WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

REGULATORY AMENDMENT

Authorizing the Optional Use of Electronic Logbook Forms

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Lead Agency: National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Pacific Islands Regional Office
Honolulu, Hawaii

Responsible Officials:

William L. Robinson
Regional Administrator
Pacific Islands Regional Office
1601 Kapiolani Blvd., Suite 1110
Honolulu, HI 96814
(808) 944-2200

Kitty M. Simonds
Western Pacific Regional
Fishery Management Council
1164 Bishop St., Suite 1400
Honolulu, HI 96813
(808) 522-8220

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1. ABSTRACT

This regulatory amendment would allow fishery participants the option of using electronic logbook forms in substitution of paper logbook forms for federal data recording and reporting requirements under the Fishery Management Plans of the Western Pacific Region. By recommending this measure, the Council recognizes that the availability and capability of personal computers have increased to the point where their use in recording fisheries dependent information can improve data accuracy and result in significant time savings for fishermen and National Marine Fisheries Service alike.

2. SUMMARY

At its 120th meeting, the Western Pacific Fishery Management Council (Council) took initial action to recommend that the National Marine Fisheries Service (NMFS) authorize the optional use of approved electronic logbook forms in fisheries with federal reporting requirements as an alternative to the currently required paper logbook forms. Specifically, the Council recommended that NMFS authorize the optional use of electronic logbook forms, allow the submission of logbook data on non-paper media such as 3.5" diskette, CD, DVD, memory stick, flash card, and also allow for the data to be transmitted to NMFS via e-mail or satellite systems. At its 123rd meeting in June 2004, the Council took final action to recommend that the existing reporting and record keeping regulation (50 CFR 665.14) be amended to allow the optional use of electronic logbooks, the submission of logbook data on non-paper media, and allow for the data to be transmitted to NMFS via e-mail or satellite systems.

The Council, in recommending this measure, recognizes that the availability and capability of personal computers have increased to the point where using them to record fisheries dependent information can benefit Western Pacific fishery participants and NMFS' data management program. The benefits of electronic logbook forms include significant time savings for fishery participants, increased data accuracy, and time and money savings for NMFS.

The alternatives considered in this document range from maintaining the current regulations, to requiring the use of electronic logbook forms, and further, requiring their submission via e-mail or satellite systems. In recognition of the fact that not all fishery participants may have the technology or desire to use electronic logbooks, the preferred alternative would amend the five Fishery Management Plans of the Western Pacific to allow the optional use of electronic logbook forms, and the submission of such forms on non-paper media or transmission via e-mail or satellite systems. This option would be available to participants in those fisheries with federal reporting requirements (meaning fisheries in which participants submit federal logbooks directly to NMFS) as well as those participants in fisheries that may become subject to federal reporting.

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4. INTRODUCTION

4.1 Responsible Agencies

The Council was established by the Magnuson Fishery Conservation and Management Act of 1976 (Public Law 94-265; 16 U.S.C. 1801 et. seq.) to develop fishery management plans (FMPs) for U.S. fisheries operating seaward of American Samoa, Guam, Hawaii, the Northern Mariana Islands and the Pacific Remote Island Areas.[1] Once an FMP is approved by the Secretary of Commerce (Secretary), it is implemented by federal regulations which are enforced by the National Marine Fisheries Service (NMFS) and the U.S. Coast Guard (USCG), in cooperation with state agencies.

For further information, contact:

Kitty M. Simonds
Executive Director
WPFMC
1164 Bishop St., Suite 1400
Honolulu, HI 96813
Telephone: (808) 522-8220
Fax: (808) 522-8226

William L. Robinson
Regional Administrator
NMFS Pacific Islands Region
1601 Kapiolani Blvd., Suite 1110
Honolulu, HI 96814-0047
Telephone: (808) 944-2200
Fax: (808) 973-2941

4.2 Public Review Process and Schedule

The optional use of electronic logbook forms as an alternative to paper logbook forms was afforded public review at the Council's 120th meeting held October 20-23, 2003 in Honolulu, HI. At that meeting, a document outlining various regulatory options regarding electronic logbook forms was made available to the public. The Council discussed the document at that meeting and the public was given opportunity to provide comments.

In March 2004, the optional use of electronic logbook forms was discussed at meetings of the Council's Advisory Panels in Hawaii, American Samoa, Guam, and the Commonwealth of Northern Mariana Islands. The Council took final action on this measure at its 123rd meeting in March 2004, at which opportunities for public comment were also provided.

4.3 List of Preparers

This document was prepared by:

Western Pacific Fishery Management Council

Marcia Hamilton, Economist
Eric Kingma, NEPA Coordinator

[1] Howland Island, Baker Island, Jarvis Island, Johnston Atoll, Midway Island, Kingman Reef, Palmyra Atoll, and Wake Island.

National Marine Fisheries Service, Pacific Islands Fisheries Science Center

Kurt Kawamoto, Fishery Biologist

5. PURPOSE AND NEED FOR ACTION

Existing regulations (50 CFR 665.14) require permit holders that fish for Western Pacific management unit species under Pelagics, Coral Reef Ecosystems, Crustaceans, and Precious Corals, and Bottomfish[2] FMPs to maintain and submit paper logbook forms to NMFS. The time burden to comply with reporting and recordkeeping regulations is substantial. For example, some fishery participants in the Hawaii-based limited entry longline fishery estimate they spend at least 45 min/day filling out paper logbook forms while on a fishing trip (PIFSC E-log Pilot Project). In addition to a time burden, paper logbook forms (and the interpretation thereof) are subject to a high level of error due to bad handwriting and the recording of inaccurate information.

