

NMFS Review Draft

**Revision to regulatory requirements for the subsistence taking
of northern fur seals on St. Paul and St. George Island, Alaska
Regulatory Impact Review**

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Abstract This Regulatory Impact Review evaluates the costs and benefits of a revision to the northern fur seal subsistence use regulations. The National Marine Fisheries Service (NMFS) is evaluating alternatives, which consider balancing the use of federal regulations and cooperative management with Aleut Community of St. Paul Island

(ACSPI) Tribal Government, to manage subsistence use. The different combinations of regulatory and non-regulatory restrictions within each alternative would provide greater harvest flexibility and food security, while allowing Privilovians to resume certain traditional practices, preserve their cultural values and identity, and practice environmental stewardship of a subsistence use resource, compared to the no action alternative. Under any alternative, NMFS and ACSPI would both co-manage subsistence use consistent with the requirements of Marine Mammal Protection Act and regulate aspects of subsistence use under the Fur Seal Act. For St. Paul Island, the alternatives evaluate the potential effects of: changes in the subsistence use range setting process, such as setting the number of fur seals needed for subsistence purposes in regulation as opposed to the triennial review and specification process; allowing a portion of the harvest to be comprised of male fur seal pups; hunting seals using firearms; expanding the seasons and changing the season dates; restricting in regulation the location, timing, and frequency of take; authorizing accidental mortality of a certain number of female fur seals and creating suspension and termination provisions based on total accidental mortality of female fur seals; and transferring more management and enforcement responsibility of the subsistence use to the locally-based Co-Management Council. For St. Paul Island, the alternatives include different combinations of regulatory and non-regulatory provisions listed above to manage subsistence use. NMFS did not consider regulatory actions affecting St. George Island in the Draft Supplemental Environmental Impact Statement for St. Paul Island, as we did not anticipate any changes for St. George. Upon drafting the proposed rule for St. Paul Island, NMFS determined that changing the regulation for the triennial review and range specification process applied to both St. Paul and St. George Islands. Accordingly, the proposed rule would create a fixed annual limit of 2,000 male seals on St. Paul Island and a fixed annual limit of 500 male seals on St. George Island to replace the triennial range specification process. In addition to removal of unnecessary regulations for St. Paul Island, NMFS determined that the removal of some unnecessary regulations for St. George Island was appropriate to consider in the proposed rulemaking. For St. George Island, NMFS has considered the no-action alternative of no change to the existing regulations for St. George Island compared to the proposed action that would set the annual limit in regulation and eliminate or modify unnecessary and duplicative regulations. Prior to the final rule, NMFS will prepare a Supplemental Information Report to the 2014 Final Supplemental Environmental Impact Statement for Management of the Subsistence Harvest of Northern Fur Seals on St. George Island, Alaska.

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1 Introduction

This Regulatory Impact Review (RIR) evaluates the costs and benefits of a regulatory amendment to Federal regulations (at 50 Code of Federal Regulations [CFR] 216.71-74) established under the Fur Seal Act (FSA) (16 U.S.C. §§ 1151-1175) in 1985. Under these regulations, harvests on the islands of St. Paul and St. George are managed independently, and the taking of northern fur seals for subsistence purposes is restricted to a season from June 23 to August 8 each year by experienced sealers using traditional harvesting methods. These regulations apply to Pribilovians, as defined at § 216.3. Pribilovians means Indians, Aleuts, and Eskimos who live on the Pribilof Islands.

NMFS has prepared a 2017 Draft Supplemental Environmental Impact Statement (DSEIS) for the Management of the Subsistence Harvest of Northern Fur Seals on St. Paul Island, Alaska (NMFS, 2017) and a 2005 Final Environmental Impact Statement for Setting Annual Subsistence Harvest of Northern Fur Seals on the Pribilof Islands (NMFS 2005). This analysis is a companion to these NEPA documents and incorporates each by reference here. These documents are available at <https://alaskafisheries.noaa.gov/pr/fur-seal>. Prior to the final rule, NMFS will prepare a Supplemental Information Report to the 2014 Final Supplemental Environmental Impact Statement for Management of the Subsistence Harvest of Northern Fur Seals on St. George Island, Alaska (NMFS, 2014), which when final will be available at <https://alaskafisheries.noaa.gov/pr/fur-seal>.

In February 2007 the Aleut Community of St. Paul Island (ACSPI), Tribal Government, passed a resolution requesting that NMFS revise regulations governing the northern fur seal subsistence use on St. Paul Island. In October 2009, ACSPI submitted a resolution to NMFS with further information on the petition to modify the regulations governing the subsistence use of northern fur seals on St. Paul Island, Alaska. Through a series of subsequent meetings and communications with NMFS, ACSPI amended its initial resolution requesting that the subsistence use regulations for St. Paul allow for more flexibility in the management of the harvest and hunting under the co-management system. On July 12, 2012, NMFS announced in the Federal Register the receipt of the Tribal Government of St. Paul's petition for rulemaking to revise the regulations governing the subsistence taking of northern fur seals (77 FR 41168).

NMFS held public meetings June 17-19, 2015, on St. Paul Island to discuss the proposed action. Following the public meeting, NMFS incorporated aspects of the comments received into the range of alternatives. NMFS received comments from the U.S. Environmental Protection Agency, Humane Society of the United States (HSUS), Marine Mammal Commission (MMC), Central Bering Sea Fishermen's Association (CBSFA), Aleutian Pribilof Islands Association, Inc. (APIAI), ACSPI, and eight individuals. Based on comments received, NMFS has increased the number of alternatives under consideration and incorporated comments into components of several of the alternatives.

In 2006, the Traditional Council of St. George Island, Tribal Government (Traditional Council) petitioned NMFS to change the subsistence use management of northern fur seals on St. George. NMFS worked with the Traditional Council to clarify the petitioned changes and authorize the annual harvest of up to 150 male pups during a second season from September 16 to November 30. The action included changes to the authorized subsistence use locations on St. George

applicable to both pup and sub-adult harvests, as well as other regulatory provisions for conservation of fur seals.

In 2014, NMFS finalized the rule that authorized the harvest of up to 150 male pups, allowed harvests of sub-adults and pups at all areas capable of sustaining a harvest, added a harvest suspension provision if two females were killed during the either harvest, and specified termination of the subsistence use for the remainder of the year if three females were killed (79 FR 65327; November 4, 2014). At that time, NMFS did not change the process used to establish the subsistence needs of the Pribilovians on St. George, so NMFS continued to specify in the triennial notice in the Federal Register the lower and upper limit of the number of seals required to meet the subsistence needs on both Islands, per 50 CFR 216.72(b). NMFS now proposes to set in regulation the maximum number of fur seals that may be taken annually on St. George Island, remove unnecessary regulations, and revise termination regulations to clarify the applicability of those termination provisions by season dates, age class, island, and sex. The proposed regulation will establish 500 males seals as the maximum number of fur seals that may be taken annually on St. George Island and is the same upper limit as established in the most recent triennial review for the 2017-2019 period (82 FR 22797, August 17, 2017). NMFS is analyzing the costs and benefits of the proposed regulatory changes for St. George Island compared to the status quo, which would be retaining the triennial review and specification process to establish the range of seals required annually to meet the subsistence requirements of the Pribilovians on St. George, retaining duplicate regulations, and retaining the current termination provisions at 50 CFR 216.72(g).

2 What is a Regulatory Impact Review?

This RIR is required under Presidential Executive Order (E.O.) 12866 (58 FR 51735, September 30, 1993). The requirements for all regulatory actions specified are summarized in the following statement from the order.

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider. Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

E.O. 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be “significant.” A “significant regulatory action” is one that is likely to:

- 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 and safety, or State, local, or tribal governments or communities;

- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in Executive Order 12866.

3 Statutory authority for this action

The subsistence use of northern fur seals on the Pribilof Islands is governed by regulations established under the FSA. The FSA broadly prohibits the “taking” of fur seals by directing that “[i]t is unlawful, except as provided in this chapter or by regulation of the Secretary [of Commerce], for any person or vessel subject to the jurisdiction of the United States to engage in the taking of fur seals in the North Pacific Ocean or on lands or waters under the jurisdiction of the United States. . .” (16 U.S.C. § 1152). Section 105(a) of the FSA authorizes the promulgation of regulations “with respect to the taking of fur seals on the Pribilof Islands...as [the Secretary of Commerce] deems necessary and appropriate for the conservation, management, and protection of the fur seal population” (16 U.S.C. § 1155(a)). In the absence of regulations promulgated under the FSA, all taking of fur seals would be prohibited by the FSA. Accordingly, a non-regulatory approach would prevent the subsistence use of fur seals on the Pribilof Islands and would not provide Pribilovians the opportunity to continue their cultural and nutritional practices related to subsistence use of fur seals. A non-regulatory approach is not appropriate to ensure both the conservation, management, and protection of fur seals on the Pribilof Islands and the subsistence use of fur seals by Pribilovians.

Additionally, the Secretary of Commerce may enter into co-management agreements with Alaska Native Organizations under Section 119 of the MMPA to conserve and provide for the subsistence uses of marine mammals (16 U.S.C. § 1388). On St. Paul Island, NMFS works with the Co-Management Council, guided by a Co-Management Agreement¹, to cooperatively implement subsistence use monitoring programs, marine debris cleanup, fur seal entanglement response, and fur seal habitat monitoring as resources allow. On St. George Island, NMFS works with the Traditional Council of St. George Island, Tribal Government (Traditional Council) to cooperatively implement similar programs regarding subsistence use of fur seals. The regulations remain the basis for managing and restricting the taking of northern fur seals by Pribilovians for subsistence uses.

¹ Co-Management Agreement between Aleut Community of St. Paul Island and NMFS for the Steller Sea Lion and Northern Fur Seal, 2000 (June 13, 2000).

4 Purpose and need for this action

The purpose of the proposed action is to conserve northern fur seals and manage the subsistence use of fur seals on St. Paul Island and St. George Island for the long-term sustainable use of fur seals for food, cultural continuity, clothing, arts, and crafts. The proposed action is needed to allow Pribilovians on St. Paul Island and St. George Island greater flexibility to meet their subsistence needs by obtaining fresh fur seal meat and subsistence resources throughout the year.

Since northern fur seals are the primary source of subsistence protein to the Pribilovians, the current regulatory regime does not adequately provide for the nutritional or cultural needs of the residents of St. Paul throughout most of the year. ACSPI's request is to revise current harvest regulations to allow for two extended subsistence seasons to include hunting with firearms and harvesting to address the nutritional need for fresh meat throughout a greater portion of the year.

NMFS did not consider regulatory actions affecting St. George Island in the DSEIS for St. Paul Island, as we did not anticipate any changes for St. George. Upon drafting the proposed rule for St. Paul Island, NMFS determined that changing the regulation for the triennial review and range specification process applied to both St. Paul and St. George Islands. Therefore in the process of regulatory streamlining for St. Paul Island, NMFS determined it was appropriate to streamline the regulatory process for St. George Island. The proposed rule would create a fixed limit of 500 male seals on St. George Island to replace the triennial range specification process. In addition, NMFS determined that the removal of some unnecessary regulations, and revision to the termination provisions for St. George Island was appropriate to consider in the proposed rulemaking. NMFS will prepare a Supplemental Information Report to evaluate whether a Supplemental Environmental Impact Statement is required for the regulatory changes related to subsistence use on St. George Island.

5 Description of the alternatives under consideration for St. Paul Island

Alternative 1 (Status Quo): Maintain existing management of the northern fur seal harvest on St. Paul Island (seasonal, age, sex, and location restrictions in 50 CFR 216.72).

Every three years, NMFS determines the number of seals expected to be taken annually to satisfy the subsistence requirements of St. Paul and St. George Islands, and NMFS publishes in the Federal Register the lower and upper number (or range) of fur seals necessary to meet their subsistence needs. Since 1992, NMFS has set the annual subsistence use range on St. Paul Island of 1,645 to 2,000 northern fur seals (82 FR 39044, August 17, 2017). The average number of male seals harvested annually during the past decade on St. Paul was 318 per year, with a range of 262 to 383 seals per year. Most recently, the reported fur seal subsistence harvest for St. Paul was 266 animals in 2014, 314 in 2015, and 309 in 2016 (Melovidov *et al.* 2014, Lestenkof *et al.* 2015, Melovidov *et al.* 2017).

