# SUPPORTING STATEMENT CENTRAL VALLEY ANGLER SURVEY OMB CONTROL NO. 0648-XXXX 

## A. JUSTIFICATION

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

This request is for a new information collection.
California's Central Valley includes two major river systems - the Sacramento and the San Joaquin. The two rivers drain into the Sacramento/San Joaquin Delta (the largest estuary on the Pacific Coast) and flow through San Francisco Bay to the Pacific Ocean. Fishing in the Central Valley occurs on multiple water bodies, including rivers/creeks, lakes/reservoirs, and Delta waterways. Central Valley fisheries are exclusively sport fisheries, with angler participation occurring in a variety of modes, including shore, private boats, and rented boats with hired guides. A number of species are harvested in the Central Valley, including hatchery Chinook and steelhead. The National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) has listed several wild Central Valley salmonid stocks under the Endangered Species Act (ESA) - including Sacramento River winter-run Chinook (endangered), Central Valley spring-run Chinook (threatened), and Central Valley steelhead (threatened) - and is responsible for the recovery of these stocks.

Salmon fishery management has a strong state-federal nexus, with NOAA Fisheries managing the ocean commercial fishery and California managing the recreational fisheries (ocean and freshwater, including the Central Valley). ${ }^{1}$ Fishery management objectives and regulations are coordinated through the Pacific Fishery Management Council and subject to requirements specified in the Magnuson-Stevens Fishery Conservation and Management Act. Although not directly responsible for freshwater fisheries, NOAA Fisheries' strategies for recovering ESAlisted salmonids - including habitat restoration and improved fish passage over Central Valley dams - influence freshwater as well as ocean salmon fisheries.

The California Department of Fish and Wildlife (CDFW) conducts the Central Valley Salmon and Steelhead Harvest Monitoring Project - an annual creel survey involving collection of harvest, fishing effort and zip code of residence data from anglers on the Sacramento River system (where the great majority of salmon harvest occurs in the Central Valley). The Sacramento River system is also an important focus of NOAA Fisheries' efforts to improve habitat and fish passage for ESA-listed salmonids. In addition to enhancing salmonid recovery, these actions may also have effects on existing recreational fisheries. For instance, habitat restoration that benefits salmonids may also affect the abundance of non-salmonid species targeted by recreational anglers. Improved fish passage may provide hatchery strays as well as

[^0]ESA-listed salmonids with access to new habitat. Existing non-salmonid fisheries may be adversely affected by the introduction of ESA-listed salmonids if regulations are implemented to minimize incidental take of salmonids in these fisheries. Given the potential effects of salmon restoration on non-salmon as well as salmon fisheries, this survey targets non-salmon as well as salmon anglers.

The purpose of this survey is to better understand how anglers might respond to the potential habitat changes noted above and how non-fish factors such as landscape/water features and the availability of recreational amenities might affect their location choices. To help address these questions, this survey will:

- Provide baseline information on Sacramento River anglers - including the size of the angling population, their fishing effort and expenditures on Central Valley water bodies (Sacramento and San Joaquin River systems, lakes/reservoirs and the Delta), and their demographic characteristics. According to focus group results included in this submission, Sacramento River anglers also fish on other water bodies in the Central Valley. Information regarding the range of their Central Valley fishing activities is important for providing a comprehensive profile of these anglers and for identifying the choice set that each angler would be considering in terms of their receptivity to fishing at newly restored or newly accessible locations.
- Identify factors other than fish abundance (i.e., landscape/water characteristics, recreational amenities) that are also important to fishing location choices made by Central Valley anglers. Although fish abundance is generally known to affect anglers' location choices, little is known about non-fish factors that also affect these choices and that could potentially affect the willingness of anglers to fish in newly restored or newly accessible locations outside their accustomed areas.

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.

## How this information will be collected

The proposed data collection is a new, one-time data collection. The survey will be implemented once in the spring of 2015, pending OMB approval. A random telephone survey of licensed anglers in the sample frame will be conducted to recruit anglers for a follow-up mail survey. The mail survey will be implemented using protocols outlined by Dillman et al. (2009). Mail-based surveys are a common mode used by NOAA Fisheries for the collection of fisheries-related data.