NMFS' Pacific Islands Fisheries Science Center (PIFSC) is responsible for compiling and analyzing Western Pacific fisheries logbook data. To obtain accurate logbook information, PIFSC has developed data verification systems which include: a) daily dockside pickup of paper logbooks (Hawaii longline fishery) where NMFS personnel verify data with vessel captains at the dock, b) pre-data entry edits and checks, and c) "double blind" data entry where two people enter the same data, and the files are compared and differences corrected. PIFSC spends a great deal of resources (time and money) to verify that the data submitted are accurate. Therefore, ways to reduce the amount of resources (time and money) needed to obtain accurate logbook information are highly desired. In addition, reducing the paperwork burden on fishermen is an important goal of the Paperwork Reduction Act (44 U.S.C. 3501 *et. seq.*).

Electronic logbook forms can markedly reduce the time burden on fishery participants while improving data accuracy, thus reducing the paperwork burden on fishery participants and saving resources for PIFSC. In a pilot project (1998-2003) conducted by PIFSC involving five vessels from the Hawaii-based longline fleet, electronic logbook forms were demonstrated to save fishermen 30 min/day and nearly six hours per trip. Results of the pilot project also indicated that electronic logbooks could save PIFSC personnel more than four days/year (based on eight hour days) for each vessel that uses electronic logbook forms. Based on this information, electronic logbook forms have the potential to significantly reduce the time and paperwork burden on fishery participants, in addition to improving data accuracy and saving resources (time and money) for PIFSC. See Appendix II for more detail on estimated time savings.

The ability of fishermen to conduct real time reporting is also important when discussing electronic reporting. For example, under the Inter-American Tropical Tuna Commission (IATTC) the Hawaii-based longline fishery is subject to an annual fleet wide quota of bigeye tuna east of 150°W. latitude. To monitor the fishery so that it does not exceed its quota, NMFS extrapolates catch

[2] Reporting and record-keeping requirements for fishery participants under the Bottomfish FMP provide logbook forms to the State of Hawaii, which then shares this data with NMFS.

information to the fleet based on called in observer data. This system is not accurate and relies on satellite phone communications between NMFS and observers. Electronic reporting through VMS systems could be an easy and accurate method of transmitting real time catch information. It is realistic that both domestic (Council) and international (Commissions) fishery management will be utilizing quota-based systems to manage fisheries in the future.

Electronic Reporting in Other Regions

Electronic reporting programs have been implemented in other fishery management councils' areas of responsibility and NMFS regions. For example, in the Alaska Region, electronic logbooks and other reporting forms (e.g., dealer reports) are accepted from groundfish catcher vessels and catcher/processor vessels. In addition, Alaska's crab rationalization program, which includes both federal and state partners, accepts daily electronic logbook submissions via email or web-based applications. At this time both programs allow the optional use of electronic reporting, however according to the NMFS' Alaska Region Sustainable Fisheries Division, mandatory electronic reporting for both fisheries will likely be required in the near future.

In the Northeast Region, effective May 1, 2004, all seafood dealers issued a Federal permit to purchase seafood harvested in various fisheries are required to submit electronic trip level reports to NMFS. Under this program, dealers categorized as large must submit trip level reports on a daily basis, whereas small dealers must submit weekly trip level electronic reports.

6. INITIAL ACTIONS

In recent years, PIFSC conducted a pilot project testing the utility of an electronic logbook program (HIPlot) for the Hawaii-based longline fleet. Developed by Mr. Edward ("Tim") Timony, a NWHI bottomfish limited entry permit holder, the HIPlot software program is capable of incorporating connected peripheral devices like GPS (providing accurate position, time, and dates) with 'point and click' and auto-filled data fields for required logbook information. Many of the auto-filled fields on the program such as time and place, represent the source for many of the errors observed on hand written, paper logbook forms. Results from the pilot project indicate that electronic logbook submissions produce very clean data with almost no errors.

As the pilot project dealt with new and emerging technology, concerns have been raised involving the use of electronic logbook forms within the current regulatory framework. For example, existing regulations require paper logbook forms to be signed prior to their submission. For a reporting software to be accepted by NMFS, the software would meet certain standards such as back up systems and data confidentiality safeguards. For example, in lieu of signatures, the vessel captain would be assigned a unique identifier such as a PIN code to certify the logged or submitted data. In addition, the name of both the captain and permit holder, the federal permit number, and State of Hawaii's Commercial Marine License number would be required fields in any NMFS approved electronic logbook form. Currently, there is a NMFS Electronic Reporting Professional Specialty Group tasked with addressing issues such as electronic signatures as well as developing technical specifications for approved electronic logbook software.

Concerns were also expressed by the USCG in regard to their boarding officers not having access to electronic logbook information when checking for compliance of daily recordkeeping requirements. However, the HIPlot program automatically saves and backs-up data, so that boarding officers would be able to read electronic logs directly off the vessel's computer or store the information on floppy disc, CD, memory stick, or other NMFS approved media. Also, the USCG and NOAA Office of Law Enforcement have been provided copies of the HIPlot program by NMFS, enabling them to read the logbook data if it were saved to a diskette, CD, memory stick, or other approved media. The pilot project was used HIPlot on test basis, and the mention of that program is provided as an example of a software program that could be approved by NMFS for electronic reporting applications.