This alternative continues subsistence use under the regulatory process used to establish harvest take levels every 3 years, and would not alter a set of regulatory restrictions that have been in place since 1994. Federal regulations at 50 CFR 216.72(e) currently restrict subsistence harvests on St. Paul by location and frequency: (1) scheduling at the Pribilovians discretion with advance notice of their schedule to NMFS for monitoring purposes; (2) starting of the harvest June 23; (3) describing the method by which fur seals may be taken, including how and by whom; (4)

prohibiting take of adult fur seals or pups, or the intentional taking of sub-adult female fur seals; (5) authorizing take of sub-adult male fur seals 124.5 cm or less in length; and (6) taking of seals with tags and/or entangling debris, if so directed by NMFS scientists. Under Alternative 1, the regulations would continue to identify seals that may be taken for subsistence use on St. Paul Island as males 124.5 cm or less in length. This length of male seal corresponds to an age range of two to four years old, and is called a “sub-adult” male in reference to those seals taken typically in the past commercial and subsistence harvests. For St. Paul, the take of adults and pups is prohibited in 50 CFR 216.72(e)(4) (see DSEIS Table 2.2-1).

Alternative 2: (Petition Action and Preliminary Preferred Alternative) Modify the management to allow for a regulated harvest of male northern fur seals to meet the subsistence needs described in the petition of the Pribilof Island Aleut Community of St. Paul Island, Tribal Council, and implement new conservation controls.

Alternative 2 considers two options which would terminate the continuation of subsistence use based on mortality of female fur seals. Alternative 2A directly addresses the ACSPI’s petition, and Alternative 2B is the preliminary preferred alternative.

Alternative 2B creates three revised regulatory provisions governing the management of subsistence use of northern fur seals on St. Paul Island. Most issues with management would be left to the co-management process. The co-management decisions would be non-regulatory and may address any relevant topics, including but not limited to: frequency of hunting and harvesting, locations where hunting and harvesting may occur, age-specific subsistence use levels, monitoring methods, and non-regulatory suspension or termination provisions to minimize the probability that the regulatory thresholds are not required to be implemented. NMFS determined that Alternative 2B would retain 50 CFR 216.71 and would replace all of the existing provisions under 50 CFR 216.72(e), which are applicable to St. Paul Island, with the following provisions:

1. Authorization to take by hunt or harvest for subsistence use of up to 2,000 juvenile (i.e., less than 7 years old, including pups) male fur seals annually;
2. Authorization of a subsistence hunt with firearms for juvenile male fur seals from January 1 to May 31 each year;
3. Authorization of a subsistence harvest without the use of firearms for juvenile male fur seals from June 23 to December 31 each year; and
4. Authorization of up to 20 mortalities of female fur seals each year.

The revised regulations applicable to St. Paul Island would no longer specify the location of haulouts where subsistence hunting or harvest could occur and would no longer dictate the frequency of hunting or harvest at those haulouts. The regulations also would no longer specify the length of fur seal authorized for subsistence use. Instead, as part of the regulatory revisions NMFS will define male seals less than 7 years old including pups as “juvenile” and authorize juvenile males to be used for subsistence purposes in Alternative 2B. Because Alternative 2B would set in regulation the total number of juvenile fur seals authorized for subsistence use on St. Paul Island, the triennial specification process under 50 CFR 216.72(b) to set a lower and upper limit (or range) for the number of seals needed for subsistence purposes would no longer

be necessary; therefore, Alternative 2B would remove 50 CFR 216.72(b) and would remove the suspension and termination provisions that relate to the lower and upper limit established under subparagraph (b) (see 50 CFR 216.72(f)-(g)). Similarly, because the number of fur seals needed to meet subsistence need would be set in regulation, the suspension and termination provisions related to whether subsistence need has been satisfied in any given year would be removed under Alternative 2B.

Alternative 2B also would clarify, through revision to 50 CFR 216.74, that NMFS and ACSPI would continue to cooperatively manage subsistence use under Section 119 and the MMPA, which means that on St. Paul Island both the harvesting and hunting of fur seals will be co-managed by the Aleut Community of St. Paul Island and NMFS under a Co-Management Agreement. In preparation of the proposed rule, NMFS determined the proposed rule did not require a regulatory provision promulgated under the FSA because co-management of subsistence use is authorized under Section 119 of the MMPA (16 U.S.C. § 1388) and no implementing regulations under the FSA are necessary to allow for continued co-management between NMFS and ACSPI pursuant to the MMPA. Thus under Alternative 2, co-management will continue through the existing Co-Management Council, although the existing Co-Management Agreement will be revised to be consistent with any final regulatory changes.

Alternative 2B would authorize the St. Paul Island Co-Management Council (see discussion in Sections 1.5 and 2.1.2 of the DSEIS) to develop an annual subsistence use management plan. The annual plan will include monitoring to collect in-season subsistence harvest and hunt data to ensure that practices under Alternative 2B are implemented consistent with statutory and regulatory requirements, including the regulatory requirement that subsistence use is not accomplished in a wasteful manner (50 CFR 216.71). The St. Paul Island Co-Management Council would have the ability to create additional limitations or clarifications (*i.e.*, beyond the regulatory restrictions) deemed necessary to ensure subsistence activities meet the subsistence needs of the community and continue to be conducted in a humane and non-wasteful manner. This could include the development through the Co-management Council of alternative methods for the hunting and harvest of fur seals, if those methods are consistent with the FSA and 50 CFR 216.71; if those methods will help ensure Pribilovians can meet their annual subsistence needs and minimize wasteful taking, including incidental mortality and harassment of fur seals; and if those methods will support, and not undermine, the sustainability of the fur seal population. If ACSPI subsequently proposes alternative methods of hunting and harvesting seals that may have different effects from the methods previously analyzed by NMFS, NMFS will consider whether those differences warrant additional rulemaking and NEPA analysis in order for those methods to be adopted and implemented on St. Paul Island.

Additionally, Alternative 2 considers two options related to the mortality of female fur seals. NMFS considered in the DSEIS that accidental mortality (meaning, incidental or non-intentional mortality) of females could occur and therefore included regulatory text (Alternative 2B) and non-regulatory description (Alternative 2A) related to the incidental mortality of females. During the process of preparing the proposed rule, NMFS determined that mortality of females could occur as a result of the misidentification of the sex of a seal during the stunning process. It is also possible that during the process of rounding up seals that a female seal could die. The distinction of accident or incidental was immaterial to the underlying interest in documenting and minimizing the mortality of females. NMFS determined that the goal is to protect the population

and the practical approach would be to authorize the mortality of up to 20 female fur seals without attempting to distinguish among the circumstances that resulted in the mortality of females in the regulations. Ultimately, NMFS examined whether a certain threshold of female mortality, regardless of cause of mortality, would impact the population overall.

Alternative 2A (see DSEIS Table 2.2-2) reflects ACSPI's petition that requested no federal regulation related to female mortality. The petition requested that the female mortality limit would be instituted through co-management rather than in regulation. Pursuant to the FSA, any taking of fur seals is prohibited unless otherwise authorized by the statute or through regulations promulgated by the Secretary of Commerce. Under Alternative 2A, there is no regulatory exception specifically authorizing the mortality of females during either season when subsistence activities would occur, and, while accidental female mortality rarely occurs, there is a likelihood of female mortality associated with the subsistence use seasons. To ensure consistency with the FSA and clarity on the maximum level of female mortality authorized each year, NMFS created Alternative 2B (see DSEIS Table 2.2-3). Alternative 2B would authorize the mortality of up to 20 females during the subsistence use seasons and would revise the existing termination provision (see 50 CFR 216.72(g)). Under Alternative 2B, the proposed regulations would specify that, if 20 females are killed on St. Paul Island at any point during the year, subsistence use will be terminated for the remainder of the year (see 50 CFR 216.72(g)). Additional details on the application of Options A and B may be found in DSEIS section 2.2 and DSEIS Table 2.2-2 and Table 2.2-3.

Alternative 3: Revise federal regulations to manage subsistence use by including prescriptive restrictions defining seasons, locations, methods of killing, and harvest and hunt allocation by age and season. This alternative incorporates elements of federal regulation and co-management to restrict the subsistence use of fur seals.

Alternative 3 uses federal regulations to manage most aspects of the subsistence use of fur seals and limits the use of the Co-Management Council to prohibiting subsistence use at breeding locations likely to reach unsustainable abundance levels, managing sub-lethal effects of hunting and harvesting, and monitoring and reporting subsistence use. Alternative 3 would add regulations to authorize and restrict the use of firearms to hunt fur seals to two specific locations.

Alternative 3 (see DSEIS Table 2.2-4) would amend federal regulations to manage the following aspects of subsistence use of fur seals:

1. Authorize the Pribilovians on St. Paul to kill up to 2,000 male fur seals annually for subsistence use;
2. Create two subsistence seasons totaling 219 days: the first to hunt juvenile male fur seals with firearms from January 1 to March 15, and the second to only harvest male pups from August 9 to December 31;
3. Retain the prohibition on harvesting adult fur seals;
4. Retain the provision to limit the frequency of harvests to any site occupied by fur seals to occur once per week;
5. Limit the harvest of male pups from August 9 to December 31 to 1,500 animals;

6. Limit the hunt of juvenile males (*i.e.*, fur seals up to 7 years old, excluding pups, killed with firearms) to 500 animals from January 1 to March 15;
7. Allow the use of firearms to hunt juvenile males hauled out on land at two specific locations (the Vostochni and Morjovi hauling and breeding grounds), and the use of firearms would be prohibited at all other sites and for seals in the water;
8. Terminate the subsistence use for that year if and when five females have been killed (*i.e.*, 0.25% of the authorized total male kill);
9. Create a provision that suspends subsistence use for up to 2 days if and when three females have been killed, and during the suspension period prescribe measures to be taken by the Pribilovians to minimize the future female mortality after the circumstances of the three accidental mortalities have been reviewed;
10. Retain the suspension and termination provisions regarding a determination that the harvest is being conducted in a wasteful manner (same as Alternative 1); and
11. Create a provision that Pribilovians' method of harvest must include at a minimum that all pups be captured, handled, and their sex determined prior to harvesting male pups.

Alternative 3 would eliminate the following provisions from the regulations:

12. Eliminate the provision to set the harvest range every 3 years;
13. Eliminate the provision to establish a lower end of the subsistence harvest range;
14. Eliminate the juvenile male harvest period between June 23 and August 8 of each year; and
15. Eliminate the prohibition on harvesting pups.

Alternative 3 would include suspension and termination provisions within the regulations. The harvest would be suspended for up to 2 days if NMFS determines the harvest is being conducted in a wasteful manner, or if three female fur seals are killed during the harvest of male seals. The NMFS Assistant Administrator would terminate subsistence use annually under Alternative 3 if and when five females were killed, 2,000 seals have been harvested, or if the conditions that led to harvests or hunts being conducted in a wasteful manner have not been remedied.

Alternative 3 includes non-regulatory provisions to manage and restrict hunting and harvesting by the Co-Management Council (see DSEIS Table 2.2-4). The Co-Management Council would estimate which breeding locations have adequate abundance to sustain a pup harvest each year. Alternative 3 would implement this co-management conservation control (*i.e.*, non-regulatory provision) based on the same analytical approach used by NMFS to manage the St. George subsistence harvest by regulations (NMFS 2014). Specifically, the Co-Management Council would obtain the pup production and trend information at each breeding location to evaluate the statistical probability of pup production falling below a level that is necessary for long-term stability of the population.

Under Alternative 3, NMFS would estimate the probability of any breeding areas being reduced below the levels established in Johnson *et al.* (2013), by projecting estimated biennial pup production at each breeding area 10 years into the future. NMFS would provide the estimated population projections to the Co-Management Council for review. NMFS (2014b) based harvest prohibitions on projections with a greater than 5% probability that pup production at a breeding site would fall below 500 within the 10-year timeframe. NMFS chose this probability threshold based on the best available science from the population viability analysis in Gerber and DeMaster (1999). The Co-Management Council would evaluate the estimated projections and determine thresholds for prohibiting subsistence use at all breeding areas as new data are available.