## Justification for proposed mode of data collection

Justification for the telephone screener:

- The telephone screener will be used to recruit anglers for the follow-up mail survey. The response rate to the mail survey is expected to be higher with the screener than if a mail survey was sent to anglers in the sample frame without the screener.
- The screener will be used to estimate the proportion of anglers in the sample frame who fish on the Sacramento River system. This proportion will be multiplied by the number of anglers in the sample frame to estimate the population of Sacramento River anglers.
- The question in the screener regarding avidity (number of days fished on the Sacramento River system) will be used to evaluate non-response bias in the mail survey. This will be done by comparing phone respondents and the subset of phone respondents who return the mail survey in terms of their avidity.

Justification for follow-up mail survey:

- A mail survey provides an easy way to depict the geographic scope of the survey (through inclusion of a map). The survey includes many categorical questions with a large number of potential responses. Questions of this type are easier for respondents to consider in a mail survey than on the phone.

Other survey modes considered but rejected:

- A straight mail survey (foregoing the telephone screener and just sending the mail survey to a random selection of anglers from the sample frame) was rejected for several reasons:
- The mail response rate would likely be lower without the initial screener.
- A mail survey would not provide information on the proportion of anglers in the sample frame who fish in the Sacramento River system. Non-return of a mail survey would not necessarily mean that the non-returnee did not fish on the Sacramento River, as even some Sacramento River anglers will not return the survey.
- Without the phone screener, it would not be possible to determine the extent of avidity bias associated with non-response to the mail survey.
- A straight telephone survey (i.e., conducting both the telephone screener and the mail follow-up questions on the phone) was considered inappropriate due to the length of the mail questionnaire (16 pages) and the large number of potential responses to some of the categorical questions - which would be difficult to convey on the telephone. Additionally, hiring and training interviewers to conduct a telephone survey would have been cost-prohibitive.
- Similar to the telephone survey, in-person interviews were also not well suited for this data collection due to the cost-prohibitive and time consuming efforts of hiring, training, and deploying interviewers statewide.
- A web-based survey was not possible for this data collection due to the nature of the sample frame, which will be based on CDFW's Automated License Data System (ALDS). This electronic database includes names, addresses and telephone numbers of all resident and non-resident anglers who purchase fishing licenses in California but does not include e-mail addresses. A web-based survey may not be suitable in any case, as survey results would likely be biased by systematic exclusion of anglers who do not have access to the web or are less accustomed to using the web.


## Identifying an appropriate sample frame

According to CDFW's creel survey, 76\% of fishing effort on the Sacramento River system is attributable to anglers residing in the following 14 counties: Amador, Butte, Colusa, El Dorado, Glenn, Nevada, Placer, Sacramento, Shasta, Solano, Sutter, Tehama, Yolo and Yuba. This 14county area coincides closely with the area covered by the Sacramento River system (Figure A1) and suggests the strong influence of residential proximity on fishery participation. California residents who live outside the 14-county area account for $22 \%$ and out-of-state residents for $2 \%$ of anglers encountered in the creel.


Figure A-1. 14-county area covered by the Sacramento River system (in pink).

CDFW has a computerized Automated License Data System (ALDS) that includes names, addresses and telephone numbers of all resident and non-resident anglers who purchase fishing licenses in California. Resident and non-resident anglers in the ALDS who purchase their fishing license in the 14 -county area encompassing the Sacramento River system (including major tributaries) will serve as the sample frame for this survey.

## Survey implementation

The telephone screener will be administered to a random sample of anglers drawn from the sample frame. A follow-up mail survey will be sent to licensed anglers identified in the telephone screener who fished on the Sacramento River system in the 12 months preceding the survey. The mail survey protocol will be based on methods suggested by Dillman, et al (2009), which includes the following mailings: an advance notice letter, the survey questionnaire, a thank you postcard, a replacement survey, and a final thank you postcard.

## Justification for individual questions

Questions asked in the telephone screener and mail survey will serve three major objectives: (a) provide baseline information on Sacramento River anglers (e.g., size of angling population, angler characteristics and expenditures, fishing effort by water body and target species, trip characteristics), (b) identify landscape/water characteristics and recreational amenities that affect anglers' fishing location choices, and (c) gauge anglers' receptivity to fishing in new Central Valley salmon locations that may become available due to habitat restoration and improved fish passage.

