

**SUPPORTING STATEMENT
GROUND FISH TAGGING PROGRAM
OMB CONTROL NO. 0648-0276**

INTRODUCTION

Beginning with the passage of the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801 *et seq.* (MSA) in 1976, the Secretary of Commerce (Secretary) has undertaken a set of objectives for the conservation and management of marine fishery resources. Under this stewardship role of one of the Nation's natural resources, the Secretary was given certain regulatory authorities to ensure the most beneficial uses of these resources through regional councils. The North Pacific Fishery Management Council (Council) has prepared groundfish Fishery Management Plans (FMP) for the following fisheries in the exclusive economic zone (EEZ) off Alaska: Groundfish fisheries in the Gulf of Alaska (GOA) EEZ under the Fishery Management Plan for Groundfish of the Gulf of Alaska and groundfish fisheries in the Bering Sea and Aleutian Islands EEZ under the Fishery Management Plan for the Groundfish Fishery of the Bering Sea and Aleutian Islands Area. These fishery management plans are implemented by regulations at 50 CFR part 679. General regulations that also pertain to these fisheries appear in subpart H of 50 CFR part 600.

The National Marine Fisheries Service (NMFS) Groundfish Tagging Program provides scientists with information necessary for effective conservation, management, and scientific understanding of the groundfish fishery resources off Alaska. The collection of information for the Groundfish Tagging Program has been in operation since the early 1970s. Prior to 1992, Office of Management and Budget (OMB) Control No. 0648-0009 included fish tagging reports from all Regions. That collection of information was later revised to include only the annual burden for the Southwest Regions's tag reporting.

This statement supports renewal for an existing collection of information under OMB Control No. 0648-0276, assigned to the Groundfish Tagging Program on the northeast Pacific coast and Alaska. The groundfish tagging and tag recovery program is part of the fishery resource assessment that NMFS conducts under the Magnuson-Stevens Act authority as codified in 16 U.S.C. 1854 (e) and 1801 (a)(8). The program is part of NOAA Operations, Research, and Facilities Appropriation which is available for necessary expenses of activities authorized by law.

A. JUSTIFICATION

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

This collection involves the submission of tag recovery information from the public. Each year, thousands of fish are caught during NMFS stock assessment surveys. These fish are weighed and measured, and their sex is determined. Fish that appear healthy and uninjured are tagged before being released back into the wild. Fishermen and seafood processors subsequently find the tagged fish. By returning the tag along with information on when and where the fish was

caught and the size and weight of the fish, these fishermen and processors provide extremely valuable information to fishery scientists and managers.

Groundfish tagging programs in the northeastern Pacific Ocean and Alaska waters provide essential research data on groundfish life histories and migration patterns that are necessary for implementing management regimes. To be most cost effective, tagging of sablefish and other groundfish is usually accomplished on board National Oceanic and Atmospheric Administration (NOAA) and NMFS chartered survey vessels as one of many data collection tasks performed during the surveys. Tagging groundfish for subsequent tracking and recovery is an important tool for managing fishery resources and the information gathered has resulted in numerous scientific and management publications by NMFS personnel.

There are two general categories of tags. Simple plastic tags (spaghetti tags) are external tags approximately two inches long printed with code numbers. When a tag is returned the tag number is correlated with databases of released, tagged fish to determine the net movement and growth rate of the tagged fish. Archival tags are microchips with sensors encased in plastic cylinders that record the depth, temperature or other data, which can be downloaded electronically from the recovered tags. See the information flyers posted with this submission for photos of each type of tag. Flyers are distributed to inform fishers and processors of the program and to encourage them to be on the lookout for tagged fish. Tag return information is collected through the use of either of two 4" x 6-1/2" forms sent directly to the fishing vessel's captain, or are made available at the processing plants where fishermen unload their catches. One form is specific to sablefish, the other to all other groundfish species. Sablefish are the predominant species tagged. Approximately three thousand are tagged annually as part of a long term and well advertised program. Groundfish other than sablefish are generally tagged in fewer numbers. They are usually tagged on a more opportunistic basis and for shorter duration projects. Both types of tags (spaghetti and microchip) are used with both sablefish and other groundfish; archival tags are quite expensive, so are used less frequently. A significant percentage of the tags are recovered by fishery agency staff and fishery observers, while the remainder are recovered by fishermen and processing workers.

