

Appendix B. Compatibility Determinations

B.1 Introduction

The compatibility determinations (CDs) developed during the comprehensive conservation plan (CCP) planning process evaluate uses projected to occur under Alternative B, the preferred alternative, in the Draft CCP/Environmental Assessment (EA) for the Dungeness National Wildlife Refuge (NWR or Refuge) (USFWS 2012a), which was carried forward as the management direction for the Refuge in this CCP. The evaluation of funds needed for management and implementation of each use is described in Appendix C, Implementation. Chapter 6 of the Draft CCP/EA also contained an analysis of the impacts of refuge uses to wildlife and habitats. That document is incorporated through reference into this set of CDs.

B.1.1 Uses Evaluated At This Time

The following section includes full CDs for all refuge uses that are required to be evaluated at this time. According to Service policy, compatibility determinations are to be completed for all uses proposed under a CCP that have been determined to be appropriate. Existing wildlife-dependent recreational uses must also be reevaluated and new CDs prepared during development of a CCP. According to the Service's compatibility policy, uses other than wildlife-dependent recreational uses are not explicitly required to be reevaluated in concert with preparation of a CCP, unless conditions of the use have changed or unless significant new information relative to the use and its effects have become available or the existing CDs are more than 10 years old. However, the Service planning policy recommends preparing CDs for all individual uses, specific use programs, or groups of related uses associated with the proposed action. Accordingly, the following CDs are included in this document for public review.

Table B-1. Summary of Compatibility Determinations

Refuge Use	Compatible	Page
Environmental Education, Wildlife Observation, Photography, Interpretation	Yes	B-4
Research, scientific collecting, and surveys	Yes	B-11
Recreational fishing	Yes	B-25
Tribal fishery	Yes	B-31
Boating	Yes	B-37
Vehicle access to New Dungeness Light Station	Yes	B-43
Horseback riding	Yes	B-48
Jogging	Yes	B-55

B.1.2 Compatibility—Legal and Historical Context

Compatibility is a tool refuge managers use to ensure that recreational and other uses do not interfere with wildlife conservation, the primary focus of national wildlife refuges. Compatibility is not new to the Refuge System and dates back to 1918, as a concept. As policy, it has been used since 1962. The Refuge Recreation Act of 1962 directed the Secretary of the Interior to allow only those public uses of refuge lands that were “compatible with the primary purposes for which the area was established.”

Compatibility Determination

Use: Environmental Education, Wildlife Observation, Photography, and Interpretation

Refuge Name: Dungeness National Wildlife Refuge

County and State: Clallam County, Washington

Establishing and Acquisition Authorities:

- Executive Order 2123, Dungeness Spit Reservation for Protection of Native Birds, signed 20 January 1915
- Tidelands of the second class were conveyed to the United State of America, U.S. Fish and Wildlife Service, from the State of Washington through a permanent easement on May 29, 1943, (Deed No. 18251 App. No. 10585), under the authority described in Section 152, Chapter 255, State of Washington Laws of 1927.
- Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j) as amended
- Refuge Recreation Act of 1962 as amended (16 U.S.C. 460k-460k-4)
- Endangered Species Act of 1973

Refuge Purpose(s):

The purposes for the Dungeness NWR have been identified in historic legal documentation establishing and adding refuge lands. The Refuge was originally established to preserve important habitat for native birds with refuge purposes specified as follows:

“...as a refuge, preserve, and breeding ground for native birds.” (Executive Order 2123 dated 20 January 1915.

“... suitable for- (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ...” (16 U.S.C. 460k-1)

“... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ...” 16 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended).

“... to conserve (A) fish or wildlife which are listed as endangered species or threatened species or (B) plants ...” 16 U.S.C. § 1534 (Endangered Species Act of 1973)

“... for the development, advancement, management, conservation, and protection of fish and wildlife resources ...” 16 U.S.C. § 742f(a)(4) “... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ...” 16 U.S.C. § 742f(b)(1) (Fish and Wildlife Act of 1956)

In accordance with 601 FW 1, all lands acquired since the original establishment of the Refuge retain these purposes.

National Wildlife Refuge System Mission:

“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.” (National Wildlife Refuge System Administration Act of 1966 as amended, 16 U.S.C. 668dd-668ee).

Description of Use:

In the National Wildlife Refuge System Improvement Act of 1997, the United States Congress declared wildlife observation and photography, and environmental education and interpretation as four of six priority wildlife-dependent public uses of the NWRs. These four uses are non-consumptive, wildlife-dependent public uses with similar elements and are considered together in this compatibility determination (CD).

Existing wildlife-dependent public uses include wildlife observation, photography, interpretation, and environmental education. Dungeness NWR is open to public use year-round during daylight hours. Existing public use facilities that are involved in these uses include an orientation kiosk with interpretive panels; an entrance fee kiosk; a 3,300 foot main hiking trail with interpretive panels; a 1,800 foot primitive hiking (former equestrian) trail with associated entrance fee kiosk; two observation decks (upper and lower) at the confluence of the main and primitive trails; and a parking lot and public restroom leased from Clallam County. Visitors engage in wildlife observation and photography while walking the self-guided forest trails and open areas of Dungeness Spit (approximately 5 miles of beach), sitting on observation benches along the main trail and at the observation decks. “Dungeness Spit,” as it is known to the local public, provides an opportunity for the public to enjoy the marine portion of the Refuge. Visitors use select portions of the beach for walking, picnicking, and wading in the course of observing seabirds, shorebirds, bald eagles, and occasional marine mammals. By allowing visitors to access only certain areas of the beach and water and monitoring visitor behavior, adverse effects associated with refuge visitation can be minimized. Complex staff, the Friends of Dungeness NWR, and refuge volunteers provide environmental education programs on site to local schools on a request basis. Interpretation is provided of the wildlife resources and habitat via interpretation panels at the orientation kiosk, along the main trail, and during on-site events by refuge friends, volunteers, and staff.

