



Department Of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service

INCIDENTAL HARASSMENT AUTHORIZATION

The St. George Reef Lighthouse Preservation Society (SGRLPS), P.O. Box 577, Crescent City, CA 95531, is hereby authorized under section 101(a)(5)(D) of the Marine Mammal Protection Act (16 U.S.C. 1371(a)(5)(D)) and 50 CFR 216.107, to harass marine mammals incidental to conducting helicopter operations and restoration and maintenance work on the St. George Reef Light Station (Station) on Northwest Seal Rock in the northeast Pacific Ocean.

1. This Incidental Harassment Authorization (IHA) is valid from February 18, 2011 through April 30, 2011 or during the period of November 1, 2011 through December 31, 2011.
2. This IHA is valid only for activities associated with helicopter operations and restoration and maintenance activities (See items 2(a) – (d)) on the Station on Northwest Seal Rock (41° 50'24'' N, 124° 22'06'' W) in the northeast Pacific Ocean.
 - (a) The use of a small, compact, 4-person helicopter with two-bladed main and tail rotors fitted with noise-attenuating blade tip caps to transit to and from Northwest Seal Rock;
 - (b) restoration activities (e.g., painting, plastering, welding, and glazing) conducted on the Station;
 - (c) maintenance activities (e.g., bulb replacement and automation of the light system) conducted on the Station; and
 - (d) emergency repair events (e.g., the failure of the PATON beacon light) between February 18, 2011 through April 30, 2011 or during the period of November 1, 2011 through December 31, 2011, outside of the three-day work session.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of the SGRLPS, its designees, and work crew personnel operating under the authority of this IHA.
 - (b) The species authorized for taking are the California sea lion (*Zalophus californianus*), Pacific Harbor seal (*Phoca vitulina*), the eastern Distinct Population Segment of Steller sea lion (*Eumetopias jubatus*), and the eastern Pacific stock of northern fur seal (*Callorhinus ursinus*).
 - (c) The taking, by Level B harassment only, is limited to the species listed in condition 3(b) (See Table 1 for take numbers, attached).

- (d) The taking by Level A harassment, injury or death of any of the species listed in item 3(b) of the Authorization or the taking by harassment, injury or death of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this IHA.
- (e) In the unanticipated event that any cases of pinniped injury or mortality are judged to result from these activities, the holder of this Authorization must immediately cease operations and report the incident, within 48 hours, to the Assistant Regional Administrator (ARA) for Protected Resources, Southwest Region, National Marine Fisheries Service (NMFS), phone (562) 980-4000 and to the Chief, Permits, Conservation, and Education Division, Office of Protected Resources, NMFS, phone (301) 713-2289.
 - (i) The SGRLPS shall postpone the helicopter operations and restoration and maintenance activities until NMFS is able to review the incident and determine whether steps can be taken to avoid further injury or mortality or until such taking can be authorized under regulations promulgated under section 101(a)(5)(A) of the Marine Mammal Protection Act.
- (f) In the case of an emergency repair event (i.e., failure of the PATON beacon light) between May 1, 2011 through October 31, 2011, the SGRLPS will consult with the ARA, Southwest Region, NMFS, to best determine the timing of an emergency repair trip to the Station.
 - (i) The Southwest Region NMFS marine mammal biologist will make a decision regarding when the SGRLPS can schedule helicopter trips to the Northwest Seal Rock during the emergency repair time window and will ensure that such operations will have the least practicable adverse impact to marine mammals.
 - (ii) The ARA, Southwest Region, NMFS will also ensure that the SGRLPS' request for incidental take during an emergency repair event would not exceed the number of incidental take authorized in this IHA.

4. Cooperation

The holder of this Authorization is required to cooperate with the NMFS and any other Federal, state, or local agency authorized to monitor the impacts of the activity on marine mammals. The holder must notify the ARA for Protected Resources, Southwest Region, NMFS at (562) 982-4020 at least 24 hours prior to starting helicopter operations and restoration and maintenance activities (unless constrained by the date of issuance of this IHA).