## Telephone screener

Telephone interviewers will ask randomly contacted anglers (1) if they are at least 18 years old, and (2) if they fished on the Sacramento River system in the past 12 months. Anglers who indicate 'yes' to both (1) and (2) will be asked two additional questions: (3) the number of days fished on the Sacramento River system in the past 12 months, and (4) whether they would be willing to complete a follow-up mail survey. Questions (1) and (2) will be used to determine the angler's eligibility for the mail survey. Question (2) will also be used to estimate the proportion of anglers in the sample frame who fish on the Sacramento River system. This proportion will be multiplied by the number of anglers in the sample frame, to estimate the population of Sacramento River anglers. Question (3) will be used to evaluate non-response bias in the mail survey, based on the assumption that more avid anglers will be more likely to return the mail survey than less avid anglers. Question (4) will be used to recruit for the mail survey.

## Mail survey

## First page of survey instrument

The first page of the survey describes the survey topic (Central Valley Sport Fishing), the sponsor (NOAA Fisheries), the voluntary nature of survey, and the OMB control number and expiration date.

## Introduction

The introduction includes a map depicting the geographic scope of the survey.

## Section A - Your Fishing Experiences in the Central Valley in the Past 12 Months

Question A1 will be used to screen for ineligible anglers that may have been missed in the telephone survey.

Questions A2-A3 will be used to estimate the average number of one-day and overnight trips per angler. The total number of one-day and overnight trips will be estimated by multiplying these average estimates by the total number of Sacramento River anglers (the latter estimated from the telephone screener).

Questions A4-A9 (number of days fished by water body) and Question A10 (number of days fished by target species) will be used to estimate the average number of days fished per angler and how that effort is distributed among individual water bodies (rivers/creeks, lakes/reservoirs, Delta) and among target species.

## Section B - Your Most Recent Fishing Trip in the Central Valley

Section B asks respondents for detailed information about their most recent Central Valley fishing trip. Although it would have been desirable to ask similar details for all of their trips, that was deemed too burdensome; moreover, focusing on the most recent trip was expected to minimize recall bias.

Question B7 asks anglers to identify landscape/water characteristics and recreational amenities that influenced their location choice on their most recent trip. Focus groups were particularly informative regarding the types of characteristics/amenities to include in this question.

Question B17 (cost of most recent trip) is asked in itemized form (rather than simply asking for total trip costs) to facilitate recall and ensure that anglers are considering a common set of cost elements in their response. Question B17 will be used to estimate the average cost per one-day and overnight trip, with one-day and overnight trips distinguished on the basis of Question B9. The total cost of one-day and overnight trips will be estimated by multiplying these average estimates by the total number of one-day and overnight trips made by Sacramento River anglers (the latter derived from Questions A1-A3).

Questions B1-B6 and B8-B16 focus on characteristics of the angler's most recent fishing trip: water body, target species, mode, activities pursued besides fishing, duration of trip, size of fishing party. Responses to these questions will be considered in conjunction with Question B7 to determine how these trip characteristics relate to the landscape/water characteristics and recreational amenities that are also important to anglers. Questions $B 1-B 6$ and $B 8-B 16$ will also be considered in conjunction with Question B17, to facilitate understanding of how trip characteristics affect the nature and magnitude of trip costs.

## Section C - Questions About Your Other Fish- and Water-Related Activities

Question C1 gauges the intensity of respondents' interest in fishing (participation in fishing clubs/derbies/tournaments/seminars/public education/fish planting/festivals), their awareness of the salmon life cycle and the role of hatcheries and dams in the Central Valley (hatchery/dam tours, spawning events), and their interest in conservation (cleanups/stewardship organizations).

Question C2 asks about anglers' receptivity to fishing in new Central Valley salmon locations that may become available due to habitat restoration and improved fish passage, and the reason(s) for their interest or lack of interest. This question is relevant to non-salmon as well as salmon anglers, as even anglers who had not fished for salmon in the past 12 months may be interested in initiating or resuming salmon fishing under improved conditions.

Question C5 (annual fishing costs not attributable to individual trips) is asked in itemized form (rather than simply asking for total costs) to facilitate recall and ensure that anglers are considering a common set of cost elements in their response. The check box at the bottom of the question is intended to help determine whether non-response to this question should be interpreted as zero expenses versus genuine non-response.