Although the two information collection forms are very similar, it is useful to have distinct forms. The groundfish program and the sablefish program are run from two separate facilities. The tagged fish are caught in distinctly different fisheries. Separate forms generally avoid the need to sort out responses in Seattle and forward some to Auke Bay.

The tag recovery information collected from fishermen, observers, port samplers, various state and federal fishery agencies, and fish processors is received by the NMFS Alaska Fisheries Science Center in Seattle, Washington (groundfish) and its Auke Bay Laboratory in Juneau, Alaska (sablefish). In recent years, between 600 and 1000 tag recoveries have been submitted per year. The number of individuals returning tags varies widely. Many fishers and processors associate the tagging programs with the NMFS observer program and utilize observers onboard fishing vessels and in processing plants to collect and return all tags from that particular vessel or plant. The usual number of non-NOAA people participating ranges between 300 and 400 annually. About 10% of the tagged fish are recovered. There is no way of determining, for those not recovered, how many are simply not caught vs. how many fishermen do not follow through with the tag returns. However, the program is very well known, there is a high level of interest

due to curiosity about the original fish release information as well as the rewards, the burden is minimal and there is no cost to the fishermen.

The standard tag recovery form is attached to a business reply envelope. Individuals use this envelope to submit and record recovery information for each tag. Typical information given by the respondent and collected is: (1) tag number, (2) date of capture, (3) location, (4) size of fish, (5) sex, and (6) depth of capture.

Submitting tag recovery information is voluntary and can be accomplished at any time. Most tag recovery information is submitted directly after a groundfish fishery closure because fishermen are anxious to receive the release information. Respondents receive information only on the tags they have recovered. Recovery information needs to be as accurate as possible, and fishermen are aware of this necessity. Some individuals return recovered tags quickly, while others will accumulate many tags and return them on an annual or seasonal schedule. Less frequent transmittal of data (less than annually) delays processing of the information. Such a delay can make the information less valuable to the fishermen and reduce the temporal significance of the data for prediction of stock abundance by management area.

Existing data sets are used to match recovery and release information for each tag submitted. A letter generated by a series of computer programs and the existing tag release data set provides fishermen with release information for each tag recovery submitted, while providing researchers with information necessary to manage the groundfish fisheries.

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.

Scientists of NMFS, the Alaska Department of Fish & Game (ADF&G), universities, and from Japan and Canada use the groundfish tag identification number, recovery position, biological data from the tagged fish, (sex, length, weight), and recovery nation, depth, and gear information to study growth rates, mortality, recruitment, migration patterns, and differences by area, sex, size, and depth.

Data collected from the groundfish tagging program are used in population dynamics models to effectively estimate population size and manage the groundfish resource. Information gathered provides data on the rates of migration between the west coast, British Columbia, and Alaska and among Alaska management areas.

It is anticipated that the information collected will be disseminated to the public or used to support publicly disseminated information. As explained in the preceding paragraphs, the information gathered has utility. NOAA Fisheries will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with 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.

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.

Electronic archival tags represent advances in the collection of data, both in the quantity and specificity of the data collected from individual fish. However, the means by which respondents report tag information through the mail will not become automated. The necessity of obtaining the actual tag from each fish to verify the data collected make it impractical to seek electronic or other automated methods of collecting tag information.

4. Describe efforts to identify duplication.

No other tagging information is available for groundfish in outside waters off California, Oregon, Washington, and Alaska. Scientists from the United States (U.S.), Canada, and ADF&G are collaborating to form a joint database of groundfish tag releases and recoveries. Tags can be sent to any of the agencies, because tags will be forwarded to the appropriate agency upon receipt. Duplication of effort and superfluous data collection is avoided through this cooperation. Only the recoverer of the tagged groundfish can supply the information necessary for analysis. There is no other source for these data.