Alternative 3 would use the Co-Management Council to implement a conservation control to jointly develop harvest and hunt monitoring and reporting plans. These conservation controls would define methods to minimize sub-lethal effects, such as harassment, on seals not harvested and maximize detection and avoidance of females. Monitoring and reporting goals under Alternative 3 would be to obtain harvest and hunt data to include the number of females accidentally killed, total number of juvenile seals killed, and estimate the number of seals struck and lost.

Alternative 4: Continues regulatory control of the monitoring of the harvest to ensure no wasteful taking occurs, minimizing the disturbance of breeding and resting fur seals, the taking of females, and the prohibition on the use of firearms.

Alternative 4 (DSEIS Table 2.2-5) would amend federal regulations to manage the following aspects of subsistence use of fur seals:

1. Authorize the Pribilovians on St. Paul to kill up to 2,000 male fur seals annually for subsistence use (same as Alternatives 2 and 3);
2. Retain the provision to establish the lower and upper range of the subsistence need every 3 years (same as Alternative 1);
3. Create a 342-day subsistence harvest period, split into three seasons: January 1 to May 31, June 23 to August 8, and August 9 to December 31;
4. Retain the limit to harvest once per week per site (same as Alternatives 1 and 3), but revise to allow the harvest of fur seals from any occupied site, rather than dictating in regulation the sites where fur seals may be harvested (same as Alternative 3);
5. Prohibit the harvest of adult fur seals (same as Alternatives 1, 2, and 3);
6. Create a limit to harvest up to 1,500 male pups from August 9 to December 31 annually (same as Alternative 3);
7. Create a limit to harvest up to 500 juvenile males (*i.e.*, fur seals up to 7 years old, excluding pups) during January 1 to May 31, and June 23 to August 8;
8. Create a provision to prohibit the harvest from breeding locations at risk of reaching unsustainable population levels (same as Alternative 3);
9. Create a provision to prohibit the use of firearms to hunt or harvest fur seals;

10. Create a provision to prohibit the mortality of female fur seals, with the exception of allowing no more than 20 accidental female mortalities (*i.e.*, 1% of the authorized total male kill);
11. Create a provision that suspends subsistence use for up to 2 days if and when five females have been killed, and during the suspension period prescribe measures to be taken by the Pribilovians to minimize the future female mortality after the circumstances of the five female mortalities have been reviewed;
12. Retain the suspension and termination provisions regarding a determination that the harvest is being conducted in a wasteful manner (same as Alternative 1). The harvest would be suspended for up to 2 days if NMFS determines the harvest is being conducted in a wasteful manner, or if five female fur seals are killed during the harvest of male seals. Termination provisions would include a determination that the subsistence needs have been met, 20 females were killed, 2,000 seals have been harvested, and if the conditions that led to a suspension if harvests were being conducted in a wasteful manner have not been remedied;
13. Retain the provision that harvest may be only conducted by experienced sealers using the traditional methods, including stunning followed immediately by exsanguination (same as Alternative 1); and
14. Create a provision that Pribilovians' method of harvest must include at a minimum that all pups be captured, handled, and their sex determined prior to harvesting male pups.

Alternative 4 would create non-regulatory co-management provisions to manage sub-lethal effects on non-harvested fur seals and assessment of subsistence needs through the co-management process.

Alternative 5: Continues to establish the subsistence need by regulation, but creates a new process to estimate the lower and upper limit of the subsistence need.

Alternative 5 (DSEIS Table 2.2-6) would amend federal regulations at 50 CFR 216.72 to manage the following aspects of subsistence use of fur seals:

1. Retain the federal regulatory requirement to establish the lower and upper range of the subsistence need every 3 years (same as Alternative 1);
2. Create a new method for establishing the upper and lower end of the range of the annual subsistence need. From 2017 to 2019, the upper end of the range of subsistence harvest of male pups and juveniles (*i.e.*, fur seals up to 7 years old, excluding pups) will be authorized up to 50% of the potential biological removal (PBR) for the St. Paul population. PBR for St. Paul is 9,805 seals²; therefore, the upper limit of the subsistence

² Based on the 2012 Stock Assessment Report and used as the basis for the St. George Subsistence Harvest SEIS (Allen and Angliss 2013).

harvest range would be 4,902 seals. The lower end of the range would be set at the most recent 3-year average (2014 to 2016) of subsistence harvest. Beginning in 2020, the lower end of the 3-year harvest range (2020 to 2022) would be set based on the average number of reported seals harvested over the 2017 to 2019 period, and the upper end of the range to be based on the average from the entire subsistence period (*i.e.*, 1985 to the present year);

3. Create a 188-day subsistence harvest period, split into two seasons: June 23 to August 8, and August 9 to December 31;
4. Retain the limit to harvest once per week per site (same as Alternatives 1, 3, and 4);
5. Prohibit the harvest of adult fur seals (same as Alternatives 1, 2, 3, and 4) and remove the prohibition on the harvest of male pups (same as Alternatives 2, 3, and 4);
6. Create a provision to prohibit the mortality of female fur seals, with the exception of allowing no more than 200 accidental juvenile (*i.e.*, less than 7 years old) female mortalities;
7. Create a restriction to only harvest juvenile males (*i.e.*, fur seals up to 7 years old, excluding pups) during June 23 to August 8;
8. Create a restriction to only harvest male pups from August 9 to December 31;
9. Create a provision to prohibit the harvest from breeding locations at risk of reaching unsustainable population levels (same as Alternative 4);
10. Create a provision to prohibit the use of firearms to harvest fur seals (same as Alternative 4);
11. Create a provision that suspends subsistence use for up to 2 days if and when 150 females have been killed, and during the suspension period prescribe measures to be taken by the Pribilovians to minimize the future female mortality after the circumstances of the 150 mortalities have been reviewed;
12. Retain the suspension and termination provisions regarding a determination that the harvest is being conducted in a wasteful manner (same as Alternatives 1, 3, and 4);
13. Retain the suspension provision regarding when the lower end of the harvest range has been reached (same as Alternative 1). A suspension issued in accordance with this section may not exceed 48 hours in duration and shall be followed immediately by a review of the harvest data to determine if a harvest termination determination is warranted. If the harvest is not terminated under this section, the NMFS Assistant Administrator must provide a revised estimate of the number of seals required, up to the upper end of the range, to satisfy the Pribilovians' subsistence needs;
14. Retain the provision that harvest may be only conducted by experienced sealers using the traditional methods, including stunning followed immediately by exsanguination (same as Alternatives 1 and 4); and

15. Create a provision that Pribilovians method of harvest must include at a minimum that all pups be captured, handled, and their sex determined prior to harvesting male pups (same as Alternatives 3 and 4).

The upper and lower limit of the subsistence harvest would be established in the regulation every 3 years based on the averages of the past levels of subsistence harvests. The upper limit of the harvest range from 2017 to 2019 would be set at 50% of PBR, and in subsequent 3-year periods would be reset based on overall average harvest level since 1985. PBR is a precautionary measure of allowable human-caused mortality that is intended to allow a marine mammal population to recover from a depleted state. After the initial 3-year period to establish the upper limit of the subsistence needs of the Pribilovians, the regulatory process will use the average of the entire subsistence period to establish the subsequent upper limit of the harvest range. The lower limit of the harvest range would be set in the regulation based on the average harvest for the most recent 3-year period. Beginning in 2020, the regulatory process used to establish harvest levels every 3 years would be based on the reported harvest levels.

6 Analysis of the alternatives for St. Paul Island

St. Paul Island has what is considered a “mixed” economy: a blend of traditional subsistence cultural and a Western, cash-based network. However, like many rural Alaskan villages, the St. Paul Island economy is relatively underdeveloped, providing few jobs and little cash. There are, of course, some exceptions to this when considering the community’s involvement in commercial fisheries. St. Paul Island is a community still in transition from government control since Congress ended the commercial harvest of fur seals in 1984. The local halibut commercial fishery became a primary focus for the community after the end of the commercial fur seal harvest and later expanded to provide greater economic opportunity through the Community Development Quota (CDQ) program. The commercial processing of crab on St. Paul Island also has provided some tax revenue and other economic opportunities. The St. Paul Island economy has diversified since 1984, and is likely more stable as a result.

Despite the influence of the commercial fisheries, however, reliable access to subsistence protein sources are seasonal and highly uncertain, which limits the stability and sustainability of meeting subsistence needs on St. Paul Island. For purposes of a NEPA analysis, it is difficult to quantify the importance of the subsistence way of life and the value of co-management to foster that way of life in terms of food sources and associated cultural practices and traditional skills. The subsistence way of life in St. Paul has remained an important, consistent, and supporting factor in the personal, economic, and traditional character of the Pribilof Islands. Subsistence is not simply the collection of food that can be replaced by a visit to a grocery store or the replacement of a pound of fresh fur seal meat for a pound of beef or pork or fish, or even other subsistence food. Subsistence connects community members and relatives through food sharing and cooperative hunting and harvesting efforts. Subsistence provides raw materials for the creation of crafts and other saleable items under federal law. Subsistence connects community members to their environment as an integral part of the system. A continued subsistence harvest preserves the traditional skills and cultural values and knowledge of the Pribilovians, and it enables the passing of cultural values on to younger generations of subsistence users. In terms of the St. Paul socioeconomic and cultural environment, increasing the opportunities for subsistence use of fur

seals is a beneficial effect, and changing the opportunities for subsistence use could result in beneficial or adverse effects depending on the alternative.

The Co-Management Agreement provides the framework for full partnership and full participation in decisions affecting the management of marine mammals used for subsistence purposes on St. Paul Island. Participation and partnership between ACSPI and NMFS in decision-making regarding subsistence is built on trust and communication. In this analysis, we assume actions that build trust and promote open and regular communication are beneficial to the subsistence community. Actions that could hinder communication, erode trust, or do not support a partnership between ACSPI and NMFS would result in adverse effects on the community.

A 1987 State of Alaska Subsistence Division study on annual subsistence harvests in 98 Alaskan communities gathered data collected between 1980 and 1987 on the taking of fish, land mammals, marine mammals, and other species (*e.g.*, birds, plants, invertebrates, etc.), measured by the common statistical unit of “pounds” (dressed-weight), per capita, per year. The study reported two key conclusions:

1. Non-commercial taking of wild plant and animal species for food and other domestic uses continues to produce “significant economic value,” particularly in the rural areas; and
2. This sector of the state’s economy is generally not reflected in government statistics on productivity and growth (Wolfe and Walker 1987).

In this instance, “significant economic value” was defined based on the fact that 45 of the 98 communities surveyed reported wild food harvests equaling or surpassing the Western U.S. standard for average annual per capita purchases of meat, fish, and poultry (222 pounds). In communities such as St. Paul, purchasing meat that is flown in from Anchorage is a very expensive way to supplement a locally available source of protein, such as northern fur seals or Pacific halibut.

The distance of St. Paul from larger population centers, along with the unpredictability of events such as storms or flight cancelations that impact the availability of store-bought food, underscores the reliance of community members on local resources for subsistence. Subsistence in Alaskan communities, such as St. Paul, is often necessary for all families regardless of access to wage-earning jobs (Kruse 1991). Thus, denying subsistence communities the opportunity to obtain wild resources would result in the deterioration of nutrition, public health, and social stability and would undermine a critical component of local culture. This combination of traditional and modern lifestyle helps to sustain cultural identity and provides a measure of economic security by providing a substitute for potentially unstable cash-based systems.