5. Mitigation Measures

In order to ensure the least practicable impact on the species listed in condition 3(b), the holder of this Authorization is required to:

- (a) Abide by all of the Terms and Conditions listed in the Incidental Take Statement for NMFS' 2010 Biological Opinion (attached).

- (b) Conduct restoration and maintenance activities at the Station at a maximum of one session per month between February 18, 2011 through April 30, 2011 or during the period of November 1, 2011 through December 31, 2011. Each restoration session will be no more than three days in duration. Maintenance of the light beacon will occur only in conjunction with the monthly restoration activities.
- (c) Ensure that helicopter approach patterns to the Northwest Seal Rock will be such that the timing techniques are least disturbing to marine mammals. To the extent possible, the helicopter should approach Northwest Seal Rock when the tide is too high for the marine mammals to haul-out on Northwest Seal Rock.
- (d) Avoid rapid and direct approaches by the helicopter to the station by approaching Northwest Seal Rock at a relatively high altitude (e.g., 800 - 1,000 ft; 244 - 305 m). Before the final approach, the helicopter shall circle lower, and approach from area where the density of pinnipeds is the lowest. If for any safety reasons (e.g., wind conditions or visibility) such helicopter approach and timing techniques cannot be achieved, the SGRLPS must abort the restoration and maintenance session for that day.
- (e) Provide instructions to the SGRLPS' members, the restoration crew, and if applicable, to tourists, on appropriate conduct when in the vicinity of hauled-out marine mammals. The SGRLPS' members, the restoration crew, and if applicable, tourists, will avoid making unnecessary noise while on Northwest Seal Rock and must not view pinnipeds around the base of the Station.
- (f) Ensure that the door to the Station's lower platform shall remain closed and barricaded at all times.

6. Monitoring

The holder of this Authorization is required to:

- (a) Have a NMFS-approved biologist present during all three workdays at the Station at least once during the period between February 18, 2011 through April 30, 2011 or during the period of November 1, 2011 through December 31, 2011. This requirement may be modified depending on the results of the monthly monitoring reports. The biologist shall document use of the island by the marine mammals (i.e., dates, time, tidal height, species, numbers present, frequency of use, weather conditions, and any disturbances), and note any responses to potential disturbances.
- (b) Record the date, time, and location (or closest point of ingress) of each visit to the Northwest Seal Rock. See Table 2 for an example of a data collection sheet.
- (c) Collect the following information for each visit:
 - i. information on the numbers (by species) of marine mammals observed during the activities;
 - ii. the estimated number of marine mammals (by species) that may have been harassed during the activities;

- iii. any behavioral responses or modifications of behaviors that may be attributed to the specific activities (e.g., flushing into water, becoming alert and moving, rafting); and
 - iv. information on the weather, including the tidal state and horizontal visibility.
- (d) Employ a skilled, aerial photographer to document marine mammals hauled out on Northwest Seal Rock for comparing marine mammal presence on Northwest Seal Rock pre- and post-restoration.
- i. The photographer will complete a photographic survey of Northwest Seal Rock using the same helicopter that will transport SGRLPS personnel to the island during restoration trips.
 - ii. For a pre-restoration survey, photographs of all marine mammals hauled-out on the island shall be taken at an altitude greater than 300 m (984 ft) during the first arrival flight to Northwest Seal Rock.
 - iii. For the post-restoration survey, photographs of all marine mammals hauled-out on the island shall be taken at an altitude greater than 300 m (984 ft) during the last departure flight from Northwest Seal Rock;
 - iv. The SGRLPS and/or its designees will forward the photographs to a biologist capable of discerning marine mammal species. The SGRLPS shall provide the data to NMFS in the form of a report with a data table, any other significant observations related to marine mammals, and a report of restoration activities (see Reporting). The SGRLPS will make available the original photographs to NMFS or to other marine mammal experts for inspection and further analysis.