At its 123rd meeting, the Council took final action to recommend amending Western Pacific FMPs to allow the optional use of electronic logbook forms and the submission of such forms on non-paper media or the transmittal of logbook data via e-mail or satellite systems. This recommendation is represented as Alternative 3 in this document.

While the purpose of this regulatory amendment is to allow the optional use of electronic logbooks, this document does not set out the technical requirements or protocols for electronic logbook software program or hardware that may be approved by NMFS. NMFS will publish technical specifications that venders must meet in order for their electronic reporting system to be approved by NMFS.

7. MANAGEMENT OBJECTIVES

The overall objectives of this action are to: improve data accuracy, reduce paperwork requirements, and save time and money for fishery participants and NMFS. This is consistent with provisions of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) as well as various objectives of the Council's Fishery Management Plans which are provided below.

MSA - Title IV Fishery Monitoring and Research

(a)(6) Establish standardized units of measurement, nomenclature, and formats for the collection and submission of information; (7) Minimize the paperwork required for vessels registered under the system.

Bottomfish and Seamount Groundfish FMP

Improve the data base for future decisions through data reporting requirements and cooperative Federal/State/Territory programs.

Coral Reef Ecosystems FMP

To establish integrated resource data collection and permitting systems, establish a research and monitoring program to collect fishery and other ecological information, and to collect scientific data necessary to make informed management decisions about coral reef ecosystems in the EEZ.

Crustaceans FMP

To collect and analyze biological and economic information about the lobster fishery and improve the basis for conservation and management in the future.

Pelagics FMP

To improve the statistical base for conducting better stock assessments and fishery evaluations thus supporting fishery management and resource conservation in the EEZ and throughout the range of the management unit species.

Precious Corals FMP

Allow a fishery for precious corals in the fishery conservation zone of the Western Pacific but to limit the fishery so as to achieve the Optimum Yield (OY) on a continuing basis.

Government Paperwork Elimination Act (GPEA)- The GPEA requires Federal agencies to allow individuals or entities that deal with the agencies the option to submit information or transact with the agency electronically, when practicable, and to maintain records electronically, when practicable. The GPEA specifically states that electronic records and their related electronic signatures are not to be denied legal effect, validity, or enforceability merely because they are in electronic form, and encourages Federal government use of a range of electronic signature alternatives.

8. ALTERNATIVES CONSIDERED

Alternative 1- Status quo (no action) - maintain current FMP regulations for reporting and recordkeeping.

Alternative 2- Allow the optional use of electronic logbook forms, with data submitted on paper or on NMFS approved non-paper media - Under this alternative, fishermen would have the option of using NMFS approved electronic logbook forms to maintain required data in lieu of paper logbook forms. Data would be accepted on paper copy or on NMFS approved non-paper media (3.5" floppy, CD, DVD, memory stick, flash card, other approved media). Paper logbook forms would be required to be kept on board and used as backup in lieu of a computer malfunction.

Alternative 3 (preferred)- Allow the optional use of electronic logbook forms, with data submitted on paper or on NMFS approved non-paper media or by over-the-air transmissions (e.g., satellite systems) - Under this alternative, fishermen would have the option of using NMFS approved electronic logbook forms. They would also be allowed to submit data on paper or on NMFS approved non-paper media (3.5" floppy, CD, DVD, memory stick, flash card, other approved media), or by transmission through email or satellite systems that are compatible with

NMFS' communication systems as determined by the Regional Administrator. Paper logbook forms would be required to be kept on board and used as backup in lieu of a computer malfunction.

Alternative 4- Mandatory use of electronic logbook forms and option to submit data by over-the-air transmission- Under this alternative, record- keeping on NMFS approved electronic logbook forms would be mandatory and paper logbook forms would not be accepted. Data would be submitted on NMFS approved non-paper media (3.5" floppy, CD, DVD, memory stick, flash card, other approved media), or by over-the-air transmission. Paper logbook forms would be required to be kept on board and used as backup in lieu of computer malfunction.

Alternative 5- Mandatory use of electronic logbook forms and mandatory over-the-air transmission of data - Under this alternative, the use of NMFS approved electronic logbook forms would be mandatory and paper copy logbook forms would not be accepted. In addition, the data would be required to be transmitted to NMFS via e-mail or satellite systems deemed acceptable by the Regional Administrator. Paper logbook forms would be required to be kept on board and used as backup in lieu of computer malfunction.

Discussion of Alternatives

Alternative 1 would maintain the current regulations of federal reporting and recordkeeping for fishery participants under the FMPs of the Western Pacific Region. The existing regulations (50 CFR 665.14(a)) require vessel captains to record daily catch and effort information in logbooks within 24 hours of deploying fishing gear. In addition, the vessel Captain must submit (by hand or mail) the completed logbook forms to NMFS within 72 hours (30 days if registered under a Coral Reef Ecosystems FMP special permit) following his or her return to port after each trip. Since the inception of daily logbooks, NMFS personnel have executed daily dockside pickup of paper logbook forms, in addition to accepting hand delivery of paper logbook forms to NMFS by representatives, captains, and owners of vessels within the Hawaii-based longline fleet. This procedure was established because more than 99% of the Hawaii-based longline fleet is home-ported on Oahu, Hawaii, and NMFS personnel were already visiting the docks on a daily basis to maintain their longline vessel inventory.

Although the current data collection system is working relatively well, it is not taking advantage of emerging technology that could improve the efficiency of reporting and recordkeeping while reducing human error and improving data accuracy. Maintaining paper logbook forms, and the interpretation of such forms, is subject to high levels of potential error due to bad handwriting and inaccurate recording. The program that produces the electronic logbook forms significantly reduces error associated with illegible handwriting, and employs built-in programming that would automatically run error and range checks on information inputted into required data fields.

