



# Chapter 2 Alternatives

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1 **2.0 ALTERNATIVES**

2 **2.1 Introduction**

3 This chapter describes and compares the alternatives under consideration, including the proposed  
4 action. Figure 1-1 in Chapter 1 provides a map of the Makah Indian Tribe's (Makah's or Tribe's)  
5 usual and accustomed fishing grounds (U&A) and the proposed action area within the Makah  
6 U&A where the Tribe proposes to hunt eastern North Pacific (ENP) gray whales for ceremonial  
7 and subsistence purposes. All further references to 'gray whales' or 'whales' in this chapter are to  
8 ENP gray whales. Section 2.2 describes the process NMFS followed to formulate the alternatives.  
9 Section 2.3 describes the alternatives analyzed in detail in this environmental impact statement  
10 (EIS). Section 2.4 includes alternatives NMFS considered but eliminated from detailed analysis,  
11 and Section 2.5 compares the way the alternatives NMFS is analyzing in detail address the key  
12 concerns raised during scoping (described in Section 1.5.2, Concerns Identified During Scoping),  
13 which are summarized below:

- 14 • Conservation impacts (to gray whales and the local marine ecosystem)
- 15 • Impacts on the Makah Tribe
- 16 • Other impacts on the local human environment (such as public safety, aesthetics, public  
17 sentiment regarding whales, and tourism/whale-watching)

18 Table 2-2, which is placed at the end of this chapter, is a resource matrix that compares the  
19 resource effects among alternatives.

20 **2.2 Alternative Development Process**

21 The National Marine Fisheries Service (NMFS) received the Makah's request for a waiver of the  
22 Marine Mammal Protection Act (MMPA) take moratorium in February of 2005. NMFS reviewed  
23 the request and concluded that it contained relevant and appropriate information to warrant  
24 proceeding with a full evaluation. The agency held a series of internal meetings to determine  
25 appropriate public scoping procedures and to identify a set of preliminary alternatives to serve as  
26 a starting point for discussions in public scoping meetings. Section 1.5.1.1, Internal Scoping,  
27 contains detailed information on the process. NMFS initially focused the scope of its review on  
28 the MMPA formal rulemaking process (Section 1.2.3, Marine Mammal Protection Act, for more  
29 detail about the legal framework and formal rulemaking process of the MMPA). Four public  
30 scoping meetings were held in the fall of 2005 at which the public was invited to offer and

1 discuss potential alternatives to be analyzed and discuss resources that may be affected by those  
2 alternative actions in the project area. Section 1.5.1.2, Public Scoping, contains more detail.

3 During fall of 2005, NMFS also received 247 written public comment submittals during the  
4 60 days of public scoping. Several comments addressed the International Whaling Commission  
5 (IWC) and Whaling Convention Act (WCA) aboriginal subsistence whaling processes and  
6 associated catch limits and quotas, leading NMFS to reconsider its previous decision to analyze  
7 only the MMPA formal rulemaking process in this EIS. In January 2006, the Makah Tribe wrote  
8 a letter asking NMFS to consider its request to resume whaling under all applicable laws and  
9 regulations, including the WCA. In February 2006, NMFS published a notice of its decision to  
10 expand the scope of the EIS to include publication of aboriginal subsistence whaling quotas for  
11 the Makah under the WCA. This decision allowed NMFS to address all key concerns under its  
12 jurisdiction related to Makah whaling in a single EIS. NMFS reopened public comment for 30  
13 days in the spring of 2006 and received 91 written public comments (Section 1.5.1.2, Public  
14 Scoping, for more information about the public scoping process). The agency then developed a  
15 full range of EIS alternatives for internal review and discussion, based on its review of several  
16 sources of information:

- 17 • The Makah Tribe's request
- 18 • Public comment
- 19 • Input from other Federal agencies, (including the Bureau of Indian Affairs as NMFS'  
20 cooperating agency)
- 21 • NMFS' previous experience conducting environmental reviews of Makah whaling  
22 proposals
- 23 • The MMPA and its regulations
- 24 • The WCA and its regulations
- 25 • The Council on Environmental Quality's National Environmental Policy Act (NEPA)  
26 regulations (40 Code of Federal Regulations [CFR] 1500-1508)
- 27 • Other applicable statutes and regulations
- 28 • The Treaty of Neah Bay
- 29 • The federal trust responsibility

30 The Council on Environmental Quality's regulations require that an agency consider and assess  
31 the environmental consequences of a No-action Alternative, the proposed action alternative, and  
32 other reasonable alternatives (40 CFR 1502.14). Reasonable alternatives, along with the proposed  
33 action and the No-action Alternative, must be rigorously explored and objectively evaluated in

1 the EIS and presented in comparative form to define the issues sharply and provide the decision-  
2 maker with a clear basis for choice among the options (40 CFR 1502.14). An agency preparing an  
3 EIS must, therefore, make a threshold determination of reasonableness when selecting  
4 alternatives from those identified during internal and public scoping. Alternatives that meet the  
5 reasonableness threshold are analyzed in detail in the EIS, while alternatives that do not meet this  
6 threshold are eliminated from detailed study.

7 The Council on Environmental Quality's regulations and guidance include general quantitative  
8 and qualitative factors to consider when evaluating reasonableness of alternatives. According to  
9 the Council on Environmental Quality's '40 Most Asked Questions' publication, the number of  
10 reasonable alternatives to analyze in detail depends on the nature of the case, but should cover a  
11 full spectrum of alternatives to the proposed action (46 Federal Register [FR] 18026, 18027(1b),  
12 March 23, 1981). Qualitatively, reasonable alternatives include those alternatives that are  
13 practical or feasible from the technical and economic standpoint and use common sense, rather  
14 than being simply desirable from the standpoint of the applicant (46 FR 18027(2a)). Reasonable  
15 alternatives may also be outside the legal jurisdiction of the lead agency (that is, may require  
16 legislative implementation) (46 FR 18027(2b)).

17 To develop the full range of action alternatives, NMFS considered the principal components  
18 associated with a hunt. These components were identified during scoping:

- 19 1. The time when whale hunting would occur
- 20 2. The area where whale hunting would occur
- 21 3. The annual and five-year limits on the number of whales harvested, struck, and struck and  
22 lost
- 23 4. Cessation of whale hunting if a predetermined number of identified whales were harvested
- 24 5. The method of hunting

25 NMFS developed a full range of reasonable alternatives by combining and varying these  
26 components in ways that would illuminate potential impacts and key concerns. The agency did  
27 not develop separate alternatives that would alter the fifth component, the method of hunting.  
28 Instead NMFS identified all possible methods of striking and killing whales, based on the Tribe's  
29 request, internal scoping, public comments, and an examination of aboriginal subsistence hunting  
30 world-wide. It eliminated from consideration those hunting methods considered unreasonable.  
31 Those methods, and the basis for concluding they are unreasonable, are described in Section

1 2.4.5, Employ Different Hunting Methods. The hunting methods not eliminated as unreasonable  
2 are included for analysis and incorporated into each of the action alternatives. The method of  
3 hunting is, therefore, treated as an element common to all action alternatives. All components are  
4 described more fully below under the proposed action and other action alternatives.

5 To assess the reasonableness of an alternative, NMFS considered the potential of the alternative  
6 to meet the project's purpose and need. Factors considered included consistency with applicable  
7 law, practicability and feasibility, and the extent to which it would identify and illuminate  
8 potential impacts or key concerns (see the summary of key concerns above in Section 2.1,  
9 Introduction).

## 10 **2.3 Alternatives Considered for Detailed Study**

11 This EIS analyzes six alternatives in detail. Outside of the No-action Alternative (described in  
12 Section 2.3.1), the five action alternatives (described in Sections 2.3.3 through 2.3.7) would allow  
13 the Makah Tribe to conduct limited ceremonial and subsistence hunting of gray whales, but  
14 would impose different restrictions on any hunt. These restrictions would differ with respect to  
15 the first four principal components discussed above in Section 2.2, Alternative Development  
16 Process. Differences in those components among all alternatives are displayed in Table 2-1. All  
17 action alternatives would require NMFS to waive the take moratorium, promulgate regulations,  
18 issue a permit under the MMPA, and authorize whaling under the WCA by publishing a quota.  
19 Other elements in common among action alternatives, including method of the hunt, are  
20 described below in Section 2.3.2, Elements Common among Action Alternatives. Alternatives  
21 NMFS considered but eliminated from detailed study are described in Section 2.4, Alternatives  
22 Considered but Eliminated from Detailed Analysis. Alternatives NMFS determined were out of  
23 scope are described in a separate memorandum to the file (NMFS 2007a).

### 24 **2.3.1 Alternative 1 (No-action)**

25 The No-action Alternative would result in no authorized hunting of gray whales by the Makah  
26 Tribe. NMFS would not waive the MMPA take moratorium, promulgate regulations, issue  
27 permits, publish any quota for the Makah under the WCA, or enter into any cooperative  
28 management agreement with the Makah Tribe for ENP gray whale hunts. The IWC catch limit of  
29 620 whales for the five-year period beginning in 2008 would not change if NMFS were to adopt  
30 the No-action Alternative. Under the No-action Alternative, no part of the catch limit would be  
31 allocated to the Makah Tribe, so the entire catch limit would be available for harvest by the

1 Chukotka Natives. Examining the No-action Alternative will provide the public and NMFS with  
2 information about the following:

- 3 • Cultural and social impacts on the Makah Tribe if tribal members are unable to exercise  
4 their treaty right to hunt whales in their U&A
- 5 • Conservation impacts on gray whales and the local marine ecosystem if no gray whales  
6 are hunted in the action area
- 7 • Social effects from no hunting, including public safety, aesthetics, and public sentiment  
8 regarding whales
- 9 • Tourism/whale-watching effects if no gray whales are hunted in the action area

### 10 **2.3.2 Elements Common among Action Alternatives (Alternatives 2 - 6)**

11 All of the action alternatives would allow the Makah Tribe to conduct limited ceremonial and  
12 subsistence hunting of gray whales. Consistent with the bilateral agreement between the United  
13 States and Russia, gray whales harvested by the Makah Tribe would be counted against the IWC  
14 catch limit and not available for harvest by the Chukotka Natives. The action alternatives have  
15 several elements in common, which are discussed in detail under Alternative 2 (Proposed Action,  
16 Section 2.3.3) and which also apply to the remaining alternatives. The descriptions for  
17 Alternatives 3 to 6, therefore, describe only those elements that are distinct from Alternative 2.  
18 Elements in common among all action alternatives include the following:

- 19 • MMPA waiver, regulations, and any necessary permits
- 20 • WCA quota publication and execution of a cooperative agreement
- 21 • Hunting of gray whales only (no other marine mammal would be harvested)
- 22 • No hunting of a whale calf or whale accompanied by a calf
- 23 • Gray whale product use and distribution
- 24 • Certain public safety measures and enforcement
- 25 • Training, certification, and permit process for tribal whalers and whaling captain
- 26 • Makah Department of Fisheries Management and NMFS hunt observers
- 27 • Tribal enforcement of whaling regulations
- 28 • Adaptive management plan with monitoring
- 29 • Ongoing gray whale management and monitoring at the national and international levels
- 30 • Method of hunt

31 During public scoping, several commenters asked that this EIS examine alternative methods of  
32 hunting (the last item in this list). The method of hunting itself includes the vessels used to scout,

1 pursue, and tow animals, as well as the weapons used to strike and/or kill animals. Different  
2 methods may have different effects on individual whales, on other marine wildlife (for example  
3 disturbance from noise associated with firearms), and on public and hunter safety. NMFS  
4 concluded this EIS could best identify and illuminate the impacts associated with alternative  
5 hunting methods by identifying reasonable options for striking and killing whales and by  
6 collectively treating those options as an element common among action alternatives, because each  
7 different method of hunting could be accommodated by all of the action alternatives. In the  
8 analysis of all action alternatives, therefore, this EIS will examine the impacts of the two options  
9 for striking and killing whales – the proposed method and an alternative method.