Questions C3-C4 ask for information regarding total days fished in the U.S. (inside and outside the Central Valley) in the past 12 months. These questions - combined with Questions A4-A9 will be used to estimate the proportion of each respondent's fishing days that occur on the Sacramento River. This proportion will be used to prorate the angler’s annual fishing costs (Question C5) between their Sacramento River fishing and other U.S. fishing.

## Section D - More About You

Questions D1-D8 pertain to demographic variables (fishing experience, age, gender, race/ethnicity, education, household size, income) that will be part of the baseline characterization of Sacramento River anglers. These data will be used to determine whether Central Valley fishing patterns (e.g., frequency of fishing, water body/mode/target species preferences, fishing expenditures) and willingness to consider new fishing sites vary with demographic characteristics.

## End of Survey

The last page of the survey thanks respondents for their participation and asks those who are interested in receiving a summary report on the survey to provide an email address. Anglers are also given an opportunity to provide comments regarding the survey and their Central Valley fishing experiences. Such comments may increase the awareness of managers regarding issues important to anglers. Providing an opportunity to comment may also encourage anglers to fill out and return the questionnaire. All comments will be transcribed (in anonymous form) and included in the final survey report.

## Reporting of survey results and Information Quality guidelines

The information collected will be used in publicly disseminated reports. A descriptive summary of results from this proposed data collection will be prepared and posted on the NOAA Fisheries website. This summary will also be distributed to respondents if requested; the opportunity to request such a summary is provided at the end of the survey. Results may also be reported through peer-reviewed publications and presentations at conferences.

NOAA Fisheries Service 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 Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is to 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.

A Computer Assisted Telephone Interview (CATI) system will be used to facilitate the telephone screening survey. For the mail survey, a self-addressed, stamped envelope will be provided to respondents so they can return their surveys to the NOAA Fisheries contractor without incurring mailing fees.

## 4. Describe efforts to identify duplication.

This survey is being designed and implemented in close collaboration with CDFW. No other similar survey efforts are being planned for California by NOAA Fisheries, CDFW or other known entities in 2015 or in the foreseeable future.

Previous data collections funded by NOAA Fisheries and other agencies provide some information related to freshwater fishing activities in California. However, data collected in these other surveys do not satisfactorily address the major objectives of the proposed survey: (a) provide baseline information on Sacramento River anglers (e.g., size of angling population, angler characteristics and expenditures, fishing effort by water body and target species, trip characteristics), (b) identify landscape/water characteristics and recreational amenities that affect anglers' fishing location choices, and (c) gauge anglers' receptivity to fishing in new Central Valley salmon locations that may become available due to habitat restoration and improved fish passage.

The following is an overview of these other data collections.

- Central Valley Salmon and Steelhead Harvest Monitoring Project (CDFW)

CDFW's Central Valley Salmon and Steelhead Harvest Monitoring Project (mentioned above) is a creel survey that provides data on harvest, effort and zip code of residence for anglers who fish on the Sacramento River and its tributaries. The creel survey does not provide information on the number of Sacramento River anglers, their fishing activity on other Central Valley water bodies, or their expenditures and demographics. The creel survey also does not include any questions regarding landscape/water features and recreational amenities that affect fishing location choices, or the receptivity of anglers to new salmon fishing locations.

- National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FHWAR)

The National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FHWAR) administered by the U.S. Fish and Wildlife Service and U.S. Census Bureau - is a periodic survey implemented about every five years in all 50 states; the most recent survey was conducted in 2011. Freshwater recreational fishing is included in the survey, in addition to other activities such as saltwater fishing, hunting, and wildlife-watching.

While both the FHWAR and the proposed survey include freshwater fishing, the FHWAR survey has a broader geographic focus (state and national) than the proposed survey. For instance, FHWAR provides state-level estimates of freshwater fishing participation, effort and expenditures, and demographic characteristics of all anglers and hunters combined. The proposed survey targets freshwater anglers who fish on one particular water body (the Sacramento River system) and will provide fishing effort, expenditure, demographic, and location choice information specific to this particular subset of anglers.