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

Individuals at processing plants, on fishing vessels, and state fishery agencies send tag recovery information as tagged fish are caught in state and federally managed groundfish fisheries. Both tag recovery forms require five minutes to complete and are designed to create minimal burden. Many fishing vessels and processors in the fisheries associated with these tagging programs carry NMFS observers. In the great majority of these instances, tagged fish will simply be handed to the observer for recovery of the tag and recording and forwarding of pertinent information thereby minimizing public burden.

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

If the information were not collected, management effectiveness of the groundfish resource would be diminished. Tagging has provided estimates of a number of important biological parameters used in stock assessment models, models that are used to recommend harvest levels. Parameters include growth, fishing and natural mortality, and direction and rates of fish movement among management areas. The parameters are incorporated in population dynamics models such as stock reduction analysis, stock synthesis, and more advanced methods incorporating likelihood functions and non-linear optimization functions. The lack of adequate information derived from tagging would result in groundfish stock assessments that are less accurate thereby decreasing the credibility of the fishery management process and increasing costs associated with under and over harvest of groundfish resources.

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

NMFS Alaska Region has no special circumstances that require information collection to be conducted in a manner inconsistent with the OMB guidelines.

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.

A Federal Register Notice published on April 6, 2009 (74 FR 15459) solicited public comment. No comments pertaining to the information collection were received.

NMFS observers are a primary liaison between the groundfish tagging program and fishers and processors in the field. Comments from observers are used to gauge participant interest and the general level of participation in the program.

Persons consulted on the information requirements of the groundfish tagging program during research cruises, at fishery meetings, and elsewhere over the years include:

1. Dr. Jon Heifetz, NMFS, TSMRI/Auke Bay Laboratory, 17109 Pt. Lena Loop Rd., Juneau, AK 99801, (907) 789-6052.
2. Frank Shaw, Fisheries Biologist, NOAA/NMFS, 7600 Sand Point Way N.E., Seattle, WA 98115-0070, (206) 526-4120.
3. Takashi Sasaki, Far Seas Fisheries Research Laboratory, Japan, 0543-34-0715.
4. Dave Carlile, State of Alaska, Department of Fish & Game, 907-465-4216.
5. Gordon A. McFarlane, Fisheries and Oceans, Canada, 1-604-756-7052.
6. Bob Demory, State of Oregon, Department of Fish and Wildlife, 503-867-4741.
7. Al Millikan, State of Washington, Department of Fisheries, 206-545-6597.
8. Jim Hardwick, State of California, Department of Fish and Game, 408-649-2884.
9. Jim Ianelli, NMFS Alaska Fisheries and Science Center, 206-526-6510.

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

The various tagging efforts within the groundfish tagging program offer a variety of rewards and incentives for participation (\$5 cash, a ball cap, etc.) Participants also receive the release information (date, position, depth, size) and data generated from each tag recovered (growth, miles traveled, and days at large). The data associated with the recovered tags is of great interest to fishermen and may be as much of an incentive as the small rewards. For sablefish, there is also an annual drawing of the recovered tag numbers; the recoverer of the winning tag number receives \$1,000. The sablefish information is currently more valuable, which is why an additional reward is offered for these tags. Similarly, archival electronic tags earn the participant \$200 for return of an undamaged electronic tag, reflecting the value of the data contained therein.

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

As stated on the program forms, the information collected is confidential under section 402(b) of the Magnuson-Stevens Act (16 U.S.C. 1881a). It is also confidential under NOAA Administrative Order 216-100, which sets forth procedures to protect the confidentiality of fishery statistics. Under guidance of NOAA General Counsel, Alaska Region, changes to Alaska state regulations have been implemented to allow the State access to fishery information collected from the groundfish industry under Federal regulations, consistent with NOAA Administrative Order 216-100.

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.

The burden associated with a respondent returning a spaghetti tag is five minutes to complete the form. Since a business reply envelope is provided to the participant, no other burden is associated. There are two forms used with this tagging program. The first, the tagged sablefish form, has approximately 20 responses per year. The second, the groundfish tagging form, has approximately 437 non-NOAA responses per year.

