



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Office of National Marine Sanctuaries
West Coast Region
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Monterey, CA 93940

November 22, 2017

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Attention: Review and Compliance Unit (RACU)

RE: Proposed Regulation of United States Coast Guard Vessel and Training Discharges in Greater Farallones and Cordell Bank National Marine Sanctuaries: Section 106 Review

Greater Farallones National Marine Sanctuary (GFNMS) and Cordell Bank National Marine Sanctuary (CBNMS) are administered by the Office of National Marine Sanctuaries (ONMS), National Ocean Service (NOS), National Oceanic and Atmospheric Administration (NOAA), within the Department of Commerce. NOAA is proposing an administrative action to exempt the United States Coast Guard (USCG) from two types of otherwise prohibited discharges within federal waters of the areas added to GFNMS and CBNMS in the 2015 sanctuaries expansion (referred to as “expansion areas” in this document. As part of the National Environmental Policy Act (NEPA) compliance process GFNMS and CBNMS submits the proposed undertaking for your review in compliance with the Section 106 Review process, requesting concurrence on a finding of “No Adverse Effect.”

With respect to historic archaeological properties, ship and aircraft wrecks, approximately seven are reported lost in the region of the expansion area in federal water (see 2.1 Historic Properties in the review document). In recent years an extensive inventory has been compiled using primary source documentation, NOAA’s U.S. Pacific West Coast shipwreck database, California State Lands Commission, California Department of Parks and Recreation, and National Park Service shipwreck assessment reports (see References). In terms of prehistoric resources, no submerged sites have been located in California state waters, but there are known prehistoric sites along the coastal bluffs adjacent to the expansion area. Prehistoric sites however, are likely not in federal waters of GFNMS and CBNMS.

Jurisdictional authority of GFNMS overlaps and borders the jurisdictions of several other state and federal agencies (see Regulatory Setting). NOAA’s preservation mandates for maritime archaeological resources derive directly from elements of the Federal Archaeology Program, including the National Historic Preservation Act of 1966. Section 110 of the National Historic Preservation Act states that each federal agency shall establish a preservation program for the protection of historic properties. Other relevant preservation guidelines include the Antiquities Act of 1906, Archaeological Resources Protection Act of 1979, National Environmental Policy Act (NEPA) of 1982, Preserve America Executive Order (EO 13287 2003) and Sunken Military Craft Act of 2004, revised 2015. These laws codify the protection of heritage sites from illegal salvage and looting. NOAA’s jurisdictional authority is consistent with the regulatory framework, and so would be the proposed undertaking of exempting USCG discharges in

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National Marine Sanctuary
115 E. Railroad Avenue
Suite 301
Port Angeles, WA 98362

Cordell Bank
National Marine Sanctuary
P.O. Box 159
Olema, CA 94950

Greater Farallones
National Marine Sanctuary
The Presidio
991 Marine Drive
San Francisco, CA 94129

Monterey Bay
National Marine Sanctuary
99 Pacific Street
Suite 455A
Monterey, CA 93940

Channel Islands
National Marine Sanctuary
University of California Santa Barbara
Ocean Science Bldg 514, MC 6155
Santa Barbara, CA 93106

federal waters of the expansion area of GFNMS and CBNMS, NOAA expects no adverse effect to archaeological properties to result from this undertaking.

After a thirty-day review following receipt of this letter initiating consultation, NOAA will assume that a Section 106 Review has been satisfied and that, the parties stated above are in concurrence with a "No Adverse Effect" for historic and pre-historic properties for the proposed expansion, unless NOAA receives a response.

We value the opportunity to work with the State of California to protect our nation's historic maritime resources.

Best regards,



Robert Schwemmer
Regional Maritime Heritage Coordinator

CC: Pamela Griggs, California State Lands Commission
Maria Brown, Superintendent, Greater Farallones National Marine Sanctuary
Dan Howard, Superintendent, Cordell Bank National Marine Sanctuary
Jen Lechuga, Environmental Compliance Coordinator, Office of National Marine Sanctuaries

PROPOSED REGULATION OF UNITED STATES COAST GUARD VESSEL AND TRAINING DISCHARGES IN GREATER FARALLONES AND CORDELL BANK NATIONAL MARINE SANCTUARIES