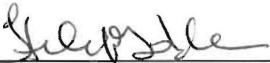
7. Reporting

The holder of this Authorization is required to:

- (a) Report observations of Steller sea lion injury, mortality, or the presence of a newborn pup (which is highly unlikely) to Monica DeAngelis, Marine Mammal Biologist, Southwest Region, NMFS at (562) 982-3232. SGRLPS and/or its designees will cease all activities immediately.
- (b) Interim Report: Submit an interim report on all activities and monitoring results to the ARA for Protected Resources, Southwest Region, NMFS, 501 West Ocean Blvd., Suite 4200, Long Beach, CA 90802-4213; phone (562) 980-4020; and to the Chief, Permits, Conservation and Education Division, Office of Protected Resources, NMFS, at (301) 713-2289, no later than 30 days after the conclusion of each monthly work session. This report must contain the following information:
 - (i) A summary of the dates, times, and weather during all helicopter operations, and restoration and maintenance activities.
 - (ii) Species, number, location, and behavior of any marine mammals, observed throughout all monitoring activities.

- (iii) An estimate of the number (by species) of marine mammals that are known to have been exposed to visual and acoustic stimuli associated with the helicopter operations, restoration and maintenance activities.
 - (iv) A description of the implementation and effectiveness of the monitoring and mitigation measures of the IHA and full documentation of methods, results, and interpretation pertaining to all monitoring.
- (c) Final Report: The holder of this authorization is required to submit a final monitoring report to the ARA for Protected Resources, Southwest Region, NMFS, 501 West Ocean Blvd., Suite 4200, Long Beach, CA 90802-4213; phone (562) 980-4020; and to the Chief, Permits, Conservation and Education Division, Office of Protected Resources, NMFS, at (301) 713-2289 no later than 90 days after the project is completed. The report must contain the following information:
- (i) A summary of the dates, times, and weather during all helicopter operations, restoration, and maintenance activities.
 - (ii) Species, number, location, and behavior of any marine mammals, observed throughout all monitoring activities.
 - (iii) An estimate of the number (by species) of marine mammals that are known to have been exposed to visual and acoustic stimuli associated with the helicopter operations, restoration, and maintenance activities.
 - (iv) A description of the implementation and effectiveness of the monitoring and mitigation measures of the IHA and full documentation of methods, results, and interpretation pertaining to all monitoring.

8. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein, or if the authorized taking is having a more than a negligible impact on the species or stock of affected marine mammals.

for 

James H. Lecky,
Director, Office of Protected Resources,
National Marine Fisheries Service.

Feb 16, 2011

Date

Table 1. Authorized Take Numbers for Each Species on Northwest Seal Rock

Species	Authorized Take for Northwest Seal Rock in the Pacific Ocean
Steller sea lion (<i>Eumetopias jubatus</i>) Eastern Distinct Population Segment	172
California sea lion (<i>Zalophus californianus</i>)	204
Pacific harbor seal (<i>Phoca vitulina</i>)	36
northern fur seal (<i>Callorhinus ursinus</i>)	6

Table 2. California Sea Lion (CSL) counts and responses during activities associated helicopter operations and maintenance and restoration activities. (Example).

Date	Location	Activity	Weather Tidal	Time	# CSL non-pups
2/13/2010	NWSR	Helicopter approach 1	Cloudy Low tide	8:30 am	60 total on initial approach 35 flushed and rafting 20 remain hauled out
2/13/2010	NWSR	Helicopter departure 1	Cloudy Low tide	8:40 am	5 more animals flushed 15 remain hauled out 40 CSL rafting near NWSR

INCIDENTAL TAKE STATEMENT - Endangered Species Act, Section 7

Section 9 of the ESA and Federal regulations pursuant to section 4(d) of the ESA prohibits the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(0)(2), taking that is incidental to and not the purpose of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary and must be implemented by the St. George Reef Lighthouse Preservation Society, U.S. Coast Guard, and NMFS-OPR in order for the exemption in section 7(0)(2) to apply. If either of these entities fails to implement and adhere to the terms and conditions of this Incidental Take Statement, the protective coverage of section 7(0)(2) may lapse. A marine mammal species or population stock which is listed as threatened or endangered under the ESA is, by definition, also considered depleted under the MMPA.