**TABLE 2-1. PRIMARY DIFFERENCES AMONG ALTERNATIVES**

WHALE HUNTING COMPONENTS		ALTERNATIVES					
		1 NO-ACTION	2 PROPOSED ACTION	3 HUNT OUTSIDE STRAIT, NO TIMING RESTRICTIONS, NO IDENTIFIED WHALE LIMITS	4 SANCTUARY AND NATIONAL WILDLIFE REFUGE RESOURCE ALTERNATIVE	5 HUNT OUTSIDE STRAIT, NO TIMING RESTRICTIONS, MORE RESTRICTIVE NUMBERS, NO IDENTIFIED WHALE LIMITS	6 HUNT ANYWHERE IN U&A, NO TIMING RESTRICTIONS, NO IDENTIFIED WHALE LIMITS
Hunt timing		Not authorized	December 1 through May 31	January 1 through December 31	Same as Alternative 2	Same as Alternative 3	Same as Alternatives 3, 5
Hunt area		None	U&A west of Bonilla-Tatoosh line <sup>1</sup>	Same as Alternative 2	Same as Alternative 2,3, except prohibit hunting within 200 yards of rocks and islands at all times	Same as Alternatives 2, 3	Entire U&A <sup>2</sup>
Maximum limit for harvested, struck, and lost whales	Annual	0	Up to 5 harvested, 7 struck, and 3 struck and lost	Same as Alternative 2	Same as Alternatives 2, 3	Up to 2 harvested, 3 struck, and 1 struck and lost	Same as Alternative 2
	Five-year	0	Up to 20 harvested, 35 struck, and 15 struck and lost	Same as Alternative 2	Same as Alternatives 2, 3	Up to 10 harvested, 15 struck, and 5 struck and lost	Same as Alternatives 2, 3, 4
Additional limits for identified whales		Not Applicable	Yes	No	Same as Alternative 2	Same as Alternative 3	Same as Alternatives 3,5

1 U&A west of Bonilla-Tatoosh line is the Makah Tribe's U&A fishing grounds off the coast of Washington and west of the Bonilla-Tatoosh line, excluding the Strait of Juan de Fuca. See Figure 1-1.

2 The entire Makah Tribe U&A includes the Strait of Juan de Fuca and waters off the coast of Washington, as adjudicated by United States v. Washington (1974 and 1985). See Figure 1-1.

1 The Makah Tribe proposes to hunt gray whales using a hand-thrown, toggle-point harpoon to  
2 strike the whale and a .50 caliber rifle to kill the whale. As another option, this analysis also  
3 evaluates using explosive grenades to strike and/or kill whales. Both the Tribe’s proposed method  
4 and this optional method are described in 2.3.3.2.5, Overview of Proposed Hunting Method.  
5 Other methods raised during the scoping process that are not analyzed in detail in this EIS are  
6 discussed in Section 2.4, Alternatives Considered but Eliminated from Detailed Analysis (Section  
7 2.4.5, Employ Different Hunting Methods).

### 8 **2.3.3 Alternative 2 (Proposed Action)**

9 NMFS based its description of the Makah Tribe’s proposed action on the Tribe’s February 2005  
10 MMPA waiver request and subsequent January 2006 request that NMFS take all actions  
11 necessary under applicable laws to allow treaty whale hunting. In its waiver request, the Tribe  
12 referred to a whale management plan it adopted in 1998 and revised in 2001 to govern its future  
13 proposed whale hunts. The Tribe’s waiver request includes a proposal that NMFS issue  
14 regulations with provisions similar to those contained in the 2001 Gray Whale Management Plan.  
15 The waiver request and the management plan are provided as Appendix A to this EIS, along with  
16 the Makah’s subsequent letter requesting that NMFS complete all legal processes necessary to  
17 authorize any hunts. In its MMPA waiver request, the Tribe proposed to abide by the specific  
18 conditions described below.

#### 19 **2.3.3.1 Regulatory Actions Requested of NMFS**

20 The Makah Tribe is seeking to conduct limited hunting of gray whales in the coastal portion of  
21 the Makah U&A, (that is, excluding the Strait of Juan de Fuca) (Figure 1-1). Whaling is a right  
22 expressly secured in the 1855 Treaty of Neah Bay. Pursuant to the court’s decision in *Anderson v.*  
23 *Evans* (2004), to hunt whales, the Makah Tribe is seeking to obtain domestic authorization from  
24 NMFS under two statutory authorities — the MMPA and the WCA.

25 Specifically, NMFS would have to authorize any Makah whaling by (1) waiving the moratorium  
26 prohibiting take of marine mammals under Section 101(a)(3)(A) of the MMPA, (2) promulgating  
27 regulations implementing the waiver and governing the hunts in accordance with Section 103 of  
28 the MMPA, (3) issuing any necessary permits to the Makah under Section 104 of the MMPA, and  
29 (4) entering into a cooperative agreement for co-management of the hunt and publishing any

1 relevant aboriginal subsistence whaling quotas under the provisions of the WCA  
2 (see Section 1.2.3, Marine Mammal Protection Act, and Section 1.2.4, Whaling Convention Act,  
3 for a discussion of those statutes).

#### 4 **2.3.3.2 Eastern North Pacific Gray Whale Hunt Details**

##### 5 **2.3.3.2.1 Species (Element Common among Action Alternatives)**

6 The Makah Tribe is requesting a waiver to hunt gray whales only. No other species are included  
7 in their waiver request; thus, intentional take of marine mammals is not analyzed in this EIS  
8 (though the potential for incidental take is considered).

##### 9 **2.3.3.2.2 Numbers and Status of Whales Harvested (Five-year and Annual)**

10 The Tribe proposes to limit the number of gray whales that may be harvested to no more than  
11 five whales in any calendar year and no more than 20 whales in any five-year period. A harvested  
12 whale is one that has been secured to the Makah canoe and/or chase boats and support vessels  
13 with floats and towing lines. Harvested whales might be landed on the beach for butchering, or  
14 lost at sea (i.e., struck and lost) and presumed dead. The Tribe's request refers to 'take' of whales,  
15 a term defined in the IWC Schedule to mean "to flag, buoy, or make fast to a whale catcher"  
16 (IWC Schedule 2006, paragraph (1)(c)), but defined in the MMPA to mean "harass, hunt, capture,  
17 or kill, or attempt to harass, hunt, capture, or kill" (16 United States Code [USC] 1362(13)). To  
18 clarify the Makah's proposed hunting activities for the purposes of this EIS, NMFS substituted  
19 the phrase 'harvest' for 'take.' All whale hunting activities that the Makah propose (i.e., harvests,  
20 strikes, struck and lost, and harassed) are takes under the MMPA. The Tribe also proposes to  
21 limit the number of harvested whales further if necessary to meet international treaty obligations  
22 of the United States under the International Convention for the Regulation of Whaling (ICRW),  
23 or to prevent the abundance of the gray whale stock from falling below its optimum sustainable  
24 population (OSP) level (Section 3.4.2.1, Marine Mammal Protection Act Management, provides  
25 an explanation of OSP).

#### 26 **Additional Limits on Harvesting Whales Identified in Local Survey Areas**

27 Generally, gray whales migrate seasonally along the coast of North America between a summer  
28 range as far north as the Chukchi and Beaufort Seas to a winter range as far south as the Baja  
29 California Peninsula and Gulf of California in northwestern Mexico. During the spring northward  
30 migration, most gray whales migrate as far north as the Bering, Chukchi, and Beaufort Seas to  
31 feed intensively during the summer months. Some whales find adequate food sources further  
32 south along their migration and remain to feed during the summer feeding period (approximately

1 June 1 through November 30). The whales that feed in the more southern portion of the summer  
2 feeding range are distributed along a continuum from California to southeast Alaska, including  
3 off the coast of Washington. NMFS' National Marine Mammal Lab (NMML) maintains a  
4 photographic catalog of gray whales observed in local survey areas during the summer feeding  
5 period, including the area from northern California to northern Vancouver Island, referred to here  
6 as the Pacific Coast Feeding Aggregation (PCFA) survey area, and a smaller survey area within  
7 the PCFA survey area from Oregon to southern Vancouver Island (ORSVI). Distinctive markings  
8 on the whales' backs and flukes allow individual identification. Using the photographic catalog,  
9 scientists can determine whether an identified whale has been sighted previously in either the  
10 PCFA or ORSVI survey areas during the summer feeding period. Section 3.4.3.1, General Life  
11 History and Biology (of ENP gray whales), describes the biology and ecology of gray whales in  
12 greater detail.

13 The Makah's proposed action contains two conservation measures related to these identified  
14 whales. They are (1) restricting the time and area of any hunt to reduce the likelihood that an  
15 identified whale would be harvested (discussed in Section 2.3.3.2.3, Location of Hunt, Area  
16 Restrictions, and Section 2.3.3.2.4, Timing of Hunt, Seasonal Restrictions) and (2) ceasing the  
17 hunt if a predetermined number of identified whales in the PCFA survey area are harvested.

18 The Makah Tribe's waiver request states that the Makah Department of Fisheries Management  
19 observers (Section 2.3.3.2.7, Other Environmental Protection Measures, Makah Department of  
20 Fisheries Management and NMFS Observers and Monitoring) would photograph any whale  
21 landed and provide the photographs to NMFS to compare with the NMML's photographic  
22 catalog. This would allow NMFS and the Tribe to determine if any harvested whale was an  
23 identified whale (a whale photographed in the PCFA and ORSVI survey areas in a prior summer  
24 feeding period). The Makah propose to use the photographic comparison to limit the number of  
25 identified whales that would be harvested. They would stop hunting when a predetermined  
26 number of matches are made to NMML's photographic catalog. That number would be  
27 established by calculating an allowable bycatch level using a method similar to one NMFS uses  
28 under the MMPA. The Makah's waiver request is discussed in detail in Appendix A, including  
29 information about the proposed 'allowable bycatch level' methodology. See Section 3.4.2.1,  
30 Marine Mammal Protection Act Management, Section 3.4.3.3.1, Summer Range Distribution and  
31 Habitat Use, and Section 3.4.3.4.4, Population Dynamics and Trends, and Section 3.4.3.4.5,  
32 Potential Biological Removal, for more information about how NMFS manages marine mammals  
33 and the gray whale stock.