1. DESCRIPTION OF UNDERTAKING

1.1 Geographic Setting

The National Oceanic and Atmospheric Administration’s (NOAA) Office of National Marine Sanctuaries (ONMS) manages two federally protected marine protected areas offshore of California’s north central coast: Greater Farallones and Cordell Bank national marine sanctuaries (GFNMS and CBNMS). GFNMS protects approximately 3,295 square miles (2,488 nautical miles) off the north-central California coast that surround the Farallon Islands. GFNMS also protects the mainland coast, starting at Rocky Point in Marin County, along the Point Reyes Peninsula and Bodega Bay up to Alder Creek, to the north of Point Arena in Mendocino County. GFNMS was designated in 1981 because of its national significance as an area that encompasses a diversity of highly productive marine habitats, an abundance of species, and historically significant maritime heritage resources. CBNMS protects approximately 1,286 square miles (971 square nautical miles) and is entirely offshore. CBNMS shares its southern and eastern boundary with GFNMS; the eastern boundary of CBNMS is six miles from shore and the western boundary is the 1,500-fathom isobath on the edge of the continental slope. CBNMS was designated in 1989 to protect Cordell Bank, a plateau consisting of a series of steep-sided ridges and narrow pinnacles, home to extraordinarily diverse and abundant marine life. A limited number of maritime heritage resources are known to exist in CBNMS. NOAA expanded both sanctuaries in 2015 (80 FR 13078). A map of the existing boundaries, and the pre-expansion boundaries (created in 1981 and 1989 for GFNMS and CBNMS, respectively) is depicted in Figure 1. National marine sanctuaries are administered by NOAA’s ONMS within the National Ocean Service (NOS).

1.2 Regulatory Setting

Each national marine sanctuary is designated with a broad “scope of regulations” within which regulations may be promulgated as necessary to ensure the protection and management of the conservation, ecological, recreational, research, educational, historical, cultural and aesthetic resources and qualities of the sanctuary.

Jurisdictional authority of Greater Farallones National Marine Sanctuary overlaps and borders the jurisdictions of several other state and federal agencies. Two other national marine sanctuaries share boundaries with Greater Farallones sanctuary: to the north and west is CBNMS, and to the south and east is Monterey Bay National Marine Sanctuary.

The National Park Service is a significant collaborator with the sanctuaries. The Golden Gate National Recreation Area and Point Reyes National Seashore work closely with GFNMS and CBNMS on the protection and management of natural and cultural marine resources. Golden Gate National Recreation Area includes an extensive network of recreational and historic sites.

GFNMS coordinates and cooperates with Point Reyes National Seashore and Golden Gate National Recreation Area in the areas of resource protection, enforcement, interpretation, administrative support, wildlife protection, oil spill preparedness and natural resource damage assessment and restoration. Point Reyes National Seashore represents the largest stretch of shoreline adjacent to GFNMS, with a small portion of the national seashore overlapping the sanctuary boundary within Tomales Bay. It includes certain state tide and submerged lands that have been conveyed to the national seashore. The national seashore's management plan defines "natural zones" that are to remain unaltered by human activity. Portions of the Golden Gate National Recreation Area shoreline, from the mean high tide to approximately a quarter-mile offshore overlap jurisdiction with GFNMS. These areas are along the Marin Headlands, Stinson Beach, Bolinas Lagoon and Tomales Bay.

Other agencies with management responsibility in the California national marine sanctuaries or in coastal areas adjacent to the sanctuaries include the California State Lands Commission, the California Department of Parks and Recreation and the counties of San Francisco, Marin and Sonoma. All of these counties have Local Coastal Plans certified by the California Coastal Commission.

1.3 Protection of Maritime Archaeological Resources

A number of established laws govern the protection and management of maritime heritage resources. The Abandoned Shipwreck Act of 1987 charges each state with preservation management for "certain abandoned shipwrecks, which have been deserted and to which the owner has relinquished ownership rights with no retention." For NOAA, preservation mandates for maritime heritage resources derive directly from elements of the Federal Archaeology Program, including the National Historic Preservation Act of 1966. Section 110 of the National Historic Preservation Act states that each federal agency shall establish a preservation program for the protection of historic properties. Other relevant preservation guidelines include the Antiquities Act of 1906, Archaeological Resources Protection Act of 1979, National Environmental Policy Act of 1982, Preserve America Executive Order (EO 13287 2003) and Sunken Military Craft Act of 2004, revised 2015. These laws codify the protection of heritage sites from illegal salvage and looting.

NOAA's Maritime Heritage Program is specifically designed to address these preservation mandates and to inventory and protect these special resources for the benefit of the public. California state regulations also prohibit the unpermitted disturbance of submerged archaeological and historical resources. Additionally, ONMS and the California State Lands Commission have an archaeological resource recovery permit system in place. Protection and monitoring of these sites will become a more pronounced responsibility in the sanctuaries' heritage resources management program.

Under ONMS regulations, removing or damaging any historical or cultural resource is prohibited within GFNMS and CBNMS. Additionally, the National Marine Sanctuaries Act (NMSA) requires each sanctuary to inventory and document its maritime heritage resources. Given the existence of historically important shipwrecks in GFNMS, the likelihood of finding more

shipwrecks, and the keen public interest in these resources, it is a priority for GFNMS and CBNMS to continue their efforts to inventory and document archaeological resources.

