**SUPPORTING STATEMENT**

**ALASKA VESSEL MONITORING SYSTEM (VMS) PROGRAM**

**OMB CONTROL NO. 0648-0445**

This action is a request for revision of an existing collection due to changes in an associated proposed rule (RIN No. 0648-BE06).

**BACKGROUND**

National Marine Fisheries Service (NMFS), Alaska Region manages the groundfish fisheries in the exclusive economic zone (EEZ) of the Bering Sea and Aleutian Islands Management Area (BSAI) and Gulf of Alaska (GOA) under fishery management plans (FMPs) for groundfish in the respective areas. The North Pacific Fishery Management Council (Council) prepared, and NMFS approved, the FMPs under the authority of the [Magnuson-Stevens Fishery Conservation and Management Act](http://www.nmfs.noaa.gov/msa2005/docs/MSA_amended_msa%20_20070112_FINAL.pdf), 16 U.S.C. 1801 et seq. (Magnuson-Stevens Act). The [Northern Pacific Halibut Act of 1982](http://www.law.cornell.edu/uscode/text/16/chapter-10/subchapter-IV) (Halibut Act) at 16 U.S.C. 773–773k provides the Secretary of Commerce with the authority and general responsibility to carry out the requirements of the Preservation of the Halibut Fishery of the North Pacific Ocean and Bering Sea (Convention), signed at Ottawa, Ontario, on March 2, 1953. Commercial halibut fisheries operate within the Individual Fishing Quota (IFQ) Program, Western Alaska Community Development Quota (CDQ) Program, and through area-specific catch sharing plans. Regulations implementing the FMPs appear at

[50 CFR part 679](http://www.ecfr.gov/cgi-bin/text-idx?SID=d7714d18b4ef10bcbc014b3709006e87&tpl=/ecfrbrowse/Title50/50cfr679_main_02.tpl).

NMFS has management responsibility for certain threatened and endangered species, including Steller sea lions, under the Endangered Species Act (ESA) of 1973, 16 U.S.C. 1531, et seq. NMFS has the authority to promulgate regulations to enforce provisions of the ESA to protect such species. As the action agency, NMFS is responsible for conducting a section 7 consultation to insure that the Federal action of authorizing the Alaska groundfish fisheries is not likely to jeopardize the continued existence of an ESA-listed species or result in the destruction or adverse modification of its designated critical habitat. Under the provisions of section 7 of the ESA, NMFS Alaska Region Sustainable Fisheries Division is the action agency and consults with the NMFS Alaska Region Protected Resources Division on the impacts of groundfish fisheries for most ESA-listed species of marine mammals, including Steller sea lions.

Since listing Steller sea lions as an endangered species, NMFS has implemented a number of management measures, commonly known as Steller sea lion protection measures, to protect Steller sea lions from the potential effects of groundfish fishing. NMFS would strengthen Steller sea lion protection measures to insure that groundfish fisheries in the BSAI are not likely to jeopardize the continued existence of the western distinct population segment of Steller sea lions or destroy or adversely modify its designated critical habitat. Steller sea lion protection measures disperse catch of groundfish prey species in time (temporal dispersion) and space (spatial dispersion) through a variety of harvest limitations and closure areas. Many of these Steller sea lion protection measures apply specifically to Atka mackerel, Pacific cod, and pollock, which are particularly important prey species for Steller sea lions.

**INTRODUCTION**

NMFS requires that vessel operators participating in groundfish fisheries in the BSAI comply with a range of monitoring requirements and restrictions. NMFS uses area, season, gear, operation type, and sector specific fishery closures to maintain catch within specified allocations. Traditional methods of monitoring compliance with fishing regulations do not fully meet NMFS’s need to monitor fishing activities under protection measures.

Vessel Monitoring System (VMS) units integrate global positioning system and communications electronics in a single, tamper-resistant package to automatically determine the vessel’s position several times per hour. The units can be set to transmit a vessel’s location periodically and automatically to an overhead satellite in real time. In most cases, the vessel owner is unaware of exactly when the unit is transmitting and is unable to alter the signal or the time of transmission. The VMS unit is passive and automatic, requiring no reporting effort by the vessel operator. A communications service provider receives the transmission and relays it to NOAA Fisheries Office for Law Enforcement (OLE) and United States Coast Guard (USCG).