Availability of Resources:

Base funding is available to cover staff costs and sufficient funds are available to manage the activity at current levels but not at the level described under the management direction of the CCP. The following funding/annual costs will be required to administer and manage wildlife observation, photography, interpretation, and environmental education activities as designed under the CCP.

Category	One-time Expenses	Recurring Expenses
Special equipment, facilities, or equipment(signs, brochures, EE material)	\$23,000	
Monitoring and Administration		\$15,000
Maintenance		\$22,000
Law Enforcement		\$18,000
Totals	\$23,000	\$55,000

Anticipated Impacts of the Use(s):

The presence of people observing or photographing wildlife at Dungeness NWR has the potential to cause disturbance to wildlife such as nesting and loafing species and harbor seal pups left on the beach. Human activities on the forest trails and on the beach may result in direct effects on wildlife through harassment, a form of disturbance that can cause physiological effects or varying levels of behavioral modification (Smith and Hunt 1995). Various studies have shown that the severity of the effects depends upon the distance to the disturbance and its duration, frequency, predictability, and visibility to wildlife (Knight and Cole 1995). The variables found to have the greatest influence on wildlife behavior are (a) the distance from the animal to the disturbance and (b) the duration of the disturbance. Animals also show greater flight response to humans moving unpredictably than to humans following a distinct path (Gabrielsen and Smith 1995). These wildlife disturbance considerations were folded into the design of the interpretive trail, which helps keep people on a path to reduce off-trail walking, and assists in keeping human activities away from bluff edges.

Of the wildlife-dependent public uses evaluated, wildlife photographers tend to have the largest disturbance impacts (Klein 1993, Morton 1995, Dobb 1998). While wildlife observers frequently stop to casually view species, wildlife photographers are more likely to approach wildlife (Klein 1993) to get that perfect photograph. Even slow approach by wildlife photographers tends to have behavioral consequences to wildlife species (Klein 1993). Other compounding factors include the potential for photographers to remain close to wildlife for extended periods of time in an attempt to habituate the wildlife subject to their presence (Dobb 1998) and the tendency of casual photographers, with low-power lenses, to get much closer to their subjects than other activities would require (Morton 1995), including wandering off trails. This usually results in increased disturbance to wildlife and habitat, including trampling of plants. The establishment of seasonal and permanent areas closed to the public on Dungeness and Graveyard spits and the requirement that visitors remain on forest trails restricts the general visitor and photographers' accessibility to areas where their actions would cause wildlife disturbance or trample sensitive vegetation.

Impacts from the wildlife-dependent public uses of wildlife observation and photography are contained effectively and mitigated within the overall design of the 1997 Environmental Assessment "Management of Public Use for Dungeness National Wildlife Refuge" (USFWS 1997) by providing clearly defined zones where and seasons when these activities can take place, and requiring that visitors restrict their use to those seasons and areas. This strategy will continue to be implemented under the CCP. The Complex is aware that some visitors disregard signs requiring visitors to stay within the designated public use areas (Area Closed signs). Such unauthorized use creates the potential for greater disturbance to wildlife.

The other two wildlife-dependent public use programs – interpretation and environmental education – use the existing public facilities, including the kiosk area, trail, interpretive panels, and wildlife observation accommodations (upper and lower observation decks). Impacts from these uses will not be additive with regard to impacts from wildlife observation and photography.

Public Review and Comment:

This compatibility determination was submitted for 90-day public review and comment as an appendix to the Draft Comprehensive Conservation Plan and Environmental Assessment for Dungeness NWR.

Determination:

_____ Use is Not Compatible

X Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

The requirements laid out in the preferred alternative of the Environmental Assessment – “Management of Public Use for Dungeness National Wildlife Refuge” (USFWS 1997) are adopted as stipulations to ensure compatibility and include:

User stipulations:

- Graveyard Spit and the tip of Dungeness Spit are closed to public access
- In Zone 1 – Beach in front of bluffs - Hiking, wildlife observation, and wildlife photography permitted year-round
- In Zone 2 – Base of Dungeness Spit out to ½ mile - Hiking, wildlife observation, wildlife photography and incidental beach uses (picnicking and wading) permitted on the Strait of Juan de Fuca side year-round and on the Dungeness Harbor side from May 15 to September 30. From October 1 to May 14, the Harbor side of Zone 2 is closed to all access.
- In Zone 3 – Strait side of Dungeness Spit from ½ mile to New Dungeness Light Station – Hiking, wildlife observation, and wildlife photography permitted on the Strait side year-round.
- In Zone 4 – Dungeness Spit from lighthouse to end of spit, the Harbor and Bay sides of Dungeness Spit, and all of Graveyard Spit including a 100-yard buffer zone below the mean high tide line - closed to public access year-round. Where the refuge boundary does not accommodate a 100 yard buffer, the buffer is slightly narrower. Boats are permitted to land year-round between the hours of 9 AM and 5 PM, by reservation only through the Complex office (as deemed necessary by the Refuge) in the designated 100 yard zone of beach next to the light station compound on the Bay side of Dungeness Spit. Visitors are allowed to walk through Zone 4 in a designated area to get to and from the landing site to the lighthouse.
- In Zone 5 – Refuge waters and tidelands on the Harbor and Bay sides of Dungeness and Graveyard spits outside of the 100 yard buffer zone - wildlife observation and photography by use of a boat permitted from May 15 through September 30. From October 1 to May 14 this zone is closed to all public access.