1.4 Undertaking

NOAA's ONMS is proposing to exempt the United States Coast Guard (USCG) from two types of otherwise prohibited discharges within federal waters of the expansion areas of GFNMS and CBNMS. The two types of discharges proposed to be allowed are: untreated sewage and non-clean graywater from USCG vessels; and ammunition and pyrotechnic materials (warning projectile, flare, smoke float and marine marker) used during USCG training exercises for use of force (live fire or gunnery) and search and rescue (SAR) of vessels or persons in distress. The proposed regulatory exemptions would be applied to federal waters of the expansion areas of GFNMS and CBNMS. A map delineating the federal waters of the expansion areas of GFNMS and CBNMS is shown in Figure 1. In general, the proposed action area is seaward of the three nautical miles state boundary line offshore of Sonoma and Mendocino Counties up to a point just south of Alder Creek. The western boundary is approximately aligned with the 1,500 fathom depth contour. The proposed undertaking does not propose a change to the regulatory prohibitions or exceptions applicable to the pre-expansion boundaries of the two sanctuaries.

The purpose of the proposed action would be to enable the USCG to continue mission operations that entail certain discharges in the expanded portions of GFNMS and CBNMS, including missions to protect the sanctuaries' resources and enforce the sanctuaries' regulations, in a manner compatible with protection of the sanctuaries' resources. Specifically, the proposed action would enable the USCG to: 1) continue surveillance of activities in GFNMS and CBNMS; 2) conduct monitoring and enforcement activities to uphold the NMSA and its implementing regulations; and 3) conduct other USCG mission activities during non-emergency situations that support sanctuary management. The proposed action would also support the USCG in training its personnel to be ready for emergency SAR and use of force activities.

The proposed action would allow current activities, or status quo, to continue, whereby USCG vessels would continue to discharge untreated sewage and non-clean graywater and USCG training-related discharges of ammunition and pyrotechnic materials would continue within federal waters of the GFNMS and CBNMS expansion areas. These discharges were not prohibited in this area prior to the sanctuaries' expansion in 2015, and NOAA has postponed its discharge regulations from taking effect with respect to USCG discharges in the expansion area since then. The types of and amount of USCG discharges that are currently taking place in the sanctuaries' federal expansion areas, and would be allowed to continue are summarized in Tables 1 and 2.

**Proposed Regulation of United States Coast Guard Vessel and Training Discharges
In Greater Farallones and Cordell Bank National Marine Sanctuaries
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Table 1. Summary of Types and Estimated Maximum Numbers of Proposed USCG Training Discharges

Activity	Description of Discharge	Estimated Numbers per Year	Number of Events
Live Fire Training Ammunition Discharges*	Ammunition from 4 weapon types: 1) copper-jacketed rounds from .50-caliber mounted machine guns 2) copper-jacketed rounds from M240 (7.62 mm) machine guns 3) 12-gauge Copper Sabot rounds from shotguns 4) M-16 rifle rounds (5.56 mm)	Average 1,200 rounds (total for all weapon types) (Maximum 18,000 rounds for all weapon types under a "worst case scenario"**)	3 to 5 days per year***
Live Fire Training Pyrotechnics Discharges	LA-51 aerial flash bang pyrotechnics (for warning)	180 rounds	3 to 5 days per year
SAR Training Pyrotechnics Discharges	L283 pyrotechnic flares (Mk 124 MOD 0 Marine Smoke and Illumination)	90 flares and/or smoke floats	3 to 5 days per year
	L312 white parachute flares (Mk 127)		3 to 5 days per year
	L553 smoke floats (Mk 25)		3 to 5 days per year
	L133 pencil flare kits (Mk 79)		3 to 5 days per year
	L580 Kilgore smoke float and flare (Mk 58)		3 to 5 days per year

* Ammunition discharges from all weapon types include cartridge case, bullet or shot, propellant powder, and primer.

** A "worst case scenario" describes when a serious national security event has happened and the USCG needs to expand its normal law enforcement training program to address the incident.

*** The USCG estimates it would conduct training exercises 3 to 5 days per year, involving live fire and SAR in the expansion areas of GFNMS and CBNMS. Generally, each crew member must train at least two times per year to maintain their live fire training qualifications.

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Table 2. Summary of Types and Estimated Quantities of Proposed USCG Vessel Sewage and Graywater Discharges

Activity	Description of Discharge	Quantity (at Capacity) for Individual Vessels (by Class) *	Number of Events
Vessel Sewage Discharges from Holding Tanks	Untreated sewage	Coastal Patrol Boat – 381 gallons Seagoing Buoy Tender – 1,755 gallons Coastal Buoy Tender – 844 gallons National Security Cutter – 3,351 gallons	As needed throughout the year, per operational considerations
Vessel Graywater Discharges from Holding Tanks	Non-clean graywater (galley, bath and/or shower water)	Coastal Patrol Boat - 58 gallons	As needed throughout the year, per operational considerations

* Note that three Marine Protector Class Coastal Patrol Boats, one Seagoing Buoy Tender, one Coastal Buoy Tender, and three National Security Cutters operating in the GFNMS and CBNMS expansion areas may discharge untreated sewage; the Coastal Patrol Boats may also discharge non-clean graywater. Additional vessels in these classes may operate in or transit through the two sanctuaries short term. USCG told NOAA that National Security Cutters do not discharge untreated sewage in the sanctuaries. At least five other classes of USCG vessels, which do not discharge untreated sewage and non-clean graywater, operate in or transit through the GFNMS and CBNMS expansion areas.