The VMS is generally acknowledged to be an essential component of monitoring and management for complicated, geographically widespread fishing closures. The VMS allows verification of where fishing is taking place in real time. This, in turn, allows verification that vessels fishing in an area are permitted to fish in that area. When a VMS track is examined by a knowledgeable analyst, much information can be inferred: (e.g., whether a vessel is actively fishing and the type of gear being used). When VMS tracks are compared with active, open fisheries vessels may be identified for closer scrutiny. Given the large size and remoteness of the area in which Alaska fisheries occur and the limited enforcement infrastructure available, determination of vessel location depends crucially on VMS reports.

Information from VMS is used to identify where vessels are operating, to organize patrols so as to increase the number of fishing vessels visually examined, or to focus examination of vessels of greatest concern (because of past records of fishing violations, or because of the location of fishing activity), and as evidence in prosecutions. The VMS also ensures that harvested fish are properly debited or reported, because NMFS can track vessels as they arrive in port to offload the product.

**A. JUSTIFICATION**

**1. Explain the circumstances that make the collection of information necessary.**

The proposed action would establish Steller sea lion protection measures for the Atka mackerel, Pacific cod, and pollock fisheries in the Aleutian Islands subarea that spatially, temporally, and globally disperse fishing to mitigate potential competition for prey resources between Steller sea lions and these fisheries. Spatial and temporal fishery dispersion is accomplished through closure areas, harvest limits, seasonal apportionment of harvest limits, and limits on participation in a fishery. This action would require that vessel operators with a Federal Fisheries Permit (FFP) [see OMB Control No. 0648-0206] for a vessel using trawl gear that harvests groundfish deducted from the Federal total allowable catch (TAC) in the Aleutian Islands subarea set their VMS to transmit the vessel location at least 10 times per hour. This requirement is

recommended because of the extent and complexity of the proposed trawl closure areas in the Aleutian Islands reporting area.

**2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.**

Enforcement of measures, such as critical habitat no-fishing and directed fishing closures, is heavily reliant on use of VMS. VMS is the primary enforcement tool for groundfish management in the Aleutian Islands and it is likely to become more important in the future. Use of VMS is likely to increase because the Aleutian Islands are a challenging environment to implement any other form of compliance monitoring. It is an expansive area, with low commercial fishing vessel densities. The management strategies for limiting catch of Steller sea lion prey species in proximity to Steller sea lion habitat, apply numerous and complex area closures. This vast management area is supported by a limited USCG and OLE presence.

Considering the current fiscal limitations, VMS has become a critical tool for monitoring and enforcement of area closures. VMS systems are small, tamper-resistant, transmitter-GPS combinations that send regular signals identifying the vessel and its location to ground stations via overhead satellites. These signals make it possible for OLE to monitor the locations of fishing vessels. The information helps OLE identify vessels that may have fished inside closed areas, permitting the targeting of investigative resources. VMS information is also used by NMFS in-season fishery managers to monitor fishing effort in a region or area, and plays an important role in determining when to close a fishery and when it can safely be left open.

**a. VMS operation [REVISED]**

This action would require that vessel operators with a Federal Fisheries Permit (FFP) [see OMB Control No. 0648-0206] for a vessel using trawl gear that harvests groundfish deducted from the Federal TAC in the Aleutian Islands subarea, set their VMS to transmit the vessel location at least 10 times per hour. This requirement is recommended because of the extent and complexity of the proposed trawl closure areas in the Aleutian Islands reporting area. Monitoring is further complicated by the overlap of proposed trawl closures with the existing closures.

OLE developed national standards for VMS transmitters, base stations, and communication service providers. These standards ensure that a vessel purchasing a unit for use in one region of the United States will not have to purchase a different unit to fish in another region. Currently approved VMS units are posted at <http://www.nmfs.noaa.gov/ole/docs/2014/051414_noaa_fisheries_service_type.pdf>

Prior to participation in a fishery that requires VMS, a vessel owner must purchase a NMFS-approved VMS transmitter and install it or have it installed onboard the vessel. The VMS transmitter must be available for inspection by NMFS personnel, observers, or authorized officers. The vessel owner must ensure that the VMS transmitter is not tampered with, disabled, destroyed, or operated improperly; and must pay all charges levied by the communication service provider.

