



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pacific Southwest Region
2800 Cottage Way, Suite W- 2606
Sacramento, California 95825

Ellie Cohen, President and CEO
Point Reyes Bird Observatory
dba Point Blue Conservation Science
3820 Cypress Drive, #11
Petaluma, California 94954-6964

DUNS: 119744100

Subject: Notice of Cooperative Agreement Award F14AC00237
Modification Number: 4

Dear Ms. Cohen:

Your organization's request for Federal financial assistance titled "Protect, Conserve and Monitor the Farallon Islands' Ecosystem" submitted to the U.S. Fish and Wildlife Service (Service)'s CFDA Program 15.608 is approved. This award is made under the authority of the Fish and Wildlife Act of 1956, as amended, 16 U.S.C. 742a-742j. For a complete list of this program's authorizing legislation, go to <https://www.cfda.gov/> and search by the CFDA Program number. This award is made based on Service approval of your organization's proposal signed on March 21, 2018, hereby incorporated by reference into this award.

This modification is to provide funding for project segment 5 of this monitoring and stewardship agreement with Point Reyes Bird Observatory doing business as Point Blue Conservation Science (Point Blue) at the U.S. Fish and Wildlife Service, Farallon Islands National Wildlife Refuge. The objective is to protect, conserve and monitor the Farallon Islands ecosystem including but not limited to birds, mammals, salamanders, insects, other wildlife and plants and to assist with Refuge stewardship.

Type of Agreement:

- ☐ Grant Agreement
- ☒ Cooperative Agreement
- ☐ Fire Agreement
- ☐ Challenge Cost Share
- ☐ CESU
- ☐ NRDA

Program:

- ☐ Fisheries Program
- ☒ Refuges Program
- ☐ Ecological Services Program
- ☐ Science Applications
- ☐ Migratory Birds
- ☐ National Wetlands Inventory

Type of Organization:

- ☐ State Government
- ☐ Tribal

- ☐ Local Government
- ☒ Non-Profit Organization

[] Higher Education Inst.

[] For Profit Organization

[] Private Individual

SAM Registration expires: March 13, 2019

Period of Performance:

The overall performance period of this award is April 1, 2014 through March 31, 2019. This is the period of Federal sponsorship.

The funding period for this segment of this project is April 1, 2018 through September 30, 2018.

The total amount of Service funding available for this segment of this project is \$27,675.70.

Line item #140 must be liquidated no later than 90 days after September 30, 2018.

Only allowable costs resulting from obligations incurred during this funding period may be charged to this award.

All obligations incurred under the award must be liquidated no later than 90 calendar days after the end of the performance period, unless the Service approves a final financial reporting period extension. (See Reporting Requirements section below.)

If you need more time to complete project activities, you must submit a written request to the Service Project Officer identified in the Project Contacts section below at least **30** calendar days before the end of the stated performance period.

Funding:

This award is funded as follows:

	<u>Service</u>	<u>Recipient</u>
This obligation:	\$27,675.70	\$0.00
Previous obligation:	\$682,967.00	\$1,098,984.00
Cumulative Total:	\$710,642.70	\$1,098,984.00

System for Award Management (SAM) Registration: Under the terms and conditions of this award, your organization must maintain an active SAM registration at <https://www.sam.gov/portal/public/SAM/> until the final financial report is submitted or final payment is received, whichever is later. If your organization's SAM registration expires during the required period, the Service will suspend payment under this and all other Service awards to your organization until you update your organization's SAM registration.

Reporting Requirements:

Financial and Performance Reporting Requirements:

Annual interim financial and performance reports and final financial and performance reports are required under this award and must be submitted to the Service Project Officer.

The report periods and due dates under this award are:

Report:	Report Period:	Report Due Date:
<u>Interim</u> financial & performance report	April 1, 2014-March 31, 2015	June 29, 2015

Interim financial & performance report	April 1, 2015-March 31, 2016	June 29, 2016
Interim financial & performance report	April 1, 2016-March 31, 2017	June 29, 2017
Interim financial & performance report	April 1, 2017-March 31, 2018	June 29, 2018
Final financial & performance report	April 1, 2018-March 31, 2019	June 29, 2019

Recipients must use the Standard Form (SF) 425, *Federal Financial Report* form for all financial reporting. This form is available at <http://www.grants.gov/web/grants/forms/post-award-reporting-forms.html#sortby=1>.