The majority of submerged cultural and historic maritime heritage resources in GFNMS and CBNMS are in coastal state waters (within 3 nautical miles of shore), while approximately seven are thought to be in federal waters in the expansion areas. Often, last known positions of these resources are general in nature. Since San Francisco has been a major shipping port for more than 150 years, there is a high probability of additional shipwrecks lost in the region, but their last positions went unreported. NOAA does not foresee any adverse impacts on cultural resources and maritime heritage resources from the proposed undertaking. NOAA does not anticipate that the continued USCG vessel discharges within this area would alter the characteristics of known historic shipwrecks and aircraft (see Section 2.1 of this document), such that they would no longer qualify for inclusion in the National Register of Historic Places.

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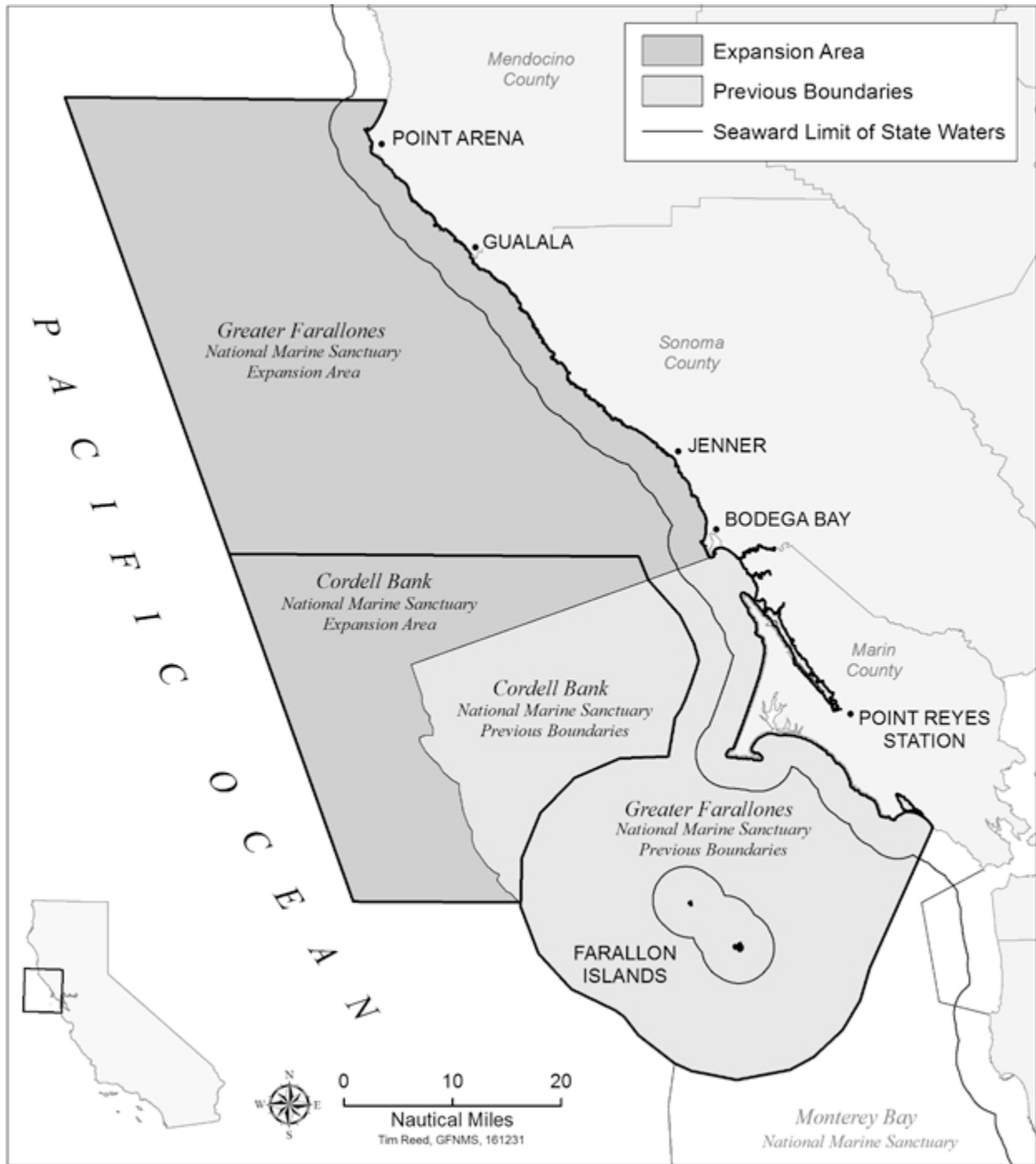


Figure 1. Greater Farallones and Cordell Bank National Marine Sanctuaries. The proposed action area is located within the federal waters (seaward of the state boundary line) of the expansion areas of both sanctuaries.