Management actions taken to reduce disturbance to harbor seals pupping in areas open to public use will include:

- As soon as a new pup is found, the immediate area where the pup is located will be closed and marked with cones.
- A volunteer will be stationed at the site whenever possible to prevent disturbance and to educate visitors.
- Brochures, signs, and visitor contacts will be used to educate the public about unnecessary pup disturbance and human intervention.

The response of wildlife to these modifications in public use activities will be monitored and evaluated to measure the effectiveness of the program in meeting refuge purposes. Based on monitoring data, public use regulations could become more restrictive in the future.

Justification:

Wildlife observation, photography, and environmental education and interpretation are priority public uses of the NWRs. Providing opportunities for these activities will contribute toward fulfilling provisions of the National Wildlife Refuge System Administration Act, as amended in 1997, and one of the goals of Dungeness NWR. Wildlife observation, photography, and interpretation will provide an excellent forum for allowing public access and increasing understanding of refuge resources. The educational possibilities provided by these opportunities will outweigh any anticipated negative impacts associated with implementation of the program. The stipulations outlined above, as well as the best management practices identified, will minimize potential impacts relative to wildlife/human interactions.

Although all of these activities can result in disturbance to wildlife, disturbance will be limited in time and space. There is more than an adequate amount of undisturbed habitat available to the majority of refuge wildlife for escape and cover.

It is anticipated that wildlife populations will find sufficient food resources and resting places such that their abundance and use of the Refuge will not be measurably lessened from wildlife observation, photography, and environmental education and interpretation activities. The relatively limited number of individuals expected to be adversely affected due to allowing these uses will not cause wildlife populations to materially decline, the physiological condition and production of refuge wildlife species will not be impaired, their behavior and normal activity patterns will not be altered dramatically, and their overall welfare will not be negatively impacted.

Thus, allowing interpretation, environmental education, wildlife observation, and photography to occur with stipulations outlined above will not materially detract or interfere with achieving Dungeness NWR purposes or the NWRs mission, and in some instances may benefit refuge purposes. For example, an educated public is one less likely to damage natural and cultural resources and is more likely to be supportive of funding for national wildlife refuges and other public land.

Mandatory Re-Evaluation Date:

Mandatory 15-year reevaluation date (for wildlife-dependent public uses)

Mandatory 10-year reevaluation date (for all uses other than wildlife-dependent public uses)

NEPA Compliance for Refuge Use Decision: (check one below)

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

References:

- Dobb, E. 1998. Reality check: the debate behind the lens. *Audubon* 100(1):44-51, 98-99.
- Gabrielsen, G.W. and E.N. Smith. 1995. Physiological responses of wildlife to disturbance. Pages 95-107 in: R.L. Knight and K.J. Gutzwiller, eds. *Wildlife and recreationists: coexistence through management and research*. Washington, D.C.: Island Press.
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- USFWS. 1997. Management of public use for Dungeness National Wildlife Refuge – final environmental assessment. U.S. Department of Interior, Fish and Wildlife Service. Sequim, WA. 53 pp. On file at the Washington Maritime National Wildlife Refuge Complex Headquarters. Sequim, Washington.

Refuge Determination:

Prepared by:

Loren Sell
(Signature)

04/19/2013
(Date)

Acting Refuge Manager/
Project Leader Approval:

Loren Sell
(Signature)

04/19/2013
(Date)

Concurrence:

Refuge Supervisor:

[Signature]
(Signature)

4/23/13
(Date)

Regional Chief,
National Wildlife
Refuge System:

L.D. West
(Signature)

4-23-13
(Date)

Compatibility Determination

Use: Fishing, General and Other

Refuge Name: Dungeness National Wildlife Refuge

County and State: Clallam County, Washington

Establishing and Acquisition Authorities:

- Executive Order 2123, Dungeness Spit Reservation for Protection of Native Birds, signed 20 January 1915
- Tidelands of the second class were conveyed to the United State of America, U.S. Fish and Wildlife Service, from the State of Washington through a permanent easement on May 29, 1943, (Deed No. 18251 App. No. 10585), under the authority described in Section 152, Chapter 255, State of Washington Laws of 1927.
- Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j) as amended
- Refuge Recreation Act of 1962 as amended (16 U.S.C. 460k-460k-4)
- Endangered Species Act of 1973

Refuge Purpose(s):

The purposes for the Dungeness NWR have been identified in historic legal documentation establishing and adding refuge lands. The Refuge was originally established to preserve important habitat for native birds with refuge purposes specified as follows:

“...as a refuge, preserve, and breeding ground for native birds.” (Executive Order 2123 dated 20 January 1915.

“... suitable for- (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ...” (16 U.S.C. 460k-1)

“... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ...” 16 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended).

“... to conserve (A) fish or wildlife which are listed as endangered species or threatened species or (B) plants ...” 16 U.S.C. § 1534 (Endangered Species Act of 1973)

“... for the development, advancement, management, conservation, and protection of fish and wildlife resources ...” 16 U.S.C. § 742f(a)(4) “... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ...” 16 U.S.C. § 742f(b)(1) (Fish and Wildlife Act of 1956)

In accordance with 601 FW 1, all lands acquired since the original establishment of the Refuge retain these purposes.

National Wildlife Refuge System Mission:

“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.” (National Wildlife Refuge System Administration Act of 1966 as amended, 16 U.S.C. 668dd-668ee).