Performance reports must contain: 1) a comparison of actual accomplishments with the goals and objectives of the award as detailed in the approved scope of work; 2) a description of reasons why established goals were not met, if appropriate; and 3) any other pertinent information relevant to the project results. Additional reporting requirements are described in the attached Statement of Work. Please include the Service award number provided in the subject line of this letter on all reports.

Financial and performance reporting due dates may be extended by the Service upon receipt of a written request addressed to the Service Project Officer identifying the type of report to be extended, the requested revised due date, and a justification for the extension. The Service Project Officer may approve an additional extension if justified by a catastrophe that significantly impairs the recipient's operations. Requests for reporting due date extensions must be received by the Service Project Officer no later than one day before the original reporting due date.

Significant Developments Reports (see 2 CFR 200.328(d)):

Events may occur between the scheduled performance reporting dates that have significant impact upon the supported activity. In such cases, notify the Service Project Officer in writing as soon as the following types of conditions become known:

- Problems, delays, or adverse conditions that will materially impair the ability to meet the objective of the Federal award. This disclosure must include a statement of any corrective action(s) taken or contemplated, and any assistance needed to resolve the situation.
- Favorable developments that enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

Conflict of Interest Disclosures:

Recipients are responsible for notifying the Service Project Officer in writing of any actual or potential conflicts of interest that may arise during the life of this award. Conflicts of interest include any relationship or matter which might place the Recipient, the Recipient's employees, or the Recipient's sub recipients in a position of conflict, real or apparent, between their responsibilities under this award and any other outside interests. Conflicts of interest may also include, but are not limited to, direct or indirect financial interests, close personal relationships, positions of trust in outside organizations, consideration of future employment arrangements with a different organization, or decision-making affecting the award that would cause a reasonable person with knowledge of the relevant facts to question the impartiality of the Recipient, the Recipient's employees, or the Recipient's sub recipients in

the matter. Upon receipt of such a notice, the Service Project Officer in consultation with their Ethics Counselor will determine if a conflict of interest exists and, if so, if there are any possible actions to be taken by the Recipient, the Recipient's employee(s), or the Recipient's sub recipient(s) that could reduce or resolve the conflict. Failure to resolve conflicts of interest in a manner that satisfies the Service may result in any of the remedies described in 2 CFR 200.338, Remedies for Noncompliance, including termination of this award.

Other Mandatory Disclosures:

Recipients and their sub recipients must disclose, in a timely manner, in writing to the Service or pass-through entity all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting this award. Non-Federal entities that have received a Federal award including the term and condition outlined in 2 CFR 200, Appendix XII—Award Term and Condition for Recipient Integrity and Performance Matters are required to report certain civil, criminal, or administrative proceedings to SAM. Failure to make required disclosures can result in any of the remedies described in 2 CFR 200.338, Remedies for noncompliance, including suspension or debarment (See 2 CFR 200.113, 2 CFR Part 180, 31 U.S.C. 3321, and 41 U.S.C. 2313).

Project Contacts:

The Service Project Officer for this award is:

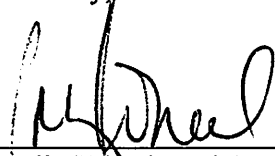
Anne Morkill
Refuge Complex Manager
San Francisco Bay NWRC
1 Marshlands Road
Fremont, CA 94555
510-792-0222, ext. 123
anne_morkill@fws.gov

The Recipient Project Officer for this award is:

Ellie Cohen
President and CEO
3820 Cypress Drive, #11
Petaluma, CA 94954
707-781-2555, x 318
ecohen@pointblue.org

Please contact Gerry McChesney, Farallon Islands National Wildlife Refuge Manager, at (510) 792-0222 ext. 222 with any questions. Please include the USFWS award number provided in the subject line of this letter in all written communications.