Regulations at 50 CFR part 679.28 require that the VMS be operational. VMS equipment failure may interfere with normal vessel operations until repairs can be made, and this may impose additional costs. If the VMS unit is not working, the vessel operator must contact OLE who will assist in troubleshooting the system to get it operational again. OLE treats equipment breakdowns on a case-by-case basis and tries to avoid interrupting a fishing trip already in progress.

For additional information and any questions, contact OLE Headquarters VMS Support

Phone:888-219-9228

Fax: 301-427-0049

Hours of Operation: 7:00AM to 11:00PM (EST), Monday through Friday

Under this action, the operator of the vessel would be required to set the VMS unit to transmit at least 10 times per hour. The current transmission rate, commonly known as the polling rate, of 2 times per hour could allow vessels to fish in significant portions of these closed areas without detection. The increased polling rate would limit the ability of a vessel to operate inside or through a closed area undetected. Vessels using trawl gear have the capability of fishing through a closed area without detection if the polling rate of the transmission is less than 10 times per hour. Increasing polling rates will provide OLE and the USCG with the additional information needed to monitor potential accidental or intentional trawl vessel incursions into the often small, and irregularly shaped Steller sea lion critical habitat areas.

There are currently 4 NOAA type approved VMS units available for use in the Alaska Region, although as of July, 2011, no new installations of the GMPCS Thrane & Thrane Sailor TT-3026D VMS Gold are authorized by NOAA.

**Cost comparison for the VMS units with average costs for the different units and polling rates**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Company | Base Unit  Cost ($)  With Data  Terminal | 1 poll/hr.  $/month | Annual  Cost ($)  for  1 poll/hr. | 2 polls/hr.  $/month | Annual  Cost for 2  polls/hr. | Additional  Data  Cost/KB |
| CLS American Thorium | 3,095.00 | 45.00 | 540.00 | 55.00 | 660.00 | 1.75 |
| Faria WatchDog | 3,195.00 | 40.00 | 480.00 | 54.52 | 654.24 | 1.70 |
| GMPCS Thrane & Thrane | 2,495.00 | 44.00 | 528.00 | 88.00 | 1,056.00 | 2.70 |
| Skymate/Orbcomm (Gold Plan) | 3,100.00 | 38.99 | 467.88 |  |  | 1.90 |
| Skymate/Orbcomm (Platinum Plan) | 3,100.00 | 38.99 | 467.88 | 73.99 | 887.88 | 1.40 |
| **Average Cost** | **2,971.25** | **42.00** | **503.97** | **67.88** | **814.53** | **1.89** |

Depending on which brand of VMS is chosen, increasing polling rates to 10 per hour from 2 per hour is likely to increase the average monthly cost of a VMS service provider agreement to approximately $340 per month [(815 x 5 = 4,075/12 = 340].

Estimated Cost to Trawl Vessels by increasing Polling rate in the Aleutian Islands based on 2010 data

|  |  |  |  |
| --- | --- | --- | --- |
|  | Estimated hours and costs in dollars: Trawl Gear by Species | | |
|  | CV (all target species) | CP (Atka mackerel) | CP (fishing other than Atka mackerel) |
| Estimated months for projecting costs\* | 2 months | 6 months | 2 months |
| Estimated cost per Month | $200 | $200 | $200 |
| Estimated total Cost per year | $400 | $1,200 | $400 |

\*Based on fishing activity by relevant vessels and adjusting upwards as necessary to account for VMS billing practices.

In some cases, vessels may have to replace VMS units, because existing units cannot be adjusted to do 10 pols per hour. NMFS estimates that three vessels may need to replace VMS unit with an estimated cost per vessel of about $3,500.