Description of Use(s):

Two types of fishing occur at Dungeness National Wildlife Refuge; fin fish (salmon species primarily) and shell fish (mollusks and Dungeness crab). The Refuge has jurisdiction over the land base including shorelines to mean high water and the second class tidelands under a perpetual easement from the State of Washington and the waters associated with those tidelands. Anglers accessing the fishing opportunities on the Refuge do so by fishing from the shoreline or from boats. Finfishing from the shoreline occurs on the Strait of Juan de Fuca side of Dungeness Spit from the western boundary east to the New Dungeness Light Station (Zones 1, 2 and 3) and from boats in refuge waters associated with the Refuge’s second class tidelands on the Dungeness Harbor and Bay sides of Dungeness Spit outside a 100 yard buffer zone below Mean High Tide (Zone 5). Shellfishing occurs on the Dungeness Harbor side from the base of Dungeness Spit out to ½ mile (Zone 2)—foot access only—and on the Refuge’s second-class tidelands and waters associated with these tidelands on the Dungeness Harbor and Bay sides of Dungeness Spit outside a 100 yard buffer zone below Mean High Tide (Zone 5) – boat access only. Public uses of Zones 2 and 5 are restricted to May 15 to September 30. All fishing is conducted in accordance with State regulations.

This compatibility determination (CD) reassesses and re-evaluates recreational fishing from all shorelines and Dungeness Harbor and Bay areas within the refuge boundary. Under this use fishing will be allowed consistent with State regulations. Specific species/numbers to be taken and open periods will be set by the Washington Department of Fish and Wildlife to match adjacent areas open to fishing, however seasonal closures of Refuge Zones 2 and 5 will continue.

Recreational fishing (a wildlife-dependent activity) has been identified in the National Wildlife Refuge System Administration Act, as amended, as a priority public use, provided it is compatible with the purpose for which the Refuge was established.

Availability of Resources

The recreational fishing program will not require any new infrastructure or personnel. Administration of a fishing program will require coordination with the State of Washington and require monitoring and some law enforcement patrols; however refuge staff is in place and capable of conducting these additional duties.

Category	One Time Expenses	Recurring Expenses
Monitoring/Law Enforcement		\$4,000
Signage/Brochures	\$3,000	\$500
Maintenance		\$1,500
Totals	\$3,000	\$6,000

Anticipated Impacts of the Use(s):

As a solitary and stationary activity, fishing tends to be less disturbing to wildlife than hunting or motorized boating (Tuite et al. 1983). It is well recognized that fishing can give many people a

deeper appreciation of fish and wildlife and a better understanding of the importance of conserving habitat, which has ultimately contributed to the Refuge System mission. A goal of Dungeness National Wildlife Refuge is to provide opportunities for wildlife-dependent recreation. Fishing is one of the six priority public uses in the National Wildlife Refuge System. Of key concern, then, is to manage the activity to keep any potential adverse impacts within acceptable limits.

Any angler activities on the Refuge are and will remain consistent with State guidelines. Related impacts for fish stocks associated with recreational fishing in the Strait of Juan de Fuca adjacent to the Refuge and Dungeness Harbor and Bay, are estimated annually and taken into consideration by the State of Washington in the development of annual fishing agreements and associated regulations. Because fishing regulations are established to provide a sustainable fish resource, impacts to fish populations from recreational fishing activity are expected to be minor.

Additional disturbance will be caused to birds and other wildlife using the open waters and where fishing will occur. Fishing activities may influence the composition of bird communities, as well as abundance, and productivity of waterbirds (Bell and Austin 1985, Bouffard 1982, Cooke 1987, Edwards and Bell 1985, Tydeman 1977). Anglers often fish in shallow, sheltered bays and creeks that birds prefer, negatively impacting distribution and abundance of waterfowl, grebes, and coots (Cooke 1987). Increases in anglers and associated shoreline activity discouraged waterfowl using otherwise suitable habitat (Jahn and Hunt 1964). Anglers influenced the numbers, behavior, and diurnal distribution of avian scavengers present at sites in Washington, when compared to non-fishing days (Knight et al. 1991). Shoreline activities, such as human noise, can cause some birds to flush and go elsewhere.

Boating associated with fishing can alter bird distribution, reduce use of particular habitats or entire areas by waterfowl and other water-birds, alter feeding behavior and nutritional status, and cause premature departure from areas (Knight and Cole 1995). Boating close to shore may disturb harbor seals hauled out on the beach. Impacts of motorized boating can occur even at low densities, given their noise, speed, and ability to cover extensive areas in a short amount of time. (See Boating Compatibility Determination.)

Despite the potential impacts that fishing and supporting activities (boating) can have on wildlife, impacts to wildlife from allowing fishing are expected to be minor for the following reasons. The 100 yard buffer from the mean high tide on the Harbor and Bay side of Dungeness and Graveyard spits coupled with the requirement for boats to have no wake will minimize disturbance to any nesting seabirds or shorebirds and resting or pupping harbor or elephant seals. The majority of waterfowl use on the Refuge occurs in the fall, winter and spring months, with some birds arriving as early as September and October. Because the majority of the fishing activity occurs in the summer and fall (through mid-October), disturbance to waterfowl species is reduced by annual closing refuge waters to all use from October 1 to May 14.

Public Review and Comment:

This compatibility determination was submitted for 90-day public review and comment as an appendix to the Draft Comprehensive Conservation Plan and Environmental Assessment for Dungeness NWR.