Alternative 1

Alternative 1 would maintain the same process for determining the number of fur seals for subsistence requirements, a process that has resulted in the same subsistence use range of 1,645 to 2,000 northern fur seals per year since 1992. The status quo subsistence harvest method is efficient (*i.e.*, 100s of non-breeding males can be separated from the population and specific seals can be chosen for subsistence use). The status quo subsistence harvest method results in an

average of about two females (0.2% of the annual harvest) killed accidentally each year during the subsistence harvest. This is considered to have a negligible effect based on the criteria presented in DSEIS Table 4.2-4. The level of accidental mortality due to hyperthermia (overheating, which can be caused during the harvest of fur seals) is also negligible (0.2% of the annual harvest), supporting the determination that the harvest is not conducted in a wasteful manner.

The upper end of the subsistence use range provides a degree of flexibility regarding population changes and unanticipated food needs within the community during the season when fur seals are easily available on the Pribilof Islands. However, the process for exceeding the lower end of the range limits can be viewed as an unnecessary regulatory burden on the community during the end of the harvest season. Under the existing regulations, the NMFS Assistant Administrator is required to suspend the harvest when the lower limit (1,645) of the harvest range has been reached (50 CFR 216.72(f)(1)(iii)). After a 48-hour suspension, the NMFS Assistant Administrator must determine if the subsistence needs of St. Paul have been met, or provide a revised estimate of the number of seals required to satisfy the Pribilovians' subsistence needs by August 8. NMFS analysis includes seal mortality up to 2,000, yet the harvest is required to be suspended for no more than 48 hours when the lower end of the subsistence need is reached. The lower limit has been reached a number of times on St. Paul and most recently in 1991, requiring the mandatory 48-hour suspension and evaluation of harvest data and need.

Alternative 1 restricts the harvest to a period from June 23 through August 8 and at seven of the numerous hauling grounds, which may be harvested no more than once per week, thus the regulations would continue to restrict food resource availability, access, and utilization. The community would not be allowed the opportunity hunt seals during the winter and spring, nor to harvest male pups as requested in the petition, an historic tradition dating back to at least the 1800s (see Section 3.9.4 in the DSEIS). The age and seasonal restrictions of the harvest would not allow the community an opportunity to obtain fresh fur seal meat when needed at other times of the year.

The No Action Alternative would also continue to maintain a size and age restriction, by prohibiting both the harvest of seals greater than 124.5 cm in length and also prohibiting the harvest of adult fur seals. There is a very limited biological basis for using the length threshold of 124.5 cm. In fact, the 124.5 cm threshold is more closely tied to prices received for fur seal pelts during the commercial harvests (Scheffer *et al.* 1984). The price per size peaked at a 49-inch long skin (124.46 cm) and was the basis for killing a greater percentage seals up to the 124.5 cm threshold each summer (Scheffer *et al.* 1984). In the subsistence harvest on St. Paul, less than 1% of seals harvested have been greater than 124.5 cm (see DSEIS, NMFS 2017). The current size restrictions create confusion among harvesters because the harvesters cannot readily measure the seals prior to stunning them using the traditional harvest method found in 50 CFR 216.72(e)(3). Harvesters must make split-second decisions about which seals to harvest. During the harvest, stunners attempt to choose the smallest seals of those in each harvest round-up, therefore the sizes are relative to those in the group. Therefore, there are times when the smallest seal in a group may be larger than 124.5 cm, but is harvested because it is relatively small.

The public has expressed concern about whether changing the methods and restrictions to accommodate the subsistence needs of St. Paul is based on an unrealistic assessment of

subsistence need and would result in decreasing the efficiency of the harvest (*i.e.*, result in unnecessary take). To satisfy the subsistence needs of the community, harvesters must try to obtain healthy fresh fur seal meat when seals are available and when individuals in the community have time to harvest. The timing of the fur seal harvest may conflict with earning wages through the few seasonal or full-time job opportunities available. The short fur seal harvest season under Alternative 1, No Action currently conflicts with the commercial halibut season. Thus, the No Action Alternative artificially forces individuals in the community to choose between earning a wage to pay bills (*i.e.*, for heating homes or purchasing store-bought food) versus participating in subsistence harvests of fur seals, which contribute to improved food security and have significant cultural and social value.

As described in DSEIS Section 2.2, Alternative 1 would continue NMFS's significant oversight and responsibility to manage the subsistence harvest through federal regulations as compared to allowing the community of St. Paul Island to manage the harvest through a more comprehensive co-management system, as under Alternative 2. The administrative burden associated with managing by regulations results in slower response to addressing community subsistence needs or changing environmental conditions that may affect the harvest. Under Alternative 1, the regulations would continue to dictate that harvest could occur at the seven hauling grounds identified and no more than once per week, limiting the flexibility of the community to meet their subsistence needs. Alternative 1 would include non-regulatory provisions within the current co-management agreement that the subsistence harvest of fur seals may be suspended if five females were accidentally harvested or terminated if eight females were accidentally harvested. The current co-management system would not change or expand under Alternative 1, which could degrade trust between ACSPI and NMFS given that ACSPI's petition explicitly requested more responsibility and flexibility be placed on the co-management system rather than codified regulations. While some objectives of co-management could be met under the existing agreement (per Alternative 1), the key action requested by ACSPI to expand co-management of subsistence use and make recommendations for appropriate changes to management measures would not be met. The effects of the status quo alternative extend across the entire Alaska Native community of St. Paul Island.

The harvest restrictions under the No Action Alternative do not allow the opportunity to obtain fresh fur seal meat and handicraft resources at any other time of year other than the current, limited subsistence use season. Instead, St. Paul would continue to harvest sub-adult (non-pups less than 124.5 cm) male fur seals between June 23 and August 8 each year. Under Alternative 1, St. Paul's request to reinitiate the pup harvest in autumn and begin winter hunting with firearms to obtain fresh meat and resources for handicrafts in autumn would be denied. In light of the impact criteria based on food resource availability, access, utilization, and stability (see DSEIS Table 4.3-4), Alternative 1 would have an adverse economic effect on the community of St. Paul Island and their ability to meet their subsistence needs.

Alternative 2 (Petitioned / Preferred Alternative)

Alternative 2 (Preliminary Preferred/Petitioned Alternative) directly addresses the subsistence need of the St. Paul community expressed in their 2014 petition and is NMFS' preferred alternative. The petitioned alternative recognizes a formal request by the ACSPI to use co-management to the maximum extent possible, rather than federal regulations, to manage and

restrict subsistence practices. Based on ACSPI's request, current regulations would be modified to increase the opportunities for fur seal subsistence use by streamlining the regulatory processes for determining subsistence need, eliminating the regulations that specify locations for subsistence harvest, extending the harvest season, and by adding a hunting season January 1 through May 31 every year. During the hunting season, firearms would be a permitted hunting method on St. Paul Island to pursue fur seals on land or in the water. The community would also be authorized to harvest fur seal pups during the hunting season and during the extended harvest season.

Alternative 2 would also remove the language in the current rule regarding the size limit (124.5 cm in length or less) of seals to be harvested. Instead, under Alternative 2, harvest regulations would state that seals up to, but not including the age of 7, could be harvested or hunted, including pups. The size restriction was included in the emergency rulemaking in 1985, and has been retained even though it was based on maximizing the market value of skins from the commercial harvest. In 1946, the government-marked skins in the field based on length, followed those skins through processing, and determined their individual sale price during the fur auctions held later that year. The analysis showed the highest cost return on skins ranged from 46 to 51 inches (117 to 129 cm). The price per size peaked at a 49-inch long skin (124.46 cm); therefore, this was the basis for killing a greater percentage seals up to the 124.5 cm threshold each summer (Scheffer *et al.* 1984). Under Alternative 2, Pribilovians have petitioned to remove this outdated size restriction from the regulation.

Instead of a size restriction that can only be confirmed after the killing of a seal, NMFS proposes to authorize the harvest of male fur seals up to seven years old (termed juveniles), which would allow subsistence users to determine prior to killing a seal eligibility for take based on physical and behavioral characteristics. Male fur seals between age 5 and 6 years have broader shoulders, and longer, different colored guard hairs around their head and neck (Scheffer 1962). They also begin to behave differently by defending the space around them from all smaller and similarly sized seals (Gentry 1998). Juvenile male seals regularly interact with one another directly and do not defend the space around them from other seals. For these reasons, harvesters can easily distinguish between juvenile males and adult males by their physical characteristics and behavior versus attempting to adhere to a regulatory prohibition of less than 124.5 cm in size. A length restriction would not be useful for managing the proposed subsistence hunting season from January 1 through May 31. NMFS and ACSPI do not have a clear understanding of the sizes of seals available at this time of year, and it is unrealistic to expect hunters to estimate the length of a mostly-submerged seal before pulling the trigger of a firearm. Similarly, this is true for the harvest season because a precise measurement of a moving seal among ten or more seals of similar size cannot be taken until after the seal is dead. At age seven most male fur seals show secondary sexual characteristics such as growth of a mane and broadening of the sagittal crest, neck, and shoulders (Scheffer 1962) that provide a reliable means for hunters to distinguish adult males from juveniles during the hunting and harvest seasons on St. Paul Island.

Alternative 2 proposes two seasons for obtaining fresh meat and that these seasons would be codified under federal regulations. During the first season, between January 1 and May 31, hunting male juvenile fur seals by firearms would provide community residents significantly more flexibility for obtaining fresh meat during winter months, when the chances of flight cancellations due to bad weather or storms is very high and could cause lack of availability of

store-bought food. Allowing winter hunting would significantly reduce food costs for families whose cost of living is inflated due to the remoteness of St. Paul Island (see DSEIS Section 3.9.8.1). As described in detail in DSEIS Section 3.2.3, the chances of accidentally killing a female fur seal during this time of year are extremely low because they are not found on or near the island (see DSEIS Figure 3.2-3). The second season would occur June 23 through December 31, and is intended to allow the use of pups, although all juvenile seals would be authorized for subsistence use. As described in DSEIS Section 3.9.4, the Aleut culture has a long history of harvesting pups for food. This change proposed under Alternative 2 directly addresses the community's petition and would result in beneficial effects for the community by reinstating a traditional harvest practice. Both Options A and B under Alternative 2 would improve food security and the stability and affordability of food resources on St. Paul Island.

Under Alternative 2, the maximum number of seals authorized for harvest on St. Paul Island would remain at 2,000 seals per year, which is based on NMFS's consistent prior determinations of subsistence need and on the sustainable nature of a harvest of up to 2,000 seals per year. However, Alternative 2 would change the process. Under Alternative, the regulatory requirement for NMFS to specify subsistence need every three years would be eliminated. Instead, NMFS would set in regulation the maximum number of seals authorized for harvest each year. This approach will streamline and simplify the process. This approach also recognizes that, although maximum harvest level has been set at 2,000 seals per year and average annual harvest in the past decade has been 318 seals per year, there are many factors that can force Pribilovians on St. Paul Island to harvest fewer seals each year, regardless of their particular annual needs, including: the burdensome administrative process associated with the suspension of the harvest per 60 CFR 216.72(f); normal year-to-year variability in seal size; the Pribilovians' preference for smaller seals; the limited availability of two-year-old seals until late in the harvest season; the availability of wage earning jobs on both Islands that conflicts with the subsistence season; and the availability of experienced sealers (58 FR 32892, June 13, 1993). These factors can force a diminished harvest over time. Under Alternative 2, setting in regulation a maximum harvest level will ensure Pribilovians have a maximum, yet sustainable, number of seals authorized for subsistence use in order to provide assurance and flexibility in each year for Pribilovians to harvest fur seals for their subsistence needs in that year.

By authorizing in regulation a maximum harvest level and by allowing subsistence use of different age classes of fur seals at more locations on St. Paul, the community would have greater resilience in meeting their subsistence need when responding to changing future environmental conditions and fur seal availability, as well as the capability of the community to participate in the subsistence use seasons. The increased access to fur seals addresses both availability, access, and utilization (see DSEIS Table 4.3-4) of this important resource, thereby improving the year-round stability or "food security" of the community in the long-term. By removing the prohibition on the subsistence use of pups and allowing the hunting and harvest of pups during both subsistence use seasons, NMFS would acknowledge the cultural and traditional heritage of the community by legalizing an important subsistence practice and food preference for Pribilovians.