As with any new technology, fishermen's time would be needed to learn how to use the electronic logbook program. For Alternatives 2-5, paper logbook forms would be required to be kept onboard vessels and maintained if the electronic logbook form or vessel's computer system became inoperable.

Alternative 2 builds upon the current regulatory framework by providing fishery participants the option of recording required information on NMFS-approved electronic logbook forms. Electronic logbook forms save a significant amount of time, and ultimately reduce the amount of paperwork required of fishery participants. In addition, NMFS approved electronic logbook forms would likely involve real-time 'point and click' and auto-fill data elements, which are presumed to provide a strong incentive for timely completion. Electronic logbook forms also reduce error and improve data accuracy, as automatic verification systems can be built into the software. Alternative 2 would also allow submission of required information via NMFS approved electronic media (such as CD, 3.5" floppy disc, DVD, flash cards, memory sticks, other approved media). These types of media would need to be mailed or picked up at the dock by NMFS personnel. Alternative 2, however, would not allow for the transmission of logbook data via e-mail or satellite, therefore a fishery participant's reporting flexibility and potential time savings are limited when compared to Alternative 3.

Alternative 3, which builds upon Alternatives 1 and 2, provides fishery participants the greatest flexibility in complying with reporting and recordkeeping requirements. Alternative 3 would allow the optional use of NMFS approved electronic logbook forms, the option of submitting the required data on NMFS approved non-paper media, and the option of transmitting the data via over-the-air transmissions (e.g., satellite). Providing these options for complying with reporting and recordkeeping requirements would reduce the amount of paperwork required of fishery participants, increase time savings of fishery participants, increase time and money savings for NMFS, and improve the accuracy of logbook data. While the potential exists for unauthorized access to confidential logbook information when it is being transferred via the internet, NMFS will take necessary steps and precautions to secure the transfer of logbook information via over-the-air transmissions.

Alternative 4, which would make electronic logbook forms mandatory, and Alternative 5, which would make the transmission of those forms through email or satellite systems mandatory, would reduce fishery participants' options for compliance with reporting and recordkeeping requirements. In addition, many fishery participants would be economically impacted as they would have to buy computer equipment and the NMFS-approved software, estimated to be at least $ 1,500.00. Also, many fishery participants are not computer literate and would require time to familiarize themselves with the computer and logbook software, ultimately, costing time and money.

Alternative 5, by requiring over-the-air transmission of required data, is not practical as computer systems can be subject to malfunction, and satellite transmission can be expensive and experience interference due to weather and atmospheric conditions. Table 1 provides a summary of the advantages and disadvantages of each of the alternatives.

Table 1. Advantages and Disadvantages of Alternatives 1-5

Alternative	Advantages	Disadvantages
Alternative 1. Paper record forms must be maintained every 24 hrs while on fishing trip; forms must be signed and submitted within 72 hours of returning to port. Current data submission procedures include daily dockside pick-up, mail, or hand delivery.	System is working. Fishermen are familiar with the current logbook requirements. Costs for the mail-in system of reporting is inexpensive.	Paper forms subject to error caused by bad handwriting, inaccurate recording. Current system doesn't take advantage of new technology that could improve efficiency and data accuracy. Current system does not reduce paperwork burden on fishermen.
Alternative 2. Allow the optional use of E-log forms + option of submitting forms on non-paper media (CD, 3.5" floppy, DVD, flash cards, memory sticks, other approved media). Paper logs required to be onboard and used as a back-up.	Increased flexibility for data recording and submission (paper or E-log forms may be used). Improved data accuracy. Reduced time and paperwork burden on fishermen and NMFS.	Initial costs for E-log form program and necessary computer equipment ~ $1500.00. Corruption of electronic data storage media resulting in data loss. Corruption of E-log program resulting in data loss or inability to copy data for submission. Time/self-training for E-log program competency.

Alternative 3 (Preferred) Allow the optional using of E-logs + option of submitting forms on non-paper media (CD, 3.5" floppy, DVD, flash cards, memory sticks, other approved media) + option of transmitting data via e-mail or satellite systems. Paper record forms required to be onboard and used as a back-up.	Increased flexibility for data recording and submission (paper or E-log forms may be used). Improved data accuracy. Reduced time and paperwork burden on fishermen and NMFS. Take advantage of more efficient data transmission methods. Facilitate real time reporting	Initial costs for E-log form program and necessary computer equipment ~ $1500.00. Corruption of electronic data storage media resulting in data loss. Corruption of E-log program resulting in data loss or inability to copy data for submission. Time/self-training for E-log program competency. Potential issues concerning data confidentiality during electronic transfer.
Alternative 4. Mandatory use of E-logs + mandatory submission of data on non-paper media (CD, 3.5" floppy, DVD, flash cards, memory sticks, other approved media; optional over-the-air transmission. Paper record forms required to be onboard and used as a back-up.	Improved data accuracy. Elimination of the data entry step for NMFS personnel saving time and money. Reduced time and paperwork burden on the fishermen.	Reduces fishery participants flexibility to comply with reporting requirements. Forces fishery participants to buy E-log program and necessary computer equipment ~ $ 1500.00. Requires time/self-training to learn program

Alternative 5. Mandatory use of E-logs + mandatory transmission of data via e-mail or satellite systems. Paper record forms required to be onboard and used as a back-up.	Improved data accuracy. Elimination of the data entry step for NMFS personnel saving time and money. Reduced time and paperwork burden on the fishermen. Increased efficiency in submission/transmission of data. Facilitate real time reporting	Reduces fishery participants' flexibility to comply with reporting requirements. Forces fishery participants to buy E-log program and necessary computer equipment ~ $1,500.00. Requires time/self-training to learn program. Potential issues concerning data confidentiality during electronic transfer. Satellite transmission can be expensive.