Determination:

_____ Use is Not Compatible

X Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

The requirements laid out in the preferred alternative of the 1997 Environmental Assessment – “Management of Public Use for Dungeness National Wildlife Refuge” (USFWS 1997) are adopted as stipulations to ensure compatibility and include:

User stipulations:

- Graveyard Spit and the tip of Dungeness Spit are closed to public access
- In Zone 1 – Beach in front of bluffs – Fin fishing permitted year-round
- In Zone 2 – Base of Dungeness Spit out to ½ mile – Fin fishing permitted on the Strait of Juan de Fuca side year-round. Fin fishing and shell fishing permitted on the Dungeness Harbor side from May 15 to September 30 – foot access only. From October 1 to May 14, the Harbor side of Zone 2 is closed to all access.
- In Zone 3 – Strait side of Dungeness Spit from ½ mile to New Dungeness Light Station – Fin fishing permitted year-round.
- In Zone 4 – Dungeness Spit from lighthouse to end of spit, the Harbor and Bay sides of Dungeness Spit, and all of Graveyard Spit including a 100-yard buffer zone below the mean high tide line - closed to public access year-round. Where the refuge boundary does not accommodate a 100 yard buffer, the buffer is slightly narrower.
- In Zone 5 – Refuge waters and tidelands on the Harbor and Bay sides of Dungeness and Graveyard spits outside of the 100 yard buffer zone – fin fishing and shell fishing permitted from May 15 through September 30 – boat access only. From October 1 to May 14 this zone is closed to all public access.

The response of wildlife to these modifications in public use activities will be monitored and evaluated to measure the effectiveness of the program in meeting refuge purposes. Based on monitoring data, public use regulations could become more restrictive in the future.

Justification:

Recreational fishing is one of the six priority public uses of the National Wildlife Refuge System. Providing a quality fishing program contributes to achieving one of the Refuge’s goals. Despite the potential impacts that fishing and supporting activities (boating) can have on wildlife, impacts to wildlife from allowing fishing are expected to be minor for the following reasons. The 100 yard buffer from the mean high tide on the Harbor and Bay side of Dungeness and Graveyard spits coupled with the requirement for boats to have no wake will minimize disturbance to any nesting seabirds or shorebirds and resting or pupping harbor or elephant seals. The majority of waterfowl use on the Refuge occurs in the fall, winter and spring months, with some birds arriving as early as September and October. Because the majority of the fishing activity occurs in the summer and fall (through mid-October), disturbance to waterfowl species is reduced by annual closing refuge waters to all use from October 1 to May 14.

Mandatory Re-Evaluation Date:

Mandatory 15-year reevaluation date (for wildlife-dependent public uses)

Mandatory 10-year reevaluation date (for all uses other than wildlife-dependent public uses)

NEPA Compliance for Refuge Use Decision: (check one below)

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

References:

Bell, D.V. and L.W. Austin. 1985. The game-fishing season and its effects on overwintering wildfowl. *Biological Conservation* 33:65-80.

Bouffard, S.H. 1982. Wildlife values versus human recreation: Ruby Lake National Wildlife Refuge. *Transactions of the Forty-Seventh North American Wildlife and Natural Resources Conference* 47:553-556.

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Tuite, C.H., M. Owen, and D. Paynther. 1983. Interaction between wildfowl and recreation at Llangorse Lake and Talybont Reservoir, South Wales. *Wildfowl* 34:48-63.

Tydeman, C.F. 1977. The importance of the close fishing season to breeding bird communities. *Journal of Environmental Management* 5:289-296.

Refuge Determination:

Prepared by:

Loren Soll
(Signature)

04/19/2013
(Date)

Acting Refuge Manager/
Project Leader Approval:

Loren Soll
(Signature)

04/19/2013
(Date)

Concurrence:

Refuge Supervisor:

[Signature]
(Signature)

4/23/13
(Date)

Regional Chief,
National Wildlife
Refuge System:

L. S. West
(Signature)

4-23-13
(Date)

Compatibility Determination

Use: Fishing, Other, Tribal

Refuge Name: Dungeness National Wildlife Refuge

County and State: Clallam County, Washington

Establishing and Acquisition Authorities:

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- Tidelands of the second class were conveyed to the United State of America, U.S. Fish and Wildlife Service, from the State of Washington through a permanent easement on May 29, 1943, (Deed No. 18251 App. No. 10585), under the authority described in Section 152, Chapter 255, State of Washington Laws of 1927.
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“... suitable for-(1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ...” (16 U.S.C. 460k-1)

“... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ...” 16 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended).

“... to conserve (A) fish or wildlife which are listed as endangered species or threatened species or (B) plants ...” 16 U.S.C. § 1534 (Endangered Species Act of 1973)

“... for the development, advancement, management, conservation, and protection of fish and wildlife resources ...” 16 U.S.C. § 742f(a)(4) “... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ...” 16 U.S.C. § 742f(b)(1) (Fish and Wildlife Act of 1956)

In accordance with 601 FW 1, all lands acquired since the original establishment of the Refuge retain these purposes.

National Wildlife Refuge System Mission:

“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.” (National Wildlife Refuge System Administration Act of 1966 as amended, 16 U.S.C. 668dd-668ee).

Description of Use:

The S’Klallam and Skokomish Tribes were signatories to the Point-No-Point Treaty with the U.S. Government in 1855. The S’Klallam tribe today consists of the Jamestown S’Klallam, Lower Elwha Klallam, and Port Gamble S’Klallam. In accordance with the Treaty, the Tribes retained the right to fish “at their usual and accustomed places.” The Tribes, in exercising their Treaty rights, fish in Dungeness Harbor and Bay by set nets or other traditional methods, or by modern or improved fishing techniques. The U.S. Fish and Wildlife Service recognizes that the Treaty fishing rights include access to National Wildlife Refuge System lands. This is a treaty right against land owned by the United States. Access to the Refuge is only open to Tribal members involved in fishing. In 1983, the USFWS and the three S’Klallam Tribes signed a Letter of Agreement for Management of the Tribal Fishery on Dungeness National Wildlife Refuge. The Letter of Agreement contained 8 principles of agreement to promote mutual understanding and cooperation between the USFWS and the Tribes of the Point-No-Point Treaty and to provide for orderly conduct of the fishery on Dungeness NWR. These principles of agreement are reflected in the stipulations necessary to ensure compatibility.