Sincerely,



Polly Wheeler, Ph.D.
Assistant Regional Director
National Wildlife Refuge System

5/31/18
Date

Attachments:
SF424a Budget
Statement of Work

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 01/31/2019

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Cosco Busan Auklet Nest Box project	15.608	\$	\$	\$ 27,675.70	\$	\$ 27,675.70
2.						
3.						
4.						
5. Totals		\$	\$	\$ 27,675.70	\$	\$ 27,675.70

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
	Cosco Busan Auklet Nest Box project				
a. Personnel	\$ 12,628.00	\$	\$	\$	\$ 12,628.00
b. Fringe Benefits	5,872.00				5,872.00
c. Travel					
d. Equipment					
e. Supplies	1,500.00				1,500.00
f. Contractual					
g. Construction					
h. Other	500.52				500.52
i. Total Direct Charges (sum of 6a-6h)	20,500.52				\$ 20,500.52
j. Indirect Charges	7,175.18				\$ 7,175.18
k. TOTALS (sum of 6i and 6j)	\$ 27,675.70	\$	\$	\$	\$ 27,675.70
7. Program Income	\$	\$	\$	\$	\$

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Prescribed by OMB (Circular A -102) Page 1A

SECTION C - NON-FEDERAL RESOURCES				
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8. Cosco Busan Auklet Nest Box project	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
9. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
10. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
11. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
12. TOTAL (sum of lines 8-11)	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
14. Non-Federal	\$ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15. TOTAL (sum of lines 13 and 14)	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT				
(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16. Cosco Busan Auklet Nest Box project	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
17. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
18. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
19. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
20. TOTAL (sum of lines 16 - 19)	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges: <input type="text" value="20,500.52"/>	22. Indirect Charges: <input type="text" value="7,175.18"/>
23. Remarks: <input style="width: 100%;" type="text"/>	

ATTACHMENT 1
SCOPE OF WORK
COOPERATIVE AGREEMENT
between the
U.S. FISH AND WILDLIFE SERVICE
and
POINT REYES BIRD OBSERVATORY (DBA Point Blue Conservation Science)

FARALLON NATIONAL WILDLIFE REFUGE
Ecosystem Monitoring and Refuge Stewardship
Period of Performance: April 1, 2014 to March 31, 2019

I. PURPOSE/OBJECTIVE

This agreement is being implemented in order to provide stewardship with Point Reyes Bird Observatory doing business as Point Blue Conservation Science (hereafter Point Blue) of the United States Fish and Wildlife Service (USFWS, hereafter Service), Farallon National Wildlife Refuge (hereafter Refuge). The objective is to protect, conserve and monitor the Farallon Islands ecosystem including but not limited to birds, mammals, salamanders, insects, other wildlife and plants. The project will benefit the Refuge and the public by maintaining facilities on the Farallon Islands and by collecting data to help guide management actions and to promote public awareness.

II. BACKGROUND

The Farallon Islands support the largest seabird nesting colony in the United States south of Alaska and contain >30% of the breeding seabirds in California. Currently, 13 species of marine birds breed on the Refuge, including globally significant populations of several species, and hundreds of species of migratory birds. The islands also provide important breeding and resting habitat for five species of seals, fur seals and sea lions. In addition, the Refuge hosts the endemic Farallon arboreal salamander, endemic Farallon camel cricket, and a unique plant community. One of the world's largest concentrations of white sharks visit the surrounding waters of the Gulf of the Farallones National Marine Sanctuary to feed on the island's marine mammals, and globally important populations of blue, humpback and gray whales feed and migrate just offshore. In addition to providing information for Refuge management, the vigor and productivity of Farallon seabird populations is used as a barometer by scientists, organizations, and government agencies to help assess the health of the Pacific Ocean food webs and impacts of climate change. In addition to this scientific public purpose, conserving the islands' natural resources and sharing wildlife information serves a broader public purpose as well, since a large percentage of the American public considers themselves to be conservationists.

