

7 DESCRIPTION OF ALTERNATIVES

OCNMS staff has worked over the past 24 months with its Advisory Council (AC), the Olympic Coast Intergovernmental Policy Council (IPC) and the public to review and consider revisions to the current management plan for OCNMS. During this time, the IPC, AC and OCNMS staff held public meetings, formed working groups and held workshops to consider a variety of topics that needed to be addressed in the revised management plan. The AC, IPC and OCNMS staff reviewed and analyzed all of the recommendations that emerged. This detailed analysis resulted in the development of three alternatives to the proposed action. These alternatives are:

1. A no-action alternative (alternative A)
2. An alternative containing the strategies and activities (the Final Management Plan presented in section 5.0) that OCNMS staff, the AC and the IPC agree are priorities to meet the need for this action (alternative B)
3. An alternative containing several additional or modified activities to those presented in section 5.0 (alternative C).

The preferred alternative (alternative B) is presented in full in section 5 as the final management plan. A summary of each alternative is provided in Table 12.

Table 12 Summary of three alternatives analyzed

Alternative	Description
alternative A (no action)	<ul style="list-style-type: none"> • No revisions or changes to original OCNMS 1994 management plan • No changes to original OCNMS goals (there were no objectives identified in the 1994 management plan) • No changes to OCNMS regulations • No action plans or performance measures • Continuation of existing OCNMS programs
alternative B (preferred)	<ul style="list-style-type: none"> • Set of 20 action plans presented in section 5 (Final Management Plan) • Includes the revised goals and objectives presented in section 1.3 • Includes activities describing changes to regulations being proposed concurrent with the management plan review process
alternative C	<ul style="list-style-type: none"> • Set of 20 action plans presented in section 5 (Final Management Plan) • Includes the revised goals and objectives presented in section 1.3 • Includes the regulatory changes described in alternative B, as well as the following actions: <ul style="list-style-type: none"> - Evaluate options to make compliance with the ATBA mandatory, - A regulatory ban of all large ship discharges (including cruise ships), excepting 1) vessels lacking sufficient holding capacity for sewage and graywater, and 2) specific routine discharges necessary for vessel operation. - A regulatory ban on the discharge of invasive species in the sanctuary - A regulatory change that would reduce the overflight floor over the sanctuary from 2000 feet to 1000 feet

Regulatory changes ONMS proposed in alternatives B and C were included as activities in relevant action plans, and the environmental consequences of these regulatory changes are analyzed, as required under NEPA, in section 8 of this document. These changes to OCNMS regulations involved a federal rulemaking process separate from the adoption of a revised management plan but these processes ran concurrently. Proposed regulatory changes were published in a *Federal Register* notice with its own public comment period (76 FR 2611 and 76 FR 6368).

7.1 ALTERNATIVE A (NO-ACTION ALTERNATIVE)

The no-action alternative (alternative A) would be to adopt the current OCNMS management plan – without revision – as OCNMS’ management plan for the next five to ten years. This management plan (OCNMS1993) was published in 1993 and officially adopted in 1994 at the time of sanctuary designation (it is therefore referred to as the 1994 management plan). It was OCNMS’ first management plan and dates from the time of sanctuary designation. Under the no action alternative, there would be no changes made to the 1994 management plan: no changes to existing OCNMS regulations, no changes to the existing OCNMS goals (there are no objectives in the 1994 management plan), and no inclusion of any additional information (such as the performance measures, cost estimates, budgets, action plans included in alternatives B and C).

The 1994 management plan broadly outlines the resource protection, research, education, administrative and visitor services necessary at the time of the sanctuary’s designation. The focus of this management plan was on the initiation of sanctuary research, education and protection programs. Because this management plan was written at the time of sanctuary designation, when OCNMS staff and programs were emerging, the guidance provided in the 1994 management plan is purposefully general in nature. It does not specifically address cultural resources, local and customary knowledge or the socioeconomic values of resources in the sanctuary, but it does not prohibit work on these topics.