9. CONSISTENCY WITH NATIONAL STANDARDS FOR FISHERY CONSERVATION AND MANAGEMENT

National Standard 1 states that conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

The preferred alternative is consistent with National Standard 1 as it will not affect fishing capacity or lead to overfishing, but will help achieve optimum yield of respective Western Pacific FMP fisheries by reducing time burdens on fishery participants, thus increasing efficiency. In addition, the preferred alternative will also provide increased data accuracy which benefits the accuracy of calculating optimum yield.

National Standard 2 states that conservation and management measures shall be based upon the best scientific information available.

As described in Section 8, the use of electronic logbooks under the preferred alternative has the potential to improve the accuracy of catch, effort, and other fisheries data provided by fishermen to NMFS. More accurate data, as well as the ability of NMFS to process electronic logbook data in a more timely manner will facilitate that the best scientific information is available for management decisions. Therefore, the preferred alternative is consistent with National Standard 2 as it will improve the accuracy of fishery dependent data which is used to support conservation and management measures.

National Standard 3 states that, to the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

The preferred alternative will not change or modify the manner in which individual stocks of fish are managed throughout their ranges. Therefore, the preferred alternative is consistent with National Standard 3 as it will not affect the manner in which stocks are managed as a unit.

National Standard 4 states that conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

The preferred alternative, which would amend the general reporting and record keeping regulations applicable to Western Pacific Fishery Management Plans, does not discriminate between residents of different states, nor does it allocate fishing privileges. Therefore, the preferred alternative is consistent with National Standard 4.

National Standard 5 states that conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no measure shall have economic allocation as its sole purpose.

By saving time for fishery participants that choose to log and report their catches electronically, the preferred alternative is consistent with National Standard 5 as it would improve the efficiency of Western Pacific fishery operations.

National Standard 6 states that conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

The preferred alternative is consistent with National Standard 6 as it provides an additional option (not a requirement) for fishery participants when complying with Federal reporting and record keeping requirements.

National Standard 7 states that conservation and management measures shall, where practicable, minimize costs, and avoid unnecessary duplication.

The preferred alternative is consistent with National Standard 7 as it will not provide for unnecessary duplication of logbook forms, nor require substantial costs for fishery participants and, in fact, it will reduce costs for NMFS' data management program.

National Standard 8 states that conservation and management measures shall, consistent with the conservation requirements of the MSA (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

The preferred alternative is consistent with National Standard 8 because it will have insignificant effects on fishery stocks, will not affect the sustained participation of fishing communities, nor will it result in adverse economic impacts on fishing communities. Alternatively, the preferred alternative is presumed to result in time savings for participants, therefore ultimately saving money.

National Standard 9 states that conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

The preferred alternative is consistent with National Standard 9 as it will not have any affect on the bycatch, the minimization of bycatch, or the mortality of bycatch. The preferred alternative is further consistent with National Standard 9 as it will provide more accurate data regarding catches and catch locations.

National Standard 10 states that conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

The preferred alternative is consistent with National Standard 10 as it is presumed to result in time savings for fishery participants which may have a positive effect on the safety of human life at sea. In other words, vessel captains that choose to log and submit their catch information electronically will have more time attending to vessel operations instead of filling out paper logbooks, thus promoting safety at sea.

10. RELATIONSHIP TO OTHER APPLICABLE LAWS AND PROVISIONS OF THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

10.1 National Environmental Policy Act (NEPA)

National Oceanic and Atmospheric Administration (NOAA) Administrative Order Series 216-6 6.03a.3(a) states "[m]anagement plan amendments not requiring an [environmental impact statement] must be accompanied by an [environmental assessment] unless they meet the criteria of a [categorical exclusion]." Categorical exclusions are intended to exempt qualifying actions from environmental review procedures required by National Environmental Policy Act (NEPA). A categorical exclusion is appropriate where a proposed action falls into a category of actions that do not individually or cumulatively have a significant impact on the quality of the human environment as determined through an environmental review.

Environmental Review

A categorical exclusion determination is made on a case-by-case basis by the agency. The proposed action, as outlined in Section 8, is the authorization of the optional use of electronic logbook forms, i.e., the acceptance of logbook data on approved non-paper media or via over-the-air transmission. In determining whether the effects are significant, certain factors relevant to the proposed activity are considered. These factors include the degree to which the effects on the quality of the human environment are any of the following six points.

1. Involve a geography area with unique characteristics.

This proposed action would allow fishery participants the option of using electronic logbook forms in substitution of paper logbook forms for federal data recording and reporting requirements under the fishery management plans of the Western Pacific Region. The Western Pacific Region includes the waters of the Exclusive Economic Zone (EEZ) around the State of Hawaii, the Territory of American Samoa, the Territory of Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Pacific Remote Island Areas.[1] The Western Pacific Region fisheries are currently managed under five species-based FMPs: Pelagics, Bottomfish and

[1] The U.S. Pacific Remote Island Areas (PRIA) includes Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Island, Wake Island, and Palmyra Atoll.

Seamount Groundfish, Coral Reef Ecosystems, Crustaceans, and Precious Corals.[2] The geographical area is large, but not unique in its characteristics.

