

# Compatibility Determination

## Title

Waterfowl Hunting on Willapa National Wildlife Refuge

## Refuge Use Category

Hunting

## Refuge Use Type(s)

Hunting (waterfowl), Hunting (other migratory birds)

## Refuge

Willapa National Wildlife Refuge

## Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

“... as a refuge and breeding ground for migratory birds and other wildlife ...”  
(Executive Order 7541, dated January 22, 1937)

“... in order to effectuate further the purposes of the Migratory Bird Conservation Act (45 Stat. 1222)” (Executive Order 7721, October 8, 1937)

“... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” (Migratory Bird Conservation Act of 1929, 16 U.S.C. 715 et. seq.)

“... 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)

“... 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)

Management priorities are described in various memoranda and legal and land acquisition documents. Management priorities include:

To preserve, protect, and restore newly acquired habitats and provide habitat for other migratory birds, plants, and wildlife with special emphasis for marbled murrelets, bald eagles, Aleutian Canada geese, shorebirds, marsh birds, and wading birds.

To support a diverse assemblage of native fish, wildlife, and plants which includes: eelgrass beds, gravel bars, old-growth/mature forests, riverine habitats, intertidal mudflats, sand dune habitat, fish species (coho, Chinook, chum salmon, steelhead, sea-run cutthroat trout), amphibian diversity, compatible wildlife-dependent recreation, educational/research opportunities, and cultural resource sites.

“... one of the most important concentration points for migratory waterfowl on the Washington Coast. It has a fine supply of natural aquatic foods, especially eel-grass, and thereby has been for years one of the few suitable wintering grounds available for Black Brant ... it is essential for the preservation of the Pacific flyway that the Restoration program provide adequate sanctuary facilities for migratory birds in that state.” (Migratory Bird Conservation Commission Memorandum, Memo 16, May 7, 1936)

To preserve and protect unique ecosystems associated with Willapa Bay ... To provide for maximum use and production by migratory birds other than wintering waterfowl, with special emphasis on bald eagles and marsh and wading birds.” (Long Island Land Exchange; September 1983)

“... protect habitat for old growth dependent species including the threatened marbled murrelet and threatened northern spotted owl ... protect and restore upland forest and associated stream habitat in order to protect and enhance declining fish populations, including coastal cutthroat trout, and Chinook, coho, and chum salmon runs ... protect and restore coastal wetlands to provide a diversity of habitats for migratory waterfowl, shorebirds, wading birds, and songbirds ... protect the intertidal mudflats along Willapa Bay by consolidating spartina infested lands for better management of control and eradication efforts on existing Refuge lands and on adjacent tidelands.... provide large scale habitat management through linking existing Refuge lands in a contiguous Refuge boundary, and provide wildlife-dependent public use opportunities compatible with Refuge purposes.” (Willapa Addition Environmental Assessment/Land Protection Plan, and Conceptual Management Plan 1999)

## **National Wildlife Refuge System Mission**

The mission of the National Wildlife Refuge System, otherwise known as Refuge 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 (Pub. L. 105-57; 111 Stat. 1252).

## **Description of Use**

**Is this an existing use?**

Yes. This Compatibility Determination (CD) revises and supersedes the 2011 Compatibility Determination for Waterfowl Hunting at Willapa NWR, which was developed concurrently with the Comprehensive Conservation Plan (CCP) and Hunt Plan for Willapa NWR (USFWS 2011).

**What is the use?**

This CD examines existing and proposed hunting for waterfowl (ducks and geese), coot and snipe on designated units of the Willapa National Wildlife Refuge.

**Is the use a priority public use?**

Yes

**Where would the use be conducted?**

The Refuge currently has 5,833 acres available for waterfowl hunting (Figure 1) and proposes to expand waterfowl hunting by 105 acres at the Nemah and South Bay Units (Figure 2). Existing open portions of Leadbetter, South Bay (includes Riekkola, Porter Point, Lewis, and South Bay), Stanley, Potshot, and North Potshot will remain open to waterfowl hunting in accordance with State and Federal regulations. For additional details about the hunt program see Appendix M, Hunt Plan, in the Final Willapa NWR Comprehensive Conservation Plan and Environmental Impact Statement (2011), as amended.