Because the 1994 management plan is written so broadly, any of the non-regulatory actions (administrative, resource protection, research, education and outreach, visitor services, maritime heritage) detailed under alternatives B and C (i.e., in the 20 action plans) could conceivably be implemented under alternative A (no action) – even though alternative A does not include these action plans. ONMS does not believe the no-action alternative would adequately address the purpose and need for revising the management plan. Because extensive efforts in collaboration with multiple partners were made through the management plan review process to evaluate OCNMS programs and more clearly define future priorities, it is likely that non-regulatory actions in alternative B would be implemented under the no action alternative. Thus, in the Environmental Consequences discussion (section 8.0), the environmental and human effects of non-regulatory actions in alternative A are addressed through analysis of alternatives B and C.

The environmental and socioeconomic consequences of alternative A are analyzed in section 8.0 of this document.

7.2 ALTERNATIVE B (PREFERRED ALTERNATIVE)

The preferred alternative (alternative B) is adopted as the Final Management Plan (FMP) presented in section 5.0 of this document in place of the 1994 OCNMS management plan. The FMP is comprised of 20 action plans organized under five of the six priority issues described in section 4.0 (priority management need one – treaty trust responsibility – does not encompass action plans per se, but is discussed in detail in section 2.0):

1. Treaty Trust Responsibility
2. Achieve Effective Collaborative and Coordinated Management
3. Conduct Collaborative Research, Assessments and Monitoring to Inform Ecosystem-Based Management
4. Improve Ocean Literacy
5. Conserve Natural Resources in the Sanctuary
6. Understand the Sanctuary's Cultural, Historical and Socioeconomic Significance

The action plans describe the work OCNMS staff would undertake over the next five to ten years, which includes both regulatory and non-regulatory activities. There are several regulatory changes associated with alternative B, and they will be issued in the same timeframe as the FMP. These regulatory changes, which include technical clarifications to the OCNMS regulations and a ban on cruise ship discharges, are noted in the relevant action plans and their impacts are analyzed in section 8.0 (Environmental Consequences). All regulatory changes are proposed as a separate rulemaking process and will be announced in the *Federal Register*. OCNMS is synchronizing the rulemaking and management plan review processes to streamline these efforts; and this EA will be used to support both processes.

Each action plan is comprised of a series of strategies and activities both regulatory and non-regulatory in nature. In addition to the 20 actions plans, the FMP contains cost estimates for each strategy, a suite of performance measures by which OCNMS would evaluate its effectiveness in implementing the management plan, and an implementation table showing the level of priority (high, medium, low) for each strategy under three budget scenarios: a level-funded budget, a moderately-increased budget and a substantially-increased budget. Alternative B provides substantially more detail about the work OCNMS will undertake than does the no action alternative A, which provides only broad descriptions of OCNMS program areas. Moreover, by including performance measures, cost estimates and an implementation plan, alternative B will create a high level of accountability not provided under alternative A.

Alternative B, in addition to encompassing all the actions proposed in section 5.0 (Final Management Plan), also includes the revised OCNMS goals and objectives presented in section 1.3. These goals and objectives replace the goals in the original 1994 management plan.

Alternative B (preferred) is the alternative that best meets the purpose and need for revising the OCNMS management plan. Alternative B and the 20 action plans it encompasses address all of the primary needs identified, including:

- Updating an out-of-date management plan
- Addressing recent changes in regional ocean governance
- Filling data gaps
- Incorporating new technologies
- Addressing issues that have emerged over the past 16 years

Moreover, the suite of regulatory and non-regulatory activities in alternative B address these needs in a manner best complementing the existing programs, policies and regulations of OCNMS' key ocean management and conservation partners in the region. Over 100 regional experts were involved in developing and refining the action plans presented in alternative B. These action plans identify a clear and precise role for OCNMS in each of the 20 topic areas they cover – a role that would not duplicate the efforts of others and would provide for the most effective use of OCNMS' limited resources.

The environmental and socioeconomic consequences of alternative B are analyzed in section 8.0 of this document.

7.3 ALTERNATIVE C (NOT PREFERRED)

Alternative C is based on alternative B (preferred) by adopting the FMP (and 20 its action plans) presented in section 5.0, but with modifications to specific action plans and strategies. The modifications included in alternative C follow:

1. In the Spills Prevention, Preparedness, Response and Restoration Action Plan, **Strategy SPILL1: ATBA Management, Compliance and Monitoring would be modified to include the following new *non-regulatory* activity:**

“Work collaboratively with other Federal agencies and the International Maritime Organization (IMO) to evaluate options to make compliance with the ATBA mandatory.”