As part of the federal rulemaking process NOAA's ONMS submits the proposed undertaking for review in compliance with the Section 106 Review process, requesting concurrence on a finding of "No Adverse Effect."

1.5 Maritime Archaeological Resources of GFNMS and CBNMS Expansion Area in State and Federal Waters

The maritime cultural landscape for GFNMS and CBNMS can be separated into three broad categories. Pre-contact history describes events prior to European exploration and influence in the Americas. Ethno-history represents information gleaned from ethnographic sources (including oral histories and anthropological and sociological studies) and historical accounts of Native American groups. History is generally post-contact information gathered from written documents from the time of early European exploration until today. The expansion area is rich in cultural and archaeological resources and has a long and interesting maritime history.

It is generally believed that human occupation of the West Coast dates back to at least 13,000 years before present (BP). Several sites around California are thought to have been occupied between 40,000 to 200,000 years BP; however, the reliability of the dating techniques used and the validity of the artifacts found in those sites remain controversial (*Moratto 1984*). It is widely held that prehistoric shorelines extended far out onto the continental shelf, and it is probable that the remains of California's earliest settlements were inundated following the last Ice Age. Archaeological evidence for occupation of California during the Holocene Epoch (13,000 years BP to present) is stronger. Miwok and *Kashia* (an alternate spelling is *Kashaya*) Pomo once lived and harvested the resources of an abundant marine landscape that was inundated by sea level rise with the end of the last great Ice Age, which reflects persistence and adaptation to a changing climate.

Following Spain's "discovery" of the Pacific Ocean in 1513, early Spanish explorers took to that ocean beginning in 1527. Among those voyages that followed were explorations by mariners such as Juan Rodríguez Cabrillo, Sebastian Rodríguez Cermeño, and Sebastian Vizcaíno in 1542-1543, 1595 and 1602 that studied and visited the California coast, while others crossed the Pacific to commence a transoceanic trade with the Philippines after 1565 (*Mathes 1968*). In the two centuries that followed, the "Manila galleons" and other Spanish ships made regular landfall on the northern California coast in or around Cape Mendocino before turning south to bear for Acapulco (*Gearhart et al. 1990*).

As the influx of foreign ships continued and as the region transitioned to American rule following the Mexican War (1846-1848) and prospered following the Gold Rush (1849-1855), ports, such as San Francisco and Monterey, and smaller coastal harbor towns from Bodega Bay to Point Arena were developed through fishing, lumber trade, coastal shipping, and economic exchange. Regional fishing communities dating back to the middle of the 19th century are distinctive for their rugged, individualistic culture born of a hard and sometime dangerous life harvesting fish at sea. It is an area strongly shaped and influenced by the offshore marine environment and the edge of the continental shelf, where the upwelling of the California current

created a fishery as well as inshore kelp forests on marine terraces that provided habitat for marine mammals.

The rich coastal resources of this maritime landscape, particularly the kelp forests in the numerous coves and inlets provided habitat for the California sea otter (*Enhydra lutris nereis*). The presence of sea otters combined with this area's agriculture, which benefits from the ocean-influenced climate brought the Russian American Company to the coast in the early 19th century to hunt otters for their fur, and ultimately to establish settlements for agriculture. Eventually the Russian American Company also established a base for their sealing operations.

The maritime fur trade also changed the cultures of the native peoples involved in it, from the Aleut and other peoples of Alaska such as the Tlingit, to the peoples of British Columbia, Washington, Oregon and California, to the native peoples of Hawaii. In California, the trade and the arrival of the Russians had a particular impact on the *Kashia* Pomo, whose major village, *Meteni*, became the site of the Ross Colony, or Fort Ross, a major settlement for three decades (Figure 2.). A separate settlement was made inland of "Port Rumiantsev," or Bodega Bay, where two shore-side warehouses and a dock occupied the lands of the Coast Miwok. At Fort Ross, the *Kashia* lived, worked and intermarried among the Aleuts and Russians in a multicultural community (Ogden 1941).

Ocean-based commerce and industries are important to the maritime history, the modern economy, and the social character of this region. The cold sea merges with warm air from the coastal hills and valleys to pull in thick blankets of fog that created an ideal climate for the growth of the redwood forests. By 1870, the coast was lined with dozens of camps and settlements that shipped goods in small, two-masted schooners that easily navigated the rocky shoreline to load at the end of wire-rope "chutes" in ports known as "dogholes" because they were so small that "a dog had enough room to go in and back out." This also spurred the development of small shipyards along the coast that included Point Arena.

