SUPPORTING STATEMENT WEST COAST REGION PERMIT FAMILY OF FORMS OMB CONTROL NO. 0648-0204

INTRODUCTION:

This is a resubmission, with the draft final rule, of the request for a revision to the existing reporting requirements of the collection of information *West Coast Region Family of Forms – Long Beach*. There are minor adjustments to individual information collections.

The National Marine Fisheries Service (NMFS) West Coast Region (WCR) Long Beach Permits Office administers permits required for persons to participate in Federally-managed fisheries off the West Coast under the Magnuson-Stevens Fishery Conservation and Management act, 16 U.S.C. 1801 et seq. This submission requests the addition of the Drift Gillnet Limited Entry Permit package. This package includes: 1) permit application, 2) transfer form, and 3) application renewal form.

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) established regional fishery management councils, including the Pacific Fishery Management Council (Pacific Council), to develop fishery management plans (FMP) for fisheries in the U.S. exclusive economic zone (EEZ). These plans, if approved by the Secretary of Commerce, are 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 to the extent possible. FMPs are intended to regulate fishing for stocks to prevent overfishing and achieve the optimum yield from the fisheries for the benefit of the U.S.

Section 303 (b) (1) of the Magnuson-Stevens Act specifically authorizes the establishment of permit requirements. Almost all international, federal, state, and local fishery management authority uses permits as part of their management systems.

The Pacific Council has prepared FMPs for the coastal pelagic species (CPS) fishery and Pacific Highly Migratory Species (HMS) off the U.S. West Coast. Each of these FMPs created permit programs which are administered by the West Coast Region, NMFS.

Responses to the items in the supporting statement address the various types of permit functions:

A. JUSTIFICATION

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

There are three types of permits: basic fishery permits (e.g., highly migratory species), limited entry permits for selected fisheries (e.g., West Coast coastal pelagic fishery), and exempted fishing permits (EFPs). Basic permits are used in all fisheries where there are no specific limitations or eligibility criteria for entry to the fishery. Limited access/entry permits are used to prevent overcapitalization or address other management goals in the fishery. EFPs are issued to applicants for fishing activities that would otherwise be prohibited under a FMP. A specific form for an EFP application is not required; however, an applicant for an EFP must provide a narrative

description of the proposed activity to fully document the intended operations. This documentation allows NMFS, the Pacific Council and affected state/territorial fisher agency to evaluate the consequences of the excepted fishing activity and weigh the benefits and costs. EFPs allow innovation that may relieve excessive fishing effort or discover new methods that may resolve existing technological barriers to better management of the fishery and resource. There are previsions for transfers among owners and for appeals of actions of certain limited entry permits such as the coastal pelagic species limited entry permits. There are provisions in the permit process for appeals of permit denials.

General permit requirements are found in 50 CFR 660.1-3 (Subpart A) with the specific requirements contained in relevant sections of 50 CFR 660 (Subpart I and Subpart K). Permits and the information obtained through permit applications are essential in the management of these fisheries. They serve to identify actual or potential participants in the various fisheries. These data are needed to help measure the impacts of management controls on participants in the fisheries. Permits are also effective tools in the enforcement of other fishery regulations. The threat of permit sanctions that would exclude a vessel from the fishery may be more effective than fines for violations of specific fishery regulations. Further, transferable limited access/entry permits may have a resale value and may be an asset that the government can seize in settlement of penalties for fishery violations.

Permits also provide an important link between the NMFS and fishermen via the permit application process. They make it easier for NMFS staff to contact fishermen and advise them of changes in the regulations or fishery conditions and give fishermen a direct point of contact in case they have questions or issues they want to bring to the attention of NMFS or a fishery management council.

Pacific Highly Migratory Species Permits (HMS)

Under 50 CFR part 660.707, HMS permits are issued to vessels that fish for HMS off or land HMS in the States of California, Oregon, and Washington. Permits are issued for a 2-year term and remain valid until the first date of renewal. Permits are endorsed for specific gear types including troll/jig, longline, bait boat, purse seine, and charter. Currently, active permits range from 1600 – 1700 with vessels continuously leaving and joining the fishery.

Permit appeal requirements are found at 50 CFR 660.707. The appeals process is available to any permit owners who have had their initial permit issuance or renewal denied by NMFS. An appeals request must be made by the permit requester or owner in writing within 30 calendar days of NMFS initial determination and must explain how the requirements for issuance or renewal of a permit have not been met and/or provide pertinent information that was not considered by the NMFS in making the initial determination.