The existing regulations have triggers that (1) suspend the subsistence seasons for some period of time, subject to additional determinations before subsistence use can continue and that (2)

terminate the subsistence seasons for the remainder of that year. Alternative 2's Options A and B offer different methods for suspension and termination provisions.

Under Alternative 2A, NMFS and ACSPI would develop both suspension and termination provisions through co-management. Currently, the co-management agreement specifies the subsistence harvest of fur seals will be suspended if five females were accidentally harvested or terminated if eight females were accidentally harvested. Under Alternative 2A, the co-management system would determine appropriate levels of female mortality to trigger the suspension and termination of the subsistence seasons. The co-management system would be responsible for suspending the subsistence harvest at interim female mortality thresholds (meaning thresholds that suspend the harvest that are less than the termination trigger). Under Alternative 2A, the co-management system would set the termination trigger at 20 females per year; the co-management system also would be responsible for terminating the harvest if subsistence needs have been met or if 20 female seals have been killed.

Under Alternative 2B, Alternative 2B would set just the termination provision in regulation: NMFS would codify a regulatory limit of 20 female mortalities, which, when reached, would terminate the subsistence seasons for the remainder of the year. However, the co-management system would be responsible for developing other provisions to management female mortality. Alternative 2B would allow the Co-management Council to develop suspension provisions (which, again, mean those thresholds that suspend the harvest but are less than the termination trigger). This would allow the Co-management Council to create and manage any interim female mortality thresholds to avoid reaching the regulatory limit of 20 female mortalities, which, when reached, terminates the subsistence seasons for the remainder of the year.

Alternative 2A directly addresses ACSPI's petition to have more responsibility for managing the subsistence use of fur seals and could result in more timely response to changing conditions during the subsistence use seasons than Alternative 2B or Alternative 1. However, NMFS has determined that, Alternative 2B is the preferred option under the FSA. The FSA prohibits all taking of fur seals, unless authorized in regulation. Under Alternative 2B, NMFS would authorize the accidental or incidental mortality during the subsistence seasons of up to 20 females per year, and once 20 females were killed, the subsistence seasons would be terminated for the remainder of the year. This proposed approach ensures consistency with the FSA and clarity on the maximum level of female mortality authorized each year. For these reasons, Alternative 2B is NMFS's preferred alternative.

Subsistence harvesters would sex pups as a co-management requirement prior to harvest under Alternative 2 Options A and B; therefore, the likelihood that 20 female pups would be killed before harvesters and monitors would identify the mistakes is very small. The traditional male harvest season likewise has resulted in an average of two accidental female mortalities, and NMFS anticipates this would continue in a similar fashion under Alternative 2B when considering the interim thresholds of female mortality to be established under the co-management system.

Building an effective monitoring and co-management program to support changes considered in Alternative 2 is critical for successful implementation. The process begins with clearly defining program goals and objectives, partitioning the program into manageable but meaningful pieces,

and developing performance-oriented monitoring for each component of the program by the co-management partners (*i.e.*, ACSPI and NMFS). Under Alternative 2, NMFS would continue research to monitor the abundance, growth rates, vital rates, and overall status of the northern fur seal population. The St. Paul ECO Program and the harvesters/hunters via NMFS and ACSPI Co-Management Council would be more effective at addressing issues related to the implementation of, and effectiveness of, the fur seal subsistence harvest and hunt to meet the subsistence needs. Option A provides ACSPI with the highest level of responsibility for managing female mortality during the harvest/hunt because suspension and termination provisions would not be codified under regulation; rather, any measures to address and limit female mortality, including suspension and termination triggers, would be implemented through co-management. Option B, on the other hand, authorizes a maximum level of female mortality per year (20 per year) and codifies in regulation a related termination trigger that requires the termination of the subsistence use seasons for the remainder of the year once 20 females are killed. Under Alternative 2B, NMFS also proposes to codify the two seasons and the male subsistence use limit, in addition to the female subsistence use limit.

By design, local monitoring would include some level of ‘trial and error’ to determine the most effective means for monitoring. Monitoring plans are designed to detect changes in the effectiveness or implementation of the alternative and effects on the northern fur seal population. To monitor effects of an alternative at a population level, some combination of the NMFS research program and local research and monitoring would be needed. The monitoring data will inform decisions to adjust management measures over time using an “adaptive management” framework. To be effective, each component of the monitoring program should track conservation and management objectives and identify whether those objectives are being met, maximizing the opportunity to meet defined subsistence needs and objectives in a scientifically defensible manner while minimizing the risks to the northern fur seals.

The co-management subsistence monitoring program for Alternative 2 would focus on the balance of meeting the subsistence needs of St. Paul and conservation of the fur seal population. Under co-management, NMFS and ACSPI would define goals, objectives, and measures of success of the monitoring program. The program under Alternative 2 would be:

- (i) Committed to scientific quality, incorporating scientific input and review at various levels (*i.e.*, programmatic, protocols, sampling design, analysis, and reporting);
- (ii) Responsive to management needs, co-management principles, and traditional knowledge;
- (iii) Designed to ensure stakeholders the opportunity for meaningful input into the process; and
- (iv) Committed to communication and creating an effective information feedback loop for shared decision-making by the co-management council.

Under Alternative 2, one of the key concerns is whether or not the use of firearms to shoot fur seals at a distance (during the proposed hunting season) meets the “not accomplished in wasteful manner” standard, given the potential for seals to be struck and lost (*i.e.*, potentially escaping into or lost in the sea to drown or die). The current harvest process under Alternative 1 does not

result in animals being struck and lost; however, the subsistence use of Steller sea lions and harbor seals throughout Alaska, and on the Pribilof Islands, is accomplished by the use of firearms. Under Alternative 2 Options A and B, the monitoring of fur seals struck and lost during the hunting season would be a priority for the monitoring program, as the current analysis in the DSEIS is based on Steller sea lion hunting and all seals struck and lost are assumed dead. Thus we assume the ratio of sea lions struck and lost to those struck and retrieved is a reasonable proxy until those numbers can be estimated for fur seals and incorporated into the total number of animals taken as part of the annual harvest.

Defining a specific monitoring approach at this point in the process would undermine the relationship between NMFS and ACSPI given that ACSPI has requested to co-manage (and monitor) subsistence use of fur seals within the Co-Management Agreement. ACSPI has taken the primary responsibility for monitoring and reporting the hunting of endangered Steller sea lions under Tribal Ordinance, and proposes to add fur seal hunting to their current co-management monitoring. As a result, it may be determined that most monitoring of fur seal hunts would be consistent with that used for Steller sea lions. This would place a greater level of responsibility on the St. Paul ECO Program to expand the subsistence use monitoring program, including the traditional harvests of juvenile males, the harvest of male pups, and the hunting of fur seals during the winter season (January 1 – May 31). Over time, NMFS, ACSPI, and the ECO Program would cooperatively develop means to assess performance and continue to improve harvest and hunt effectiveness and conservation value. This form of “learning by doing” monitoring is similar to adaptive management (Berkes *et al.* 2000).

Under co-management, Alternative 2 Options A and B would institute conservation controls developed in partnership with the ACSPI and harvesters to minimize accidental female mortality and avoid wasteful take by regularly evaluating harvest and hunting methods and minimizing sub-lethal effects on non-harvested fur seals by assessing the humane harvest and hunting techniques in use. Best harvest practices based on experiences and methods developed by harvesters and NMFS would promote greater participation and local support in the harvest management process.

Alternative 1, the No Action Alternative, limits harvest to seven locations, irrespective of the stability or size of the breeding site. Alternative 2, the Preliminary Preferred/Petitioned Alternative, has beneficial effects on co-management because it supports trust in the partnership intended under co-management to balance the ability of the community to meet their subsistence needs with conserving the fur seal population based on the best available science. Alternative 2 Options A and B do not increase the number of fur seals that can be harvested for subsistence purposes on St. Paul above the upper limit that has been authorized for use every year since 1992, but adds flexibility by adding a new season, honors the tradition of harvesting pups, and removes the restrictions on the haulout locations where hunting and harvest can occur and the frequency of hunting and harvesting at those locations.

Beneficial effects on subsistence and co-management are likely to occur under Alternative 2. The Preliminary Preferred/Petitioned Alternative provides greater flexibility than the No Action Alternative and provides greater resiliency for the community to withstand dramatic or unanticipated changes to the environmental, social, and economic conditions on the island (see Impact Criteria for Food and Resources Stability in DSEIS Table 4.3-4). Alternative 2B

addresses the petition of the tribal government of St. Paul Island to reinstate the pup harvest and winter hunting of fur seals, and institutes practical co-management controls to manage and minimize mortality of females up to the regulatory limit of 20 mortalities per year. In addition to fresh meat, the longer harvest period would allow for new resources to be obtained for creation of handicrafts on St. Paul Island. Increased co-management of the subsistence use of northern fur seals under Alternative 2B would use monitoring “feedback loops” to improve communication, performance, and effectiveness of measures to ensure the subsistence needs of the community are balanced with fur seal conservation.

It is critical to restate, and more importantly understand, that the Alternative 2 would implement a subsistence use monitoring program that is, at its core, built on adaptive management with co-management, and regulatory limits based on extensive biological analysis and population modeling (see DSEIS Section 4.3.5). As such, the monitoring program would openly acknowledge a level of uncertainty about the outcomes of the management actions based on the real-time monitoring data, and the response of the northern fur seal population to the proposed additional opportunities for subsistence use.

When compared to a more restrictive regulatory model as in Alternative 1, co-management would continue to provide subsistence opportunities over time and flexibility that are based on actual conditions of subsistence use and fur seal response. Alternative 2 Options A and B would promote more locally-based co-management of subsistence use, with Option A providing slightly more flexibility than Option B in terms of when to suspend and terminate the subsistence use seasons. Alternative 2 Options A and B would have major positive effects on food security, availability, and stability for the Pribilovians of St. Paul Island. Thus Alternative 2B provides legal basis for the proposed subsistence use of northern fur seals and a beneficial effect on the availability, access, and utilization of subsistence resources than Alternative 1 No Action.

Alternative 3

Alternative 3 incorporates elements of Alternative 2, but also includes certain regulatory controls to monitor the harvest and manage taking of female fur seals in a manner more restrictive than Alternative 2. Given that the ACSPI has requested to co-manage (and monitor) subsistence use of fur seals under a revised Co-Management Agreement, any alternative or framework predetermining a monitoring approach with the continued dominant role of the federal management as in Alternative 3, as compared to those actions managed under co-management in Alternative 2 (see DSEIS Table 2.2-2), would be viewed negatively by ACSPI and could undermine the co-management process, as well as undermine the responsibility of Pribilovians to co-manage the subsistence use of a food source of considerable cultural and traditional significance.

Under Alternative 3, there would be two seasons for killing up to 2,000 male seals (non-adults). The first season (January 1 through March 15) would authorize hunting up to 500 juvenile male fur seals with firearms on land at two specific locations (Vostochni and Morjovi). The second season would allow harvest of up to 1,500 male pups between August 9 and December 31 from any area that could support a harvest up to once per week per site. Under Alternative 3, the harvest would be suspended if three female seals were killed; in addition, the harvest would be terminated if any of the following occurred: the subsistence need was met, take was determined

to be wasteful and not remedied, or five female seals were killed accidentally. In the regulations, the size restriction (of seals 124.5 cm or less) would also be removed and changed to read juvenile “seals up to 7 years” (including pups), as under Alternative 2.

While Alternative 3 acknowledges the cultural significance of harvesting young seals by allowing the harvest of up to 1,500 pups, the first season for juvenile males, which ends March 15, would be approximately 6 to 7 weeks shorter than under Alternative 2, in which the season ends May 31. This restriction would reduce the opportunity to obtain fresh meat and could result in a minor beneficial effect on food security and stability, as compared to Alternative 2. Additionally, the restriction to limit hunting to two locations on the northern end of the Island, far from the community, reduces the benefit of this alternative for meeting the community’s food needs. Therefore, some beneficial effects on subsistence and co-management under Alternative 3, as compared to Alternative 1 would occur; however, these benefits do not provide the flexibility or the ability of the community to withstand dramatic or unanticipated changes to the environment or fur seal availability, as well as the availability of community members to participate in the subsistence use seasons for fur seals, as does Alternative 2.