Traders adapted to the rugged maritime environment utilizing these small maneuverable schooners that hugged the coast to log the redwoods and carry the timber to markets as close as San Francisco and as distant as the Eastern Seaboard, Australia and Asia (McNairn and MacMullen 1945). The only highway to create that economy was by the sea, with vessels working the coast before heading to Cordell Bank and thence turning south to commence their run to the Golden Gate. That trade left not only place names and the archaeological remains of the dogholes and those vessels unlucky enough to be lost on these shores, but also lasting communities like Bodega Bay, Fort Ross, Timber Cove, Stewart's Point, Iversen's Landing in Sonoma County and Gualala and Point Arena in Mendocino to name a few (Sullenberger 1980). Submerged archaeological remnants relating to the many landings, such as wire, trapeze loading chutes and offshore moorings have been surveyed by NOAA along with California State partners in the expansion area, adding significant knowledge about the vessel loading operations for these unique doghole ports.

Records indicate that approximately 200 vessel and aircraft losses were documented between 1820 and 1961 along California's North coast from Bodega Head north to Point Arena's

contiguous waters. Some of the lost vessels and aircraft have been located and inventoried by NOAA, National Park Service, California State Parks, as well as recreational SCUBA divers (*Schwemmer 2017*). Shipwrecks include vessels lost while sailing to and from the North coast doghole ports. These shipwrecks, as well as other cultural ties, including family and business relationships, demonstrate the interconnected nature of maritime activity that strongly linked communities such as Point Arena, or Gualala, with a city and major port like San Francisco.

The earliest known shipwreck in the expansion area is a Russian brig lost off Point Arena. On June 4th, 1820 one such voyage of supply began when the company brig *Il'mena* weighed anchor at Sitka, Alaska and set sail for the Ross settlement. The ship carried 25 passengers and a cargo of supplies consisting largely of materials for outfitting the brig *Buldakov*, which was then lying on the launching ways at the Ross shipyard. The voyage was uneventful until June 18th when landfall was made off the northern California coast. Just before midnight of that day, the *Il'mena* became trapped behind the cape and projecting reef of present day Point Arena. After several desperate but failed tacking maneuvers, the ship grounded in the surf zone just north of the cape. Passengers and crew were quickly transferred to shore where they spent the remainder of the night in the shelter of the small sand dunes that parallel the shoreline (*Allan 2013*).

One submerged historic property, SS *Pomona*, was listed on the National Register of Historic Places in 2008; the shipwreck is located in Fort Ross Cove, Sonoma County, and partly in a California State Park. The steamship *Pomona* was built in 1888 by the Union Iron Works in San Francisco for the Oregon Improvement Company. The passenger-cargo steamer was a single-propeller, steel-hulled vessel that traveled between San Francisco and Vancouver, British Columbia making stops at ports in between. On March 17, 1908, the SS *Pomona* was transiting northward on a routine voyage encountering heavy seas, when it struck a reef off Fort Ross. Captain Swansen, *Pomona's* master, tried to save the vessel by running it aground in Fort Ross cove, but impacted a wash rock inside the cove and sank. Over the subsequent months, salvage efforts were conducted on the ship, and eventually it was dynamited as a navigational hazard. Today, the wreckage of SS *Pomona* lies in less than 50 feet of water in Fort Ross Cove (*Schwemmer 2017*).



Figure 2. Fort Ross Cove, chute, settlement and indigenous place names T-Sheet T01457 (NOAA Library)

2. DESCRIPTION OF AREA OF POTENTIAL EFFECTS, ARCHAEOLOGICAL PROPERTIES AND THE UNDERTAKING WITH NO ADVERSE EFFECTS

2.1 Historic Properties in Federal Waters Inside Preexisting Sanctuary Boundaries and Expansion Area of GFNMS and CBNMS

In compliance with Section 106 of the National Historic Preservation Act the Area of Potential Effect (APE) describes the historic ship and aircraft properties located in federal waters inside preexisting boundaries and expansion area of GFNMS and CBNMS.

A cultural resource is defined as any historical or cultural feature, including archaeological sites, historic structures, shipwrecks, and artifacts. Historical resources are defined as any resources possessing historical, cultural, archaeological or paleontological significance, including sites, contextual information, structures, districts, and objects significantly associated with or representative of earlier people, cultures, maritime heritage, and human activities and events. Historical resources include “submerged cultural resources,” and also include “historical properties,” as defined in the National Historic Preservation Act (NHPA), as amended, and its implementing regulations, as amended. Submerged cultural resources are defined loosely as archaeological or culturally significant sites over fifty years old that are located underwater. These sites may include shipwrecks, downed airplanes, or submerged structures within the more recent historic period, or may include sites dating to the prehistoric period consisting of campsites with stone tools or stones used for grinding.