Drift Gillnet Limited Entry Permit (DGN LE) - NEW

In March 2017, the Pacific Fisheries Management Council (Council) authorized a Federal limited entry permit for the California large mesh drift gillnet fishery. The Council adopted Alternative 1: only fishermen authorized to fish with large mesh drift gillnet gear under the state law would be entitled to a DGN LE permit issued by NMFS. Fishermen who hold valid state DGN permits on the date of Final Rule publication would be eligible for the Federal DGN LE permit. Currently, there are 74 proposed state DGN LE permits.

The DGN LE program will mostly mirror current state practices. Permits will be valid for one year with an annual renewal period. New permits applications will be mailed to current state DGN LE permit holders and will be accepted until March 31, 2018. Permit holders will then be eligible to submit a pre-filled renewal form every year thereafter. Permit holders will be eligible to transfer permits every three years using a transfer form. This form asks that both parties provide information regarding captains, vessel ownership, transfer history, and evidence of fishing with DGN gear. Transferees must have at least three years of fishing history using DGN gear. Evidence of fishing includes copies of logbook pages with names of the vessels crew or a letter from a vessel operator verifying the transferees fishing history. Permit holders are also required to be onboard the vessel when fishing, but authorized to designate an alternate operator for up to 15 days. Designation of an alternate operator for over 15 days for reasons of serious illness requires a physician's note to be submitted to NMFS. Permit appeal requirements are available under 50 CFR 660.707.

Coastal Pelagic Species Limited Entry Permit (CPS)

On January 27, 2003, NMFS published a final rule (68 FR 3819) for the Council-adopted Amendment 10 of the CPS FMP establishing a capacity goal for the CPS fleet and set conditions for a limited entry permit fishery. The fleet capacity was set to an aggregated gross tonnage of 5650.9gt with 65 federal limited entry permits (currently 64 permits). Each permit has a fixed gross tonnage determined by applying the USGS formula 46 CFR 69.209 to vessels using their overall length (l), depth (d), and breath (b). Permits can be transferred with the following restrictions: (1) full transferability of permits only to vessels of comparable capacity (vessel GT +.10 (GT) or less), and (2) permits can be combined up to a greater level of capacity in cases where the vessel to which the permits would be transferred to is of greater harvesting capacity than the vessel from which the permit originated.

Permit appeal requirements are found at 50 CFR 660.512. The appeals process is available to any permit transfer requesters or permit owners who have had their permit transfer or renewal denied by NMFS. An appeals request must be made by the permit requester or owner in writing within 30 calendar days of NMFS initial determination and must explain how the requirements for transfer or renewal of a permit have not been met and/or provide pertinent information that was not considered by the NMFS in making the initial determination.

Exempted Fishing Permits (EFPs)

EFPs are issued in the interest of developing an efficient and productive fishery for harvest of HMS or CPS that would otherwise be prohibited. In accordance with the criteria and procedures specific in 50 CFR 600.745, the permit issuance requests 2-year exemptions from various prohibitions under the HMS and CPS FMPs to test the effects and efficacy of using supplemental gear types.

There is no permit appeal requirement for EFPs. EFP denial requirements are found at 50 CFR 600.745. After receiving a complete application (including all required analysis and consultation; and responses from the public), if the agency denies an EFP, the applicant will be notified in writing of the decision to deny the EFP and the reasons for the denial. The decision of a Regional Administrator or Director to grant or deny an EFP is the final action of NMFS. NMFS may publish notification in the Federal Register describing the reasons for denial.

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.

The information requested by the WCR on the NMFS West Coast Region federal fisheries permit application forms is utilized to determine whether the applicant meets the eligibility criteria for a permit for the fishery the applicant intends to participate in. These data may also be used by several offices of NMFS, USCG, and state and territorial fishery-management, research, and enforcement agencies. Information on the vessel (as provided in documentation or registration certificates) is used to ascertain actual or potential participants in different sectors of each fishery and the amount of harvesting pressure they might exert on the fishery. This is important in determining the potential effectiveness and impacts of different management approaches and in assessing the capacity of the fleets in the fisheries.

The information collected is basic data on applicants, such as name of owner and vessel operator, name of vessel and its official number (USCG documentation or state registration number), address, telephone number, and international radio call sign. Independently verifiable data on the vessel's USCG documentation or state registration certificates identify the legal ownership of the vessel being permitted. This latter requirement is essential for imposing permit sanctions, which are an effective fisheries enforcement tool. Since many vessels may be owned by partnerships or corporations, identification of ownership on the application form allows NMFS to sanction the company as well as the individual vessel operator for repeated violations of federal regulations. By having addresses, NMFS can mail fishery information to vessel owners and operators; also permit renewal forms are sent to permit holders quickly and easily. Telephone numbers (business, home, facsimile) and email addresses are used to assist NMFS in processing the application by allowing questions to be resolved more quickly than by correspondence. Photos of vessels may also be collected in conjunction with IATTC resolutions and High Seas Fishing Compliance Act (16 U.S.C. 2431 *et seq*).