2. Controversial based on potential environmental consequences.

The effects of the proposed action are not likely to be highly controversial. Under proposed activity, fishermen would have the option of submitting required data on paper forms, as currently required, or through the use of electronic (i.e., non-paper) media, such as a computer diskette, or by transmission of the data through electronic forms, e-mail, etc. Thus, the proposed action provides additional options for fishery participants when complying with Federal reporting and record keeping requirements.

3. Have uncertain environmental impacts or involve unique or involve unknown risks.

The proposed action does not involve unique or unknown risks. Providing reporting options, including the option to use electronic logs, will reduce errors and improve data accuracy, as automatic verification systems can be built into the software (Section 8.1).

4. Establish a precedent or represent a decision in principle about future consideration.

The proposed action is not precedent setting. Capability of personal computers has increased to the point where their use in recording fisheries dependent information can improve data accuracy, and result in significant time savings during data entry and verification. Electronic reporting programs have been implemented in other regions (Section 5.1). Additionally, the proposed action does not preclude future modification, elimination or substitution of another management action, should changing circumstances so warrant.

5. May result in cumulatively significant impacts.

The proposed action will not have significant effects, individually or cumulatively, on fishery stocks (Section 9), or on marine mammal species that may occur in the management area (Section 10.6). The proposed action will not affect the sustained participation of fishing communities, nor will it result in adverse economic impacts on fishing communities (Section 9). The proposed action will not have any affect on the bycatch, the minimization of bycatch, or the mortality of bycatch and will not affect the manner in which stocks are managed (Section 9.0). Since the proposed action only consists of a minor technical addition to reporting and record keeping regulations and will not affect fishery operations or the physical environment, the proposed action will not have any cumulatively significant impacts.

[2] On November 10, 2005, the Environmental Protection Agency (EPA) published a notice (70 FR 68443) announcing the availability for public review the Draft Programmatic Environmental Impact Statement (DPEIS)—Towards an Ecosystem Approach for the Western Pacific Region: From Species-Based Fishery Management Plans to Place-Based Fishery Ecosystem Plans, dated October 27, 2005. The proposed federal action in the DPEIS would be the realignment of the existing fishery regulations contained in the Western Pacific Region's five species-based FMPs into geographically-based fishery ecosystem plans (FEPs) regulations.

6. May have any adversely impact species listed under the Endangered Species Act or their habitats.

The proposed action consists only of a minor technical addition to reporting and record keeping regulations and will not affect fishery operations or the physical environment. Thus, the proposed action will not have any adverse or significant impact on the endangered and threatened species that occur in the management area of the Western Pacific Region (Section 10.5). Additionally, the proposed activity is not expected to have any adverse impacts on essential fish habitat (EFH) or habitat areas of particular concern (HAPC) for species managed under the Council's management plans (Section 10.8).

Conclusion and Recommendation

NOAA Administrative Order Series 216-6 6.03a.3(b)(2) states that examples of categorical exclusions for management plan amendments include "minor technical additions, corrections, or changes to a management plan." The proposed action is the authorization of the optional use of electronic logbook forms, i.e., the acceptance of logbook data on approved non-paper media or submittal via over-the-air transmission. The Council finds that the proposed activity is a "minor technical addition" to the management plan. Additionally, the Council finds that the proposed activity falls into a category of actions that do not individually or cumulatively have a significant impact on the quality of the human environment, as outlined on the above environmental review.

The Council reviewed Sections 5.05 "General Requirements for Categorical Exclusions" under NOAA Administrative Order Series 216-6, and in particular Section 5.05b "Determining Appropriateness for Use of Categorical Exclusions." After considering information provided, the Council recommends that NMFS make the determination that the categorical exclusion determination be made for this proposed activity under NEPA, per NOAA Administrative Order Series 216-6 6.03a.3(b)(2). If NMFS concurs with the Council's recommendation, then the proposed activities would be excluded from the need to prepare either an environmental assessment or an environmental impact statement.

10.2 Executive Order 12866

To meet the requirements of Executive Order 12866 (E.O. 12866), NMFS requires that a Regulatory Impact Review (RIR) be prepared for all regulatory actions that are of public interest. This review provides an overview of the problem, policy objectives, and anticipated impacts of the action, and ensures that management alternatives are systematically and comprehensively evaluated such that the public welfare can be enhanced in the most efficient and cost-effective way. In accordance with E.O. 12866, the following is set forth: (1) This action is not likely to have an annual effect on the economy of more $100 million or to adversely affect in a material way the economy, a sector of the economy, productivity, jobs, the environment, public health or safety, or state, local, or tribal governments or communities; (2) This action is not likely to create any serious inconsistencies or otherwise interfere with any action taken or planned by another agency; (3) This action is not likely to materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights or obligations of recipients thereof; and, (4) This action is not likely to raise novel or policy issues arising out of legal mandates, or the principles

set forth in the Executive Order. Based on these analyses, it is anticipated that this proposed action will maximize benefits by a) improving data accuracy, b) saving fishermen's time, which may lead to more efficient operations, c) reducing NMFS' administrative costs.

10.3 Regulatory Flexibility Act (RFA)

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires government agencies to assess the impact of regulatory actions on small businesses and other small organizations. The purpose and need for this rule are described in Section 5.0. It is estimated that nearly 200 vessels, all of which are considered to be small entities under the Small Business Administration definitions, will be impacted by this rule. Since all vessels are considered small entities, there will be no disproportionate economic impact between small and large vessels resulting from this rulemaking. In addition, there are no disproportionate economic impacts among vessels resulting from different vessel length, gear type, or location of home port.

