

6. Cumulative and Other Impacts

6.1 Resource Specific Cumulative Impact Analysis

A cumulative impact is defined as the incremental impact of the Proposed Actions and alternatives when added to past, present, and reasonably foreseeable actions. Reasonably foreseeable future actions consist of activities that have been approved and can be evaluated with respect to their impacts. Cumulative impacts can result from individually minor, but collectively significant, actions occurring over a period of time.

The cumulative impacts analysis considers past, present, and planned or reasonably foreseeable programs and projects that could affect each resource area and may add to the incremental impacts of the Proposed Actions and alternatives in the ROIs. Because the size of the ROIs is extensive, local projects will not be analyzed; instead general threats to each resource area will be analyzed. Future, reasonably foreseeable MMHSRP actions that are not fully analyzed in the PEIS are listed in Table 6-1. For the purposes of this PEIS, only those resources identified in Section 3.0 that might be impacted by the Proposed Actions and alternatives will be discussed in this section.

Table 6-1. Reasonably Foreseeable MMHSRP Actions

| MMHSRP Action | Description | Timeline |
|---|--|--|
| Standards for Rehabilitation Facilities/Release Criteria | Currently, these standards and criteria can only be implemented as guidelines. A proposed rule would be written to make these into regulations for all future rehabilitation facilities and activities. At a minimum, an EA would be prepared to assess any impacts associated with the proposed rule that have not been addressed in this PEIS, including a Regulatory Impact Review. | 1-2 years (after release of this PEIS) |
| Rehabilitation Facility Inspection Program | The MMHSRP has an interagency agreement with APHIS to plan and possibly implement an inspection program for rehabilitation facilities, based upon the Standards for Rehabilitation Facilities. | Plan in place by 2007 |
| Public Viewing Guidelines | Public viewing at rehabilitation facilities is not allowed under MMPA regulations (50 CFR 216.27 (c)(5)). Public viewing guidelines would be developed and a proposed rule would be issued to change the MMPA regulations. At a minimum, an EA would be prepared to assess any impacts associated with the proposed guidelines and rule, including a Regulatory Impact | Undetermined |

Table 6-1. Reasonably Foreseeable MMHSRP Actions (continued)

| MMHSRP Action | Description | Timeline |
|--|---|---------------------------------------|
| Disentanglement Network- Use of Divers in Water | A workshop is being planned regarding the use of divers for disentanglement activities. The workshop attendees would include national and international professionals involved in disentanglement activities. | Workshop- within the next year (2007) |

6.1.1 Biological Resources

The response, rehabilitation, and release activities of the MMHSRP would have a beneficial cumulative effect on marine mammals. The MMHSRP would continue to rehabilitate and return animals to the wild that would have died otherwise. Returning threatened and endangered animals back to the wild would have a large impact on the survival of these species. With the implementation of the release criteria, the threat of releasing diseased animals would be eliminated or minimized. Without the release criteria, a potential cumulative adverse impact could occur if diseased animals were released and infected wild populations. The MMHSRP, combined with other NMFS activities, would have beneficial cumulative impacts on all marine mammals. Other NMFS activities include: the North Atlantic Right Whale Ship Strike Reduction Strategy; Marine Mammal Conservation Plans; ESA Recovery Plans; and Take Reduction Plans.

Research activities of the MMHSRP, combined with all other past, present, and future marine mammal research authorized by permits from the NMFS PR1, could have cumulative adverse impacts on marine mammals. All research activities include takes of marine mammals. Activities have the potential to interrupt mating, feeding, and diving behaviors as well as injure or kill animals. Takes may be occurring on the same individual or group of animals and could be disrupting essential behaviors. NMFS PR1 currently has 143 scientific research and enhancement permits issued for marine mammals. Of these permits, 34 are general authorizations for Level B Harassment (Hubard pers.comm.). However, the MMHRSP activities and other permitted research activities could result in cumulative beneficial impacts on marine mammals. The information gained from these activities may lead to ways to protect and conserve all marine mammals and increase those animals that are declining.

The Standards for Rehabilitation Facilities and release criteria cannot be enforced unless they are incorporated into regulations. These regulations would have beneficial cumulative impacts on marine mammals. By law, Stranding Network participants would have to adhere to these regulations. Participants who are in violation of these regulations could be put on probation, suspended, or have

1 their SA terminated, according to the Final SA Criteria (Appendix C). The rehabilitation facility
2 regulations would ensure that rehabilitated animals would have the appropriate veterinary care in a
3 healthy environment, maximizing the success rate of rehabilitation. The release criteria regulations
4 would ensure that only healthy animals are released back to the wild, minimizing potential impacts to
5 the wild population and ensuring a better survival rate for the released animal.

6 The Rehabilitation Facility Inspection program would complement the rehabilitation facility
7 regulations. Facilities would be inspected to ensure compliance with the regulations. This program
8 along with other MMHSRP activities would have beneficial cumulative impacts on marine mammals.

9 Currently, public viewing of animals in rehabilitation is not allowed under MMPA regulations (50
10 CFR 216.27 (c)(5)). The MMHSRP would like to establish guidelines to allow public viewing that
11 would protect the animals as well as the general public. At a minimum, an EA would be prepared to
12 assess any impacts associated with the proposed guidelines and rule, including a Regulatory Impact
13 Review. The guidelines would be designed to protect animal and human health; therefore significant
14 cumulative effects on marine mammals would not be expected.