Point Blue has been studying wildlife populations and staffing a small research station on Southeast Farallon Island (SEFI) since 1968. The Farallon NWR was established in 1909, but SEFI was not added to the Refuge until 1969. The islands, with the exception of Southeast

Farallon Island, were designated as a Wilderness Area in 1974. Even after it was added to the Refuge, the Service recognized a public benefit to having Point Blue continue their presence on the island, and the arrangement became formalized in a Cooperative Agreement in the early 1970s. Maintaining a human presence on the island deters trespassers, minimizes wildlife disturbance, and helps maintain facilities in serviceable condition. Because of their stature as a widely respected research and conservation organization, Point Blue can educate a broader segment of the public about Farallon wildlife than the Refuge can on its own. Their connections with other non-profit organizations allow them to cultivate additional partnerships that benefit the mission of the Service, help fulfill the purposes for which the refuge was established, and help secure additional funding for priority initiatives.

The role of the Service in the partnership is focused mostly on restoring habitats, controlling or eradicating invasive species, maintaining infrastructure and facilities, managing/developing other partnerships, and conducting other administrative functions such as issuing Special Use Permits. Data collected by Point Blue is used by the Service to help guide management actions and promote public awareness.

Other public benefits resulting from Point Blue's activities and data collection on SEFI include the following:

- Point Blue's organizational mission is to advance conservation of birds, other wildlife and ecosystems through science, partnerships and outreach, which furthers purposes of the Migratory Bird Treaty Act, the Marine Mammal Protection Act and other regulatory mandates;
- Point Blue's Farallon Islands Program goal is to understand, protect and conserve the rich wildlife on the Farallon Islands in the face of accelerating impacts from changes in climate and other human stressors. Their research has contributed to the establishment of 3 National Marine Sanctuaries, a state law protecting California's white sharks, fishing regulations to protect seabirds, 2 state marine reserves and 1 state marine conservation area around the Farallon Islands;
- Point Blue scientists have published hundreds of scientific papers in journals and made scores of presentations at scientific symposia based on Farallon data;
- Point Blue Farallon biologists wrote the authoritative text on Farallon seabirds;
- Point Blue educational staff developed and published several brochures to raise awareness of the islands and to reduce human disturbance to seabirds;
- Point Blue, in collaboration with California Academy of Sciences (CAS) and the Service, is enhancing public outreach through the installation of a web camera;
- Point Blue, in collaboration with universities, engages graduate students in research targeted to specific Service management needs;
- Point Blue interviews with the local and national media have resulted in numerous articles and television news segments on Farallon natural history;
- Point Blue developed the California Current Seabird Conservation Plan, which makes recommendations to conserve seabirds on the Pacific Coast and serves as a catalyst to involve other entities and the public;
- Water quality information, including a radioactivity assessment from the Fukushima Nuclear Power Plant event, are collected from SEFI, sent to Scripps Institute of

Oceanography, and posted on their website as part of a regional monitoring system.

These data are available online at http://shorestation.ucsd.edu/active/index_active.html;

- Weather data is taken three times daily and sent to the National Weather Service and used in marine and coastal weather tracking and forecasting (see <http://www.weather.gov/oh/hads/>);
- Violations of the California Fish and Wildlife Code are documented and reported to state enforcement personnel;
- Current weather and sea conditions are communicated to fishermen and other boaters planning boat trips offshore, enhancing public boater safety;
- U.S. Coast Guard (USCG) maintains an automated lighthouse on Southeast Farallon Island. Point Blue reports malfunctions, troubleshoots, and repairs the navigational light when possible, contributing to general maritime safety. Vessels in distress are reported to the USCG Search and Rescue office;
- Observations of oiled wildlife are reported to Oil Spill Prevention and Response division of California Department of Fish and Wildlife. This has resulted in the apprehension of parties responsible for oil spills and successful recovery of costs associated with restoring damaged public resources;
- Point Blue shares Farallon data and information with National Marine Fisheries Service, Gulf of the Farallones and Cordell Bank National Marine Sanctuaries, universities and other institutions involved in collecting information, developing policies, and implementing actions to understand and conserve marine resources;
- Point Blue shares information from its Farallones research with the U.S. Integrated Ocean Observing System including the Pacific Coast Ocean Observing System and Central California Ocean Observing System.
- Point Blue has provided information for public processes aimed at the establishment of Marine Protected Areas and fishing regulations in California;
- Point Blue prepared a proposal resulting in the Farallon Islands being designated a Globally Important Bird Area by the American Bird Conservancy (national organization);
- Point Blue personnel communicate by marine radio with natural history boat tours around the Farallon Islands, greatly enhancing the public's understanding of the area's ecosystem;
- Point Blue internships provide educational benefits, training, and job experience for recent graduates of university biology programs. Former Point Blue interns have moved on to positions in universities, conservation agencies, non-profits and other institutions.