Disclosure of the Employer Identification Numbers of the corporate applicants is mandatory in accordance with the Debt Collection Improvement Act (31 U.S.C. 7701), which requires that agencies obtain taxpayer identification numbers from person applying for Federal permits. Vessel owner or his or her agent's signature is required as legally binding actions, which ensure eligibility to receive or transfer a permit under specific FMP regulations. False statements without the signature of the applicant would be difficult to prosecute.

It is anticipated that the information collected will be disseminated to the public or used to support publicly disseminated information. 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. <u>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.</u>

The West Coast Region's Web site at

http://www.westcoast.fisheries.noaa.gov/permits/commercial fishing research permits.html is used to inform the public about the WCR permit programs and provides a means to obtain the application forms for the Pacific HMS; and transfer forms for LE DGN and LE CPS permits. Currently, EFPs managed by the Council for supplemental gear for swordfish can be found at http://www.westcoast.fisheries.noaa.gov/fisheries/migratory species/gear research permits.html

A public interface option is available through the National Permits System (NPS) website at http://fisheriespermits.noaa.gov to allow WCR permit applicants to apply for and renew Pacific HMS and CPS permits. EFP applications have no Federal forms associated with them. These applications are relatively rare events and cannot be predicted in advance. LE DGN applications will only be made available to current state LE DGN permit holders. New federal applications and future transfers will only be accepted by mail until an online form is available.

4. Describe efforts to identify duplication.

One Federal program that provides some similar information is the vessel documentation program of the U.S. Coast Guard. The permit process incorporates verification of the current USCG Certificate of Documentation data on file for vessels to determine information about the vessels and their ownership. This is achieved via a NMFS internet site that reflects quarterly updates from USCG data sources. Similar verification is occasionally conducted via state vessel registration contacts. The HMS permit application does not contain a requirement to provide duplicate information. The CPS permit form for transfers and renewals does request vessels information, in which a request for USCG Certificate of Documentation, vessel tonnage certificate, or marine survey is necessary to verify the calculated gross tonnage of vessels. Although USCG Certificate of Documentation data is available, vessel tonnage certificates and marine surveys are not. For consistency, it is necessary to include all options available on the form. The LE DGN permit form for new applications and transfers requests vessel information to verify vessel ownership and federal fishery participation eligibility.

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

All of the vessels in the Pacific CPS and HMS fishery (including DGN) are categorized as small business entities of similar size and are affected comparably. No special measures are needed to accommodate different sized businesses. Only the minimum data to meet the permit program objectives are requested from the permit applications.

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

If permit data are not available or are collected less frequently, NMFS will have difficulty monitoring the fishery, determining entry and exit patterns, and providing information needed to ensure full impact analysis from the regulatory programs. NMFS Enforcement will not be

assured of being able to identify current permit holders for purposes of compliance monitoring and enforcement of the regulations. There will be less frequent contact with fishermen and our ability to contact permit holders to consult them prior to adopting new regulations and to advise them of regulatory changes will diminish. Our ability to document transfers of marketable permits under the CPS and DGN limited access permit programs will be compromised.

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

The collection is consistent 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 proposed rule, RIN 0648-BG81, published on 10/31/2017. There were no comments on the information collection requirements.

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

No payments or gifts are involved in this program.

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

As stated on the forms: under the Magnuson-Stevens Act and NOAA Administrative Order 216-100, information submitted in accordance with regulatory requirements under the Act is confidential. This includes confidential information submitted with a permit application. Personal and proprietary information is not released to the public.

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.

No questions of a sensitive nature are asked.

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

Table A – Total WCR-LONG BEACH Federal Fisheries Permit Renewal Annual Burden Hours

	No. of Respondents	Total No. of Responses Per	Average Time per Response	Total Time (hours)
		Year		
HMS New Paper	162	81	20 minutes	27 hours
HMS New Online	276	138	15 minutes	35 hours
HMS Renew Paper	893	447	10 minutes	75 hours
HMS Renew	276	138	5 minutes	12 hours
Online				
CPS Renewal	64	32	15 minutes	8 hours
CPS Transfer	6	2	30 minutes	1hours
EFP	1	1	60 minutes	1 hour
LE DGN New	74	74	30 minutes	37 hours
LE DGN renew	74	74	20 minutes	25 hours
LE DGN transfer	6	2	30 minutes	2 hours
Appeals	1	1	240 minutes	4 hours
TOTAL	1887*	990		227 hours

Note: *This number represents the number of unique respondents for each specific form or individual information collection.