The ESA allows takings of threatened and endangered marine mammals only if authorized by section 101(a)(5) of the MMPA. Until the proposed action receives authorization for the incidental taking of marine mammals under section 101(a)(5)(D) of the MMPA, the incidental takes of marine mammals described below are not exempt from the taking prohibition of section 9(a), pursuant to section 7(0) of the ESA. The St. George Reef Lighthouse Preservation Society submitted an application for a Letter of Authorization in June, 2006 (deemed incomplete by NMFS), which was later modified in October, 2006 (deemed complete by NMFS). Issuance of an Incidental Harassment Authorization (not a Letter of Authorization-application received October 2006 from SGRLPS to NMFS-OPR), is anticipated by January 2010.

Amount or Extent of the Take Anticipated

The effects analyses contained in this biological opinion concluded that individual Steller sea lions may be exposed to and are likely to respond to, aircraft and human presence associated with the proposed renovation and maintenance activities. This biological opinion concluded that Steller sea lions are likely to be exposed to and likely to respond to, helicopter and human presence in ways that constitute "harassment" for the purposes of the ESA. The closer these seals are to the activities and the greater the number of times they are exposed to these activities, the greater their likelihood of being exposed to and responding to, that exposure. Based on our analysis, NMFS does not expect any Steller sea lions to be injured or killed as a result of exposure to the proposed action (refer to the *Effects of the Action* section of this biological opinion for further discussion).

The estimated six (and as many as 17 on Sunday) landings, at relatively short intervals, on a given restoration day may be considered as one bout of "taking" with variable impacts on each landing. For the purposes of this biological opinion and Incidental Take Statement, we assumed that 100% of the animals hauled out at St. George Reef Lighthouse might be exposed to renovation and maintenance activities (including helicopter and human presence), and this represents the number of times a sea lion might be "taken" in the form of harassment. Table 6 provides the estimate of anticipated exposures (Column 3 of Table 6) based on the estimated number of individuals expected to be taken (Column one of Table 6) on an annual basis using the estimate for population variance in the absence of actual count data detailed in the *Exposure Analysis* and *Integration and Synthesis* Sections). This annual estimate is likely a gross

overestimate of the number of animals expected to be hauled out at St. George Reef Lighthouse, during the proposed work window. The estimated 172 individual animals expected to be taken by harassment does not take into account that multiple individuals may be exposed more than once during each day and it is expected that some of the same individuals will be impacted over the 3-day work window (as demonstrated in the Table 6 exposure estimates). Should emergency work occur during the work window, it is anticipated that 0-4 incidents (Table 6) may occur during the 3-year proposed project period.

The minimum population estimate for the eastern DPS of Steller sea lions is 44,404, therefore this project may incidentally harass 0.4% of the total minimum population, annually, and this includes emergency work within the proposed 3-day work window; these estimates would be slightly higher should emergency work occur in addition to the 3-day work trip during the work window. It is estimated that approximately 172 individual Steller sea lions could be potentially affected by Level B behavioral harassment over the course of the proposed IHA. Estimates of the numbers of marine mammals that might be affected are based on consideration of the number of marine mammals that could be disturbed appreciably by approximately 30 hours of aircraft operations during the course of the proposed activity.

This estimate is also based on pinniped survey counts conducted by Crescent Coastal Research on Northwest Seal Rock in 1997, 1998, 1999, and 2000 (September, October, and April; see Table 5) (Crescent Coastal Research 2001), calculated for the average monthly abundance, then multiplied by six to account for the six months of the proposed restoration project between November 1 and April 30. All of the potential takes are expected to be Level B behavioral harassment only. Because of the mitigation measures that will be required and the likelihood that some pinnipeds will avoid the area during restoration and maintenance activities, no injury or mortality to pinnipeds is expected or requested.