Currently, the Olympic Coast ATBA is an International Maritime Organization (IMO) voluntary vessel routing measure. Under alternative B (preferred), it would remain voluntary and ONMS would work with the USCG to prepare a proposal to the International Maritime Organization Subcommittee on Safety of Navigation to pass implementing legislation requiring that “restrictions apply to all vessels required to prepare a response plan pursuant to Section 311(j) of the Federal Water Pollution Control Act (33 U.S.C. 1321(j)) (other than fishing or research vessels while engaged in fishing or research within the area to be avoided)” (Section 704, Coast Guard Authorization Act for Fiscal Years 2010 and 2011). The ATBA does not apply to public vessels, or vessels owned or chartered and operated by the United States, or by a State or political subdivision thereof, or by a foreign nation, except when the vessel is engaged in commerce.

Currently, compliance with the ATBA is voluntary and, under Alternative B (preferred), it would remain voluntary. Under alternative C, ONMS would work with its partners over the next five to ten years to evaluate options to make the ATBA mandatory. Options considered included both domestic federal regulations under the authority of the

USCG (i.e., Port and Waterways Safety Act) and the ONMS (i.e., National Marine Sanctuaries Act), and IMO vessel routing measures under the authority of the United Nations Convention on the Law of the Sea.

Under Alternative C, ONMS would not immediately pursue domestic or international regulatory changes, but would work during the management plan implementation process (i.e., over the next five to ten years) to develop a new regulation(s) that mandates compliance with the ATBA. Once a proposed regulatory change is agreed upon, it would go through its own separate process.

Interest in strengthening the ATBA has come up repeatedly since its original adoption in 1994. In 2002 ONMS, working with the USCG and the IMO, modified the original provisions based on the results of a USCG Port Access Routes Study completed in 2000 (USCG 2000). This study evaluated the need for modifications to vessel routing and traffic management measures in the Strait of Juan de Fuca and adjacent waters, including the sanctuary. Recommendations included three that applied to sanctuary waters: (1) a proposal to amend the IMO-adopted ATBA off the Washington Coast to increase its size and extend its applicability to commercial ships of 1,600 gross tons and above; (2) a proposal for recommended routes in the United States waters of the Strait of Juan de Fuca for smaller, slower moving vessels that normally do not use the traffic separation scheme; and (3) a proposal amending the existing traffic separation schemes (TSSs) in the Strait of Juan de Fuca and its approaches (66 F.R. 6514). All 3 proposals were approved by the International Maritime Organization in May 2002 (67 F.R. 70933).

Interest in strengthening the ATBA was also expressed during the public scoping comment period for MPR and by a member of the public during a public comment period at an AC meeting. In 2007 the Washington State Oil Spill Advisory Council requested that OCNMS consider extending ATBA applicability to cover unladen oil barges (which carry some residual oil). Similar concerns recently led Senator Maria Cantwell (WA-D) to include provisions in legislation to strengthen the ATBA through expansion of the vessels covered by this voluntary measure (Section 704, Coast Guard Authorization Act for Fiscal Years 2010 and 2011). Given a hazardous spill is perhaps the most significant threat to resources in the sanctuary, it is reasonable to consider an alternative that strengthens the ATBA.

The Advisory Council working group focused on Spills Prevention, Preparedness, Response and Restoration did not consider a recommendation to strengthen the ATBA because the current voluntary ATBA has such a high compliance rate (98.9% compliance in 2009, WDE 2010). For this reason the alternative to consider mandatory compliance to the ATBA was not included in OCNMS' preferred alternative.

2. In the Wildlife Disturbance Action Plan, **Strategy WD2: Overflight Restriction Zone would be modified to include the following *regulatory* activity:**

“During the management plan review process, modify OCNMS regulations to reduce the overflight floor over the sanctuary from 2,000 feet to 1,000 feet.”

This new activity would represent a change to OCNMS regulations not proposed under alternative B (preferred). Under alternative B (preferred) the overflight floor (minimum altitude) would remain at 2,000 feet.