Historic research indicates that the highest density of the submerged historic maritime heritage resources in GFNMS are located in California state waters. CBNMS is entirely located in federal waters. Of the over 400 reported maritime heritage resources inventoried in the NOAA’s ONMS shipwreck database, research and survey work indicate that approximately 25 are thought to be located in federal waters. Often, last known positions of these resources are general in nature or roughly approximate. Since San Francisco has been a major shipping port for more than 150 years, there is a high probability of additional shipwrecks lost in the region, but their last positions went unreported.

The following eleven historic shipwrecks and one aircraft are in the area approximately 3.5 – 14 miles (mi) (3 – 12 nautical miles [nm]) from mainland or Farallon Islands shoreline in GFNMS, (locations verified):

1. U.S. Navy tugboat, *USS Conestoga*, 3.5 miles (3.1 nm) off Southeast Farallon Island;
2. fuel barge, 9.5 miles (8.2 nm) off Southeast Farallon Island;
3. steamship, *Ituna*, 10.6 miles (9.2 nm) off Bolinas Point;
4. tramp steamer, *Selja*, 3.5 miles (3.3 nm) off Point Reyes;
5. (last reported positions); fishing vessel, *Star of the Sea*, 4 miles off Point Arena;
6. schooner, *John D. Spreckels*, 5-7 miles off Point Reyes; a schooner, *J. P. Haven*, 10 miles north of Tomales Point;
7. schooner, *Bonita*, 6 miles southeast of Farallon Islands;

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8. schooner, *A. J. Burr*, 5 miles northwest of the Farallon Islands;
9. U.S. military aircraft Ventura PV-1, 11 miles west northwest of Point Reyes;
10. gas fishing vessel, *Xilda*, 10 miles south of Farallon Islands;
11. schooner, *Emily Stephens*, 4.5 miles off Bowens Landing; and a schooner, *Napa City*, 8 miles west northwest of Point Reyes (*Schwemmer 2017*).

Within GFNMS, nine historic shipwrecks are reported beyond 14 mi (12 nm) from shore:

1. a purse seiner, *Nordic Pride*, 20 miles (17 nm) off Point Arena;
2. bark, *Albert*, 12 miles (10 nm) north of Point Reyes;
3. bark, *Bella Vista*, 20 miles (17 nm) off Point Reyes;
4. schooner, *Ellen Adelia*, 14 miles (12 nm) off Point Reyes;
5. schooner, *Kosta*, 15 miles (13 nm) off Point Reyes;
6. schooner, *Lulu*, 14 miles (12 nm) off Point Reyes;
7. bark, *Helen W. Almy*, and
8. a side-wheel steamer, *Labouchere*, reported lost between the Golden Gate and Point Reyes;
9. C-3 freighter, *Jacob Luckenbach*, (location verified) 17 miles (15 nm) off Point Lobos in San Francisco.

Also within this region of GFNMS are three sunken U.S. military aircraft:

1. Helldiver, 15 miles (13 nm) off Point Arena;
2. Avenger, 15 miles (13 nm) off the Russian River;
3. Helldiver, 12 miles (10 nm) off Bodega Head (*Schwemmer 2017*).

Within CBNMS is the ex-USS *Stewart*, approximately 38 miles (approximately 33 nm) west of Bodega head, based on its last reported position.

- See Attachment: 2.1 Historic Properties: Sorted by region

2.2 Historic Properties Are Based on Eligibility Criteria to the National Register For Historic Places (NRHP)

For a ship and aircraft to be eligible for listing, the properties must be significant in American history, architecture, archaeology, engineering, or culture; and possess integrity of location, design, setting, materials, and workmanship. It may also evoke an aesthetic feeling of the past. The association of the vessel to its setting can also be important. The ship and aircraft should meet one or more of the four NRHP criteria:

Criteria Number

1. Be associated with events that have made a significant contribution to the broad patterns of our history;
2. Be associated with the lives of persons significant in our past;
3. Embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic values, or represent a

significant and distinguishable entity whose components may lack individual distinction; and

4. Have yielded, or may be likely to yield, information important to prehistory or history.

Further consideration of grouping these properties into a Maritime District rather than listing as individual sites may also meet the criteria listing to the NRHP. Maritime Districts make up a geographically definable area possessing a significant concentration, linkage, or continuity of maritime sites, buildings, structures, or objects united by past events or by plan or physical development.

2.3 PREHISTORIC PROPERTIES

In compliance with Section 106 of the National Historic Preservation Act the APE describes the prehistoric properties contiguous to the expansion area.

It is an area whose rich pelagic and shore-side marine resources provided sustenance for the Coast Miwok and *Kashia* Pomo peoples who have lived here for thousands of years. The heritage of the first peoples is today represented not only in the sites of former settlements but also by the traditions and heritage of those people, who have persisted as important members of the coastal community. Their place names, their memories and their traditions remain on these shores and waters whether written on a map or not.