- 2004 Salmon/Steelhead Angler Survey (NOAA Fisheries)

In 2004 NOAA Fisheries conducted a survey of freshwater salmon and steelhead anglers in California. The survey involved random sampling from two different frames: (1) CDFW's database of steelhead report card holders (to obtain data from steelhead anglers), and (2) CDFW's database of fishing license holders (to obtain data from salmon anglers). The survey collected data from in-river anglers statewide, including fishing effort by river and species, angler expenditures and demographics. The subset of responses to this survey pertaining to anglers who fished on the Sacramento River system was quite small (n=216). Also, the 2004 survey covered only rivers and did not include lakes/reservoirs or the Sacramento/San Joaquin Delta. The 2004 survey did not include questions on factors that affect anglers' fishing location choices or their receptivity to new salmon fishing locations.

## - Northern California Survey (California State University, Chico)

In 2010, California State University, Chico received funding from CDFW to conduct a survey of recreational anglers who fished in 31 northern California counties (including the

14-county area that is the focus of the proposed survey). Respondents were drawn from a sample frame consisting of a list of California residents who had expressed an interest in angling, based on multiple random digit dial (RDD) surveys conducted by a telephone survey company. The Northern California Survey involved random telephone screening of individuals from the RDD frame to identify anglers who had fished in the 31-county area and subsequent call-back telephone interviews of willing anglers. The survey included questions regarding the number of days fished in 2007, 2008 and 2009 for each of six species (Chinook salmon, steelhead, striped bass, black bass, halibut, sturgeon), changes in angler behavior associated with hypothetical changes in regulations (e.g., bag limits, size limits, seasons), expenditures, and demographics.

The Northern California Survey differed from the proposed survey in geographic scope (31 counties versus 14 counties) and the types of water bodies covered. Although both surveys include fishing in the Sacramento and San Joaquin River systems, the Northern California Survey also included saltwater fishing in San Francisco Bay and excluded freshwater fishing in lakes/reservoirs and the Delta. Also, the Northern California Survey did not include questions on factors that affect anglers' fishing location choices or their receptivity to new salmon fishing locations.
5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

The proposed data collection does not involve small business or other small entities.

## 6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

As stated in Question 1 above, this proposed collection will provide NOAA Fisheries with a much more comprehensive understanding of Sacramento River anglers and the potential effects of improved salmon fish passage on salmon fishing opportunities. This information is also of interest to CDFW, our state agency partner in this region. If this data collection was not conducted, the current gap in our collective knowledge regarding effects of fish passage would continue to be unfilled.

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

The data collection will be conducted in a manner consistent with 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 theagency 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 was published on 12/11/2013 (78 FR 75332) that solicited public comment. No comments were received.
The survey is being conducted in collaboration with the California Department of Fish and Wildlife (which manages California's freshwater salmon fisheries), the West Coast Region (NOAA Fisheries' regional lead on salmonid habitat restoration), and the Habitat Conservation Division (NOAA Fisheries' national lead on salmonid fish passage issues). These entities have been consulted regarding the management issues to be addressed in the survey, as well as wording and formatting of the survey instrument. In addition, CDFW has provided access to its ALDS license database as the sampling frame for this survey.
9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

No payments or gifts associated with this data collection will be made by NOAA Fisheries to respondents.

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

Once this data collection is completed, NOAA Fisheries researchers will adhere to the following policy related to data confidentiality: "The data that is collected will remain confidential as required by Section 402(b) of the Magnuson-Stevens Fishery Conservation and Management Act as amended in 2006 (16 U.S. C. 1801, et seq.) and NOAA Administrative Order 216-100, Confidentiality of Fisheries Statistics. The data that is collected will not be released to the public except as aggregate, summary statistics."

## 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 data collection does not contain questions of a sensitive nature.