All existing and proposed hunting areas are located within Pacific County, Washington. Under this CD, waterfowl hunting will be allowed consistent with State and Federal regulations except as specifically noted herein.

**When would the use be conducted?**

The Refuge follows the Washington Department of Fish and Wildlife (WDFW) annual regulations for waterfowl hunting harvest and seasons typically between September and February. Hunters can access the Refuge up 1.5 hours before legal sunrise and must exit within 1.5 hours after legal sunset (including parking lots). Shooting hours follow the State regulations.

## How would the use be conducted?

We will continue to conduct the hunting program according to State and Federal regulations. Federal regulations in 50 CFR pertaining to the Refuge System, as well as Refuge-specific regulations will apply.

### Existing Waterfowl Hunting Opportunities

The area currently available for waterfowl hunting is approximately 5,833 acres. This includes portions of the Leadbetter Point Unit (2,080 acres) which are open to walk-in waterfowl hunting. Access is from parking area on Stackpole Road.

The Stanley, Potshot, and North Potshot units (303 acres) are open for waterfowl hunting. These units are boat access only.

Selected areas of the South Bay Units (Riekkola, Porter Point, Lewis and South Bay, 3,450 acres) are open for waterfowl hunting. The South Bay Units are open to free-roam waterfowl hunting. In the Riekkola Unit, hunting of waterfowl from blinds or within 100 feet of blind is allowed. Hunters are required to self-check in and out of the blinds at the kiosk. Blind selection is first come first serve and blind capacity is 3 persons. One blind is available for hunters with disabilities. On non-goose hunting days, these blinds are available for duck hunting during the season. Although dogs are normally not permitted on the Refuge, they are allowed when actively engaged in hunting waterfowl and must be kept under control at all times. Access is from parking area on 67<sup>th</sup> Place or by boat in Willapa Bay.

Two boat ramps are available on the Refuge: one near Cutthroat Creek and Highway 101 and a car-top boat ramp at South Bay.

### Proposed Waterfowl Hunting Opportunities

The proposed waterfowl hunting areas would include 5 acres of shoreline of the northern and southern Nemah Unit that have been recently acquired, and 100 acres on the east side of the South Bay Unit. This expansion would incorporate approximately 105 acres into the existing waterfowl hunt area (Figure 2). Access to the hunt areas would be walk in from Lynn Point Road or by boat from Willapa Bay.

### Closed Areas

Areas closed to waterfowl hunting on the Refuge would include the Long Island and Tarlatt units and portions of the Leadbetter Point, South Bay, East Hills, and Nemah units, except the shorelines of the Nemah units that we propose to open to waterfowl hunting (Figure 1). The Refuge also maintains the 11,000-acre Presidential Proclamation Boundary established in 1940 specifically prohibiting hunting of migratory birds around Long Island.

## Why is this use being proposed or reevaluated?

Hunting is one of the priority public uses outlined in the Refuge Improvement Act. The U.S. Fish and Wildlife Service (Service, USFWS) supports and encourages priority

uses when they are compatible on Refuge lands. Hunting is a traditional activity and recreational use of renewable natural resources that is deeply rooted in America's heritage and can be an important wildlife management tool. At Willapa NWR, hunting helps fulfill Goal 8 Objective 2.4.8.3 of the Comprehensive Conservation Plan (CCP) which calls for expanded opportunities for waterfowl hunting where appropriate (USFWS 2011). The proposed action promotes one of the priority public uses of the Refuge System and provides opportunities to promote stewardship of our natural resources and increase public appreciation and support for the Refuge.

### **Availability of Resources**

Adequate Refuge personnel and base operational funds are available to manage hunting activities at existing and projected levels. Management primarily includes the inventory and monitoring of fish, wildlife, plants, and their habitats, education and outreach, coordination with WDFW, maintaining Proclamation Boundary signage and hunting or regulation signs, and law enforcement patrols. Revision and printing of hunting maps and brochures, updating the Refuge's website and other outreach information is also required.