Effect of Take

In the accompanying Biological Opinion, NMFS has determined that this level of anticipated take is not likely to result in jeopardy to the species.

Reasonable and Prudent Measures

NMFS believes the following reasonable and prudent measures are necessary and appropriate for NMFS-OPR and the USCG to minimize the impacts of incidental take on threatened and endangered species:

1. Require that the St. George Reef Lighthouse Preservation Society shall implement measures to reduce the probability of exposing Steller sea lions to renovation and maintenance activities during the work window (November 1 to April 30) beginning January 27, 2010 and ending April 30, 2012.
2. Require that the St. George Reef Lighthouse Preservation Society shall implement a monitoring program that allows the U.S. Coast Guard and NMFS to evaluate the assumptions contained in this Biological Opinion and that underlie this incidental take statement.
3. Require that the St. George Reef Lighthouse Preservation Society shall immediately cease lighthouse restoration and maintenance activities should an injured or dead Steller sea lion be found in the vicinity of Northwest Seal Rock; and that injury or death is attributed, by NMFS, to lighthouse construction or maintenance-related activities.
4. Require that the St. George Reef Lighthouse Preservation Society shall submit a report that evaluates its mitigation measures and reports the results of its monitoring program.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Endangered Species Act of 1973, as amended, the agencies must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline reporting and monitoring requirements, as required by the section 7 regulations (50 CFR 402. 14).

In addition to implementing the proposed mitigation measures NMFS-OPR and the USCG should, as detailed in the Description of the Action section of this Biological Opinion, include the following Terms and Conditions to implement Reasonable and Prudent Measure Number 1:

IA. Avoidance of a stampede, harassment, or other impacts to other islands. The helicopter shall maintain a 2.0 mile diameter "safety zone," when possible without endangering the pilot and passengers, while in transit, to avoid impacts to other Steller sea lions hauled out at other islands within the St. George Reef island chain, including the rookery at Southwest Seal Rock. The helicopter shall avoid rapid and direct approaches by approaching Northwest Seal Rock at a relatively high altitude (e.g., 800-1,000 ft or 244-305 m). Before the final approach, the helicopter shall circle lower, and approach from the area where the density of Steller sea lions is lowest. If, for any safety reasons (e.g., wind conditions of visibility) such helicopter approach and timing techniques cannot be achieved, the SGRLPS must abort the restoration and maintenance session for that day.

IB. Fuel spills. Should a fuel spill occur, be aware of the location and application of fuel spill kits and use them when necessary and use best management practices when using fuel.

IC. Secure cargo. Ensure that cargo is secure so items are not inadvertently lost from external loads.

ID. Barricade platform door. Ensure that the door to the Lighthouse's lower platform remains closed and barricaded at all times.

IE. Appropriate conduct when in the vicinity of marine mammals. Provide instructions to SGLRPS members, the restoration crew, and if applicable, to tourists, on appropriate conduct when in the vicinity of hauled out marine mammals. The SGRLPS member, restoration crew, and if applicable, tourists, shall avoid making unnecessary noise while on Northwest Seal Rock and must not view Steller sea lions around the base of the Lighthouse.

The following Terms and Conditions implement Reasonable and Prudent Measure Number 2:

2A. Monitoring. A biologist shall be present throughout restoration and maintenance activities. The biologist should be on the first flight out to the Lighthouse and either remain overnight throughout restoration activities or take the last flight out and first flight back each subsequent day of activities. The biologist and monitoring protocols are subject to approval by NMFS. A skilled aerial photographer shall complete a photographic survey of Northwest Seal Rock to compare marine mammal presence pre- and post-restoration. Photographs shall be taken at an altitude greater than 300 m (984 ft) during the first arrival flight to Northwest Seal Rock and during the last departure flight from Northwest Seal Rock.