Of the four West Coast sanctuaries with overflight regulations, OCNMS is the only one with a 2,000 foot overflight regulation; the other three sanctuaries have a 1,000 foot overflight regulation. Existing literature suggests a 1,000 foot restriction is generally adequate to protect wildlife. However, the Federal Aviation Administration (FAA) has a policy for noise-sensitive areas recommending a 2,000 foot minimum altitude over national parks and wildlife refuges (FAA AC 91-36d), such as Olympic National Park (ONP) and the Washington Maritime National Wildlife Refuge Complex (WMNWRC), the jurisdictions of which overlap with the sanctuary. This FAA policy is advisory in nature and is not enforceable. The current OCNMS regulation was established for consistency with this advisory. In recent years, OCNMS staff has been considering the possibility of reducing the overflight regulation from 2,000 to 1,000 feet because it is less restrictive to the public and could still meet the objective of protecting wildlife in the sanctuary.

This alternative is not preferred because, while lowering the elevation is not expected to have significant adverse impacts on wildlife in the sanctuary, it is not expected to improve resource protection for wildlife. In addition, the aesthetic climate of the wilderness coastline of ONP could be degraded by lowering the enforceable minimum altitude for overflights. Moreover, changing OCNMS' overflight regulation in this way would make it inconsistent with overflight advisories over adjacent National Park Service and U.S. Fish and Wildlife lands, which might lead to confusion for pilots.

3. In the Water Quality Protection Action Plan, **Strategy WQP1: Vessel Discharges, Activity B** (cruise ship discharge regulatory ban) **would be revised to state:**

Activity B: During the management plan review process, modify OCNMS regulations to prohibit:

- all discharges from cruise ships into waters of the sanctuary except clean vessel engine cooling water, clean vessel generator cooling water, clean bilge water, anchor wash. (existing language for alternative B)
- all discharges (except when limited by sewage or graywater holding capacity) from vessels 300 gross tons and above into waters of the sanctuary, except clean vessel engine cooling water, clean vessel generator cooling water, clean bilge water, anchor wash.

Under alternative B (preferred), this activity would be directed solely toward prohibiting cruise ship discharges. Under alternative C, this regulatory action would be expanded to address all vessels 300 gross tons and above for all discharges, with noted exceptions required for operations and vessels lacking sufficient holding tank capacity for sewage or graywater to hold effluent while within the sanctuary.

Interest in water quality and the effects of vessel discharges (including cruise ship discharges) in the sanctuary were expressed during the MPR public scoping period and during subsequent public comment periods at AC meetings. The Living Resource Conservation Working Group's findings to the Advisory Council recommended a regulatory prohibition on cruise ship discharges in OCNMS and several non-regulatory activities to address other discharge concerns. OCNMS staff considered a broader prohibition of discharges from additional vessel classes. Prohibiting all discharges from large vessels in the sanctuary would be consistent with the NMSA's primary objective of resource protection and could meet the need to update the 1994 management plan to reflect the development of issues since the publication of the 1994 management plan. A discharge ban on all large vessels would reduce the volume of wastewater discharged to the sanctuary and would avoid singling out one industry (i.e., cruise ship) in the analysis.

This is not the preferred alternative for addressing vessel discharges because vessels other than cruise ships generate a proportionally smaller discharge volume relative to that generated by cruise ships. Cruise ships carry many passengers, whereas most other large vessels traversing or working in the sanctuary have relatively small crews and thus do not generate nearly the volume of discharges that cruise ships do.

Given the current knowledge on vessel discharge impacts to the marine environment and the existing state of Washington regulation prohibiting all vessel discharges within three miles of the shoreline, NOAA believes eliminating discharges from cruise ships in the sanctuary would provide ample protection of sanctuary resources at this time. Additionally, there are specific, non-regulatory actions proposed in the actions plans under alternative B addressing additional discharges.

4. In the Habitat Protection Action Plan, **Strategy HP3: Invasive Species would be modified to include the following new activity:**

"During the management plan review process, modify OCNMS regulations to ban the discharge of invasive species in the sanctuary."

ONMS defines the term "invasive species" according to the state of Washington Invasive Species Council definition, "*invasive species include non-native organisms that cause economic or environmental harm and are capable of spreading to new areas of the state. Invasive species does not include domestic livestock, intentionally planted agronomic crops, or non-harmful exotic organisms.*" The Washington Invasive Species Council maintains an updated list of invasive species (aquatic and terrestrial) for the state of Washington. OCNMS would implement this regulation according to the most current version of this list.