1 **Strikes (Five-year and Annual)**

2 The Makah Tribe would limit the number of gray whales that may be struck to no more than  
3 seven whales in any calendar year and no more than 35 whales in any five-year period. The  
4 Makah define ‘strike’ in their request as “any blow or blows delivered to a whale by a harpoon,  
5 rifle, or other weapon which may result in death to a whale, including harpoon blows if the  
6 harpoon is embedded in the whale, and rifle shots that hit a whale.” NMFS considers this  
7 definition equivalent to the WCA regulatory definition of a strike, meaning “hitting a whale with  
8 a harpoon, lance, or explosive device.” A whale is considered to be struck when a harpoon is or  
9 has been embedded in a whale. This definition of ‘strike’ includes situations where the harpoon  
10 disengages from a whale; is retrieved to the water surface clean of skin, blubber, and other whale  
11 parts; and there is no other evidence of potentially lethal injury (such as blood in the water). The  
12 Tribe also proposes to limit the number of whales struck to further meet ICRW obligations of the  
13 United States, or to prevent the ENP gray whale stock abundance from falling below its OSP  
14 level.

15 **Struck and Lost (Five-year and Annual)**

16 Whales that are known to be struck, but not ultimately secured to the vessel, are considered to be  
17 ‘struck and lost’ whales. The Tribe proposes to restrict the number of struck and lost whales to no  
18 more than three whales in any calendar year and no more than 15 whales in any five-year period.  
19 These numbers are included in the numbers for annual and five-year proposed strikes (i.e., three  
20 struck and lost whales per year is part of the seven whale strike limit per year, and not additive).  
21 This struck and lost limit is a measure voluntarily imposed by the Tribe to avoid excessive  
22 numbers of struck and lost animals while hunting.

23 If the struck and lost quota is met or exceeded, the Tribe proposes to stop hunting to allow the  
24 opportunity to reevaluate techniques and address potential problems.

25 **Harassed**

26 The Tribe recognizes that whales not harvested or struck in any hunt may be subject to  
27 harassment as defined in the MMPA (see Section 1.2.3.2, Section 101(a) Take Moratorium, for a  
28 definition of MMPA take, which includes both Level A and Level B harassment). Based on  
29 experience with whale hunts in 1999 and 2000, the Tribe estimates that there could be  
30 approximately 10 approaches and four unsuccessful harpoon attempts for every whale struck. The  
31 Tribe would classify unsuccessful harpoon attempts as Level A harassment, and it anticipates that  
32 no more than 28 gray whales would be subject to such harassment in any calendar year. The Tribe

1 would classify approaches with no harpoon attempts as Level B harassment, and it anticipates  
2 that the number of whales subject to such harassment in any calendar year would not exceed 140.

### 3 **Age and Reproductive Status**

4 The Tribe proposes to prohibit the striking of a whale calf, or any whale accompanied by a calf.  
5 Gray whale calves generally accompany adult female parents during migration and may be  
6 observed as pairs of traveling whales.

#### 7 **2.3.3.2.3 Location of Hunt (Area Restrictions)**

8 The area where the Makah Tribe proposes to hunt is confined to its U&A west of the Bonilla-Tatoosh  
9 line, excluding the Strait of Juan de Fuca. WAC 220-16-490 defines the Bonilla-Tatoosh Line as a  
10 line projected from the most westerly point on Cape Flattery to the lighthouse on Tatoosh Island,  
11 then to the buoy adjacent to Duntz Rock, then to Bonilla Point on Vancouver Island. The Makah's  
12 U&A, as adjudicated in *United States v. Washington* (1974 and 1985), also excludes grounds that  
13 the Makah historically hunted and fished, but that are now beyond the exclusive economic zone  
14 (EEZ), which is also the boundary between Canada and the United States. According to the Tribe's  
15 waiver request, restricting the hunt to the area of its U&A outside the Strait of Juan de Fuca, in  
16 conjunction with the proposed seasonal restrictions (Section 2.3.3.2.4, Timing of Hunt (Seasonal  
17 Restrictions), is designed to avoid any intentional harvest of gray whales identified within the PCFA  
18 survey area.

#### 19 **2.3.3.2.4 Timing of Hunt (Seasonal Restrictions)**

20 The Makah's waiver request includes timing restrictions that would prohibit hunting from June 1 to  
21 November 30 in any calendar year. According to the Tribe's waiver request, this measure is  
22 "designed to avoid any intentional harvest of gray whales" that have been identified within the PCFA  
23 survey area by hunting outside of times that coincide with the summer feeding period.

#### 24 **2.3.3.2.5 Overview of Proposed Hunting Method (Element Common among Action** 25 **Alternatives)**

26 The Makah Tribe plans to use both traditional and modern methods for hunting whales to balance  
27 the preservation of traditional cultural methods, safety, and the need for increased hunting  
28 efficiency. Traditional and modern methods are relative terms because, as discussed in  
29 Section 3.9, Cultural Resources, the Tribe has developed technological innovations over time.  
30 The Tribe considers traditional methods to be those that would be maintained based on their  
31 contribution to the ceremonial value of whaling. The Tribe's request includes the use of modern

1 equipment when needed for safety, increased technological effectiveness, and/or to meet MMPA  
2 permit requirements.

3 The proposed method includes hunting whales from one or two sea-going canoes, at least 30 feet  
4 long, and carved by the Makah. Each canoe would be manned by an eight-person whaling crew  
5 (all Makah tribal members) and would include a captain, harpooner, and paddlers. One or more  
6 chase boats, 24 feet long and powered by a minimum 200-horsepower engine capable of safely  
7 towing an adult gray whale, would accompany the canoes. Each chase boat would be manned by  
8 a pilot, diver, rifleman, backup harpooner, and at least one other crew member. Each chase boat  
9 would be equipped with a navigation system capable of fixing the vessel's position on the water.

### 10 **Method of Striking and Killing**

11 The harpooner would use stainless steel harpoons with a toggle point. Each harpoon would be  
12 secured to a rope with float(s) attached. The harpooner would use one or more harpoons to make  
13 the first strike on the gray whale. If a harpoon struck and affixed the toggle point and floats to the  
14 whale with the harpoon line attached, the rifleman in the chase boat would shoot it at close range  
15 with a specially developed, high-powered, .50-caliber-round rifle with the intent of killing the  
16 whale with a shot to its central nervous system. A diver would attempt to sew the whale's mouth  
17 shut to prevent the whale from sinking.

### 18 **Optional Method of Striking and Killing**

19 Although the Tribe proposed a specific method of striking and killing whales, public comments  
20 asked us to consider other methods. Rather than develop full alternatives to analyze other  
21 reasonable methods, this EIS considers optional methods of striking and killing whales that would  
22 be reasonable regardless of the action alternative. For this reason, although other options for  
23 striking and killing are not part of the Tribe's proposal, this EIS will examine an optional method  
24 as an element common among action alternatives, including the proposed action.

25 The optional method would involve striking whales with a hand thrown darting gun that fires an  
26 explosive projectile into the whale. The hand thrown darting gun consists of a barrel (to hold an  
27 explosive projectile) that is attached to a wooden shaft equipped with a toggle-point harpoon. The  
28 harpoon is intended to penetrate the whale and attach a line and float to secure the whale and  
29 assist in its recovery (O'Hara et al. 1999; Øen 2000; IWC 2007a). The barrel contains a trigger  
30 rod that ignites a propellant or 'pusher' charge. This pusher charge fires the explosive projectile  
31 into the whale's body. The explosive projectile has a time delay fuse. The explosive projectile  
32 may be either black powder or penthrite and is intended to kill when it explodes inside the whale,

1 either through shrapnel or blast injury. The cervical and cranial thoracic regions are the critical  
2 targets for the darting gun projectile (O’Hara et al. 1999).

3 If the initial darting gun projectile (primary strike) fails to kill the whale, the whale would be  
4 killed with additional explosive grenades delivered using either a smooth-bore, eight-gauge  
5 shoulder gun or a darting gun.

6 Impacts on individual whales from each of the optional hunting methods are described in further  
7 detail in Section 3.4.3.6.1, Known and Potential Anthropogenic Impacts, Aboriginal Subsistence  
8 Whaling.

### 9 **Securing and Towing the Whale**

10 Following a successful harvest, the whaling crew would secure the whale with a line to tow it to a  
11 beach (mostly likely on the Makah Reservation). Once secured at the beach, tribal members could  
12 participate in celebrations and butchering, and tribal and NMFS biologists could conduct photographic  
13 analysis and tissue sampling. Most of the whale products from the beached whale would be removed  
14 within 24 hours, including tissue samples collected by biologists.

15 The Tribe proposes to conduct research and development to refine hunting methods further. After  
16 consultation with NMFS, the waiver request proposes that the Makah Whaling Commission be  
17 able to amend tribal regulations periodically to improve the safety, effectiveness, and humaneness  
18 of the gray whale hunt.

### 19 **2.3.3.2.6 Whale Product Use and Distribution (Element Common among Action** 20 **Alternatives)**

#### 21 **Limited Commercial Use and Distribution**

22 The Makah Tribe would not sell or offer for sale whale products to the extent prohibited in WCA  
23 regulations. 50 C.F.R. 230.4(f) prohibits any person from selling or offering for sale whale  
24 products taken from an aboriginal subsistence hunt, except for authentic articles of native  
25 handicraft. MMPA Section 102(f) prohibits take of whales incidental to commercial whaling.  
26 Although Section 101(b) of the MMPA allows Alaska Natives to sell edible whale products in  
27 native villages and towns in Alaska or for native consumption, the Makah would not sell or offer  
28 for sale any edible whale products. Any sales or offers to sell would be limited to non-edible  
29 whale products used to create authentic articles and native handicraft and clothing, including  
30 artwork, within the United States.

31 The Makah Tribe would prohibit tribal members who participate in any whale hunt from  
32 receiving monetary compensation, also in accordance with WCA regulations (50 CFR 230.4(e)).

1 **Non-Commercial Use and Distribution**

2 The Makah, within the borders of the United States, would be able to share whale products from  
3 any hunt (1) with relatives of participants in the harvest, (2) with others (*i.e.*, both non-relatives  
4 and relatives) in the local community, or (3) with persons in locations other than the local  
5 community with whom local residents share familial, social, cultural, or economic ties  
6 (see Section 1.2.4.1.3, IWC Aboriginal Subsistence Whaling, for provisions of the most current  
7 IWC Schedule and for the definition of subsistence use as adopted by consensus at the 2004  
8 annual meeting).