Availability of Resources:

The recreational fishing program will not require any new infrastructure or personnel. Administration of the Tribal fishing program will require coordination with the Point-No-Point Treaty Tribes and require monitoring and some law enforcement patrols; however refuge staff is in place and capable of conducting these duties.

Category	One Time Expenses	Recurring Expenses
Administration- Coordination with tribes		\$1,500
Monitoring/Law Enforcement		\$2,500
Totals		\$4,000

Anticipated Impacts of the Use(s):

Any Tribal angler activities on the Refuge are and will remain consistent with Tribal guidelines. Related impacts for fish stocks associated with Tribal fishing in Dungeness Harbor and Bay are estimated annually and taken into consideration by the State of Washington and Tribes as co-managers of the fishery in the development of annual fishing agreements and associated regulations. Because fishing regulations are established to provide a sustainable fish resource, impacts to fish populations from Tribal fishing activity are expected to be minor.

Additional disturbance will be caused to birds and other wildlife using the open waters and where fishing will occur. Fishing activities may influence the composition of bird communities, as well as abundance, and productivity of waterbirds (Bell and Austin 1985, Bouffard 1982, Cooke 1987, Edwards and Bell 1985, Tydeman 1977). Anglers often fish in shallow, sheltered bays and creeks that birds prefer, negatively impacting distribution and abundance of waterfowl, grebes, and coots

(Cooke 1987). Increases in anglers and associated shoreline activity discouraged waterfowl using otherwise suitable habitat (Jahn and Hunt 1964). Anglers influenced the numbers, behavior, and diurnal distribution of avian scavengers present at sites in Washington, when compared to non-fishing days (Knight et al. 1991). Shoreline activities, such as human noise, can cause some birds to flush and go elsewhere. Tribal members currently may set fires for camping and curing fish and construct temporary shelters as has been done traditionally. These activities reduce drift wood habitat on the spit and may result in a wildfire.

Boating associated with fishing can alter bird distribution, reduce use of particular habitats or entire areas by waterfowl and other water-birds, alter feeding behavior and nutritional status, and cause premature departure from areas (Knight and Cole 1995). Boating close to shore may disturb harbor seals hauled out on the beach. Impacts of motorized boating can occur even at low densities, given their noise, speed, and ability to cover extensive areas in a short amount of time. (See Boating Compatibility Determination.)

There will be impacts to refuge resources from Tribal fishing. Under the 1983 Letter of Agreement for Management of the Tribal Fishery on Dungeness NWR, Tribal members are allowed access to refuge closed areas in exercising their Treaty Rights. Tribal members can camp, collect drift wood and build fires. These activities result in wildlife displacement, reduce drift wood habitat on the spit and may result in a wildfire. Boating in support of the Tribal fishery can take place in waters closed to public use after September 30th if the fishery continues beyond that date. Wildlife species using these closed areas can be disturbed. In addition avian and marine mammal species may become entangled in Tribal nets and be injured or die.

Despite the potential impacts that Tribal fishing and supporting activities (boating) can have on wildlife, impacts to wildlife from allowing fishing are expected to be minor for the following reasons. In most years, relatively few individuals participate in this fishery. The use is limited in time usually beginning in mid- September and finishing in late October before we get large numbers of wintering birds and there is plenty of adjacent sanctuary for disturbed wildlife to escape to. An additional steelhead fishery occurs from December through February but has resulted in very limited participation and occurs mostly outside of refuge waters in the vicinity of Cline Spit. Tribal members must maintain visual contact with their nets and not leave them unattended which reduces the incidence of bycatch of avian and marine mammal species. Fires are not to be left unattended thus reducing the likelihood of a wildfire event.

Public Review and Comment:

This compatibility determination was submitted for 90-day public review and comment as an appendix to the Draft Comprehensive Conservation Plan and Environmental Assessment for Dungeness NWR.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

The principles of agreement as laid out in the 1983 Letter of Agreement for Management of the Tribal Fishery on Dungeness National Wildlife Refuge are adopted as stipulations to ensure compatibility and include:

1. During the prescribed fishing seasons, established by the Tribes and the Washington Department of Fish and Wildlife, the Tribes (Lower Elwha Klallam, Jamestown S’Klallam and Port Gamble S’Klallam) of the Point-No-Point Treaty (PNPT) may conduct their fishery in Dungeness Harbor and Bay in compliance with tribal and applicable state regulations
2. Access by tribal members and fish buyers to the refuge areas, which are the usual and accustomed fishing grounds and stations of the Tribes (Lower Elwha Klallam, Jamestown S’Klallam and Port Gamble S’Klallam), is limited to boat and foot.
3. Leaving equipment (boats, nets, etc.) on the refuge lands is discouraged. The owner assumes all risks associated with unattended equipment
4. The Tribes (Lower Elwha Klallam, Jamestown S’Klallam and Port Gamble S’Klallam) of the PNPT may set fires for camping and curing fish and construct temporary shelters as has been done traditionally. Fires should not be left unattended. Camp sites should be totally removed and fire pits extinguished and covered with sand at the conclusion of the fishing season.
5. The USFWS prohibits pets and littering while on refuge lands
6. The Tribal Enforcement Division will be responsible for ensuring compliance with the above principles and with Tribal fishery regulations and will respond to complaints from USFWS personnel for reasons of non-compliance.
7. The Tribes will notify the USFWS of opening and closing dates of the fishing seasons on Dungeness NWR.
8. The USFWS agrees to discourage visitors to the Dungeness NWR from vandalizing fishing gear or otherwise disturbing Indian fishing activities on refuge lands.

The Letter of Agreement is 29 years old and the Refuge will contact the Tribes concerning updating the document. In particular the Refuge will work to modify conditions 3 and 4. Should these two principles be changed then the CD (stipulations necessary to ensure compatibility) will be modified to reflect same.