Considering the positive and minor nature of economic impacts under the preferred alternative, NMFS and the Council have determined that this rule will not have a significant economic impact on a substantial number of small business entities because: (1) firms choosing to commit to electronic reporting will only do so if this mode of reporting is economically beneficial to them, and (2) electronic reporting would only represent a minute portion of the firm's cost of doing business. While this rule could affect a substantial number of vessels, depending on the relative number of firms opting to choose electronic reporting, it will not have a significant economic impact. As a result, an initial regulatory flexibility analysis is not required and none has been prepared.

10.4 Coastal Zone Management Act (CZMA)

The Coastal Zone Management Act (16 U.S.C. 1451 et. seq.) requires a determination that a proposed measure has no effect on the land or water uses or natural resources of the coast zone, or is consistent to the maximum extent practicable with the enforceable policies and of an affected state's approved coastal zone management program. Since the proposed action only pertains to a minor technical change in reporting and record keeping requirements and will not change fishery operations in the material environment, it is likely that this proposed action is consistent with the CZMA. Nonetheless, a copy of this document will be submitted to the appropriate state and territorial government agencies in Hawaii, American Samoa, Guam and the Northern Mariana Islands for their review and concurrence that the proposed action is consistent, to the maximum extent practicable, with the enforceable policies of state and territorial coastal zone management programs.

10.5 Endangered Species Act (ESA)

The Endangered Species Act (16 U.S.C. 1531 et. seq.) provides for the protection and conservation of endangered and threatened species. Section 7(a)(2) of the ESA requires federal agencies to insure that any action authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of the critical habitat of such species. Since the proposed

action only consists of a minor technical addition/change to reporting and record keeping regulations and will not affect fishery operations or the physical environment, the proposed action is not anticipated to have any adverse or significant impact on endangered and threatened species that occur in the management area.

10.6 Marine Mammal Protection Act (MMPA)

The Marine Mammal Protection Act (16 U.S.C. 1361 et. seq.), among other things, directs NMFS to categorize federal fisheries according to the rate of fishery-related injury to marine mammals. NMFS evaluates impacts to marine mammals by fisheries and designated them either as Category I, II, or III (with Category III having the lowest impact). The fishery classification criteria consist of a two-tiered, stock-specific approach that first addresses the total impact of all fisheries on each marine mammal stock, and then addresses the impact of individual fisheries on each stock. Under existing regulations, all fishers participating in Category I or II fisheries must register under the MMPA, obtain an Authorization Certificate, and pay a fee of $25. Additionally, fishers may be subject to a take reduction plan and requested to carry an observer (68 FR 20941).

In the Western Pacific Region , only the Hawaii -based longline fishery is listed as a Category I fishery, primarily due to concerns over interactions between the fishery and false killer whales (*Pseudorca crassidens*) within EEZ waters around the Hawaiian Islands. The fishery is in compliance with the MMPA in that it is subject to observer coverage and participants must obtain an Authorization Certificate. All other fisheries in the Western Pacific Region are classified as Category III fisheries (see 68 FR 20941 for further information). Since the proposed action only consists of a minor technical addition/change to reporting and record keeping regulations and will not affect fishery operations or the physical environment, the proposed action will not have any adverse or significant impact on marine mammal species that occur in the management area of the Western Pacific Region.

10.7 Paperwork Reduction Act (PRA)

The Paperwork Reduction Act (44 U.S.C. 3501 et. seq.) requires federal agencies to minimize paperwork and reporting burdens (on an annual basis) whenever the collection of information is required from the public. Each Western Pacific Region fishery that is subject to reporting and record-keeping regulations has undergone PRA analyses. Since the proposed action does not contain any new collection-of-information requirements, but only an alternative method to submit information, no new analysis is required. In addition, the proposed action would likely reduce time burdens for collecting information from fishery participants, thus, the proposed action will satisfy the objectives and requirements of the PRA.

10.8 Essential Fish Habitat (EFH)

Because the proposed action only consists of a minor technical addition/change to reporting and record keeping regulations and will not change fishery operations or the physical environment, it is not expected to have any adverse impacts on essential fish habitat (EFH) or habitat areas of particular concern (HAPC) for species managed under the Pelagics, Bottomfish and Seamount

Groundfish, Precious Corals, Crustaceans, or Coral Reef Ecosystems Fishery Management Plans of the Western Pacific Region.

APPENDIX I. Draft Regulations

For the reasons set out in the preamble, 50 CFR part 665 is proposed to be amended as follows:

PART 665--FISHERIES IN THE WESTERN PACIFIC

1. The authority citation for part 665 continues to read as follows:

Authority: 16 U.S.C. 1801 et seq.

2. In § 665.14, paragraph (a) is amended to read as follows:

§ 665.14 Reporting and recordkeeping.

(a) Fishing record forms. The operator of any fishing vessel subject to the requirements of §§ 665.21, 665.41, 665.61(a)(4), 665.81, or 665.601 must maintain on board the vessel an accurate and complete record of catch, effort, and other data on report forms (paper or electronic) provided by or approved by the Regional Administrator. All information specified on the forms must be recorded on the forms within 24 hours after the completion of each fishing day. The logbook form, paper or electronic, for each day of the fishing trip must be submitted or transmitted via an approved method as determined by the Regional Administrator and as required by this paragraph (a).