9 **2.3.3.2.7 Other Environmental Protection Measures**

10 **Seabirds**

11 Tatoosh Island and White Rock (which are located within the coastal portion of the Makah's  
12 U&A) support large seabird breeding colonies (Section 3.5.3.2.2, Non-Listed Birds and Their  
13 Associated Habitats). The Tribe proposes to avoid striking whales within 200 yards of Tatoosh  
14 Island and White Rock during May to minimize disturbance to feeding and nesting sea birds. The  
15 Tribe has further proposed that it would not hunt from June 1 through November 30, which  
16 would also help to protect seabird breeding colonies.

17 **Public Safety Measures and Enforcement (Element Common among Action Alternatives)**

18 The Tribe proposes to conduct public safety measures at least as restrictive as those described in its  
19 2001 Gray Whale Management Plan. Those measures include the public safety measures the  
20 Makah Tribe previously employed in the 1999 and 2000 hunts, as well as additional measures  
21 that the Tribe plans to use for future whale hunts. These are the measures (described in more  
22 detail in Section 3.15, Public Safety) proposed by the Tribe:

- 23 • The Makah Tribe whalers would use modern methods to take a whale quickly; this would  
24 reduce the potential for a wounded whale to injure hunters or people in other vessels.
- 25 • All whalers would participate in whaler safety training lessons and drug and alcohol  
26 testing (see Training and Certification Process for Tribal Whalers below).
- 27 • The whaling captain would also participate in captain training and certification. The  
28 captain would be responsible for the safety of his crew.
- 29 • Riflemen and/or whalers in charge of firing explosive charges would participate in  
30 training for proficient and accurate shooting under simulated hunt conditions.

- 1 • The rifleman or whaler in charge of firing explosive charges on board the chase boat  
2 would not be able to discharge his weapon until authorized to fire by a safety officer  
3 designated by the whaling captain. If a rifle were used, the safety officer would not  
4 authorize the discharge of the rifle unless the barrel of the rifle were above and within  
5 30 feet from the target area of the whale, and the rifleman’s field of view were clear of all  
6 persons, vessels, buildings, vehicles, highways, and other objects or structures that if hit  
7 by a rifle shot could injure humans or property.
- 8 • The whaling captain would suspend the hunt if visibility were less than 500 yards in any  
9 direction.
- 10 • The whaling canoe would have additional support boats available to provide first aid to  
11 whalers and help secure and tow the whale.
- 12 • All whaling equipment would be inspected before whaling.
- 13 • The Coast Guard would enforce the provisions of its permanent regulated navigation area  
14 (RNA) and moving exclusionary zone (MEZ), which would minimize the chance of  
15 bystanders accidentally being harmed during a hunt.

16 In the Tribe’s waiver request, it indicates that it would comply with additional safety measures  
17 NMFS includes in an MMPA waiver, regulations, or permit. The plan also indicates that the  
18 Makah Department of Fisheries Management would work with the Coast Guard to close off the  
19 designated whale hunting area to recreational and commercial vessel traffic during the hunt.

20 **Training and Certification Process for Tribal Whalers (Element Common among Action**  
21 **Alternatives)**

22 If NMFS were to authorize hunting by waiving the MMPA moratorium on take, issuing  
23 regulations and any necessary permits, and publishing any quota in the Federal Register, the  
24 Makah would require all tribal members who engage in whaling to be under the control of a  
25 whaling captain holding another valid whaling permit (also referred to as a license) issued by the  
26 Makah Tribal Council (see Section 1.2.4.2, National Whaling Governance under the WCA, for an  
27 explanation of responsibilities held by Native American whaling organizations). Whaling permits  
28 issued by the council would incorporate and require compliance with all NMFS requirements, as  
29 well as tribal regulations. The regulations would also provide a training and certification process  
30 for all members who participate in whaling, as required by NMFS’ WCA implementing  
31 regulations. Whaling team members may also partake in spiritual preparations.

1 The Makah Tribal Council would not issue a permit to a whaling captain unless it determined that  
2 the whaling captain and each whaling team member had been certified by the Makah Whaling  
3 Commission to perform his assigned role on the whaling crew.

4 **Makah Department of Fisheries Management and NMFS Observers and Monitoring**  
5 **(Element Common among Action Alternatives)**

6 The Makah Tribe's waiver request includes accommodations for both a Makah Department of  
7 Fisheries Management observer and a NMFS observer to accompany the whaling team in the  
8 chase boats. The Tribe would provide the designated NMFS observer with at least 24-hour notice  
9 of whaling permit issuance to the whaling captain by the Makah Tribal Council, unless the NMFS  
10 observer was already present on the Makah Reservation. The Tribe's request also indicates that  
11 the NMFS observer could collect specimen material from landed whales. This would include  
12 ovaries (as applicable), ear plugs, baleen plates, stomach contents, and other tissue samples. The  
13 Makah Department of Fisheries Management observer would be responsible for recording the  
14 time, date, location, and physical characteristics of each whale struck and, for each whale  
15 harvested, the body length, fluke width, sex, any fetus found in a landed whale, and the time to  
16 death for all whales harvested. The Tribe would have to report all monitoring data to NMFS  
17 annually.

18 **Enforcement (Element Common among Action Alternatives)**

19 Tribal regulations would include provisions requiring tribal enforcement of the regulations and  
20 permit terms and conditions NMFS adopted, if hunting were authorized. These regulations would  
21 include criminal sanctions, such as fines and imprisonment, up to the limits imposed by the  
22 Indian Civil Rights Act. Violators may also be barred from exercising treaty fishing, hunting,  
23 and/or whaling rights for up to three years. Makah Department Natural Resources Enforcement  
24 has been designated as the tribal law enforcement agency responsible for administering the  
25 requirements of whaling regulations and permits. A whaling captain would be responsible for any  
26 violations committed by a member of the whaling team under his control.

27 In the event of violations of NMFS' regulations governing any authorized hunt, federal  
28 enforcement would also be possible. Potential offenses could include violation of the WCA and  
29 MMPA and any implementing regulations.

30 **2.3.4 Alternative 3 (Hunt Outside the Strait of Juan de Fuca with No Restrictions on**  
31 **Timing or Limits on Identified Whales)**

32 Alternative 3 has the same area for the hunt as Alternative 2, but would eliminate timing and  
33 other restrictions on killing and landing identified whales. Thus, the Makah Tribe could hunt

1 whales at any time of year and would not stop hunting based on the number of identified whales  
2 harvested. All other hunt conditions and restrictions described under Alternative 2 would be the  
3 same under Alternative 3.

4 This alternative provides information to help determine possible conservation benefits to gray  
5 whales and/or to the local environment resulting from two aspects of the Tribe's proposal that are  
6 intended to limit impacts on identified whales. These two aspects are as follows: (1) the Tribe's  
7 proposal to cease hunting if it lands a predetermined number of whales found in the photo  
8 identification catalog, and (2) the Tribe's proposal to limit the hunt to months associated with the  
9 northward and southward migrations, when fewer identified whales are present in the PCFA and  
10 ORSVI survey areas, and more of the whales present are likely to be migrating whales not  
11 previously identified in the survey areas.

12 By removing the additional limits for identified whales, this alternative explores the cultural and  
13 social impacts on the Tribe of imposing that additional restriction, as well as the impacts on other  
14 social and economic values. Removing the timing restrictions also helped illuminate effects of  
15 hunt timing on Makah cultural and social values, public and hunter safety, aesthetics, and other  
16 social and economic values.

#### 17 **2.3.5 Alternative 4 (Sanctuary and National Wildlife Refuge Resource Alternative)**

18 Alternative 4 would have the same conditions as Alternative 2, except that it would also prohibit  
19 vessels associated with any Makah hunt (including Makah vessels and associated protest, media,  
20 and law enforcement vessels) from entering the 200-yard voluntary exclusionary zone that the  
21 United States Fish and Wildlife Service has established around all rocks or islands comprising the  
22 Washington Islands National Wildlife Refuges.

23 This alternative explores the conservation benefits to Sanctuary and National Wildlife Refuge  
24 resources, specifically seabirds and hauled-out marine mammals, resulting from vessel and air  
25 traffic associated with the hunts. Although this alternative would generally prevent vessel entry  
26 and striking a whale within the 200-yard exclusionary zone, the Makah hunters and chase boats  
27 would have to follow any struck whale (attached to the canoe by harpoon lines) into the 200-yard  
28 zone to dispatch it.

1           **2.3.6 Alternative 5 (Hunt Outside the Strait of Juan de Fuca with No Restrictions on**  
2           **Timing, More Restrictive Numbers [Harvested, Struck, and Struck and Lost], and No**  
3           **Limits on Identified Whales)**

4           Alternative 5 would have the same hunt area as Alternative 2, but would differ by eliminating  
5           timing restrictions and the restrictions on landing identified whales, as well as imposing  
6           additional restrictions on the total number of whales harvested, struck, and struck and lost. The  
7           restrictions on numbers of whales would be (1) no more than two harvested whales annually and  
8           no more than 10 harvested whales in any five-year period, (2) no more than three annual strikes  
9           and no more than 12 strikes in any five-year period, and (3) no more than one struck and lost  
10          whale annually and no more than four struck and lost whales in any five-year period. Thus, the  
11          Makah Tribe could hunt whales at any time of year and would not stop hunting based on the  
12          number of identified whales landed, but would be allowed to harvest, strike, and strike and lose  
13          fewer numbers of whales than included in its waiver request and allowed under the current annual  
14          and five-year IWC catch limits set in the Schedule for the ENP gray whale stock and allocated by  
15          bilateral agreement between the United States and the Russian Federation.

16          This alternative explores the conservation benefit to gray whales and/or to the local environment  
17          inherent in reducing the total numbers of whales harvested compared with limiting the hunt based  
18          on photo identification and area and seasonal restrictions. It also addresses the environmental and  
19          socioeconomic benefits of limiting the total numbers of whales hunted and the cultural and social  
20          impacts of decreased landings and strikes on the Makah Tribe.

21           **2.3.7 Alternative 6 (Hunt Anywhere in the U&A with No Restrictions on Timing or**  
22           **Limits on Identified Whales)**

23          Alternative 6 is the same as Alternative 3, except that the Tribe could hunt throughout its entire U&A,  
24          including the Strait of Juan de Fuca. Similar to Alternatives 3 to 5, there would be no harvest  
25          limitations specifically for identified whales.

26          This alternative reviews the cultural and social impact on the Makah Tribe of allowing it to hunt  
27          throughout its entire U&A, as the Tribe hunted whales for the past 1,500 years. This alternative also  
28          addresses (1) the impact on conservation of gray whales and/or the local environment of allowing  
29          hunting in the Strait of Juan de Fuca with no time limits; (2) the impact on aesthetic and other social  
30          and economic aspects of hunting in the Strait; (3) the impact to the Tribe of allowing hunting in its  
31          entire U&A, including the safety of the hunters if they hunted in the Strait of Juan de Fuca compared  
32          to the open ocean; and (4) the public safety impacts of a hunt in the Strait of Juan de Fuca.