NOAA does have a current VMS reimbursement program that is jointly managed by NOAA and the Pacific States Marine Fisheries Commission, but that is subject to future appropriations. This program provides for reimbursement of a maximum for $3,100 per unit and covers the cost of the VMS transmitter unit. To be eligible for reimbursement, vessel owners/operators must purchase an approved VMS unit and have it installed on their vessel and activated. Upon completion of the installation and activation, the vessel owner/operator must contact the VMS Support Center to ensure the vessel is properly registered in the VMS system. Once this completed, NOAA OLE will issue the vessel a number that the vessel operator then includes on their reimbursement application with the Pacific States Marine Fisheries Commission. This reimbursement does not cover costs associated with tax, labor, and installation.

Corrected miscellaneous costs to include VMS service provider agreement (transmission costs) and maintenance/repairs.

|  |  |
| --- | --- |
| **VMS operation, Respondent** | |
| **Number of VMS respondents**  Catcher vessels (all target species) = 27 (x 2 months)  Catcher/processor (Atka mackerel) = 11( x 6 months)  Catcher/processor (other than Atka) = 5 (x 2 months)  **Total**  **VMS transmissions (72,000; not counted as responses)**  VMS = 240 transmissions per fishing day  Catcher vessels (60 days x 240 = 14,400)  Catcher/processor, other than Atka (60 days x 240 = 14,400)  Catcher/processor, Atka (180 days x 240 = 43,200)  **Total responses**  **Frequency:** 1  **Total burden for maintenance and repairs** = 2 hr x 43  **Total personnel cost**  Maintenance and repairs (37/hr x 86)  **Total miscellaneous cost**  New VMS incl/installation ($3500 x 3 = 10,500)  VMS Service provider agreement – transmission costs  (43 x 4075 = 175,225) | **43**  **43**  **86 hr**  **$3,182**  **$185,725** |

|  |  |
| --- | --- |
| **VMS operation, Federal Government** | |
| **Total responses**  **Total burden hours**  **Total personnel cost**  **Total miscellaneous costs** | **0**  **0**  **0**  **0** |

**b. VMS check-in report (REVISED)**

Upon completion of purchase and installation of a VMS unit, the participant must register the VMS unit with an approved service provider. At least 72 hours before participation in a fishery that requires VMS, the participant must send a one-time VMS check-in report to OLE. This check-in report is required only once to obtain the signature of the VMS unit. The information on this report enables OLE to verify that the VMS system is functioning and that VMS data can be identified as a specific vessel. The VMS check-in report may be filled out on the screen, printed, and faxed to (907) 586-7703.

Only those vessel operators that purchased a new VMS will need to check-in. All other VMS units are identified.

**VMS Check-in Report**

Date

VMS transmitter ID or serial number

Vessel name

USCG documentation number

Federal Fisheries permit number or Federal crab vessel permit number

Name and telephone number of contact person

|  |  |
| --- | --- |
| **VMS check-in report, Respondent** | |
| **Number of respondents**  **Total responses**  Frequency = 1  **Total burden hours** (0.6)  Hours per response = 12 min  **Total personnel cost** ($37 x 1)  **Total miscellaneous costs** (18.15)  Fax ($6 x 3 = 18)  Photocopy (0.05 x 3 = 0.15) | **3**  **3**  **1 hr**  **$37**  **$18** |

|  |  |
| --- | --- |
| **VMS check-in report, Federal Government** | |
| **Total responses**  **Total burden hours** (0.6)  Hours per response = 12 min  **Total personnel cost** ($37 x 1)  **Total miscellaneous costs** | **3**  **1 hr**  **$37**  **0** |

It is anticipated that the information collected be disseminated to the public or used to support publicly disseminated information. NMFS will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with National Oceanic and Atmospheric Administration (NOAA) standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Prior to dissemination, the information will be subjected to quality control measures and a pre-dissemination review pursuant to [Section 515 of Public Law 106-554](http://www.fws.gov/informationquality/section515.html).

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.**

The VMS collection-of-information is automated and integrates current information technology in the fishery management and monitoring process.

Upon purchase of a VMS unit, the VMS check-in report may be completed onscreen using fillable forms, downloaded, and printed from the NMFS Alaska Region website <http://www.alaskafisheries.noaa.gov>. The VMS check-in report must be faxed to: NOAA Fisheries Office for Law Enforcement Fax number: 907-586-7703.