Approximately 40 electronic tags are returned per year, however the vast majority of these are simply handed over to on-site NMFS observers thereby incurring no burden. It is estimated that approximately 5 respondents per year return these tags themselves. The burden associated with a respondent returning an electronic archival tag is less than twenty minutes to remove the tag and record information.

Annual Time and Cost Burden to the Industry
Groundfish Tagging Program

Tagged sablefish form

Estimated number of respondents.....	20
Average number of responses per respondent.....	1
Estimated number of responses.....	20
Average recording time.....	.5 min.
Time requirement for all responses (20 x 5 min/60 min).....	1.7 (2) hr
Labor cost per hour, in dollars.....	\$15/hr
Total labor cost for tagging form (\$15 x 1.7 hr).....	\$30

Tagged groundfish form

Estimated number of respondents.....	150
Average number of responses per respondent.....	2.91
Estimated number of responses.....	437
Average recording time.....	.5 min
Time requirement for all responses (437 x 5 min/60 min).....	36.3 (36) hr
Burden per hour, in dollars.....	\$15/hr
Total labor cost for tagging form (\$15 x 36.3 hr).....	\$540

Electronic archival tag return

Estimated number of respondents.....	5
Average number of responses per respondent.....	1
Estimated number of responses.....	5
Average recording time.....	.20 min.
Time requirement for all responses (5 x 20 min/60 min).....	1.7(2) hr
Burden per hour, in dollars.....	\$15/hr
Total labor cost for tagging form (\$15 x 18 hr).....	\$36

Totals: 175 respondents (may be some duplication), 462 responses, 40 hours and \$606 in labor costs.

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).

Return of spaghetti tags incurs no costs on the part of respondents other than their time. Respondents who return electronic archival tags incur no costs if they simply hand the tagged fish to a NMFS observer, in which case the observer assumes responsibility for collecting and forwarding information. If a fisherman chooses to return an electronic tag himself he will incur the postage costs of mailing the tag (approximately \$2.00 per tag). In either case, the finder of the tag will receive a \$200 reward.

1. Total capital and startup cost component (annualized over its expected useful life): **no costs.**
2. Total operations, maintenance, and purchase of services component: **\$2 per electronic tag returned x 5/year = \$10.**

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

Since this is a renewal of an existing program the costs to the Federal government are not affected and remain about \$22,200 a year in rewards and \$2,000 a year in tags, paper supplies, and tagging equipment. The groundfish tagging program requires an average of two full time employees to maintain the database and return release information to the respondents. Minimal ship time costs are incurred because tagging is included in routine stock assessment survey operations.

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

An adjustment has been made to reflect: 1) an increasing majority of tag returns being handled by NMFS researchers in the field or by NMFS observers aboard fishing vessels or stationed at seafood processing plants, and 2) a decreasing numbers of sablefish tag returns. NOTE: there appears to be an \$10 increase in costs, which is simply an artifact of costs being rounded down to zero when the collection was migrated to ROCIS.

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

Results of the tagging program have been published on a regular basis in such publications as the Fishery Bulletin, Fisheries Research, the International Symposium on the Biology and Management of Sablefish in 1993. A summary report of the sablefish tagging program, *Report to Industry on the Alaska Sablefish Tag Program, 1972-2001* is available on-line at: <http://www.afsc.noaa.gov/abl/MarFish/sablecruise.html>.

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.

The forms will be used for tens of years in this study. To reduce paper work, effort, and money expended over the life of the study it is reasonable to eliminate the expiration date on the forms so that frequent renewal efforts will be eliminated. Also, fishermen and processors may keep forms on hand for long periods before needing to use them, and it would be difficult to ascertain that the most recent forms are available to them. Fishermen would be unlikely to replace old forms with new ones just because the OMB date had changed. Consequently, it is requested that the expiration date be omitted from the form.

18. Explain each exception to the certification statement identified in Item 19 of the OMB 83-I.

NA.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

This information collection does not employ statistical methods.