### **Anticipated Impacts of the Use**

The effects and impacts of waterfowl hunting to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed use. This CD includes the written analyses of the environmental consequences on a resource only when the impacts on that resource could be more than negligible and therefore considered an "affected resource." Soils, air, water, wilderness, cultural resources, and socioeconomic resources will not be more than negligibly impacted by the action and have been dismissed from further analyses.

### **Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission**

Willapa National Wildlife Refuge was established under, or to fulfill the purpose of, the Migratory Bird Conservation Act (16 U.S.C. §715a-715r), or through approval of the Migratory Bird Conservation Committee, as an "inviolate sanctuary for migratory birds, or for any other management purpose, for migratory birds." On units of the Refuge System, or portions thereof established as an "inviolate sanctuary," the Service may only allow hunting of migratory game birds on no more than 40 percent of that Refuge, or portion, at any one time unless the Service finds that taking of any such species in more than 40 percent of such area would be beneficial to the species (National Wildlife Refuge Administration Act (16 U.S.C. §668dd(d)(1)(A)); MBTA (16 U.S.C. §703-712); Migratory Bird Conservation Act (16 U.S.C. §715a-715r)).

By its very nature, hunting has very few positive effects on the target species (in this case, migratory birds) while the activity is occurring. Although hunting directly impacts individuals, the amount of waterfowl, coot and snipe harvest is not expected to change or to have a measurable effect on their populations of the Refuge, and therefore would not interfere with or detract from achieving Refuge purposes.

Hunting has given many people a deeper appreciation of wildlife and a better understanding of the importance of conserving their habitat, ultimately supporting the Refuge and contributing to the Refuge System mission.

### Short-term impacts

Impacts to habitat and vegetation. Only minor impacts to habitat and vegetation are expected due to the amount of acres available for hunting compared to the anticipated levels of use for hunting; and the fact that most waterfowl hunting occurs from blinds or boats.

Impacts to hunted species. Waterfowl hunting already occurs on portions of the Refuge, State-owned waters, and tidelands in adjacent waters. The number of hunters expected to use the Nemah, South Bay and Leadbetter Point units would be small compared to the amount of acres available for hunting.

Hunting may be either compensatory or additive to natural mortality (Anderson 1995). Compensatory mortality occurs when hunting substitutes for other forms of mortality (disease, competition, predation, severe weather, etc.). Additive mortality occurs when hunting compounds the total mortality.

Direct effects of hunting on waterfowl are mortality, wounding, and disturbance (DeLong 2002). Hunting can alter behavior (e.g., foraging time), population structure, and distribution patterns of wildlife (Bartelt 1987; Cole and Knight 1990; Madsen 1985; Owens 1977; Raveling 1979; Thomas 1983; White-Robinson 1982). In Denmark, hunting was documented to affect the diversity and number of birds using a site (Madsen 1995). Avian diversity changed from predominantly mute swan and mallard to a more even distribution of a greater number of species when a sanctuary was established. Hence, species diversity increased with the elimination of hunting. There also appears to be an inverse relationship between the numbers of birds using an area and hunting intensity (DeLong 2002). In Connecticut, lesser scaup were observed to forage less in areas that were heavily hunted (Cronan 1957). In California, the numbers of northern pintails on Sacramento NWR non-hunt areas increased after the first week of hunting and remained high until the season was over in early January (Heitmeyer and Raveling 1988). Following the close of hunting season, ducks generally increased their use of the hunt area; however, use was lower than before the hunting season began.