The total number of hours represents an increase over the previous collection. The addition of the LE DGN permit application accounts for the increase time burden for the overall collection (approved January 2017).

Detailed break-out of burden and related explanations follow:

Table A (1) – Annual Burden Hours – HMS

HMS Permit	No. of	Total Annual	Average Time per	Total Time
	Respondents	Responses	Response	(hours)
New Paper	162	81	20 minutes	27 hours
New Online	276	138	15 minutes	35 hours
Renew Paper	893	447	10 minutes	75 hours
Renew Online	276	138	5 minutes	12 hours
Total HMS	1607	804		149 hours

HMS permit application process is divided into four burden categories based on percentage of total applications received a year (1607 active permits in 2016). Each permit is received through mail on a paper form or online through NPS. It is estimated that 10% of new paper applications are estimated to take 27 hours which includes reviewing the application, creating a new NPS profile, approving the application, and mailing the permit package. New online applications (17%) are submitted by the applicant. The permits office is only required to review the application, approve the application, and mail the permit package. Renewals are also submitted by mail and online. Paper applications are pre-filled (55%). The applicant is asked to review the information, and sign and date the form. These require minimal review and estimated to take 75 hours. Finally, applicants renewing online (17%) require applicants to review their previous online application. The estimated permit office online renewal review time is 12 hours.

The annual costs associated with the burden hours for the respondents are as follows;

New Paper applications: 27 hours x \$22.04 per hour = \$595.08 New online applications: 35 hours x \$22.04 per hour = \$771.40 Renew paper forms: 75 hours x \$22.04 per hour = \$1,653.00

Renew online: 12 hours x \$22.04 per hour = \$264.48

Total: \$3,283.96

The \$22.04 per hour figure is an estimate from the approximate cost of a ZP II Interval I Permits Technician in the Los Angeles Area.

Table A (2) – Annual Burden Hours LE CPS

CPS Permit	No. of	Total Annual	Average Time per	Total Time
	Respondents	Responses	Response	(hours)
Renewal	64	32	15 minutes	8 hours
Transfer	6	2	30 minutes	1 hours
Total CPS	70	34	45 minutes	9 hours

CPS permits are valid for two years and renew every odd year. There are 64 active permits with no new permits. If applications are not renewed, they will be considered abandoned and will not be reissued. Applications and supporting documents (CG documentation, state registration, or tonnage certificate) are received by the permits office for review and processing. Permits are mailed back to the permittees. Transfers are between the current permit holder and new permit holder. The amount of burden is higher for transfers due to the communication required between both parties and permits office to determine transfer eligibility.

The annual costs associated with the burden hours for the respondents are as follows:

CPS renewal: 8 hours x \$22.04 per hour = \$176.32 CPS transfer: 1 hours x \$22.04 per hour = \$22.04

Total: \$198.36

The \$22.04 per hour figure is an estimate from the approximate cost of a ZP II Interval I Permits Technician in the Los Angeles Area.

Table A (3) – Annual Burden Hours LE DGN

DGN Permit	No. of	Total Annual	Average Time per	Total Time
	Respondents	Responses	Response	(hours)
New	74	74	30 minutes	37 hours
Renewal	74	74	20 minutes	25 hours
Transfer	6	2	30 minutes	2 hours
Total DGN	154	150	80	64 hours

DGN LE permits will be issued on an annual basis. New applications will be available for the 2018 fishing season (April 1 – March 31) and will discontinue June 30 at which no new permits will be issued. After June 30th, 2018 permits will only be eligible for renewal and transfers. 74 DGN LE permits are expected to renew each year. If a permit is not renewed by June 30th of a renewal period the permit is considered abandoned and will not be reissued.

The annual costs associated with the burden hours for the respondents are as follows:

DGN LE new application: 37 hours x \$22.04 per hour = \$815.48

DGN LE renewal: 25 hours x \$22.04 per hour = \$551.00 DGN LE transfer: 2 hours x \$22.14 per hour = \$44.28

Total: \$1,455.04

The \$22.04 per hour figure is an estimate from the approximate cost of a ZP II Interval I Permits Technician in the Los Angeles Area.

Table A (4) Annual Burden Hours EFPs

EFP	No. of Respondents	Total Annual Responses	Average Time per Response	Total Time (hours)
EFP issuance*	1	1	60 minutes	1 hour
Total	1	1	60 minutes	1 hour

Notes: * EFP issuance and response time varies per year.

