maintain 20nm closure areas. These larger haulouts are expected to impart larger demands on localized prey resources and are therefore more important closure areas than the Sutwik and Kak Island closures.

SSL trends in other areas with and without fishing restrictions indicate that fishery closures are not necessarily driving recovery. NMFS implemented area closures for Pacific cod fishing with pot gear at 39 of the 78 SSL rookery and haulout sites in the GOA. Greater area closures may not correspond with greater SSL population increases. A cursory examination of a Central GOA site with no area closures for any gear type (e.g., Caton Island) shows an increasing abundance of SSLs whereas only one animal has been counted over the last 12 years at a site with a 20 nm closure for all gear types (e.g., Samalga) (Fritz et al. 2016). The proposed action would modify one of 39 area closures in GOA for only a few vessels fishing in the parallel Pacific cod fishery.

For the above reasons, NMFS concludes that the effects of the proposed action on the WDPS SSL would not be able to be meaningfully measured, detected, or evaluated. We therefore consider the anticipated effects of this action on potential habitat alteration and prey availability for WDPS SSLs to be insignificant.

#### Fisheries Interaction

There have been no reports in the List of Fisheries of direct, incidental or intentional takes of SSLs in Alaska's Pacific cod pot fishery (NMFS 2016b). Therefore, NMFS concludes that opening the proposed area to fishing for Pacific cod with pot gear during the parallel fishery to a few vessels over a few months is not likely to result in direct or incidental takes of SSLs.

We therefore consider the anticipated fisheries interaction with WDPS SSLs due to this action to be discountable.

## Steller Sea Lion Critical Habitat

#### Habitat Alteration

NMFS identified physical and biological features essential for conservation of SSLs in the final rule to designate critical habitat (58 FR 45269; August 27, 1993). The proposed project may impact SSL critical habitat by reducing prey availability. However, this impact is expected to be insignificant due to mitigation measures in place and no anticipation of localized depletion. We evaluate effects to each of the essential features of critical habitat below.

Physical. Alaska rookeries, haulouts, and associated areas identified at 50 CFR §226.202(a) have been designated as critical habitat. These critical habitat designations include terrestrial zones that extend 3,000 feet landward, air zones that extend 3,000 feet above the terrestrial zone, and aquatic zones that extend 20 nm seaward for each major rookery and haulout west of 144° W. longitude. The proposed action will not allow fishery participants to fish within 3 nm of Sutwick and Kak Islands, and protections to all other major rookery and haulout locations in the action area would stay the same. The 17 nm surrounding Sutwick that would be open to fishing under the proposed action are anticipated to have insignificant effects on critical habitat due to the limited duration of fishing (Jan-Feb), limited number of boats (approximately four), and the limited amount of catch (approximately 300 tons).

We therefore consider the anticipated effects of this action on WDPS SSL critical habitat to be insignificant.

Biological. Three special aquatic foraging areas have been identified at 50 CFR §226.202(c): the Shelikof Strait area, the Bogoslof area, and the Seguam Pass area. All three special aquatic zones are outside the Chignik Management Area. However, these areas could be indirectly affected by the action as the TAC for Pacific cod would remain the same, while Pacific cod fishing occuring in the newly open area as a result of the action would likely mean that Pacific cod fishing in surrounding areas (including these three special aquatic foraging areas) would be slightly

reduced. This indirect effect would be wholly beneficial as it would, if anything, increase prey availability in those areas.

The potential effects of the action on biological features of the WDPS SSL critical habitat are the same as those evaluated in the habitat alteration and prey availability analysis on pages 8-9. We therefore consider the anticipated effects of this action on WDPS SSL critical habitat to be insignificant.

## Conclusion

Based on this analysis, NMFS concurs with your determination that the proposed action may affect, but is not likely to adversely affect, the WDPS SSL or designated SSL critical habitat. Reinitiation of consultation is required where discretionary Federal involvement or control over the action has been retained or is authorized by law and if (1) take of listed species occurs, (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered, (3) the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this concurrence letter, or (4) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16).

Please direct any questions regarding this letter to Suzie Teerlink at Suzie. Teerlink @noaa.gov or (907) 586-7240.

cc: Bridget Mansfield, <u>bridget.mansfield@noaa.gov</u>
Brandee Gerke, <u>brandee.gerke@noaa.gov</u>

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- Calkins, D. G., and E. Goodwin. 1988. Investigation of the declining sea lion population in the Gulf of Alaska. Alaska Dept. of Fish and Game. 76pp.
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