Human disturbance to wintering birds and other wildlife using the open waters of the Willapa Bay and associated tributaries would occur as a result of hunting activity. Migratory and wintering waterfowl generally attempt to minimize time spent in flight

and maximize foraging time because flight requires considerably more energy than any other activity, other than egg laying. Human disturbance associated with hunting includes loud noises and rapid movements, such as those produced by shotguns and boats powered by outboard motors. This disturbance, especially when repeated over a period of time, compels waterfowl to change food habits, feed only at night, lose weight, or desert feeding areas (Madsen 1995; Wolder 1993). Disturbance levels from hunting activity outside Chincoteague NWR were found to be high enough to force wintering black ducks into a pattern of nocturnal feeding within the surrounding salt marsh and diurnal resting within refuge impoundments (Morton et al. 1989a, 1989b). Unhunted populations have been documented to behave differently from hunted ones (Wood 1993).

These impacts can be reduced by the presence of adjacent sanctuary areas where hunting does not occur, and birds can feed and rest relatively undisturbed. Sanctuaries or non-hunt areas have been identified as the most common solution to disturbance problems caused from hunting (Havera et al 1992). Prolonged and extensive disturbances may cause large numbers of waterfowl to leave disturbed areas and migrate elsewhere (Madsen 1995; Paulus 1984). In Denmark, hunting disturbance effects were experimentally tested by establishing two sanctuaries (Madsen 1995). Over a five-year period, these sanctuaries became two of the most important staging areas for coastal waterfowl. Numbers of dabbling ducks and geese increased four- to 20-fold within the sanctuary (Madsen 1995).

The 11,000-acre Presidential Proclamation Boundary area surrounding Long Island in south Willapa Bay is closed to all migratory bird hunting and acts as a sanctuary for waterfowl and other wildlife during the waterfowl season. Willapa Bay is tidally influenced and encompasses over 135 square miles. In addition to the Presidential Proclamation Boundary area, vast portions of Willapa Bay's tidal estuary act as de facto sanctuaries due to the limited accessibility thus reduction to waterfowl hunting pressure.

Intermittent hunting can be a means of minimizing disturbance, especially if rest periods in between hunting events are weeks rather than days (Fox and Madsen 1997). It is common for refuges to manage hunt programs with non-hunt days. At Sacramento NWR, 3 to 16 percent of pintails were located on hunted units during non-hunt days but were almost entirely absent in those same units on hunt days (Wolder 1993). In addition, northern pintails, American wigeon, and northern shovelers decreased time spent feeding on days when hunting occurred on public shooting areas, as compared to non-hunt days (Heitmeyer and Raveling 1988). However, intermittent hunting may not always greatly reduce hunting impacts. The intermittent hunting program of three hunt days per week at Sacramento NWR results in lower pintail densities on hunt areas during non-hunt days than non-hunt areas (Wolder 1993). In Germany, several studies reported a range from a few days to approximately three weeks for waterbird numbers to recover to pre-disturbance levels (Fox and Madsen 1997).

Given that the evidence for benefits of intermittent hunting to waterfowl is equivocal, and because the Refuge includes large sanctuary areas, we did not propose intermittent hunting days at Willapa NWR. This also provides consistent management with the existing Refuge waterfowl hunt program as well as on adjacent State lands and waters. If State regulations include intermittent hunting (e.g. daily hunting during specific days within the season as well as intermittent hunting on Saturdays, Sundays and Wednesdays on specific dates for geese in the coastal zone) the Refuge would adopt guidelines consistent with the State.

Impacts to non-hunted species. Bird species that could be temporarily disturbed by the proposed alternative include bald eagles, great blue herons, waterfowl, shorebirds, and other birds that reside within the riparian and saltwater estuary habitat of Willapa Bay. Although some wildlife disturbance to non-hunted wildlife will occur during the hunting seasons, proper zoning, regulations and refuge seasons are designed to minimize any negative impacts to wildlife populations using the refuge. No effects are expected for fish populations of Willapa Bay.

Threatened and endangered species. It is the policy of the Service to protect and preserve all native species of fish, amphibians, reptiles, birds, mammals, fish, invertebrates, and plants, including their habitats, which are designated, threatened, or endangered with extinction. This includes protecting their habitats. Endangered, threatened, proposed, and candidate species occur on or near the Refuge. Under Section 7 of the Endangered Species Act of 1973, the Service is required to complete an evaluation of the proposed activity to ensure that the action does not unacceptably affect listed species.