1 **2.4 Alternatives Considered but Eliminated from Detailed Analysis**

2 During the scoping process of this EIS, NMFS reviewed several alternatives and/or options  
3 within alternatives, but eliminated them from further detailed analysis. The reasons why specific  
4 alternatives were eliminated from further study are explained below.

5 **2.4.1 Non-Lethal Hunt**

6 The non-lethal hunt alternative was requested by some members of the public. The commenters  
7 did not fully describe the details of this alternative, but it would likely include the Tribe engaging  
8 in some ceremonies and training preparatory to a hunt, a pursuit of whales on the water, and a  
9 mock attack on a whale, but would not culminate in a whale being killed or transported to shore.  
10 Federal treaties and statutes are important in informing and identifying reasonable alternatives.  
11 Under the WCA and implementing regulations, whaling (which is synonymous with hunting in  
12 the aboriginal subsistence use context) clearly contemplates killing and attempts to kill whales  
13 (16 USC 916(j) and 50 CFR 230.2). Likewise, the definition of take under IWC and the MMPA  
14 contemplates lethal takes (16 U.S.C. 1362(13); 50 CFR 216.3). Furthermore, the right of fishing  
15 and of whaling or sealing was secured by the Makah through the 1855 Treaty of Neah Bay, which  
16 was written when fishing and whaling or sealing conveyed the opportunity to take animals  
17 lethally from each of these categories.

18 The Tribe's waiver request seeks authorization to kill whales under those existing legal  
19 authorities and its interpretation of the scope of its treaty. The non-lethal hunt alternative  
20 contemplates, in effect, the No-action Alternative. As such, the impacts of this alternative are  
21 similar enough to those of the No-action Alternative so that its detailed analysis would not  
22 provide additional information to inform agency decision-making or the public's consideration.  
23 The conservation impacts on gray whales and the local ecosystem would be the same as the No-  
24 action Alternative because no gray whales would be removed from the population or from the  
25 ecosystem. The impact to the Makah would be the same as the No-action Alternative, because  
26 they would not be allowed to hunt whales according to their historical and contemporary cultural  
27 understanding or within their understanding of the scope of their treaty right. In this respect, a  
28 non-lethal ceremonial hunt would not meet the Makah Tribe's purpose and need. The other social  
29 and economic impacts would be the same as the No-action Alternative because a non-lethal hunt  
30 would not have significantly different public safety, aesthetic, sentimental, or economic impacts  
31 than no hunt. Moreover, if a non-lethal hunt were to be analyzed in detail, the MMPA waiver

1 process would apply because harassment of a live animal (which would likely occur under a  
2 ceremonial hunt) would be considered a take under the MMPA.

### 3 **2.4.2 Subsistence Use of Drift Whales**

4 On July 16, 1995, a female gray whale was found entangled and drowned in a tribal marine set net  
5 salmon fishery in the Strait of Juan de Fuca outside of Neah Bay. NMFS biologists and the tribal  
6 fisherman who discovered the whale removed the carcass from the net, and the Tribe butchered the  
7 whale for subsistence use before the meat spoiled. All tribal marine set nets were removed. The  
8 Makah Tribal Council issued a press release clarifying that it did not authorize any tribal member to  
9 net a whale and intended to seek permission to conduct a ceremonial and subsistence harvest  
10 (Makah Tribal Council 1995b). The Tribe also indicated that it would continue to work with NMFS  
11 to minimize taking of marine mammals in set nets. A NMFS report indicated that there were at least  
12 four incidences of gray whale entanglements over the last 15 to 20 years (Angliss and Outlaw  
13 2008). The use of the female gray whale for subsistence represents the first time in recent times the  
14 Makah Tribe sought to exercise its treaty rights for tribal consumption (NMFS 1995). Several  
15 commenters suggested that the Makah use drift whales (also known as stinker whales), rather than  
16 live whales, for subsistence purposes. Drift whales are whales that die naturally or as a result of  
17 some human activity other than a directed hunt (for example, entanglement in fishing gear). This  
18 alternative is essentially the same as the No-action Alternative. The conservation impacts on gray  
19 whales and the local ecosystem would be the same as those under the No-action Alternative,  
20 because no gray whales would be removed from the population or from the ecosystem as the  
21 result of a hunt. The social and cultural impacts on the Makah would be the same as those under  
22 the No-action Alternative, because they would not be allowed to hunt whales according to their  
23 historical and contemporary cultural understanding and within their concept of the scope of their  
24 treaty right. In this respect, a decision allowing only subsistence use of drift whales would not  
25 meet the Makah Tribe's purpose and need.

26 While this alternative would differ from the No-action Alternative because it would provide the  
27 Makah with an occasional and unpredictable supply of whale products, the agency could provide  
28 for the Tribe's use of drift whales without invoking the MMPA waiver provision (NOAA and  
29 Makah Indian Tribe 1989). The other social and economic impacts would be the same as those  
30 under the No-action Alternative, because the subsistence use of drift whales would not have  
31 significantly different public safety, sentimental, or economic impacts than a no-hunt alternative.

1 The use of drift whales might have an impact on aesthetics, but some of that impact (the sight of a  
2 dead whale being butchered on the beach) would be the same as in any of the action alternatives.

### 3 **2.4.3 Hunt Other Marine Mammal Species Traditionally Hunted by the Tribe**

4 This alternative, which was suggested by some members of the public, would substitute a gray  
5 whale hunt with a hunt for a different whale species or another marine mammal. Because the  
6 United States has not requested on behalf of the Makah that the IWC set aboriginal subsistence  
7 whaling catch limits for another large cetacean, and because the IWC has not considered such a  
8 request, the WCA precludes NMFS from publishing a quota for other whale species for the use of  
9 the Makah Tribe. In addition, some whales, such as the humpback whale and some marine  
10 mammal species (such as Steller sea lions), are listed under the Endangered Species Act (ESA).

11 Also, if non-ESA listed marine mammal species, such as pinnipeds or small cetaceans  
12 (e.g., dolphins and porpoises), were entirely or partially substituted for a gray whale, the total  
13 biomass harvested and the method used would likely differ (i.e., more individuals caught using  
14 different catch methods). As explained in Section 3.9, Cultural Resources, whaling and sealing do  
15 not hold equivalent historical or contemporary ceremonial and subsistence harvest values for the  
16 Makah Tribe. These differences would include the type of food obtained (blubber, meat, and whale  
17 bone), associated spiritual ceremonies, hunting activities (methods, timing, and area), and  
18 subsistence uses. In this respect, a decision requiring substitution of other marine mammal species  
19 in lieu of gray whales would not meet the Makah Tribe's purpose and need. The Makah's request is  
20 to exercise its treaty right to whale. A hunt focused on non-ESA listed pinnipeds and small  
21 cetaceans would be a different type of action, and it is too speculative to allow for an EIS analysis.

### 22 **2.4.4 Change the Hunt Location**

23 NMFS considered other alternatives for either increasing or decreasing the Makah gray whale  
24 hunting area. Hunt location options that were considered but eliminated from further study are  
25 described in the following sections.

#### 26 **2.4.4.1 Hunt Outside the OCNMS but Within the U&A**

27 This option would allow the Makah to hunt whales only within the Strait of Juan de Fuca and a  
28 small portion of the Tribe's U&A seaward of the outer Olympic Coast National Marine Sanctuary  
29 (OCNMS) boundary (Figure 1-1). Alternative 6 would include hunting within the Strait of Juan  
30 de Fuca; thus, it captures that portion of this alternative option. The area off the coast of  
31 Washington that is outside the Strait of Juan de Fuca and the OCNMS but is within the

1 Makah U&A is too small to provide for a successful hunt and is beyond the 30-mile offshore area  
2 where most whales migrate past Washington (see Section 3.4.3.3, Distribution and Habitat Use,  
3 for more information). In addition, ocean conditions are more challenging further offshore,  
4 making the hunt more difficult and hazardous when considering public safety.

5 Although the purpose of this alternative is to safeguard the natural resource values that led to  
6 designation of the OCNMS as a national marine sanctuary, OCNMS regulations allow for a  
7 Makah tribal hunt if otherwise legally permitted (15 CFR 922.152(a)(5)). OCNMS regulations  
8 allow for taking marine mammals pursuant to any treaty with an Indian tribe, as long as the taking  
9 is consistent with the MMPA, ESA, and Migratory Bird Treaty Act (16 USC 1431 *et seq.*).  
10 Alternative 4 is intended to be an alternative that would allow us to consider Sanctuary  
11 resources in greater detail. An alternative to hunt outside the Sanctuary was eliminated from  
12 detailed consideration because portions of it are already being analyzed (hunt in the Strait of  
13 Juan de Fuca), and the portion not already being analyzed (hunt seaward of the  
14 OCNMS boundary) is impracticable and not designed to protect identifiable gray whales.

#### 15 **2.4.4.2 Hunt Outside of Areas Frequented by Identified Whales**

16 Identified whales have been observed in the Makah's U&A, an area that is within the PCFA and  
17 ORSVI survey areas, year-round. There is no area within the Makah U&A that is not potentially  
18 frequented by identified whales.

#### 19 **2.4.4.3 Hunt in Russia with Chukotka Natives**

20 Members of the Makah Tribe currently have the option of hunting with the Chukotka Natives.  
21 Only those Makah Tribe members who participate in the hunt in Russia would have the  
22 opportunity to share in the ceremonial and subsistence value of the hunt because, by international  
23 law (Convention on the International Trade of Endangered Species), no whale products may be  
24 transferred out of the country of origin. Under the MMPA, in addition to international law,  
25 importing a marine mammal product without receiving authorization under the waiver process  
26 would be illegal. This option would not allow the Makah Tribe to conduct a ceremonial hunt in  
27 its U&A using traditional Makah practices, nor would most of the tribal members be able to  
28 participate in celebrations that occurred when a whale was landed in Russia. This option would  
29 not meet the Tribe's stated purpose and need to exercise its cultural values or treaty right. This  
30 option would require no action on the part of NMFS; therefore, it is similar to the No-action  
31 Alternative. Analysis of this alternative would not provide the agency or the public with

1 information useful in informing NMFS’s decision, since this alternative would require no  
2 decision on the agency’s part.

### 3 **2.4.5 Employ Different Hunting Methods**

4 During the scoping process, NMFS identified the following methods of striking and killing  
5 whales, based on the Tribe’s request, internal scoping, public comments, and an examination of  
6 aboriginal subsistence hunting world-wide: 1) a toggle point harpoon to strike the whale and a .50  
7 caliber rifle to kill the whale (as proposed by the Tribe); 2) a darting gun with explosive projectile  
8 as the striking and/or killing weapon; 3) a shoulder gun with explosive projectile as the killing  
9 weapon; 4) traditional methods only (harpoons to strike whales and lances to kill whales); and 5)  
10 a smaller caliber rifle as the killing weapon. The following sections explain NMFS’ rationale for  
11 not analyzing options 4 and 5 in detail. The other options are analyzed in detail as an element in  
12 common among the action alternatives.