It should be noted several of the national marine sanctuaries in California implemented similar regulatory bans, but these sanctuaries banned introduction of introduced (not invasive) species and defined introduced species as, "any species (including but not limited to any of its biological matter capable of propagation) that is non-native to ecosystems of the sanctuary; or any organism into which altered genetic matter, or genetic matter from another species, has been transferred in order that the host organism

acquires the genetic traits of the transferred genes.” ONMS has chosen to use the Washington Invasive Species Council definition of invasive species so an OCNMS discharge ban on invasive species would complement and be consistent with state of Washington efforts toward invasive species. Additionally, the Washington Invasive Species Council has formal, established and scientifically supported procedures for identifying which species meet their definition. This Council regularly updates and refines this list as necessary. Thus, OCNMS, in using the council’s definition, would also be able to use and refer sanctuary users to the State’s list of invasive species. Using the state’s list of invasive species would reduce confusion for sanctuary users trying to adhere to both state and OCNMS invasive species regulations.

This new management plan activity would represent an additional change to OCNMS regulations that is not proposed under alternative B (preferred). Under alternative B there would be no regulatory changes related to the discharge of invasive species.

Concern about preventing the introduction of invasive species was expressed during the MPR public scoping period. In particular, there was concern about the potential culture of invasive species in the sanctuary, such as Atlantic salmon, which is defined as a regulated invasive species by the Washington Invasive Species Council. While cultured species are regulated and have been managed in Washington waters for many decades, some cultured species, such as Atlantic salmon, are known to have escaped culture pens and caused impacts to native species (Naylor et al. 2005).

The Living Resources Conservation Working Group and the Collaborative Research, Assessments and Monitoring Working Group of the Advisory Council both considered recommending actions to address the issue of invasive, non-native species. However, the Living Resources Conservation Working Group, after reviewing existing state and regional regulations and policies related to invasive species, concluded an OCNMS regulation related to invasive, non-native species was unnecessary. However, a regulation to prevent the introduction of invasive, non-native species would be consistent with the NMSA’s primary objective of resource protection, and it could meet the need to update the 1994 management plan to reflect issues arising since the publication of the 1994 management plan.

This alternative is not preferred, however, for several reasons:

- One of the primary vectors for invasive species introductions in the sanctuary is ballast water. The state of Washington has extensive ballast water regulations, the aim of which is to prevent the introduction of invasive species (<http://wdfw.wa.gov/fish/ballast/ballast.htm>). These regulations are some of the strongest in the nation. These state regulations prevent the exchange of ballast water in or near sanctuary waters because vessels traveling into the U.S. from another country are required to exchange ballast water more than 200 nmi from shore, and vessels traveling along the U.S. coast must exchange ballast water further than 50 nmi from shore. OCNMS believes existing state regulations are an effective way to address this issue and banning the discharge of non-native

species would not strengthen protections already provided by WA state ballast water regulations.

- The other primary vector for non-native species invasions into the sanctuary is the potential spread of invasive species from populations adjacent to the sanctuary (i.e., European green crab). A regulation would not address the potential movement or range expansion of existing invasive species into the sanctuary (unless a person was caught carrying a European green crab into the sanctuary, which is highly unlikely). The most effective strategy to address a range expansion of an invasive species is monitoring for their presence and working with partners to establish eradication plans.
- Another potential vector for introduction of invasive species would be an aquaculture facility within the sanctuary. However, there are currently no aquaculture facilities in the sanctuary, nor are any foreseen at this time. Any development of aquaculture within the sanctuary is unlikely due to dynamic ocean conditions of the outer Washington coast. Further, an aquaculture operation, which required a sanctuary permit due to seabed disturbance, discharge, or otherwise, would allow OCNMS to consider all the potential impacts of the operation, including potential impacts from the culture of invasive species. Thus, it is not necessary for OCNMS to enact a specific invasive species regulation of this nature. That being said, OCNMS should continue to stay abreast of aquaculture technology developments and, if necessary, revisit this issue during the next management plan review process.

In addition to these four modifications, alternative C also encompasses the revised OCNMS goals and objectives presented in section 1. Should alternative C be selected, these goals and objectives would replace the goals in the original 1994 management plan.

The environmental and socioeconomic consequences of these modifications are analyzed in section 8 of this document.