A more detailed discussion of threatened and endangered species, and the potential impacts of hunting programs to those species, can be found in the Service's Comprehensive Conservation Plan and Environmental Impact statement (USFWS 2011). A detailed discussion of the potential impacts of the proposed expansion of waterfowl hunting to those listed species, can be found in the Intra-Service Section 7 Biological Evaluation (USFWS 2025). While streaked horned lark, and western snowy plover have been documented on the Refuge, areas where waterfowl hunting is permitted do not contain suitable habitat for these species, except for the Leadbetter Point Unit. However, waterfowl hunting occurs outside of the time when these species would be present, including the nesting season. Therefore, waterfowl hunting may affect, but is unlikely to adversely affect, these species.

Critical habitat for green sturgeon is located in the Pacific Ocean and Willapa Bay. Therefore, shoreline areas where waterfowl hunting occurs may contain suitable habitat for the species. However, green sturgeon are not present in Willapa Bay during the waterfowl hunting season. Therefore, waterfowl hunting may affect, but is unlikely to adversely affect, the green sturgeon.

The southern distinct population segment of eulachon (Pacific smelt) was listed as threatened in 2010 and critical habitat designated in 2011. However, no critical habitat

is designated in the Willapa Bay watershed. Eulachon may utilize many of the habitats found throughout Willapa Bay but details on the exact spatial and temporal use are poorly understood. The timing of eulachon spawning runs are variable and are known to occur in the larger Willapa Bay tributaries such as the Bear and Naselle rivers, although to what extent is unknown. Surveys conducted by WDFW in 2011–2012 and 2017 found eulachon eggs and larvae at sampling points on the Bear, Naselle, and Willapa rivers (Storch et al. 2014). Specific spawning locations are undetermined but spawning is suspected to occur in nearby tributaries. However, eulachon spawning occurs in late winter and early spring, outside of the waterfowl hunting season. Therefore, waterfowl hunting may affect, but is unlikely to adversely affect eulachon.

The marbled murrelet was listed as threatened in 1992 (USFWS 1992) and a recovery plan for the species was completed in 1997 (USFWS 1997). The murrelet's current range is along the Pacific coast from central California to Canada. The marbled murrelet is a seabird that nests in old growth forests. Marbled murrelet have been documented on the Refuge on Long Island and the Teal Slough area of the East Hills. Known suitable nesting habitats occur on the East Hills (near Teal Slough), Long Island, and South Bay Units where low elevation coastal forests consist of old-growth and mature western red cedar, Sitka spruce, western hemlock, and Douglas-fir trees with large diameter limbs and/or dwarf mistletoe deformations, abundant canopy epiphytes, flight-accessible crowns, and surrounding forest canopy that provides cover and functional protection. While the forested uplands adjacent to waterfowl hunting areas are vegetated by the appropriate tree species, they are not of older growth age classes and therefore the size and complexity required for marbled murrelet nesting. Moreover, upland forests are not used by marbled murrelets during the time of year when hunting is permitted. Therefore, waterfowl hunting would have no impact to marbled murrelets during the nesting season. Marbled murrelets may be seen infrequently, and in low numbers, foraging in Willapa Bay (USFWS 2011). However, they do not forage in shoreline areas where waterfowl hunting occurs. Therefore, waterfowl hunting may affect, but is unlikely to adversely effect, the marbled murrelet.

Visitor use. Hunting may result in conflicts between user groups on the Refuge, especially in shared spaces like trails and parking areas. However, these impacts to other public uses are expected to be minimal due to the time of year waterfowl hunting takes place. Public use of the Refuge for nonhunting recreation including hiking, wildlife observation, environmental education, interpretation and photography are reduced during the fall and winter due to inclement weather. Recreational uses such as camping on Long Island and kayaking or boating in Willapa Bay also decline at this time of the year.