#### 13 **2.4.5.1 Hunt Using Only Traditional Methods**

14 This alternative, suggested in public comment, is best characterized as requiring the Makah to  
15 hunt using only pre-contact hunting methods. This would mean, for example, using mussel-tipped  
16 harpoons instead of toggle-point or steel-tipped harpoons, prohibiting the use of rifles to kill  
17 whales, and prohibiting the use of chase boats with outboard motors to follow the hunt and to tow  
18 whales. More information about pre-contact Makah hunting techniques can be found in  
19 Section 3.10.3.4, Makah Historic Whaling.

20 This alternative was eliminated from detailed consideration for a variety of reasons. As stated  
21 above in Section 2.3.2, Elements Common among Action Alternatives, the information presented  
22 in this EIS related to the method of the hunt must support and inform the agency’s future  
23 decisions about waiving the MMPA moratorium or issuing a permit. The agency may only issue a  
24 permit to take a marine mammal upon a determination that the manner of taking is humane  
25 (16 USC 1374(b)(2)(B)), which the MMPA defines as “the least possible degree of pain and  
26 suffering practicable” (16 USC 1362(4)). A whale may take several hours or days to die using  
27 only pre-contact methods. Modern technologies, such as those analyzed in detail in this EIS,  
28 result in quicker times to death. Hunting using only pre-contact methods would not result in the  
29 least possible degree of pain and suffering practicable.

30 WCA regulations also require that hunting not be conducted in a wasteful manner, “which means  
31 a method of whaling that is not likely to result in the landing of a struck whale or that does not  
32 include all reasonable efforts to retrieve the whale” (50 CFR 230.2). The use of powered vessels

1 and backup hunters (e.g., harpooners and the rifleman) to chase and tow whales represent  
2 reasonable efforts to retrieve any stricken whale and are more likely to meet WCA regulatory  
3 requirements than hunting using only traditional vessels.

4 Safety of hunters and the public must also be considered. A wounded whale experiencing a  
5 lengthy death could pose a greater risk to the whaling crew and public. This situation can be  
6 avoided by using some modern tools.

7 This alternative also does not meet the Makah's purpose and need. Requiring the Makah to hunt  
8 with pre-contact weapons, boats, and other tools is not justified because technologies, including  
9 using steel-tipped harpoons and accepting tows from steam-powered commercial tow boats, were  
10 used in traditional hunts as they became available.

#### 11 **2.4.5.2 Kill Whales with Smaller Caliber Rifles**

12 Many of the aboriginal subsistence whale hunts conducted worldwide on large whales employ  
13 rifles to kill whales; some of these rifles are smaller than the .50 caliber rifle in the Proposed  
14 Action and the .577 caliber rifle used in the Makah's 1999 hunt. Three separate reports  
15 (Ingling 1999; Beattie 2001; Graves et al. 2004) have now examined humane killing and public  
16 safety aspects of the proposed Makah whale hunts, and all three authors concluded that a  
17 .50 caliber rifle (or greater) is the appropriate caliber of weapon to use. Specifically, Ingling  
18 (1999) concluded that for large game, larger bullets are more effective in producing penetration  
19 deep enough to reach a vital organ or disabling site in the animal and, thus, require more power  
20 (i.e., heavier guns); in addition, rifles that are at least .50 caliber provide a better margin of error  
21 in targeting compared to smaller caliber rifles. Graves et al. (2004) added that "small caliber rifles  
22 simply will not do the job" of quickly killing large thick-boned whales; they concluded that the  
23 .50 caliber weapon was the best choice. Russian government reports on the number of small-  
24 caliber rifle rounds fired per whale in the Chukotka Native gray whale hunt support this  
25 conclusion (Section 3.4.3.5.4, Method of Killing and Time to Death). It is also supported by the  
26 decision of New Zealand to euthanize stranded whales as the most humane method  
27 (IWC 2007a). The Ingling and Graves reports are discussed in further detail in later sections of  
28 this EIS (Section 3.15, Public Safety). As described in Section 2.4.5.1, Hunt Using Only  
29 Traditional Methods, the MMPA prescribes that taking a marine mammal must involve "the least  
30 possible degree of pain and suffering practicable" (16 USC 1362(4)). Smaller caliber rifles would  
31 not result in the least possible degree of pain and suffering practicable.

1           **2.4.6 Alternative Compensation to the Makah Tribe**

2    Compensation to the Makah Tribe for not whaling could be monetary, including financial support  
3    for a different venture (such as ecotourism associated with whale watching). Other types of  
4    compensation might be a loan for a casino resort, new facilities for health care improvements,  
5    other options for improving the quality of life on the reservation, or renegotiating the treaty and  
6    returning ceded lands. Any of these actions would, however, result in environmental conditions  
7    similar to those described under the No-action Alternative. No whale hunting would occur, and  
8    the other financial incentives (such as loans for casinos, resorts, improved health care, or  
9    ecotourism opportunities) would be provided to the Tribe with its agreement that the Tribe would  
10   forego future whaling. The No-action Alternative could occur at any time and would not be  
11   restricted to a specific future event. The Tribe was offered financial compensation by a private  
12   party in lieu of whaling during the fall of 1998. The Tribe, at that time, would not consider this  
13   offer, and the tribe has maintained that position (Makah Tribe, pers. comm., 2006). This  
14   alternative was eliminated from further consideration because any of these activities would be  
15   speculative, with uncertain negotiations between the Tribe and other government and  
16   nongovernmental entities.

17           **2.5 Alternative Comparison by Key Concern**

18    An alternative comparison draws together the conclusions from the information and discussion  
19    presented throughout this EIS and provides the result of the analysis in a brief summary. Table 2-  
20    2 provides quantitative and qualitative comparisons of the alternatives for each of the key  
21    concerns. The following EIS sections compare alternatives by key concerns and environmental  
22    consequences.

23    Alternative 1 is the baseline for comparing the action alternatives. Chapter 3 provides information  
24    on the existing condition of each resource, and Chapter 4 provides the environmental effects from  
25    implementing the proposed action by resource. Within each resource, effects are compared  
26    among alternatives, including the No-action Alternative.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES**

<b>RESOURCES</b>	<b>Alternative 1 No-action</b>	<b>Alternative 2 Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales</b>	<b>Alternative 3 Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits</b>	<b>Alternative 4 Sanctuary and National Wildlife Refuge Resource Alternative</b>	<b>Alternative 5 Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits</b>	<b>Alternative 6 Hunt Anywhere in U&amp;A, No Timing Restrictions, No Identified Whale Limits</b>
<b>WATER QUALITY</b>						
<b>Drinking Water Sources</b>	Current risk levels would continue.	No likely effect	Similar to Alternative 2	Similar to Alternatives 2 and 3	Similar to Alternatives 2-4	Similar to Alternative 2-5
<b>Marine Waters</b>	Current risk levels would continue (includes occasional disposal of drift whale carcasses).	Increased vessel traffic creates increased risk of fuel spills, but spills would be rapidly diluted. Spills could also be mitigated by modifying existing spill response plans. Negligible increased risks from disposal/leakage of whale carcasses.	Greater contamination risks than Alternative 2 due to increased days of hunting and likely increase in number of whales. Spills would be rapidly diluted and risk from whale carcasses would be negligible. Spills could also be mitigated by modifying existing spill response plans.	Similar to Alternative 2	Similar risk of fuels spills to Alternative 2 due to similar number of days of hunting. Lower risk of leakage from whale carcasses due to fewer numbers of potential whales killed.	Similar to Alternative 3
<b>Shellfish Beds</b>	Current risk levels would continue.	Negligible increased contamination risks from leakage of landed whale carcasses.	Greater contamination risks than Alternative 2 due to more whales possibly landed. Risks still negligible.	Similar to Alternative 2	Lower contamination risk than Alternatives 2, 3, 4, and 6 due to fewer whales landed.	Similar to Alternative 3