(1) The operator of any vessel subject to the requirements of §§ 665.21(a) through (c), 665.41, 665.61(a)(4), or 665.81 must submit the original logbook form, paper or electronic, for each day of the fishing trip to the Regional Administrator within 72 hours of each landing of management unit species.

(2) Except for a vessel that is fishing in the U.S. EEZ around Midway Atoll as specified in paragraph (a)(3) of this section, any operator whose vessel is registered for use with a PRIA pelagic troll and handline fishing permit under § 665.21(d) must submit the original logbook form, paper or electronic, for each day of fishing within the U.S. EEZ around the PRIA to the Regional Administrator within 10 days of each landing of management unit species.

(3) For the fisheries managed under § 665.601, the logbook for each day of the fishing trip must be submitted to the Regional Administrator within 30 days of each landing of MUS.

* * * * *

APPENDIX II. PIFSC Pilot Program - Estimated Time Savings

As described in section 5.0, PIFSC's electronic reporting pilot program was conducted from 1998-2003 and involved five Hawaii-based longline vessels.

Table 1. Summary Use of Electronic Logbook (HIPlot) Pilot Program, 2002

Total # of active longline vessels	100
Total # of trips/year	1,179
Total # of sets/year	13,961
Average # trips/vessel/year	11.79
Average # sets/vessel/year	139.61
Average # sets/trip	11.84
*Number of Hawaii vessels using HIPlot	30
Number of Hawaii vessels submitting HIPlot e-log forms	5
*Number of American Samoa vessels with HIPlot	5
*Number of U.S. vessels with HIPlot in Other Areas	3

* The number of vessels with the electronic logbook program(HIPlot) onboard represents the potential number of fishermen that could take advantage of a change in regulations which would allow the use of alternate reporting methods.

Table 2. Comparison of Reporting Burden

Activity	Estimated Time by Fishery Participants
Status Quo-Current hard copy logbook	5 minutes to 2 hours/day
Filling in hard copy log (32 fields/sheet)	35 minutes/day
Filling in fish catch	10 minutes/day
Hard copy log total time per day	45 minutes/day
Electronic logbook reporting burden	5 minutes/day
Filling in fish catch	10 minutes/day
Electronic log total time per day	15 minutes/day
Fisherman time savings per day using electronic logs	30 minutes/day

Note: Additional time savings for vessel operator using e-logs may come from an internal data checking program that prompts the operator to change any "out of bounds" entry prior to accepting the entry. The time savings is the result of not having to correct the errors at a later time. Accuracy is improved by correcting the error immediately instead of relying on memory. Time estimates were provided by participating fishermen. The original OMB collection of information reporting burden for the Hawaii-based longline fishery is 50 min per trip (56 FR 24733). However, based on fishermen's estimates this seems to be no longer accurate.

Table 3. Estimated Fisherman's Time Savings using Electronic Logs (per trip and per year)

average # sets/trip	11.84
Time savings per day using electronic logs	30 minutes/day
Potential Time savings per trip	355.2 minutes = 5.92 hours/trip
average # trips/vessel/year	11.79
Time savings per trip	355.2 minutes = 5.92 hours per trip
Potential Time savings per vessel year	69.79 hours = 2.9 days/ year

Table 4. National Marine Fisheries Service Estimated Effort

Hard copy Logbook System – Data Collection Procedures/Time Estimates for 2002		
PIFSC-Fishery Monitoring and Socio-economic Division		
NMFS personnel dock time (1 person)	4 hours/day @ 246 days/year	
Dockside edit check with Captain present	1 min/page x 13,961 pages/sets per year	233 hours/yr
Office edit check	1 min/page x 13,961 pages/sets per year	233 hours/yr
Revisit vessel for clarification or corrections	1 day - 3 weeks	
PIFSC-Fishery Data Management Division		
Pre-data entry checks/coding/edits	3 min/page x 13,961 pages/sets per year =	698 hours
Double blind data entry/verification	5 min/page x 2 = 10 minutes/page	2327 hours
PIFSC-Fishery Monitoring and Socio-economic Division		
Computer error check run on logbook data		
Identified errors checked against logsheet	2 minutes/error	
Revisit vessel for clarification or corrections	1 day - 3 weeks	
Corrections noted on logsheet	1 minute/page	
Corrections made to electronic data set	1 minute/page	
Corrected electronic data archived		
Archiving of original logsheets	3 minutes/log x 1,179 logs/year	59 hours
Minimum estimated time invested by PIFSC(for data without errors)	3550 hours/year = 444 days(@ 8 hours/day)	

Note: Estimate does not include color scanning of the original logsheet for archiving into the current system as well as the ORACLE system. Scanned logsheets will be put into a searchable database for use by researchers. Estimate does not include manual error checking, NMFS personnel dock time, or additional time to revisit the vessel for clarification or corrections.

Table 5. Estimated time per Status Quo Hard copy trip log without errors or archiving

Initial dockside edits (1 min/page @ avg 11.84 pages/log in 2002)	11.84 minutes
FMAP edits before data entry (1 min/page @ avg 11.84 pages/log in 2002)	11.84 minutes
FDMP Pre-data entry edits (3 min/page @ avg 11.84 pages/log in 2002)	35.52 minutes
Double blind data entry/verification (10 min/page @ avg 11.84 pages/log in 2002)	118.40 minutes
Total minutes/trip log	177.60 minutes
Total hours/trip log	2.96 hours
Estimated time savings for 5 vessels using electronic logbooks {(5 vessels)x(11.69 trips/vessel)x(2.96 hours/trip log)}	173 hours/year
Number of 8 hour work days saved by using electronic logbooks	21.8 days/year