Traditional knowledge and archaeological evidence indicates that the coastal peoples subsisted largely on the products of the marine environment – harvesting salt, kelp, marine mammals, shellfish and fish. The basis of accumulated wealth in addition to food resources was the processed shell of mollusks such as the Bodega Bay clam (*Saxidomus giganteus*). The traditions of the first people, as recorded by C. Hart Merriam in 1910, note that “Coyote-man brought *Koo'-tah* the big clam, from which *pis'-pe* the shell money is made, and planted it here at Bodega Bay (*Merriam 1910*).

In terms of prehistoric resources, no sites underwater have been recorded, but there are known prehistoric sites along the coastal bluffs adjacent to the expansion area or in federal waters.

2.4 THE UNDERTAKING WITH NO ADVERSE EFFECTS

NOAA does not foresee that any adverse impacts on the sanctuaries' resources and uses would occur from the proposed undertaking. No adverse impacts have been documented historically and minimal impacts on natural resources (air quality; water quality; marine mammals, seabirds, sea turtles and fish), and human uses (commercial and recreational fishing, research, and education) are expected to occur in the future. Importantly, the USCG missions in GFNMS and CBNMS include those that support enforcement and management of the sanctuaries.

When the sewage/graywater and discharge of ammunition and pyrotechnic materials training discharge effects are considered together, NOAA finds that no adverse impacts on cultural and

maritime heritage resources would be expected to occur in federal waters of the expansion areas. In the unlikely event a USGC vessel sewage/graywater and training discharge occurred at the same time and place in sanctuary waters over a submerged historic resource, NOAA expects there would be no additive adverse effect on the historic resource. Neither type of discharge is expected to have adverse effects on historic resources alone, and sewage and graywater would have dispersed long before the surface waters in which they were dispersed might reach the historic resource on the seafloor, as well as ammunition discharge being disbursed by ocean currents and buffered by the deep depth of water.

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**Proposed Regulation of United States Coast Guard Vessel and Training Discharge
In Greater Farallones/Cordell National Marine Sanctuaries
National Historic Preservation Act
Section 106 Review: Attachment
2.1 Historic Properties**

Name	Official Number	Built	Type	Lost	Where	Located	Expansion Area
<i>Helldiver SB2C-4</i>	20261		U.S. Military	1944	Bodega Head, 12 miles off		Yes
<i>Emily Stephens</i>	135388	1879	Schooner	1882	Bowens Landing, About 4 1/2		Yes
<i>Xilda</i>	206552	1909	Gas Screw Fishing	1950	Farallon Islands, 10 miles south of		
<i>A. J. Burr</i>			Schooner	1868	Farallon Islands, 5 miles northwest		
<i>Bonita</i>	3540	1892	Schooner	1900	Farallon Islands, 6 miles southeast		
<i>Helen W. Almy</i>	11831	1859	Bark	1898	Golden Gate, between Point Reyes		
<i>Star of the Sea</i>	230081	1930	Fishing Vessel	1961	Point Arena Light, 4 miles, 035		Yes
<i>Helldiver</i>	18740		U.S. Military	1944	Point Arena, 15 Miles off		Yes
<i>Nordic Pride</i>	241040	1941	Purse Seiner	1941	Point Arena, 20 miles off		Yes
<i>Ventura PV-1</i>	33304		U.S. Military	1945	Point Reyes, 11 miles west		
<i>Albert</i>	106756	1890	Bark	1919	Point Reyes, 12 miles north of		
<i>Lulu (see Ellen Adelia)</i>	7984	1864	Schooner	1883	Point Reyes, 14 miles off		
<i>Ellen Adelia</i>	7984	1864	Schooner	1883	Point Reyes, 14 miles off		
<i>Kosta</i>			Schooner	1869	Point Reyes, 15 miles north of		
<i>Bella Vista</i>			Bark	1888	Point Reyes, 20 miles off		
<i>Selja</i>		1907	Steamer - Freight	1910	Point Reyes, 3 miles south of	Yes	
<i>Stewart, USS</i>	DD-224	1920	Destroyer	1946	Point Reyes, 38.7 Miles Northwest		Yes
<i>Labouchere</i>	22174	1858	Sidewheel Steamer -	1866	Point Reyes, 8 miles off		
<i>Napa City</i>	18722	1872	Schooner	1890	Point Reyes, 8 miles West		
<i>John D. Spreckels</i>	76110	1880	Schooner	1913	Point Reyes, bearing northeast		
<i>Avenger</i>	45839		U.S. Military	1945	Russian River, 280 DGR, 15 Miles		Yes
<i>Ituna</i>	214119	1886	Fishing Vessel	1920	San Francisco Lightship, 15 miles	Yes	
<i>Jacob Luckenbach</i>	246389	1944	Cargo / Passenger	1953	San Francisco, From Point Bonito	Yes	
<i>Conestoga, USS</i>	AT-54	1904	Seagoing Tug	1921	Southeast Farallon Island, 3.5	Yes	
<i>J. P. Haven</i>	13556		Schooner	1878	Tomales Point, 10 miles north of		