EFP permits are issued on an as needed basis and requests are estimated at 1 per year. No paper application is required, but approved EFPs undergo a Federal Registry Notice process prior to issuance.

EFP issuance: 1 hour x \$22.04 per hour = \$22.04

Total: \$22.04

The \$22.04 per hour figure is an estimate from the approximate cost of a ZP II Interval I Permits Technician in the Los Angeles Area.

Table A (5) Annual Burden Hours to File an Appeal to NMFS decisions

Appeal	No. of	Total Annual	Average Time per	Total Time
	Respondents	Responses	Response	(hours)
File an Appeal*	1	1	240 minutes	4 hours
Total	1	1	240 minutes	4 hours

Notes: * Appeal action time varies per year.

Any applicant for an initial permit may appeal the initial issuance decision to the Regional Administrator (RA). To be considered by the RA, such appeal must be in writing and state the reasons for the appeal, and must be submitted within 30 days of the action by the RA. The appellant may request an informal hearing on the appeal.

Upon receipt of an appeal, the RA will notify the permit applicant, or permit holder as appropriate, and will request additional information that will allow action upon the appeal. Once received, the RA will decide the appeal in accordance with the permit provisions set forth at the time of the application, based upon information relative to the application on file at NMFS and the Council and any additional information submitted to or obtained by the RA, the summary record kept of any hearing and the hearing officer's recommended decision, if any, and such other considerations as the RA deems appropriate. The RA will notify all interested persons of the decision, and the reasons for the decision, in writing, normally within 30 days of the receipt of sufficient information, unless additional time is needed for a hearing.

Appeals: 4 hours x \$22.04 per hour = \$88.16

Total: \$88.16

The \$22.40 per hour figure is an estimate from the approximate cost of a ZP II Interval I Permits Technician in the Los Angeles Area.

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).

There is no "start-up" capital cost for complying with these requirements. 72 percent of HMS new and renewing applicants (528 responses) plus CPS (35 responses), EFP (1 response), and LE DGN (64 hours; total of 150 responses) are expected to mail in permit applications, transfers, or renewals. The annual cost to the respondents for postage, faxes, copies, etc. related to this collection for mail-in applications is estimated at \$519.76 (approximately \$0.73 per response). With the implementation of NPS, approximately 28 percent of HMS new and renewing permits applicants (276 responses) are expected to use the online permit application option. The online permit application process eliminated cost from stamps and envelopes and the remaining cost will be for copies of HMS permits (approximately \$0.10 per person) and is estimated to be \$27.60. The total recordkeeping/recording cost to HMS, CPS, EFP, and LE DGN applications is estimated at \$547.36.

A total of 804 Pacific HMS permits applications are expected per year. At \$30 fee per application, this will add \$24,120, bringing the total to \$24,667.36.

For the one EFP permit and one appeal (not for EFP), adding \$2 for mailing brings the grand total to \$24,669.36.

No fees are collected for CPS permits and a LE DGN permit fee will be determined after the proposed rule is published.

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

The estimated annualized cost to the government is estimated at \$20, 290.06 with an hourly rate of \$22.04. This is based on the approximate cost of a ZP II Interval I Permits Technician in the Los Angeles Area for sending out permit renewal notices, reviewing application, responding to inquiries, awarding the permit and processing the data. The breakdown is as follows:

Mail-in HMS, DGN, EFP, and CPS permit applications: 66 minutes x 712 responses = 783.2 hours x \$22.04 per hour = \$17,261.73

Online permit applications (HMS only): 29 minutes \times 276 responses = 133.4 hours \times \$22.04 per hour = \$2,940.14

Appeals Process 240 minutes x 1 response = 4 hours x \$22.04 per hour = \$88.16

15. Explain the reasons for any changes or adjustments.

Program Change:

With the proposed LE DGN permit application, renewal form, and transfer form, burden will increase by an annualized 64 hours and 150 responses.

Adjustments:

Burden will increase by 14.5 hours for online HMS permits based on 2016 new and renewing HMS permit applications. The previous estimates were based on 2015 which had fewer permit applications submitted online.

Net decrease in hours due to adjustments: -95 (-93 for permits,- 6 for transfers and 4 added for appeals – see below).

Due to the increased use of the online HMS permit application through NPS, refilled renewal forms and addition of LE DGN forms, the total reporting cost has decreased by \$396.64.

Addition of an appeals process, which had been omitted in error previously, will increase burden by 4 hours and \$88.16.

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

No publications based solely on permit data are planned at this time.

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 expiration dates will be shown on the application, renewal, and transfer forms.

18. Explain each exception to the certification statement.

There are no exceptions.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

This collection does not employ statistical methods.