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

For this proposed one-time data collection, 11,447 California license holders will be screened via telephone to determine whether they fish on the Sacramento River system and are willing to fill out the mail survey. Of these 11,477 license holders, 7,212 (63\%) are expected to be Sacramento River anglers, $5,769(80 \%)$ of the 7,212 are expected to be willing to complete the survey, and

1,500 (26\%) of the 5,769 are expected to actually return the survey. The $63 \%$ Sacramento River participation rate is based on results of NOAA Fisheries’ 2004 salmon/steelhead angler survey indicating that $63 \%$ of license holders residing in the 14-county Sacramento River area in 2004 (the same area that will be targeted in the proposed phone survey) fished on the Sacramento River system. This 63\% participation rate is assumed to apply to resident and non-resident anglers who purchase their license in the same 14-county area (more detailed justification for this assumption is provided in Section B of this Supporting Statement). The $80 \%$ willingness rate and $26 \%$ response rate are considered reasonable expectations, based on the NOAA Fisheries contractor's extensive prior experience with saltwater angler surveys involving random telephone interviews with mail follow-up. It is assumed here that these rates would also apply to Sacramento River anglers.

Completion of telephone screener interviews is expected to average five minutes and mail survey questionnaire to average 25 minutes, resulting in 1,579 burden hours. Time for mail survey completion is based on focus group results, included in this submission. When annualized over three years, this data collection will result in approximately 4,316 responses and 526 burden hours per year. Applying a mean wage rate of $\$ 25.49$ per hour for California (BLS 2012), these annualized burden hours result in a labor cost of $\$ 13,408$ per year (Table A-1).

| Table A-1. Expected burden associated with proposed survey |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Survey | $\#$ <br> expected <br> response <br> s | Responses <br> averaged <br> over 3 <br> years | Minutes <br> per <br> response | Burden <br> hours | Burden hours <br> averaged <br> over 3 years | Labor cost <br> averaged <br> over 3 years |
| Phone survey | 11,447 | 3,816 | 5 | 954 | 318 | $\$ 8,106$ |
| Mail survey | 1,500 | 500 | 25 | 625 | 208 | 5,302 |
| Total |  | $\mathbf{4 , 3 1 6}$ |  | 1,579 | 526 | $\$ 13,408$ |
| 1 Based on the 2013 mean wage rate of $\$ 25.49$ per hour for "All Occupations" in California <br> (http://www.bls.gov/oes/current/oes ca.htm). |  |  |  |  |  |  |

13. Provide an estimate of the total annual recordkeeping/reporting cost burden to the respondents resulting from the collection (excluding the value of the burden hours in Question \#12 above).

No additional cost burden will be imposed on respondents aside from the burden hours indicated in Table A-1 above.

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

Total annual cost to the Federal government is approximately $\$ 67,000$, annualized over a three year period. The estimate is based on the current funding allocated to this data collection, which is $\$ 200,000$. The estimate includes the cost of: (a) preparing the sample frame, (b) implementing and compiling results for the telephone survey, (c) assisting with design and formatting of the mail survey, (d) printing and mailing survey questionnaires and associated reminder and thank you postcards, (e) monitoring survey progress (mail outs and returns), (f) data entry and quality assurance and quality control (QA/QC) procedures to ensure accuracy of data entry, (g) preparation of telephone and mail survey datasets and metadata, and (h) a
contractor report describing telephone and mail survey procedures, response rates, and summary statistics.

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

This is a new program.

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

Results from this data collection will be analyzed using standard QA/QC procedures for survey research. NOAA Fisheries economists will analyze the data using standard statistical software such as STATA or R. Results from the data collection may be used in scientific, technical, and general information publications. At minimum, a report describing the sampling methods, survey completion rates, and descriptive statistics will be prepared. This report, and any other report or publication resulting from this data collection, will be subject to internal agency review. Outside peer review will be sought as necessary (e.g., for peer-reviewed publications). Data will be made available to the general public on request in summary form only. Any agency reports resulting from this data collection will be made available to the public from the NOAA Fisheries website.
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.

Not Applicable.

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

Not Applicable.


[^0]:    ${ }^{1}$ Wild Chinook salmon lay their eggs in nests (redds) in freshwater streams. The emerging fry feed and grow, then migrate downstream to estuaries where they undergo smoltification (physiological changes that enable them to adjust to saltwater). The smolts then migrate to the ocean, where they spend 3-5 years, then return to their natal river as adults to spawn and die. Hatchery Chinook are spawned and reared in hatcheries and released as smolts into the river. Most of the salmon harvested in California consists of hatchery Chinook. The anadromous life cycle of Chinook makes them subject to harvest in ocean and freshwater fisheries.