Under Alternative 3, the Co-Management Council would be given the responsibility to monitor accidental female mortality and to establish a harvest reporting system to ensure non-wasteful harvest, which could help foster trust. However, these effects would likely be minimized because most of the other management measures would be codified in regulations and managed by NMFS (*i.e.*, harvest locations, practices, suspension, and termination). Therefore, while Alternative 3 would improve availability, access, utilization, and stability of the community’s food resource (namely by allowing a limited hunting season of juvenile males January 1 to March 15 and a second harvest season of 1,500 pups from August 9 to December 31), the effects of these actions would be a moderate benefit for the community of St. Paul Island, as compared to Alternative 2.

Alternative 4

Similar to Alternative 3, the harvest range under Alternative 4 would include up to 500 juvenile males and 1,500 pups for a total potential harvest of 2,000 non-adult male fur seals. Three seasons would be allowed under this alternative as follows: January 1 through May 31 and June 23 through August 8, for male juvenile (up to 7 years, excluding pups), and August 9 and December 31, for male pups. Harvest could occur at any location that supports a harvest, but the use of firearms would be prohibited. Under Alternative 4, subsistence use would be suspended if five females were accidentally killed and would be terminated if subsistence need had been met or, similar to Alternative 2 (Preliminary Preferred/Petitioned Alternative), subsistence use would be terminated if 20 females were killed. However, contrary to Alternative 2, the harvest suspension would not be handled under co-management but would be dictated by regulations governing suspension.

Alternative 4 is perhaps slightly more flexible than Alternative 3, and therefore, may provide a minor additional benefit due to the additional season allowed for harvesting juvenile male seals between June and August. It is difficult to determine how beneficial this additional season would be given that it would overlap with the Pacific halibut season, which could continue to force individuals on St. Paul to choose between participating in the subsistence use season or earning

money in the commercial fishing season. Windy weather days that are “unfishable” tend to be good sealing days (cooler temps due to wind result in a longer time window for harvest in the morning). However, rainy and windy weather days that are “unfishable” also tend to be bad sealing days because non-breeding seals vacate the land on rainy days. Under Alternative 4, the following would be codified under regulations: harvest range, seasons, conditions for suspending or terminating the harvest, areas that could be harvested, and method of harvest.

Alternative 4 would improve access, availability, utilization, and stability of the St. Paul food resource by expanding the season during which seals could be harvested and would also allow harvest of pups, a traditional cultural practice. However, under Alternative 4, the roles and responsibilities of those responsible for the harvest continued to be managed and monitored in a large part under federal regulations, as compared to those actions managed under co-management (see Table DSEIS 2.2-4). Alternative 4 also would establish three seasons and set the number of seals that may be harvested per season, an approach that the residents of St. Paul do not favor. Overall, there would be less ownership and stewardship allowed by the local Co-Management Council under this alternative as compared to Alternative 2, which could undermine the co-management process and the responsibility of Pribilovians to co-manage the subsistence use of a food source of considerable cultural and traditional significance.

Alternative 5

Alternative 5 is based on the premise that the subsistence need demonstrated by the community would be evident from the number of fur seals harvested annually. Therefore, between 2017 and 2019, the upper limit of male pups and juvenile males (up to 7 years, excluding pups) could be up to 4,902 seals (*i.e.*, 50% of the 2013 PBR for St. Paul³). This follows the recommendations from the Marine Mammal Commission and the Humane Society of the United States to base the subsistence need for the St. Paul community on the number of seals actually killed in a prior year. Under Alternative 5, there would be two subsistence use seasons: a season for all juvenile males (up to seven years old) from June 23 through August 8 and a second season for just male pups from August 9 through December 31. No haul out could be harvested more than once per week. Alternative 5 prohibits the use of firearms.

Beginning in 2020, the 3-year subsistence use range (*i.e.*, 2020 to 2022) would be set based on the average number of reported seals harvested over the 2017 to 2019 period. The subsistence use range would continue to be established every 3 years based on the reported use levels from the previous 3-year period. As with Alternative 1, the regulations also prohibit the intentional (but not accidental or incidental) taking of sub-adult (juvenile) female fur seals. Alternative 5 would include suspension and termination provision within the regulations rather than through co-management, similar to Alternatives 2, 3, and 4. Harvest would be terminated if subsistence

³ Based on the 2012 Stock Assessment Report and used as the basis for the St. George Subsistence Harvest SEIS (Allen and Angliss 2013).

needs have been met, if wasteful taking was not remedied, or if 10 female fur seals were accidentally killed.

In the first three years, Alternative 5 would result in several beneficial changes for Pribilovians on St. Paul Island compared to the No Action Alternative. It would not only increase the number of seals that could be killed for subsistence uses but increase access and availability to fur seals as a food resource by allowing the subsistence use of male pups during a second season through December. This could provide fresh meat for a longer period throughout the year, thereby minimizing the reliance on expensive and unreliable store-bought food. The potential to increase the subsistence use range in the first 3 years would be a major beneficial effect on food security.

In subsequent years (after the first three years), the subsistence use range would be set on prior use rather than the community's subsistence need. Under this situation (basing subsistence use solely on demonstrated need), the subsistence use range setting process is 'backward looking' (*i.e.*, what was the use the past 3 years) rather than 'forward looking' (*i.e.*, what will the community need this year). This backward looking approach could consistently reduce the harvest range after the initial 3-year period. It fails to consider what the actual needs of the community may be in a future year and limits the ability of the community to respond to changing community and environmental conditions. For these reasons, it could create the perverse incentive to kill more seals than may be needed in one year in order to ensure that in a subsequent year unforeseen subsistence needs would still be met and that unforeseen events do not undermine subsistence need.

Moreover, Alternative 5 would likely undermine trust between the community and NMFS and erode the co-management partnership. Monitoring goals of subsistence use under Alternative 5 would be consistent with those under previous alternatives to ensure the humane and non-wasteful subsistence use of fur seals; however, the monitoring results would be significantly influenced by the implications of the subsistence use range setting process. In so doing, there would be no mechanism to account for the socio-economic factors such as St. Paul's future food security, as well as cultural and traditional factors. Alternative 5 is more similar to Alternatives 3 and 4, than Alternative 2, in that the federal government retains a large role in setting the harvest range, and managing and monitoring the harvest, including regulatory restrictions on the timing and location of the harvest of fur seals. The federal government also would be required every three years to continue to establish for each year the annual subsistence need on St. Paul Island, as in Alternative 1.

As described, similar restrictions on subsistence use would remain in place in terms of ensuring that the harvest of fur seals is humane and not wasteful, and to protect against accidentally killing females. Co-Management would establish a subsistence use reporting system (as under Alternatives 2, 3, and 4), placing additional responsibility in the hands of the residents of St. Paul Island. The shared monitoring responsibilities of Alternative 5 (see DSEIS Table 2.2-5) would generally be considered less desirable to the community than monitoring under Alternative 2. However, Alternative 5 could result in notable and moderately positive effects for the community of St. Paul in terms of the potential to increase access and availability to the subsistence resource when compared to Alternatives 3 and 4. Alternative 5 would provide greater benefits to the community than the No Action Alternative.

Summary of Potential Socioeconomic and Cultural Effects of the Alternatives for St. Paul Island

For St. Paul Island, Alternatives 2 through 5, in general, would provide increased opportunities for subsistence use of seals compared to Alternative 1 (No Action). While these alternatives vary in terms of harvest/hunting seasons, allowable methods, and co-management aspects, they would each increase the access, availability, utilization, and stability of the local subsistence food resource.

The comparison of these effects appears in DSEIS table 4.4-2, which is also provided below.

Direct / Indirect Effects	Alternative 1, No Action	Alternative 2, Petitioned	Alternative 3	Alternative 4	Alternative 5
Food Security (availability, access, utilization and stability)	Minor beneficial effect; harvest continues but for short duration; pup harvest prohibited	Major beneficial effect; longer harvest season and pup harvest permissible (directly addresses ACSPI petition)	Moderate beneficial effect; longer harvest season and pup harvest permissible although hunting restricted to Northeast rookeries as compared to greater flexibility in Alternatives 2 and 4	Moderate beneficial effect; longer harvest season and pup harvest permissible although not as flexible as Alternative 2	Major beneficial effect due to increased harvest range, longer season and permitted pup harvest
Cultural Integrity and emotional wellbeing	Negligible effect; most actions would continue to be codified under federal regulation rather than co-management	Major beneficial effect; Option 2A incorporates the highest level of co-management; Option 2B incorporates many of the same co-management benefits but includes some additional regulatory controls	Minor beneficial effect due to increased responsibility under co-management		

7 Description of the alternatives under consideration for St. George Island

As explained earlier, NMFS did not consider changing the regulations applicable to St. George Island when it started the process of reviewing ACSPI’s petition to change the regulations applicable to St. Paul Island. However, in the process of developing this proposed rule, NMFS determined that some regulatory changes for St. Paul Island would apply for St. George Island. NMFS determined that it would be appropriate to propose changes to the regulations applicable to both Islands.

The changes proposed in this action follow recent revisions to the regulations applicable to St. George Island. In 2006, the Traditional Council of St. George Island, Tribal Government (Traditional Council) petitioned NMFS to change the subsistence use management of northern fur seals on St. George Island. NMFS worked with the Traditional Council to clarify the petitioned changes would include an annual harvest of up to 150 male pups during an autumn harvest season, within the limits already established every three years under 50 CFR 216.72(b). This also included changes to the authorized subsistence use locations on St. George and changes to other regulatory provisions for the conservation of fur seals (for proposed rule, see 79 FR 43007, July 24, 2014).

NMFS worked with the Traditional Council to develop the 2014 final rule, which authorized Pribilovians of St. George Island to harvest up to 150 male young of the year fur seals annually from all breeding and hauling grounds, consistent with traditional practices, during a new autumn harvest season from September 16 through November 30, in order to meet the community's nutritional and cultural needs (for final rule, see 79 FR 65327, November 4, 2014). NMFS determined the killing of up to 150 pups per year would not have an adverse effect on the northern fur seal population, and the harvest of pups allowed Pribilovians on St. George Island to resume a long-standing cultural practice. In the 2014 final rule, NMFS also changed 50 CFR 216.74 to reflect that the Traditional Council and NMFS had developed a subsistence management relationship under Section 119 of the MMPA. In 2014, NMFS did not change the process used to establish the subsistence needs of the Pribilovians on St. George Island, so NMFS continued to specify in the triennial notice in the Federal Register the lower and upper limit of the number of seals required to meet the subsistence needs on St. George Island (and St. Paul Island), per 50 CFR 216.72(b). Harvests of sub-adult male fur seals on St. George Island were not changed in the 2014 final rule and continued during the summer harvest season (June 23 through August 8).

Alternative 1 (the status quo, no action alternative): No change to the existing regulations for the management of the northern fur seal harvest on St. George Island.

Under Alternative 1, which is the no action alternative, there would be no change to the existing regulations for the management of the subsistence use of northern fur seals on St. George Island. Currently, NMFS is required to publish in the Federal Register every three years a summary of the preceding three years of subsistence harvest and a determination for the next three years of the number of fur seals necessary for annual subsistence requirements for St. George Island (50 CFR 216.72(b)). NMFS publishes the number of fur seals for subsistence need as a range, with a lower and upper limit. In prior triennial specifications, NMFS has set the range of fur seals necessary to fulfill subsistence need on St. George Island at 300 to 500 fur seals per year, with 500 being the upper limit or maximum harvest level authorized (82 FR 39044, August 17, 2017). Over the last decade, the average number of male seals harvested on St. George was 119 seals annually, with a range of 63 to 206 seals per year. More recently, the reported total subsistence harvest of fur seals on St. George Island in 2014, 2015, and 2016 was 158, 118, and 83, respectively, of which the sub-adult harvest was 104 in 2014, 61 in 2015, and 37 in 2016 (Kashevarof 2014, Kashevarof 2015, Malavansky 2016) and the pup harvest was 54 in 2014, 57 in 2015, and 46 in 2016 (Testa 2016, Meyer 2016, and Meyer 2017).