General information can be found at: <https://alaskafisheries.noaa.gov/sustainablefisheries/vms/>.

**4. Describe efforts to identify duplication.**

No duplication exists with other information collections.

**5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.**

One catcher/processor and 11 catcher vessels—were believed to constitute small entities. The estimated average gross revenue for these firms, in 2012, was about $1.4 million. This collection-of-information does not impose a significant impact on small entities.

**6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.**

The VMS is an integral part of the management of the fisheries in the Alaska Region. It would not be possible to carry out the mandates of the Magnuson-Stevens Act and other laws if approval to continue these previously approved collections were to be denied.

**7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.**

No special circumstances exist.

**8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments.** **Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.**

This collection is associated with a proposed rule, published on July 1, 2014 (79 FR 37486; public comments will be solicited through that rule.

**9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.**

No payment or gift to respondents is provided under this program.

**10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.**

All VMS units include systems to minimize the risk of direct or inadvertent disclosure of vessel position. As stated in the applicable regulations, the information collected, including VMS transmission – but not including information on the VMS check-in report - is confidential under section 402(b) of the Magnuson-Stevens Act (16 U.S.C. 1801 *et seq*.); and also under [NOAA Administrative Order (AO) 216-100](http://www.corporateservices.noaa.gov/~ames/NAOs/Chap_216/naos_216_100.html), which sets forth procedures to protect confidentiality of fishery statistics.

All information collected is part of a system of records: NOAA #6: Fishermen's Statistical Data.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.**

This information collection does not involve information of a sensitive nature.

**12. Provide an estimate in hours of the burden of the collection of information.**

Total estimated unique respondents: 43, down from 48. Total estimated responses: 46, down from 48. Total estimated burden hours: 87, down from 3,745. Total estimated personnel costs: $3,219, down from $93,675.

**13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).**

Total estimated capital costs: $10,500.

Total estimated miscellaneous costs: $175,242, down from $740,145.

Total costs: 185,742 (*rounded up to 185,743 in ROCIS*).

**14. Provide estimates of annualized cost to the Federal government.**

Total estimated responses: 3, down from 240. Total estimated burden hours: 1 hr, down from 1,625. Total estimated personnel costs: $37, down from $129,675.

**15. Explain the reasons for any program changes or adjustments.**

**A program change** would require that vessel operators with an FFP for a vessel using trawl gear that harvests groundfish deducted from the Federal TAC in the Aleutian Islands subarea set their VMS to transmit the vessel location at least 10 times per hour. This requirement is recommended because of the extent and complexity of the proposed trawl closure areas in the Aleutian Islands reporting area. An estimated 3 new VMS would need to be purchased in order to comply.

VMS Operation (includes purchase, installation, transmission increase)

Capital costs: New VMS including installation ($3500 x 3) = 10,500

Miscellaneous costs: VMS Service provider agreement – additional transmission costs for 43 vessels: 3,260 x 43 = $140,180 (adding 4 x 815 to the current cost).

VMS Check-in report.

an increase of 3 respondents and responses, 3 instead of 0

an increase of 1 hr burden, 1 hr instead of 0

an increase of $37 personnel costs, $37 instead of $0

an increase of $18 miscellaneous costs, $18 instead of $0.

**The following adjustments were made.**

VMS Operation (includes transmission and maintenance) . This corrects the personnel cost. In previous analyses, personnel were indicated as doing the installation as well as maintenance.

a decrease of 5 respondents and responses, 43 instead of 48

a decrease of 3,659 hr burden, 86 instead of 3,745 hr

a decrease of $90,218 personnel costs, $3,182 instead of $93,400

a decrease of $705,100 miscellaneous costs, $35,045 instead of 740,145 (including decrease of 4,075 in communications costs and elimination of carried-over installation costs)

**16. For collections whose results will be published, outline the plans for tabulation and publication.**

NMFS has no plans to publish the results of this information collection.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.**

In accordance with OMB requirements, the control number and expiration date of OMB approval are shown on the VMS check-in report. The transmission of the VMS data is automatic and electronic, and therefore not possible to display the OMB expiration date.

**18. Explain each exception to the certification statement.**

NA.

**B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

This collection does not employ statistical methods.