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1 No-action</b>	<b>Alternative 2 Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales</b>	<b>Alternative 3 Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits</b>	<b>Alternative 4 Sanctuary and National Wildlife Refuge Resource Alternative</b>	<b>Alternative 5 Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits</b>	<b>Alternative 6 Hunt Anywhere in U&amp;A, No Timing Restrictions, No Identified Whale Limits</b>
<b>MARINE HABITAT AND SPECIES</b>						
<b>Pelagic Species and Communities</b>	Current levels of disturbance would continue.	Increased vessel traffic, carcass hauling, could result in local, short-lived disturbance of fish, zooplankton, and other pelagic species. No appreciable ecological effects.	Potentially greater impacts than Alternative 2 due to increased days of hunting, but disturbances and ecological effects are still expected to be localized and short-lived, with no appreciable effects.	Similar to Alternative 2, although the potential for disturbance would decline near protected rocks and islands.	Similar to Alternatives 2-4 although greater restrictions on numbers of whales would likely reduce any disturbances.	Similar to Alternative 3, but with any disturbances distributed over a broader area.
<b>Benthic Species and Communities</b>	Current levels of disturbance would continue.	Increased vessel traffic, carcass hauling, could result in local, short-lived disturbance of marine plant, macroalgal, shellfish, and other benthic species. No appreciable ecological effects.	Potentially greater impacts than Alternative 2 due to increased days of hunting, but disturbances and ecological effects are still expected to be localized and short-lived, with no appreciable effects.	Similar to Alternative 2, although the potential for disturbance would decline near protected rocks and islands.	Similar to Alternatives 2-4 although greater restrictions on numbers of whales would likely reduce any disturbances.	Similar to Alternative 3, but with any disturbances distributed over a broader area.
<b>ENP GRAY WHALE</b>						
<b>ENP Gray Whale Stock</b>	Current IWC-set harvest levels would continue. ENP gray whale stock is likely to remain at or near carrying capacity.	No discernable impacts because overall harvest would remain at IWC-set harvest levels.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>ENP GRAY WHALE (continued)</b>						
<b>Gray Whales Using Local Survey Areas - Abundance</b>	No hunting would occur in local survey areas.	Likely 1 (maximum of 4) Makah U&A or PCFA whale killed. One killed per year would likely be replaced in subsequent year and would not exceed PBR. If maximum of four killed, may not be replaced in subsequent year and would exceed PBR by 1.5 whales at current abundance levels. Concerns about exceeding PBR could be addressed by reducing the number of struck and lost whales allowed or adding a restriction on the combined number of (1) whales struck and lost and (2) identified whales killed and landed.	Potentially 7 Makah U&A or PCFA whales killed because all seven strikes are assumed to result in death and year-round hunting could result in all seven whales being Makah U&A whales. Seven killed whales would not likely be replaced in the Makah U&A in subsequent year and would exceed PBR by 4.5 whales per year at current abundance levels.	Similar to Alternative 2.	Potentially 3 Makah U&A or PCFA whales killed because all three strikes are assumed to result in death and year-round hunting could result in all three whales being Makah U&A whales. Three killed whales may not be replaced in subsequent year and would exceed PBR by 0.5 whales at current abundance levels.	Similar to Alternative 3.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>ENP GRAY WHALE (continued)</b>						
<b>Gray Whales Using Local Survey Areas - Distribution and Habitat Use</b>	Distribution and habitat use would continue to be determined solely by prey availability.	Whales may move within or leave Makah U&A to avoid hunt-related activities over the short or long term. Concerns about whales abandoning Makah U&A could be addressed by monitoring and/or limits on whales approached, pursued, or subjected to unsuccessful strikes.	Greater potential than Alternative 2 for whales to avoid Makah U&A over the short or long term because of the increased number of days of hunting and because more hunting is likely during the summer feeding period.	Similar to Alternative 2.	Potentially less than impacts predicted under Alternatives 3 and 6 due to greater hunt restrictions.	Similar to Alternative 3.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>ENP GRAY WHALE (continued)</b>						
<b>Individual Whales</b>	124 whales could be killed in Chukotkan hunt annually on average, experiencing manner and time to death associated with that hunt. Approx. 5 percent would be struck and lost.	On average, four whales annually could be killed in a Makah hunt rather than Chukotkan hunt. Manner and time to death would be similar to Chukotkan hunt (Alternative 1). As many as 43 percent of the 4 could be struck and lost, compared to 5 percent under Alternative 1. Concerns about the proportion of whales struck and lost could be addressed by reducing the number of struck and lost allowed.	Similar to Alternative 2, except that year-round hunting season could reduce time to death because some hunting would likely occur under more favorable weather and ocean conditions, improving the accuracy of Makah riflemen.	Similar to Alternative 2.	Half as many whales could be killed in a Makah hunt rather than Chukotkan hunt. Year-round hunting season could reduce time to death compared to Alternatives 2 and 4 because some hunting would likely occur under more favorable weather and ocean conditions, improving the accuracy of Makah riflemen. As many as 33 percent could be struck and lost, compared to the 5 percent under Alternative 1	Similar to Alternative 3.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>OTHER WILDLIFE</b>						
<b>Marine Mammals</b>	Current levels of disturbance would continue.	Hunt-related activities would increase the number of vessels, aircraft and noise in the project area. Chance of disturbance is low because of size of project area, location of haul-outs relative to hunts, and lack of association with gray whales (except killer whales). Any disturbance would be temporary and localized. Injury from vessel collision is unlikely.	Potentially greater impacts than Alternative 2 due to increased hunting opportunities, but any disturbances are expected to be localized and short-lived.	Similar to Alternative 2, although the potential for disturbance would decline near protected rocks and islands.	Similar to Alternative 2 although greater hunt restrictions would likely reduce any risks to marine mammals.	Similar to Alternative 3 although greater hunt restrictions would likely reduce any risks to other marine mammals. The ability to hunt in the summer and over a broader area might pose a greater risk of adverse effects on some species (e.g., sea otters).