In each triennial notice, NMFS publishes a lower and upper limit of the number of fur seals necessary to fulfill annual subsistence needs. When the lower limit is reached, NMFS is required to suspend the subsistence harvest (50 CFR 216.72(f)(1)(iii)), and in order to allow subsistence harvest to proceed above the lower limit, NMFS then must provide a revised estimate of the number of seals required to satisfy the Pribilovians' subsistence needs (50 CFR 216.72(f)(3)). Typically, Pribilovians have demonstrated subsistence need through household surveys; therefore, when the suspension provision is triggered, Pribilovians would be required to submit additional information to NMFS to support the revised estimate of subsistence need, even though they had already submitted information to support that determination of the upper limit and even though NMFS had already made that determination regarding the upper limit of the subsistence need in the triennial notice. The regulations also require NMFS to suspend the harvest if the subsistence needs of the Pribilovians on St George Island have been satisfied (50 CFR 216.7

In addition to the suspension provisions, there are somewhat similar termination provisions. These regulations require NMFS to terminate the harvest when the upper limit is reached, or when NMFS determines that subsistence need has been satisfied (50 CFR 216.72(g)(2)). This latter determination, as well as the suspension determination under 50 CFR 216.72(f)(1)(i), could be made prior to Pribilovians harvesting the maximum number of fur seals authorized in the triennial notice, even though NMFS had already set the range of fur seals necessary for annual subsistence requirements for St. George Island. Finally, the regulations currently prohibit the intentional harvest of certain sex and age class of fur seals (50 CFR 216.72(d)(5), (d)(9)), and regulations also prohibit the harvest of fur seals with tags or entangling debris without approval by NMFS scientists (50 CFR 216.72(d)(3)).

Alternative 2 (the preferred action alternative): *Revise the regulations for St. George Island consistent with the revisions for St. Paul Island and set a fixed maximum harvest level for the subsistence harvest seasons for St. George Island.*

The preferred alternative, Alternative 2, would revise the regulations in accordance with the proposed rule. Under Alternative 2, the proposed rule would specify in 50 CFR 216.72(d) that Pribilovians on St. George may harvest for subsistence uses up to 500 fur seals per year over the course of the sub-adult male harvest and the young of the year harvest, including up to 3 mortalities of female fur seals total per year if incidentally or accidentally killed during the subsistence harvest seasons. The proposed maximum harvest of fur seals to be authorized is based on the currently established upper limit of the subsistence need (82 FR 39044, August 17, 2017), which is the upper limit established by NMFS and agreed to by the Traditional Council since 1990. The proposed maximum harvest includes the 150 male young of the year fur seals previously authorized for subsistence harvest in the 2014 final rule (79 FR 65327, November 4, 2014).

Under Alternative 2, NMFS proposes to cease using a lower limit of the subsistence need and to eliminate references to the lower limit of the harvest range for regulations governing harvest on St. George of sub-adult male fur seals (50 CFR 216.72(d)(1)) and male young of the year fur seals (50 CFR 216.72(d)(6)); to eliminate in its entirety the provision at 50 CFR 216.72(b), which establishes a process to re-assess every three years the subsistence requirements of the Pribilovians residing on St. George Island; and to remove the provisions at 50 CFR 216.72(f)(1)(iii) and 216.72(f)(3), which are associated with the suspension of subsistence use

when the lower limit of the range of the subsistence need is reached. Under Alternative 2, NMFS proposes to remove the provision in 50 CFR 216.72(f)(1)(i) that allows for the suspension of subsistence harvest on St. George Island if NMFS determines that the subsistence needs of the Pribilovians on St. George Island have been satisfied, and NMFS proposes to remove the provision in 50 CFR 216.72(g)(2) that requires the termination of the subsistence harvest on St. George Island if NMFS determines that the upper limit of the subsistence need has been reached or if NMFS determines that the subsistence needs of the Pribilovians on St. George Island have been satisfied. Instead, per Alternative 2, NMFS would revise the subsistence use termination provisions at 50 CFR 216.72(g) to be consistent with the subsistence harvest seasons and the subsistence use limits for St. George Island established in 50 CFR 216.72(d). Finally, NMFS proposes under Alternative 2 to remove duplicative and unnecessary provisions on the take of fur seals in 50 CFR 216.72(d)(3),(d)(5), and (d)(9).

8 Analysis of the Alternatives for St. George Island

Analysis of Alternative 1 (the status quo, no action alternative)

Under the no-action alternative, the regulations for St. George Island would not be changed. The number of fur seals authorized to be harvested annually on St. George Island currently is established every three years in accordance with 50 CFR 216.72(b) and is based on an estimate of the range (a lower and upper limit) of fur seals expected to satisfy the Pribilovians' subsistence requirements (e.g., 82 FR 39044, August 17, 2017). Under Alternative 1, NMFS would continue to retain the regulations to publish every three years a determination for the next three years of the number of fur seals necessary for annual subsistence requirements for only St. George Island. Under Alternative 1, NMFS would be required under existing regulations to suspend or terminate the harvest when the lower or upper limit has been met, respectively, and to terminate the harvest when subsistence need has been met. The suspension provision (50 CFR 216.72(f)(3)) also requires, after a 48-hour suspension of the harvest once the lower limit is reached, NMFS to determine a revised estimate of the number of fur seals required to satisfy the subsistence needs on St. George after. However, these suspension and termination provisions that require NMFS to determine within a given year the subsistence needs of St. George are duplicative of the determinations NMFS would have made previously in the triennial notice. Thus, the status quo alternative, Alternative 1, maintains duplicative regulations that could otherwise be streamlined and simplified.

Moreover, the lower limit and regulatory suspension process required under the existing regulations have proven to be barriers to harvesting within the range established as meeting the subsistence need at the peak of community participation and the availability of preferred seals. If the lower limit of the subsistence need is reached, NMFS must suspend the harvest for up to 48 hours per 50 CFR 216.72(f)(1)(iii). Once the lower limit is reached, NMFS must determine whether the subsistence needs of the Pribilovians have been satisfied, and if not, must provide a revised estimate of the number of seals required to meet those subsistence needs (50 CFR 216.72(f)(3)). Thus, when the lower limit is reached, Pribilovians must collect information through surveying or querying the community and provide that information in writing to support that their subsistence need falls above the lower limit but below the upper limit of the range previously established as meeting their subsistence need. Often Pribilovians conduct an additional house-to-house survey to establish an interim limit less than the upper limit to

substantiate their subsistence need (59 FR 35474, July 12, 1994). Alternative 1 effectively imposes an additional reporting burden on Pribilovians.

After Pribilovians submit information to NMFS, NMFS must then substantiate the request to exceed the lower limit by making the determination that the Pribilovians (1) have not yet satisfied their subsistence need, (2) have not conducted wasteful take, and (3) have identified the number subsistence users needing additional meat. Often this process was cumbersome administratively, for both NMFS and the Pribilovians, because the 48 hour suspension when the lower limit was reached would occur during the last few days of the season, requiring Pribilovians to support their needs above the lower limit and NMFS to determine those needs were justified in those last remaining days of the season. At this time (early August), the number of two-year-old males landing on the hauling grounds is rapidly increasing (Bigg 1986), and thus the preferred age-class of two years old males is more easily available to subsistence users at this time. But, under the regulations, very little time would remain in August to harvest this preferred age-class of seal and to meet the subsistence need of the Pribilovians. Thus, the existing regulatory approach under Alternative 1 has not provided flexibility in the timing of the harvest and the availability of harvesters to ensure that Pribilovians can fulfill their subsistence needs, and, in addition, this regulatory approach has proven burdensome for both Pribilovians and NMFS to administer and manage.

In addition, under Alternative 1, the regulations for St. George would retain the unnecessary and duplicative regulations that prohibit the intentional harvest of certain sex and age class of fur seals and that prohibit the harvest of fur seals with tags or entangling debris without approval by NMFS scientists. These regulations are duplicative of the general statutory take prohibition in the FSA and are unnecessary in light of the regulatory processes established under the MMPA to authorize taking of fur seals associated with response to seals entangled in marine debris or previously tagged for scientific research.

The status quo alternative, Alternative 1, therefore maintains a complex and unnecessary regulatory structure that could otherwise be streamlined and simplified to improve the management and conservation of the northern fur seal population and the subsistence harvest on St. George Island. While the FSA prohibits all “taking” of fur seals unless the Secretary of Commerce determines regulations for the “taking” of fur seals are necessary and appropriate for the conservation, management, and protection of fur seals, the FSA does not mandate the current complex regulatory structure. Accordingly, the status quo regulatory approach is not legally required, and another regulatory approach that streamlines and simplifies the regulatory process and that removes unnecessary and duplicative regulations could maximize net benefits for the regulated community on St. George Island and for the conservation and management of fur seals and the subsistence harvest on St. George Island.

Analysis of Alternative 2 (the preferred action alternative)

Under this alternative, NMFS would remove from the regulations the triennial notice requirement, meaning that NMFS would not have to publish every three years the annual subsistence requirements for St. George. Under this alternative, NMFS would revise or eliminate related provisions regarding the suspension and termination of the subsistence harvest, and NMFS would remove duplicative and unnecessary regulations on the “take” of fur seals. Instead,

under this alternative, NMFS would set in regulation the maximum number of fur seals necessary for subsistence needs.

Alternative 2 would authorize Pribilovians on St. George Island to harvest up to a total of 500 male fur seals per year over the course of both the sub-adult male harvest and the male young of the year harvest, which includes the mortalities of up to 3 female fur seals per year. The authorization of Pribilovians who reside on St. George Island to take up to 500 fur seals each year would include up to 150 male young of the year fur seals that were authorized for harvest in the 2014 final rule for St. George Island. The authorization of 500 total fur seals per year is based on the upper limit established by NMFS (82 FR 39044, August 17, 2017) and agreed to by the Traditional Council since 1990. While the maximum harvest level established by NMFS every three years has consistently been 500 seals per year, the average number of male seals harvested annually during the past decade on St. George was 119 (with a range of 63 to 206 seals per year). Under Alternative 2, the maximum number of seals authorized for harvest would remain at 500 per year, which is based on NMFS's consistent prior determinations of subsistence need and on the sustainable nature of a harvest of up to 500 seals per year. However, Alternative 2 would change the process by removing the regulatory requirement for NMFS to specify subsistence need every three years and instead would set in regulation the maximum number of seals authorized for harvest each year. This approach will streamline and simplify the process; in addition, this approach will ensure Pribilovians have a maximum, yet sustainable, number of seals authorized for subsistence use in order to provide assurance and flexibility in each year for Pribilovians to harvest fur seals for their subsistence needs in that year.

Under Alternative 2, the specific regulatory changes for St. George Island include:

1. the removal of 50 CFR 216.72(b) as it applies to St. George Island, which requires NMFS to establish and publish in the Federal Register the annual subsistence need of the Pribilovians to apply for three-year periods;
2. the revision of 50 CFR 216.72(d) to establish a maximum number (500) of seals authorized to be harvested each year for subsistence uses for St. George Island, which may include up to 3 female fur seals;
3. the revisions of 50 CFR 216.72(d)(1) and (d)(6), as well as 50 CFR 216.72(f)(1)(iii) and (f)(3), which refer to the lower limit of subsistence need established in the triennial notice process under 50 CFR 216.72(b), for conformity with the removal of 50 CFR 216.72(b);
4. the removal of 50 CFR 216.72(d)(5): "Any taking of adult fur seals or young of the year, or the intentional taking of sub-adult female fur seals is prohibited";
5. the removal of 50 CFR 216.72(d)(9): "Any harvest of sub-adult or adult fur seals or intentional harvest of young of the year female fur seals is prohibited";
6. the removal of 50 CFR 216.72(d)(3): "Seals with tags and/or entangling debris may only be taken if so directed by NMFS scientists";
7. the removal of 50 CFR 216.72(g)(2), which requires the termination of the subsistence harvest on St. George Island if NMFS determines that the upper limit of the subsistence need has been reached or if NMFS determines that the subsistence needs of the Pribilovians on St. George Island have been satisfied;
8. the revision of 50 CFR 216.72(g) to ensure the termination provisions for the take of fur seals on St. George Island conform with the proposed changes regarding the sub-

adult and young of the year seasons and the total fur seals authorized for harvest, including female fur seals.