Justification:

The USFWS recognizes the Point-No-Point Treaty Tribes retained the right to fish “at their usual and accustomed places” and that Dungeness NWR is one of those places. Although there may be some wildlife and habitat disturbance associated with this activity, the USFWS will continue to work with the Tribes to minimize these effects. Although Tribal fishing and associated boating can result in disturbance to wildlife, disturbance is expected to be intermittent and limited in time and space. There are more than adequate amounts of undisturbed habitat available to the majority of wildlife for escape and cover.

It is anticipated that wildlife populations will find sufficient food resources and resting places such that their abundance and use of the Refuge will not be measurably lessened from Tribal fishing activities. The relatively limited number of individual animals and plants expected to be adversely affected due to fishing will not cause wildlife populations to materially decline, the physiological condition and production of affected species will not be impaired, their behavior and normal activity patterns will not be altered dramatically, and their overall welfare will not be negatively impacted. Thus, allowing Tribal fishing to occur with stipulations (1983 Letter of Agreement for Management of the Tribal Fishery on Dungeness National Wildlife Refuge) will not materially detract from or interfere with the purposes for which the Refuge was established or the Refuge System mission.

Mandatory Re-Evaluation Date:

Mandatory 15-year re-evaluation date (wildlife-dependent public uses)

Mandatory 10-year re-evaluation date (uses other than wildlife-dependent public uses)

NEPA Compliance for Refuge Use Decision: (check one below)

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

References:

Bell, D.V. and L.W. Austin. 1985. The game-fishing season and its effects on overwintering wildfowl. *Biological Conservation* 33:65-80.

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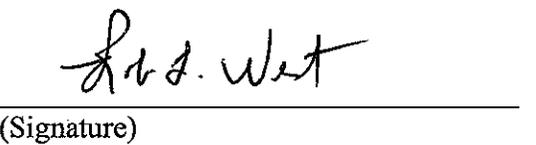
Refuge Determination:

Prepared by:  04/19/2013
(Signature) (Date)

Acting Refuge Manager/
Project Leader Approval:  04/19/2013
(Signature) (Date)

Concurrence:

Refuge Supervisor:  4/23/13
(Signature) (Date)

Regional Chief,
National Wildlife
Refuge System:  4-23-13
(Signature) (Date)

Compatibility Determination

Use: Boating (Motorized and Non-motorized)

Refuge Name: Dungeness National Wildlife Refuge

County and State: Clallam County, Washington

Establishing and Acquisition Authorities:

- Executive Order 2123, Dungeness Spit Reservation for Protection of Native Birds, signed 20 January 1915
- Tidelands of the second class were conveyed to the United State of America, U.S. Fish and Wildlife Service, from the State of Washington through a permanent easement on May 29, 1943, (Deed No. 18251 App. No. 10585), under the authority described in Section 152, Chapter 255, State of Washington Laws of 1927.
- Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j) as amended
- Refuge Recreation Act of 1962 as amended (16 U.S.C. 460k-460k-4)
- Endangered Species Act of 1973

Refuge Purpose(s):

The purposes for the Dungeness NWR have been identified in historic legal documentation establishing and adding refuge lands. The Refuge was originally established to preserve important habitat for native birds with refuge purposes specified as follows:

“...as a refuge, preserve, and breeding ground for native birds.” (Executive Order 2123 dated 20 January 1915.

“... suitable for-(1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ...” (16 U.S.C. 460k-1)

“... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ...” 16 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended).

“... to conserve (A) fish or wildlife which are listed as endangered species or threatened species or (B) plants ...” 16 U.S.C. § 1534 (Endangered Species Act of 1973)

“... for the development, advancement, management, conservation, and protection of fish and wildlife resources ...” 16 U.S.C. § 742f(a)(4) “... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ...” 16 U.S.C. § 742f(b)(1) (Fish and Wildlife Act of 1956)

In accordance with 601 FW 1, all lands acquired since the original establishment of the Refuge retain these purposes.

National Wildlife Refuge System Mission:

“The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.” (National Wildlife Refuge System Administration Act of 1966 as amended, 16 U.S.C. 668dd-668ee).

Description of Use:

Boating use addressed in this compatibility determination is for motorized and non-motorized boats, including kayaks and canoes in refuge waters associated with the Refuge’s second class tidelands. Although boating is not a wildlife-dependent public use, it does facilitate other wildlife-dependent uses such as fishing, wildlife observation, and photography. Boating at Dungeness NWR primarily supports fishing (shell fish and fin fish), although wildlife observation and photography are also conducted from these platforms. Access to the New Dungeness Light Station via boat is permitted through a reservation system (See Environmental Education, Wildlife Observation, Photography, and Interpretation Compatibility Determination). Currently boating on refuge waters is limited to May 15 through September 30. Personal watercrafts, wind surfing and para-surfing/sailing are not permitted on refuge waters.

Availability of Resources:

The following funding/annual cost will be required to administer and manage boating activities as described above:

Category	One Time Expense	Recurring Expense
Administration (Reservation system for lighthouse landings)		\$1,000
Monitoring		\$4,000
Signage/Outreach	\$3,500	\$500
Totals	\$3,500	\$5,500

The Refuge has sufficient staff and funding to allow the use.