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1 No-action</b>	<b>Alternative 2 Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales</b>	<b>Alternative 3 Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits</b>	<b>Alternative 4 Sanctuary and National Wildlife Refuge Resource Alternative</b>	<b>Alternative 5 Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits</b>	<b>Alternative 6 Hunt Anywhere in U&amp;A, No Timing Restrictions, No Identified Whale Limits</b>
<b>OTHER WILDLIFE (continued)</b>						
<b>Other Marine Wildlife</b>	Current levels of disturbance would continue.	Hunt-related activities would increase the number of vessels, aircraft and noise in the project area over a period of 7-30 days. Disturbance varies among species and habitat associations and in most cases would be localized and temporary. Most serious impact would be nest abandonment. Tatoosh and White Rock Islands would have buffers. Concerns about nest abandonment could be addressed by including buffers around other rocks and islands (as under Alternative 4).	Similar types of impacts as Alternative 2, but year-round hunting would increase the number of days (40 versus 7-30) and seasons during which activities occur. Disturbance could occur across more of species' life cycles. On the other hand, some hunting would occur in summer and fall when birds are no longer nesting, reducing chance of nest abandonment. Disturbances would be localized and temporary.	Similar to Alternative 2, except the potential for disturbance would be less to other wildlife on or near protected rocks and islands.	Similar types of impacts as Alternative 2, with similar number of days (20 versus 7-30). As with Alternative 3, year-round hunting would increase the seasons during which activities occur, with similar effects, but for fewer days (20 versus 40).	Similar to Alternative 3, except the ability to hunt in the Strait of Juan de Fuca would result in disturbance in that area, reducing the number of days of disturbance in the coastal portion of the Makah U&A.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1 No-action</b>	<b>Alternative 2 Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales</b>	<b>Alternative 3 Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits</b>	<b>Alternative 4 Sanctuary and National Wildlife Refuge Resource Alternative</b>	<b>Alternative 5 Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits</b>	<b>Alternative 6 Hunt Anywhere in U&amp;A, No Timing Restrictions, No Identified Whale Limits</b>
<b>ECONOMICS</b>						
<b>Tourism</b>	No opportunity for Tribe to promote hunt-related tourism and no likelihood of hunt-related boycott. Potential for small disproportionate effect on Tribe.	Ability to hunt creates opportunity for Tribe to promote hunt-related tourism. Also potential for hunt-related boycott.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 3.
<b>Household Use of Whale Products</b>	Current limited availability of drift whales and whales incidentally caught in fishing operations (potentially one whale every five years).	Products from up to four whales annually would be available for household consumption, manufacturing, and selling of traditional handicrafts.	Similar to Alternative 2 but year-round hunting would make it more likely the full number of whales could be harvested.	Similar to Alternative 2.	Products from up to 2 whales annually would be available for household use, compared to up to 4 whales under Alternatives 2, 3, 4, and 6.	Similar to Alternative 3.
<b>Whale-watching Industry</b>	Current levels of revenues from, and employment in, whale-watching industry would continue.	Level of gray whale harvest under Alternative 2 would not be expected to change whale-watching interest or opportunities and therefore not likely to affect whale-watching revenues or employment.	Similar to Alternative 2.	Similar to Alternative 2.	Potentially less than Alternative 2 due to hunting restrictions.	Similar to Alternative 2.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>ECONOMICS (continued)</b>						
<b>Shipping and Ocean Sport/Commercial Fishing</b>	Current passage conditions for ships and fishing vessels would continue.	Activating a MEZ during 7-30 days of hunting could temporarily disrupt shipping/fishing traffic, but no substantial economic impacts would be expected.	Potentially greater impacts than Alternative 2 due to additional days of hunting (40 versus 7-30) and greater number of times MEZ is activated. In addition, hunting could occur in summer when more recreational fishing vessels could be affected by MEZ.	Similar to Alternative 2.	Similar number of days of hunting as Alternative 2 (20 versus 7-30), resulting in similar potential for MEZ to be activated. As with Alternative 3, hunting could occur in summer when more recreational fishing vessels could be affected by MEZ.	Similar to Alternative 3.
<b>Management and Law Enforcement</b>	No change from current conditions.	Costs would be incurred for a hunt observer, and for federal, tribal, state, and local law enforcement agents and resources (e.g., helicopters and boats) to monitor the hunt and manage any protest activities.	Compared to Alternative 2, more days of hunting (40 versus 7-30) would increase the potential costs of law enforcement and hunt monitoring.	Similar to Alternative 2.	Similar to Alternative 2, there would be about the same number of days of hunting and similar levels of law enforcement and hunt monitoring.	Similar to Alternative 3.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>ENVIRONMENTAL JUSTICE</b>						
<b>Economics</b>	Current levels of tourism would continue. Current occasional household use of products from drift whales and whales incidentally caught in fishing operations (potentially one whale every five years).	Potential for short term increase in level of visitors to Neah Bay during 7-30 days of hunting. Other visitors might avoid Neah Bay because of hunt. Long-term effects on number of visitors uncertain. Household use of products from up to four whales.	Potentially greater number of visitors in short term than Alternative 2 due to additional days of hunting (40 versus 7-30) and hunting during summer. Some visitors might avoid Neah Bay because of hunt. Long-term effects on number of visitors uncertain. Greater chance the full number of whales could be harvested and available for household use.	Similar to Alternative 2.	Similar number of visitors to Neah Bay as Alternative 2 due to similar number of days of hunting (20 versus 7-30). Household use of products from two whales versus four under Alternative 2.	Similar to Alternative 3.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1 No-action</b>	<b>Alternative 2 Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales</b>	<b>Alternative 3 Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits</b>	<b>Alternative 4 Sanctuary and National Wildlife Refuge Resource Alternative</b>	<b>Alternative 5 Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits</b>	<b>Alternative 6 Hunt Anywhere in U&amp;A, No Timing Restrictions, No Identified Whale Limits</b>
<b>ENVIRONMENTAL JUSTICE (continued)</b>						
<b>Ceremonial and Subsistence Resources</b>	Current limited availability of drift whales and whales incidentally caught in fishing operations (potentially one whale every five years). Lack of access to resource has disproportionate impact on Tribe.	Consistent with Makah's stated need for access to ceremonial and subsistence resources.	Similar to Alternative 2.	Similar to Alternative 2.	Harvest limits (two whales rather than four per year) would provide less access to ceremonial and subsistence resources.	Similar to Alternative 2.
<b>Social Environment</b>	Potential for tension between Makah Tribe and others, including federal government.	Potential for tension between Makah Tribe and others. Potential for social bonding among some tribal members and tension among others. Native Americans generally might be reassured by U.S. support for traditional tribal activity.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>ENVIRONMENTAL JUSTICE (continued)</b>						
<b>Public Safety</b>	No change from current conditions.	Increased potential for hunt-related injury falls disproportionately on tribal members (but risk is voluntarily assumed by Tribe).	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 3.
<b>SOCIAL ENVIRONMENT</b>						
<b>Makah Tribal Members, Other Tribes, and Other Individuals and Organizations</b>	Likely no protests and related social tensions. No change from current level of tension between members opposed to the hunt and those supporting it. The latter may feel continued frustration with U.S. government.	Tension could increase between hunt opponents and supporters, with opponents likely to protest. Supporters are likely to feel reassured by U.S. government support for traditional tribal activity.	Similar to Alternative 2, although additional hunting opportunities could result in more opportunities for protest and greater tension between hunt opponents and supporters.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 3.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1 No-action</b>	<b>Alternative 2 Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales</b>	<b>Alternative 3 Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits</b>	<b>Alternative 4 Sanctuary and National Wildlife Refuge Resource Alternative</b>	<b>Alternative 5 Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits</b>	<b>Alternative 6 Hunt Anywhere in U&amp;A, No Timing Restrictions, No Identified Whale Limits</b>
<b>CEREMONIAL AND SUBSISTENCE RESOURCES</b>						
<b>Subsistence Use</b>	Tribe could pursue some subsistence uses of whales (such as using drift whales or whales incidentally caught in fishing operations), but they would have limited cultural value if not practiced in connection with actual whale hunts.	Compared to No-action Alternative, increased subsistence use of whales due to opportunity to hunt (likely 7-30 days of hunting opportunity) and opportunity to process, share and consume up to average of four whales per year (maximum of five).	Similar to Alternative 2, but subsistence use would increase because year-round hunting would allow for more days of hunting (40 versus 7-30) and result in greater opportunity to harvest the full number of whales allowed.	Similar to Alternative 2.	Similar to Alternative 2 in number of days whales could likely be hunted (20 days versus 7-30), but lower limit on numbers (two versus four) creates less opportunity to harvest, process, share and consume whales.	Similar to Alternative 3.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1 No-action</b>	<b>Alternative 2 Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales</b>	<b>Alternative 3 Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits</b>	<b>Alternative 4 Sanctuary and National Wildlife Refuge Resource Alternative</b>	<b>Alternative 5 Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits</b>	<b>Alternative 6 Hunt Anywhere in U&amp;A, No Timing Restrictions, No Identified Whale Limits</b>
<b>CEREMONIAL AND SUBSISTENCE RESOURCES (continued)</b>						
<b>Traditional Knowledge and Activities</b>	Tribe could continue to engage in many related activities, and could apply and transmit relevant knowledge, but this would have limited cultural value if divorced from actual whale hunts. Application and transfer of knowledge related to actual hunting would be limited to discussions of past whale hunting,	Tribe could engage in full range of activities and apply the full range of knowledge associated with whale hunting, including searching for, striking, killing, towing, processing, sharing and consuming whales.	A year-round hunting season would provide Makah hunters with a greater opportunity to harvest whales, enabling them to hunt during traditional times without regulations restricting them to a season dominated by inclement weather conditions.	Similar to Alternative 2.	Similar to Alternative 2 in number of days whales could likely be hunted (20 days versus 7-30), but lower limit on numbers (two versus four) creates fewer opportunities to engage in traditional activities and apply and transmit traditional knowledge.	Similar to Alternative 3.
<b>Spiritual Connection to Whaling</b>	Spiritual connection to whaling would continue to be limited to connection to past whale hunting and spiritual connection may eventually wane.	Spiritual connection to whaling would be current and ongoing.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>CEREMONIAL AND SUBSISTENCE RESOURCES (continued)</b>						
<b>Cultural Identity</b>	Tribal identity could erode in the absence of opportunities to participate in an activity central to Makah cultural identity.	Makah whale-hunting rituals, spiritual training, songs, dances, and ceremonial activities could increase over current conditions, and regularly recur, reinforcing Makah cultural identity. The opportunity to regularly harvest, process, share, and consume whale products could increase tribal members' sense of community. The whale-hunting ceremonies could provide an additional social framework, which could contribute to community social and spiritual stability.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>NOISE</b>						
<b>Noise Levels at Receiving Properties</b>	No change from current conditions.	Increased noise levels from vessels, aircraft, and weapons at receiving properties in Neah Bay and possibly along State Route 112 east of Neah Bay during a period of 7-30 days. Noise may also be audible to recreational users in hunt vicinity. Limited number of recreational visitors may be affected because hunting would occur in winter and early spring when visitation is low.	Compared to Alternative 2, more days of hunting (40 versus 7-30) would result in increased noise. More recreational visitors would be exposed to noise because hunting would occur during summer.	Similar to Alternative 2.	Similar to Alternative 2, there would be about the same number of hunting days (20 versus 7-30) of increased noise levels at receiving properties. However, similar to Alternatives 3 and 6, hunting could occur year round, affecting more recreational visitors.	Similar to Alternative 3, there would be about the same number of days of hunting (40) and hunting would occur year round. More noise could occur at receiving properties along State Route 112 because hunting would be allowed in the strait. Recreational visitors in the strait would be exposed to more noise than under Alternative 3.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>AESTHETICS</b>						
<b>On-scene Observers</b>	Current lack of opportunity to view an authorized whale hunt would continue.	Harvest of four whales during a period of 7-30 days would be visible to observers at beaches and vantage points along coastal portion of project area. Hunting during winter/spring period when visitation is low would reduce number of unintentional observers.	Compared to Alternative 2, more days of hunting (40 versus 7-30) and hunting during the summer would increase the chance that on-scene observers could see a whale being hunted, brought to shore, or butchered.	Similar to Alternative 2.	Similar to Alternative 2, there would be about the same number of days of hunting (20 versus 7-30), but because hunting would occur during the summer (similar to Alternatives 3 and 6), more on-scene observers might unintentionally observe a whale being hunted, brought to shore, or butchered.	Similar to Alternative 3, there would be about the same number of days of hunting (40) throughout the year. The potential for recreational visitors to view a hunt would extend to the Strait of Juan de Fuca.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>AESTHETICS (continued)</b>						
<b>Media Observers</b>	Current lack of opportunity to view an authorized whale hunt would continue.	Any whale hunts would receive media coverage. However, inclement weather during the hunt period could limit media coverage.	Any whale hunts would receive media coverage. Compared to Alternative 2, more days of hunting (40 versus 7-30) and hunting during the summer could increase the opportunity for media coverage.	Similar to Alternative 2.	Any whale hunts would receive media coverage. Similar to Alternative 2, there would be about the same number of days of hunting (20 versus 7-30). However, similar to Alternatives 3 and 6, hunting could occur during the summer, potentially increasing the opportunity for media coverage.	Similar to Alternative 6.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>TRANSPORTATION</b>						
<b>Highway, Marine, and Air Traffic</b>	No change from current conditions.	Increased hunt-related traffic could increase potential for interference with highway, marine, or air traffic in the project area and could increase the risk of traffic accidents. However, hunts would be limited to the winter and early spring months and would not overlap with peak periods for highway or air traffic.	Compared to Alternative 2, more days of hunting (40 versus 7-30) would increase the potential for interference with highway, marine, or air traffic in the project area, as well as an increased risk of traffic accidents. Hunting during summer would overlap with peak periods for highway and air traffic	Similar to Alternative 2.	Similar to Alternative 2, there would be about the same number of days of hunting and a similar increase in traffic, but because hunting would occur during summer (similar to Alternatives 3 and 6), the increased traffic would overlap with peak periods for highway and air traffic.	Similar to Alternative 3.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>PUBLIC SERVICES</b>						
<b>Law Enforcement and Medical Facilities</b>	No change from current conditions.	Hunt-related protests could increase law enforcement needs, possibly diverting such resources from other missions. Persons suffering hunt-related injuries that exceed the capacities of local health facilities could be transported to other facilities in the region.	Compared to Alternative 2, more days of hunting (40 versus 7-30) would increase the diversion of law enforcement resources from other missions, and increase the number of injuries that require medical attention. Hunting during summer would overlap with peak periods of demand for these public services	Similar to Alternative 2.	Similar to Alternative 2, there would be about the same number of days of hunting and a similar increase in demand for law enforcement and medical services, but because hunting would occur during summer (similar to Alternatives 3 and 6), the increased demand would overlap with peak periods of demand.	Similar to Alternative 3.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>PUBLIC SAFETY</b>						
<b>Injury from Weapons, Boating Accidents, and Land-based Protest Activities</b>	No change from current conditions.	Makah hunters, other participants, protesters, and bystanders would be at risk of injury from weapons, protest activities, or boating accidents during the winter and spring.	Compared to Alternative 2, more days of hunting (40 versus 7-30) could increase risks of injury from protest activity. Injury from weapons and boating accidents might decrease because year-round hunting would allow hunts to occur during more favorable weather and sea conditions.	Similar to Alternative 2.	Similar to Alternative 2, there would be about the same number of days of hunting and a similar risk of injury from protest activities, but because hunting would occur during summer (similar to Alternatives 3 and 6), there could be a decreased risk of injury from weapons and boating accidents because year-round hunting would allow hunts to occur during more favorable weather and sea conditions.	Similar to risk of injury under Alternative 3 for all groups except greater for bystanders on land in that portion of the U&A within the Strait of Juan de Fuca.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1 No-action</b>	<b>Alternative 2 Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales</b>	<b>Alternative 3 Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits</b>	<b>Alternative 4 Sanctuary and National Wildlife Refuge Resource Alternative</b>	<b>Alternative 5 Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits</b>	<b>Alternative 6 Hunt Anywhere in U&amp;A, No Timing Restrictions, No Identified Whale Limits</b>
<b>HUMAN HEALTH</b>						
<b>Nutritional Benefits, Environmental Contaminants, and Exposure to Food-Borne Pathogens</b>	No change from current conditions.	Insufficient information about nutritional value and contaminant levels in current Makah diet to allow a comparison of Alternative 2 to the No-action Alternative.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.
<b>NATIONAL AND INTERNATIONAL REGULATORY ENVIRONMENT</b>						
<b>Marine Mammals Nationally</b>	It is uncertain, but possible, that a decision not to authorize a Makah whale hunt could discourage future requests for a waiver of the MMPA.	Authorizing a Makah hunt may prompt other Indian tribes to request a similar waiver of the MMPA. The outcome of future requests would depend on the specific facts presented.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.

**TABLE 2-2. SUMMARY OF EFFECTS OF THE VARIOUS ALTERNATIVES (CONTINUED)**

<b>RESOURCES</b>	<b>Alternative 1</b> No-action	<b>Alternative 2</b> Proposed Action - Hunt Outside Strait Dec. 1 - May 31, Limits on Identified Whales	<b>Alternative 3</b> Hunt Outside Strait, No Timing Restrictions, No Identified Whale Limits	<b>Alternative 4</b> Sanctuary and National Wildlife Refuge Resource Alternative	<b>Alternative 5</b> Hunt Outside Strait, No Timing Restrictions, More Restrictive Numbers, No Identified Whale Limits	<b>Alternative 6</b> Hunt Anywhere in U&A, No Timing Restrictions, No Identified Whale Limits
<b>NATIONAL AND INTERNATIONAL REGULATORY ENVIRONMENT (continued)</b>						
<b>Worldwide Whaling</b>	U.S. decision not to authorize a Makah whale hunt is unlikely to influence the position of the United States or other countries regarding IWC issues.	It is possible, but speculative, that authorizing a Makah hunt could increase whaling worldwide by emboldening pro-whaling countries.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.	Similar to Alternative 2.
<b>Indigenous People Worldwide</b>	U.S. decision not to authorize a Makah whale hunt is unlikely to influence actions of other governments toward indigenous people.	Similar to No-action Alternative.	Similar to No-action Alternative.	Similar to No-action Alternative.	Similar to No-action Alternative.	Similar to No-action Alternative.