III. SPECIFIC OBLIGATIONS OF EACH PARTY:

Point Blue Conservation Science will:

Furnish the necessary personnel, equipment and facilities and otherwise perform all things necessary for or incident to accomplish the following:

- A. Assist in managing and promoting public awareness of the Farallon National Wildlife Refuge in compliance with the National Wildlife Refuge System Improvement Act, the Wilderness Act, the Migratory Bird Treaty Act, the Marine Mammal Protection Act, the Endangered Species Act and other related regulations.

- B. Assist in monitoring seabird and marine mammal population sizes and breeding production, and provide the Refuge Manager with the reports outlined in Section IV, below.
- C. Assist in monitoring other aspects of the Farallon ecosystem including but not limited to birds, mammals, salamanders, insects, other wildlife and plants and provide the Refuge Manager with a comprehensive report outlined in Section IV, below.
- D. Work cooperatively with the Service in providing routine sea going transportation ("Farallon Patrol") for the movement of Point Blue personnel and when feasible other authorized persons, necessary provisions and equipment.
- E. Assist with providing protective services for Refuge lands and wildlife to the maximum extent possible, with prompt notification to the Service of any wildlife disturbance or infringement of regulations.
- F. Assist the Service with development or review of reports, proposals, plans, environmental compliance documents, or other documents pertaining to the Refuge that are within the scope of Point Blue's expertise.
- G. Refer all requests and inquiries received by Point Blue concerning access to the Refuge to the Refuge Manager, who will consider them on a case-by-case basis. Farallon National Wildlife Refuge is closed to the public; visitors (other than Service and Point Blue personnel) must obtain a permit issued by the Refuge Manager. Visitors under the direct supervision of Point Blue (e.g., Farallon Patrol crew) do not require permits, however their visitation is restricted to daytime only.
- H. Support the operation and maintenance of the Refuge by operating, maintaining and improving the facilities. Inspections and preventative maintenance will be performed in accordance with procedures outlined in the Farallon Operations Handbook and Monthly Maintenance Checklist. Notify the Refuge immediately of any equipment malfunctions, and of any loss or damage to facilities or equipment made available under this Agreement.
- I. Keep quarters and assigned equipment clean, organized, and in good working condition. Abide by and implement Service Safety, Fire, and Spill Prevention Plans, which shall be jointly reviewed and updated by the Refuge Manager and Point Blue yearly.
- J. Point Blue employees and volunteers, sufficient to accomplish the items outlined in this agreement, will be allowed access to Southeast Farallon Island 365 days each year. No more than eight (8) non-Service personnel shall remain on Southeast Farallon Island overnight without approval from the Refuge Manager. These personnel must be involved in carrying out biological studies or other obligations outlined in this Agreement. In addition, up to six (6) other persons may visit the island during daylight hours only, provided that they are carrying out work outlined in the Agreement or are otherwise important to island operations. They must remain under the strict supervision of Point Blue and/or Service personnel, as appropriate.

- K. Should it become necessary for all Point Blue staff to vacate the island at any time, prior notification of the Refuge Manager shall be made as soon as possible. If the island will be vacated overnight, the U.S. Coast Guard will also be notified.
- L. Furnish monthly phone line/internet communications services that interface with Service-provided communications hardware.
- M. Provide information and expert opinion to the Service for refuge management purposes as requested within a reasonable amount of time that would not incur additional costs.
- N. Participate in the Refuge Safety Committee, including periodic meetings and obtain all required safety trainings.
- O. Meet periodically with Service personnel to assess progress and to promote exchange of information to assure coordination of this cooperative effort.