1) At least for the first year of work, the biologist shall be present during all workdays at the Lighthouse. This requirement may be modified depending on the results of the first year of monitoring.

2) *Report any incident.* An incident is an occurrence that is not expected in the usual course of events and that has had, or could have had, adverse effect on human or wildlife safety.

2B. *Schedule of submission of Interim Monitoring Reports to NMFS.* Interim monitoring reports shall be submitted to NMFS-SWR on a monthly basis during the work window. In addition, a comprehensive Draft Interim Monitoring Report shall be submitted to NMFS-SWR at the conclusion of and within 90 days of, the work window for that year. A Final Interim Monitoring Report must be submitted to the SWR Regional Administrator within 30 days after receiving comments from the SWR Regional Administrator on the Draft Interim Report. Once comments are received, a Final Interim Report must be submitted to the Regional Administrator. If no comments are received from NMFS, the Draft Interim Monitoring Report will be considered to be the final report. Information to be included in the reports is detailed in the Incidental Harassment Authorization Permit requirement for this action.

The following Terms and Conditions implement Reasonable and Prudent Measure Number 3:

3A. *Report any injured or dead animal.* If an animal has died or become injured in the vicinity of the Northwest Seal Rock all operations must cease and officials must immediately notify the SWR Stranding Coordinator at 562-980-4017 and the Marine Mammal Center at 707-465-6265. Officials must also contact the SWR Protected Resources Division at 562-980-3232 before resuming operations to determine if the death was attributed to project activities.

The following Terms and Conditions implement Reasonable and Prudent Measure Number 4:

4A. *Schedule of submission of Final Monitoring Report to NMFS.* A draft Final Monitoring Report shall be submitted to NMFS no later than 90 days after the project is completed in 2012. A Final Monitoring Report must be submitted to the SWR Regional Administrator within 30 days after receiving comments from the SWR Regional Administrator on the Draft Monitoring Report. Once comments are received, a Final Monitoring Report must be submitted to the SWR Regional Administrator. If no comments are received from NMFS, the Draft Monitoring Report will be considered to be the final report. Information to be included in the reports is detailed in the Incidental Harassment Authorization Permit requirement for this action.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Endangered Species Act (Act) directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

The following conservation recommendations would provide information for future consultations involving the issuance of marine mammal permits that may affect ESA-listed pinnipeds, specifically Steller sea lions, as well as reduce harassment related to research activities:

1. Investigate the use of a remotely operated video camera to document biological information such as species and times of no disturbance/times of disturbance, including: estimates of actual take, estimated time animals take to return to haul out site, the number of stampedes, and/or any mortalities.
2. Observe flight and approach paths described; Alternative flight paths may be used if listed distances from wildlife are maintained.
3. Avoid flying over concentrations of wildlife.
4. Where the flight paths are such that a choice exists, approach wildlife concentration sites from down-wind to reduce any disturbance from noise, exhaust fumes, and dust.
5. Fly, land, or position cargo in a way that will not result in the significant modification of the habitat or population of any native animal.
6. Avoid "banking," particularly in helicopters, as this significantly increases the amount of noise generated.
7. Consider noise impacts if flying under low clouds when near wildlife concentrations.
8. Restrict fueling and maintenance activities to designated areas in the field or at the stations.
9. Research and adopt any other practical means of, minimizing the potential environmental impacts of aircraft activities.

REINITIATION NOTICE

This concludes formal consultation on the U.S. Coast Guard's and NMFS' proposal to permit the St. George Reef Lighthouse Preservation Society to maintain the St. George Reef Lighthouse as a Private Aid to Navigation and undertake maintenance and renovation activities from November through April, beginning January, 2009 to April 30, 2012. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of authorized take is exceeded, the U.S. Coast Guard and NMFS must immediately request reinitiation of section 7 consultation.