15 **6.1.2 Water and Sediment Quality**

16 The MMHSRP's activities would not likely add to the cumulative effects on water and sediment
17 quality from other activities. Sewage outfalls, agricultural runoff, stormwater runoff, industrial
18 operations, shipping operations, and coastal development all have an effect on water and sediment
19 quality. The potential impacts from the MMHSRP's activities would be negligible compared to these
20 impacts.

21 **6.1.3 Cultural Resources**

22 The MMHSRP's activities would not contribute to cumulative effects on cultural resources.

23 **6.1.4 Human Health and Safety**

24 Currently, public viewing of animals in rehabilitation is not allowed under MMPA regulations (50
25 CFR 216.27 (c)(5)). The MMHSRP would like to establish guidelines to allow public viewing that
26 would protect the animals as well as the general public. At a minimum, an EA would be prepared to
27 assess any impacts associated with the proposed guidelines and rule, including a Regulatory Impact
28 Review. The guidelines would be designed to protect animal and human health; therefore significant
29 cumulative effects on public health and safety would not be expected.

1 The MMHSRP is in the process of planning a workshop to discuss the use of divers in the water
2 during disentanglement activities. The workshop would likely be held sometime in 2007. Workshop
3 attendees will include national and international professionals involved with disentanglement. Other
4 countries have used divers to disentangle animals and the workshop will discuss the potential ways
5 this could be implemented in the U.S. If the Disentanglement Network would decide to use divers in
6 the water, a major amendment to the MMHSRP's ESA/MMPA permit would be necessary. This
7 would require at minimum, an EA to analyze the impacts on human health and safety, biological
8 resources, and any other resource that may be affected.

9 **6.1.5 Socioeconomics**

10 The Rehabilitation Facility Standards and release criteria cannot be enforced unless they are
11 incorporated into regulations. The PEIS has taken a general look at potential impacts of requiring
12 rehabilitation facilities to comply with the standards. However, at minimum, an EA would be
13 necessary to fully assess the socioeconomic impacts of making these standards into regulations. An
14 EA would be prepared to assess any impacts associated with the proposed rule that have not been
15 addressed in this PEIS, including a Regulatory Impact Review. This action is anticipated to happen
16 within one to two years after the release of this PEIS.

17 Release of pinnipeds on the West Coast could have an adverse cumulative impact. Pinniped conflicts
18 with commercial and recreational fisheries are ongoing. California sea lions and harbor seals remove
19 catch and damage gear in all types of fisheries, including gillnet, purse seine, trap and live bait
20 fisheries. Along the West Coast, seals and sea lions have taken threatened and endangered salmon
21 passing through the fish ladders. The conflict has resulted in economic losses for some commercial
22 fisheries and impaired the recovery of salmon stocks. Recreational fishers frequently move their
23 boats when sea lion are present, and incur additional fuel costs and loss of fishing time. The release
24 of pinnipeds would add individuals to already growing populations and could contribute to an
25 increase in interactions with the commercial and recreational fisheries, causing more economic losses.
26 Space conflicts between pinnipeds and humans have occurred at harbors and beaches, such as
27 Children's Pool in La Jolla, California. More animals hauled out on beaches may deter beach
28 visitors, and impact revenue gained from beachgoers. Currently no released pinnipeds have been
29 documented in any of these conflicts. Released pinnipeds or their offspring could be involved in
30 future conflicts, which may have an adverse cumulative impact on socioeconomics.

6.2 Unavoidable Adverse Impacts

Unavoidable adverse impacts on marine mammals would occur from the MMHSRP's activities. During response and rehabilitation activities, animals may still exhibit adverse reactions, sustain injuries or die, despite the best efforts made by Stranding Network participants and the proposed mitigation measures. Disentanglement activities would always require a vessel close approach, which may produce adverse reactions from animals. However, these activities would be conducted to help animals, and the long-term beneficial impacts would outweigh the short-term adverse impacts. Research activities would impact marine mammals even with the proposed mitigation measures. Animals may have adverse reactions to research activities, or may be injured or die despite the use of best available science and techniques.

Unavoidable impacts on human health and safety would occur from the MMHSRP's activities. Even with the proposed mitigation measures, there would still be a risk to marine mammal personnel safety and public safety. Some risk would always be present when working with wild animals, as their behavior is unpredictable. Disentanglement activities would always be dangerous, due to animal behavior and working on the open ocean. Public safety would be impacted, as there would be a lag time between when an animal is reported and when a Stranding Network participant gets to the scene. Between this time, people could still come in contact with the animal, risking physical injuries or potential zoonotic diseases.

6.3 Irreversible and Irretrievable Commitment of Resources

Irreversible commitments of resources are actions which disturb either a non-renewable resource or a renewable resource to the point that it can only be renewed over a long period of time (*i.e.* decades). Irretrievable commitments are losses of resources that occur for a shorter period of time. For the alternatives, most resource commitments are neither irreversible nor irretrievable. Many potential adverse impacts are short-term and temporary. Others may have a longer effect that can be reduced through the proposed mitigation measures in Section 5.

6.4 Relationship Between Short-term Uses and Long-term Productivity

This NEPA required consideration addresses the question of whether the alternatives would be providing short-term benefits at the cost of future generations. Based on the analyses presented under Section 4, Environmental Consequences, no long-term loss of productivity would be expected. The

- 1 MMHSRP's response, rehabilitation, release, and research activities would contribute to the long-
- 2 term productivity of marine mammals.

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