The Service will:

- A. Take all responsibility for managing the Farallon National Wildlife Refuge, including issuing Special Use Permits, taking the lead for habitat restoration efforts, and making decisions with regards to resource allocations.
- B. Provide biologists and maintenance personnel, on an as available basis, necessary to maintain Service facilities and equipment, conduct habitat management activities, conduct biological activities, and other administrative duties.
- C. Meet periodically with Point Blue to provide technical assistance and review progress related to the cooperative effort.
- D. Provide basic equipment, including major kitchen appliances, washer, water supply and filter system, and materials and equipment necessary to maintain the Service facilities on Southeast Farallon Island.
- E. Provide an electrical system necessary for power to the Service facilities, water supply pump, workshop and boat hoist, including all parts, overhauls, oil, fuel, wires, circuit breakers required to maintain the electrical system. This will consist of a photo-voltaic (primary) with diesel generator (backup) for residence and workshop, and a separate diesel generator(s) to power boat hoist and water pump.
- G. Provide 2 boats with outboard motors (one each for North and East Landing) for use in accomplishing tasks specified in this Agreement, including logistic support for bringing personnel and materials to and from SEFI. Also provide crane and winch system at each landing to safely convey the boat, personnel and materials to and from the ocean and island.

- H. Provide radio and satellite communication system hardware to ensure adequate communications for health and safety of personnel on the island.

IV. REPORTING REQUIREMENTS:

Point Blue will provide the reports outlined below. Point Blue will also submit FWS Volunteer Services Agreements for all interns and volunteers. A completed Violation Report Form will be submitted for each boating, aircraft, and trespass violation.

- A. Monthly Report that includes updates on populations, breeding status for 13 nesting species of seabirds, 5 species of pinnipeds, other breeding birds, and any endangered/threatened species recorded on the South Farallon Islands. For pinnipeds, average and peak monthly adult and pup counts will be included. The monthly reports will also contain information on staffing, visitors, dates and numbers of visitors to the Wilderness Area, weather, bird, marine mammal, salamander or cricket activity of interest, habitat restoration activities, violations, sightseeing boat activity, maintenance, fuel and water usage, and other noteworthy wildlife or human occurrences on or around the Refuge. The April report will contain an estimate of water collection.
- B. Annual Seabird Report (due December 15 each year) that includes the following information for all seabird breeding species: 1) breeding population estimate (including maps of survey results and correction factor calculations); 2) breeding success (described as average number of chicks/breeding pair, combining first and second attempts; include sample size); 3) other components of breeding success (i.e., average clutch size, brood size, hatching success and fledgling success); 4) dates of last chicks fledged; 5) numbers of chicks and adults banded; and 6) interpretation of results and management recommendations. For species where estimates of population size or breeding size monitoring is problematic (i.e., ash and Leach's storm-petrels, double-crested cormorant, Cassin's and rhinoceros auklets, and tufted puffin), other information such as numbers banded, capture/recapture data, box occupancy rates, index plot data, number of active sites, etc. will be included as appropriate. For common murre and Brandt's cormorants, the report will provide information from each sample plot.
- C. Annual Pinniped Report (includes April to March, due the following May 1 each year). This report will include northern elephant seals, northern fur seals, Steller sea lions, California sea lions, harbor seals. The elephant seal section will include breeding activity and provide data on total breeding population size and breeding success. Numbers of breeding females, pups and weaners produced, and pup mortality will be reported for SEFI colonies, and as access/observation conditions allow, for West End colonies. Methods, interpretation of results, management information, and information on West End monitoring (e.g. dates and number of trips and number of animals disturbed) will also be included. Sections for all other species will include breeding activity, timing of breeding, graph of annual population cycle (average and variance), peak number of pups, and discussion of trends relative to historical data.

- D. Annual Ecosystem Report (due August 15 each year). This report will include but is not limited to landbirds (migrants and owls), white sharks (predation events), salamanders (population index), insects (including cricket population index), and summaries on other wildlife and plant monitoring.

All reports shall be submitted to:

Gerry McChesney, Manager
Farallon National Wildlife Refuge
1 Marshlands Road
Fremont, CA 94555
510-792-0222, x222
gerry_mcchesney@fws.gov