Anticipated Impacts of the Use(s):

Dungeness NWR provides crucial foraging and resting habitat for wintering migratory birds, including waterfowl, shorebirds, seabirds, and other waterbirds. Recreational boating affects their use of refuge and other Dungeness Harbor and Bay waters. Boating activity, both motorized and non-motorized, can alter distribution, reduce use of particular habitats or entire areas by waterfowl and other birds, alter feeding behavior and nutritional status, and cause premature departure from areas (Knight and Cole 1995). More sensitive species may find it difficult to secure adequate food or loafing sites as their preferred habitat becomes fragmented and recreation-related disturbances increase (Skagen et al. 1991, Pfister et al. 1992). During migration and wintering, Pacific brant can be considered obligate feeders on eelgrass. Because of this, the eelgrass beds associated with the Refuge’s second-class tidelands are important brant feeding areas.

Another species that could be impacted is the harbor seal. Harbor seals haulout and bear their pups on Dungeness Harbor and Bay tideflats and beaches. Harbor seals are afforded protection under the Marine Mammal Protection Act of 1972.

Canoes and kayaks can cause significant disturbance effects based on their ability to penetrate into shallower areas (Speight 1973, Knight and Cole 1995). Canoes or slow-moving boats have been observed to disturb great blue herons (Vos et al. 1985). Huffman (1999) found that non-motorized boats within 30 meters (98 feet) of the shoreline in south San Diego Bay caused all wintering waterfowl to flush between the craft and shore. However, compared to motorboats, canoes and kayaks appear to have less disturbance effects on most wildlife species (Huffman 1999, DeLong 2002).

The overall effects to wildlife will not be significant because refuge waters are closed to all use during the migration and winter season and there is a requirement to maintain a closed area 100 yard buffer zone below the mean high tide line during periods when these waters are open to public use.

Impacts from boating are contained effectively and mitigated within the overall design of the 1997 Environmental Assessment “Management of Public Use for Dungeness National Wildlife Refuge” (USFWS 1997) by providing clearly defined zones where and seasons when these activities can take place, and requiring that visitors restrict their use to those seasons and areas. This strategy will continue to be implemented under the CCP. The Complex is aware that some visitors disregard signs requiring visitors to stay within the designated public use areas (Area Closed signs). Such unauthorized use creates the potential for greater disturbance to wildlife

Public Review and Comment:

This compatibility determination was submitted for 90-day public review and comment as an appendix to the Draft Comprehensive Conservation Plan and Environmental Assessment for Dungeness NWR.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

The requirements laid out in the preferred alternative of the Environmental Assessment – “Management of Public Use for Dungeness National Wildlife Refuge” (USFWS 1997) are adopted as stipulations to ensure compatibility and include:

- In Zone 4 – Dungeness Spit from lighthouse to end of spit, the Harbor and Bay sides of Dungeness Spit, and all of Graveyard Spit including a 100-yard buffer zone below the mean high tide line - closed to public access year-round. Where the refuge boundary does not accommodate a 100 yard buffer, the buffer is slightly narrower.
- In Zone 5 – Refuge waters and tidelands on the Harbor and Bay sides of Dungeness Spit outside the 100 yard buffer – motorized and non-motorized boats (kayaks, small sailboats, canoes, rowboats, etc.) allowed access to the areas west and east of Graveyard Spit in Zone 5, from October 1 to May 14.
- From October 1 to May 14 this zone is closed to all public access.
- Zone 5 is a no wake zone for power boats.
- Boats are permitted to land year-round between the hours of 9 AM and 5 PM, by reservation only through the Complex office (as deemed necessary by the Refuge), in the designated 100 yard zone of beach next to the light station compound on the Bay side of Dungeness Spit.

Number of landings is limited to no more than 20 per day. Visitors are allowed to walk through Zone 4 in a designated area to get to and from the landing site to the lighthouse.

The response of wildlife to these modifications in public use activities will be monitored and evaluated to measure the effectiveness of the program in meeting refuge purposes. Based on monitoring data, public use regulations could become more restrictive in the future.

Justification:

Boating itself is not considered wildlife-dependent recreation, but many wildlife-dependent recreational activities (fishing, waterfowl hunting, environmental education, interpretation, and wildlife observation/photography) are associated with boating. Providing opportunities for wildlife-dependent priority public uses will contribute toward fulfilling provisions under the National Wildlife Refuge System Administration Act as amended in 1997. Although boating has a potential to impact wildlife, implementing the prescribed measures listed in the Stipulations section will minimize these impacts. It is anticipated that closing refuge waters to boating during the migration and winter time periods will provide secure feeding and resting places for brant, waterfowl and shorebirds. The 100 yard buffer on the Dungeness Harbor and Bay side of Dungeness and Graveyard spits will minimize the potential for disturbance to nesting black oystercatchers and harbor seals.

Thus, it is anticipated that birds will find sufficient food resources and resting places such that their abundance and use of the Refuge will not be measurably lessened, the physiological condition and production of waterfowl and other waterbirds will not be impaired, their behavior and normal activity patterns will not be altered dramatically, and their overall status will not be impaired. Thus, allowing boating under the stipulations described above will not materially detract from or interfere with the purposes for which the Refuge was established or the Refuge System mission. The Refuge will also implement a monitoring program to help assess disturbance effects on wildlife and habitat. Improved outreach and educational information for refuge visitors involved in activities associated with boating will also help to reduce the impacts associated with boating activities.

Mandatory Re-Evaluation Date:

Mandatory 15-year re-evaluation date (wildlife-dependent public uses)

Mandatory 10-year re-evaluation date (uses other than wildlife-dependent public uses)

NEPA Compliance for Refuge Use Decision: (check one below)

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

References:

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Refuge Determination:

Prepared by: Loem Soll 04/19/2013
(Signature) (Date)

Acting Refuge Manager/
Project Leader Approval: Loem Soll 04/19/2013
(Signature) (Date)

Concurrence:

Refuge Supervisor: [Signature] 4/23/13
(Signature) (Date)

Regional Chief,
National Wildlife
Refuge System: L. J. Wet 4-23-13
(Signature) (Date)