Per Alternative 2, the termination provision, 50 CFR 216.72(g)(2), would be revised to apply only to St. George Island and: (i) for the sub-adult male harvest, would terminate the season at the end of the day on August 8 or when 500 sub-adult male seals have been harvested, whichever comes first; (ii) for the male young of the year harvest, would terminate the harvest at the end of the day on November 30 or earlier when the first of the either occurs: 150 male young of the year fur seals have been harvested or a total of 500 sub-adult male and male young of the year fur seals have been harvested; or (iii) during each year, would terminate the subsistence harvest seasons when 3 female fur seals have been killed.

Alternative 2 would retain many of the regulations governing the male young of the year harvest (50 CFR 216.72(d)(6)-(d)(10)) and the sub-adult male fur seal harvest (50 CFR 216.72(d)(1)-(d)(5)).

However, under Alternative 2, NMFS proposes to simplify and streamline the existing regulatory approach by establishing in regulation the annual subsistence need for St. George Island and by revising or removing annual harvest suspension and harvest termination provisions. NMFS proposes per Alternative 2 to set a simple harvest limit that accounts for economic, social, and other factors affecting the subsistence use and that considers the expected and unexpected year-to-year variability in the availability of fur seals based on environmental factor and the availability of subsistence users to participate in the subsistence harvest seasons.

Instead of revisiting every three years the range of subsistence need that may be necessary for St. George Island, Alternative 2 would set the maximum number of fur seals that may be harvested to fulfill subsistence need in regulation. This will streamline and simplify the regulatory process, while setting the maximum subsistence harvest level available for subsistence users at 500 fur seals total per year. This approach maintains the maximum harvest level that has been authorized every year since 1990 for St. George (82 FR 39044, August 17, 2017), and maintains the allowable pup harvest authorized for St. George since 2014 (79 FR 65327, November 4, 2014). NMFS has set the annual maximum harvest of fur seals for subsistence uses based on NMFS's past determinations of the number of seals that would satisfy the subsistence requirements for St. George Island. Given these consistent determinations regarding the upper limit of subsistence needs for St. George and the sustainable nature of that level of harvest (NMFS 2014), setting the allowable harvest level in regulation would be more efficient than continuing to revisit the subsistence need of St. George Island every three years. If environmental or socio-economic circumstances later change, NMFS can initiate rulemaking under the FSA to revisit the allowable harvest levels for St. George.

In addition, setting the harvest level in regulation, instead of using a range of authorized harvest, and revising or removing annual harvest suspension and harvest termination provisions that have been based on that range will reduce the household survey burden for Pribilovians on both St. Paul and St. George Islands. This will also ease the cumbersome administration of the harvest suspension provisions and determinations that apply when the lower limit of the range was met. As detailed in the discussion of Alternative 1, the suspension provision, if triggered, would require Pribilovians to collect information through surveying or querying the community and

provide that information in writing to NMFS to support that their subsistence need falls above the lower limit but below the upper limit of the range previously established in the most recent triennial notice. Revising and removing the harvest suspension and termination provisions will therefore reduce the burden on the Pribilovians on St. George to collect and submit additional household surveys or additional information.

Setting the maximum number in regulation will ensure that Pribilovians can harvest up to the maximum number of fur seals necessary for subsistence use, without being delayed by the administration of the harvest suspension provisions. There are many factors that can force Pribilovians to harvest fewer seals each year, regardless of their particular annual needs, that include: normal year-to-year variability in seal size, the Pribilovians' preference for smaller seals, the limited availability of two-year-old seals until late in the harvest season, the availability of wage earning jobs that conflicts with the subsistence season, and the availability of experienced sealers (58 FR 32892, June 13, 1993). The administrative burdens of the harvest suspension and termination provisions can work in tandem with these factors to cause diminished allowable harvest over time. Under Alternative 2, NMFS would reduce regulatory burdens associated with the harvest suspension and harvest termination provisions by revising or removing those provisions and by setting a maximum allowable harvest. This will help mitigate the factors that have impacted the ability of Pribilovians to meet their subsistence needs through the harvest of fur seals each year.

Under Alternative 2, NMFS proposes to set a maximum harvest limit that accounts for economic, social, cultural, and other factors affecting the subsistence use. St. George Island is a remote island located in the Bering Sea populated by Alaska Native residents who rely upon marine mammals as a major food source and cornerstone of their culture. As explained earlier regarding the alternative for regulatory changes for St. Paul Island, the Pribilof Islands are considered a hybrid economy (Huskey 2004) where subsistence use, market forces, and government transfers contribute to a village's ability to maintain a self-sufficient economy. Members of the public who live in rural areas like the Pribilof Islands value (nutritionally and socio-economically) wild and store bought foods differently than residents from urban areas. From the aspect of nutrition and food security, fur seals represent an available, accessible, fresh, and safe source of traditional food for Pribilovians.

Subsistence opportunities connect community members and relatives through food sharing and cooperative hunting and harvesting efforts. Opportunities for subsistence use of fur seals preserves the Pribilovians traditional skills, cultural values, and knowledge, and enables the passing of cultural values on to younger subsistence users. Thus, unnecessarily limiting the opportunities for subsistence communities to obtain wild resources, such as fur seals, would not only result in the deterioration of nutrition, public health, and social stability, but also a critical component of their unique local culture. This combination of traditional and modern lifestyles helps to sustain the Pribilof cultural identity and provides a measure of economic and food security by providing an alternative to obtain food in newly emerging cash- and wage-based economic systems (Huskey 2004). The proposed approach under Alternative 2 seeks to address the subsistence needs of Pribilovians on St. George Island in a more environmentally, socially, and economically sustainable way by removing burdensome regulatory restrictions and by setting a maximum harvest level in regulation that accounts for a broader consideration of the factors affecting subsistence use, including nutritional, socio-economic, cultural, and practical

considerations. Rather than unnecessarily limiting subsistence opportunities by maintaining a complex and unnecessary regulatory approach under Alternative 1, the approach proposed under Alternative 2 would safeguard food security, cultural traditions, and economic surety by allowing the Pribilovians on St. George Island to harvest each year up to a maximum harvest level and by continuing the significant role Pribilovians have exercised in the co-management of fur seals.

Based on the cultural values of subsistence harvest and the need for food security for the Pribilovians on St. George Island, Alternative 2 would codify an annual subsistence regulatory threshold of 500 sub-adult male fur seals, of which up to 3 may be females killed during the subsistence harvest seasons. This would include in each year up to 150 pups currently authorized for subsistence use in regulation (50 CFR 216.72(d)(6)-(d)(10)). This regulatory approach maintains the maximum harvest level that has been authorized every year since 1990 for St. George (82 FR 39044, August 17, 2017), and maintains the allowable pup harvest for St. George (79 FR 65327, November 4, 2014), but better reflects a holistic consideration of nutritional, socio-economic, and cultural factors of subsistence use and practical considerations that can affect subsistence use. NMFS would still annually evaluate whether subsistence uses are being accomplished in a wasteful manner, and Alternative 2 would not eliminate the existing regulatory provision that requires the suspension of the subsistence harvest if the harvest is being conducted in a wasteful manner (50 CFR 216.72(f)(1)(ii)).

Finally, Alternative 2 would streamline and simplify the regulations for St. George Island by removing unnecessary and duplicative regulations on the “take” of fur seals. NMFS has determined that specific regulatory provisions in 50 CFR 216.72(d)(5) and (d)(9), which prohibit take of specific sex and age of fur seals, are duplicative of the more general statutory prohibition on “taking” in Section 102 of the FSA (16 U.S.C. § 1152), and thus Alternative 2 would remove from 50 CFR 216.72 those duplicative provisions in subparagraphs (d)(5) and (d)(9). NMFS also has determined that specific regulatory provision in 50 CFR 216.72(d)(3) is duplicative of regulations (50 CFR 216.41) promulgated for permitting scientific research under the MMPA (16 U.S.C. §§ 1361-1407) and authorizing stranding response under Section 403 of the MMPA (16 U.S.C. § 1421b). Alternative 2 would remove from 50 CFR 216.72 subparagraph (d)(3) and to rely instead on those regulatory processes established more recently under the MMPA to authorize taking associated with response to fur seals entangled in marine debris or previously tagged for scientific research.

Under Alternative 2, NMFS and the St. George Traditional Council would continue to cooperatively manage the subsistence use of northern fur seals under the existing Co-management Agreement. This continued support of the partnership between NMFS and the St. George Traditional Council fosters the building of trust and the promotion of open and regular communication that are beneficial to the subsistence community. While Alternative 2 would retain the regulations regarding some aspects of the sub-adult male fur seal harvest and the male young of the year fur seal harvest, Alternative 2 will have a beneficial effect on the St. George community by reducing the current burdens on the subsistence harvest on St. George Island while allowing a broader consideration of the economic, social, and other factors affecting the subsistence use. This will positively impact food security, availability, and stability for the Pribilovians on St. George Island. Alternative 2 will reduce unnecessary and duplicative regulations and will simplify and streamline the administration and management of the subsistence harvest on St. George Island by setting a sustainable maximum harvest level that

accounts for the prevailing socio-economic conditions and abundance of the fur seal population on the Pribilof Islands, as well as the variability in the availability of fur seals based on environmental factors and in the availability of subsistence users to participate. As compared to Alternative 1, Alternative 2 will improve availability, access, and utilization of subsistence resources on St. George Island.

9 Effects on Net Benefits to the Nation

The Alaska Native residents of St. Paul and St. George rely on a traditional subsistence lifestyle. Alternative 2 addresses the petition of the tribal government of St. Paul to reinstate the pup harvest and winter hunting of fur seals, and delegates authority to the St. Paul Co-Management Council to develop a process and implement practical, locally-supported conservation controls. These controls may include measures to manage and minimize accidental incidental mortality of females below the maximum regulatory threshold of 20 female fur seals per year, monitor and report the subsistence use during all seasons, and prohibit subsistence use at breeding locations where the annual pup production may not sustain such use. This increases opportunities for subsistence use of fur seals by authorizing harvests of juveniles and pups from June 23 through December 31, and by adding a hunting season January 1 through May 31 every year for juvenile fur seals, which may include pups. As a result of this change, the availability of fresh fur seal meat outside the current summer harvest season and the opportunities to co-manage the subsistence use are improved. During the hunting season, firearms would be a permitted method to pursue fur seals on land or in the water. By allowing subsistence use of different age classes of fur seals at more locations on St. Paul under Alternative 2B than the No Action Alternative, the community would have greater resilience in meeting the demands of changing future environmental conditions and fur seal availability to meet their subsistence need. Alternative 2B would best balance meeting the subsistence needs of the community with the conservation and management of the fur seal population. Therefore, Alternative 2B as reflected in the proposed rule is believed to have major beneficial effects to the community of St. Paul Island and net benefits to the nation.

For St. George Island, Alternative 2 will remove duplicative and unnecessary regulations on the take of fur seals and will streamline and simplify the regulations by setting a sustainable maximum harvest level in regulation, by ceasing to use a lower and upper limit to specify harvest levels, and by eliminating or revising regulations related to the lower and upper limit and the suspension and termination of the harvest. Alternative 2 would set in regulation the sustainable maximum harvest level for St. George Island that accounts for the prevailing socio-economic conditions and abundance of the fur seal population on the Pribilof Islands, as well as the variability in the availability of fur seals based on environmental factors and in the availability of subsistence users to participate. Alternative 2, as compared to Alternative 1, thus will reduce current burdens on the subsistence harvest on St. George Island while emphasizing a broader consideration of the economic, social, and other factors affecting the subsistence use, which in turn improves access and utilization of subsistence resources on St. George Island. Alternative 2, as reflected in the proposed rule, will positively impact food security, availability, and stability for the Pribilovians on St. George Island, which provides a beneficial effect for the community of St. George Island and net benefits to the nation.

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