Furthermore, trails and public use areas will be surrounded by safety zones closed to hunting to ensure visitor safety. Signage will go up at Refuge kiosks and information will be placed on the Refuge website to inform the public of the hunt. If unforeseen conflicts arise, the Refuge Manager may either further restrict hunting or limit other

public uses during the hunting season to ensure public safety and provide a climate for productive coexistence of visitor uses.

### Long-term impacts

Wildlife populations on the refuges can sustain hunting and support other wildlife-dependent priority uses. In concert with Canada, Mexico, and multistate flyway councils, the Service and state wildlife agencies regulate hunting so that harvest does not reduce populations to unsustainable levels. To manage the populations to support hunting, the refuges adopt harvest regulations set by the State within Federal framework guidelines.

Furthermore, Refuge staff conducts habitat management reviews of the Refuge, evaluating wildlife population levels, habitat conditions and visitor service activities. The areas on the Refuge closed to hunting activities provide adequate sanctuaries for wildlife. Hunting is a highly regulated activity, and generally takes place at specific times and seasons (fall and winter) when game animals are less vulnerable. Based on the limited number of individuals which are harvested, hunting is not expected to impact future recruitment or reproduction of waterfowl, coot, and snipe. Therefore, although hunting directly impacts individuals, it is not expected to change or to have a measurable effect on populations of waterfowl, coot, and snipe on either locally or regionally in the long term. A detailed description of short and long-term hunting impacts can be found in the Refuge's CCP (USFWS 2011).

## Public Review and Comment

The draft compatibility determination was made available for public review and comment for 45 calendar days concurrent with the publication of the 2025-2026 proposed Sport Hunting and Fishing Regulations in the Federal Register on May 15, 2025. The public comment period ended June 30, 2025. The public was made aware of this comment opportunity through publication of the Federal Register Docket No. FWS-HQ-NWRS-2025-0031 and through a news alert on the Refuge website [www.fws.gov/refuge/willapa](http://www.fws.gov/refuge/willapa). A hard copy of this document was posted at the Refuge Headquarters at 7112 67<sup>th</sup> Place, Long Beach, WA. The public could submit comments or requests for additional information through any of the following methods:

Email: [HuntFishRuleComments@fws.gov](mailto:HuntFishRuleComments@fws.gov) Include "Willapa Hunting Expansion" in the subject line of the message.

U.S. Mail: U.S. Fish and Wildlife Service, Attn: Refuge Manager, Willapa NWR, 7112 67th Place, Long Beach, WA 98631.

Two comments were received, both supporting the expansion of waterfowl hunting at Willapa NWR. No changes were made to the CD in response to comment.

## Determination

Is the use compatible?

Yes

### **Stipulations Necessary to Ensure Compatibility**

1. Hunting will be conducted in accordance with all federal, state, and Refuge specific regulations. A combination of electronic and printed information and signs will be available.
2. Law enforcement patrols to ensure compliance with hunting regulations would be conducted by Fish and Wildlife Law Enforcement Officers. State fish and wildlife officers also patrol the Refuge.
3. Limited areas of the Refuge (Stanley, Potshot, and North Potshot and portions of South Bay, Nemah, Leadbetter Point units) would be open to waterfowl hunting to minimize human disturbance and impacts.
4. Harvest and season lengths and shooting hours are established by the State of Washington. Refuge staff and WDFW staff would consult on issues regarding law enforcement and any significant changes in the number or behavior of wildlife.
5. The Refuge is open for hunting access from 1 1/2 hours before legal sunrise until 1 1/2 hours after legal sunset.
6. Hunting is prohibited within 150 yards of roads, trails, dikes, buildings, and parking areas. Hunting weapons must be unloaded while in these safety zones
7. Dogs are not permitted on the Refuge, except service dogs and dogs used for waterfowl hunting.
8. Camping, overnight use, and fires are prohibited except in the designated campsites on Long Island.
9. Access to the hunting areas would be by boat and/or foot access only. Use of bicycles is also permitted on logging roads and trails on Long Island, Nemah and East Hills Units, except for the Cedar Grove, Teal Slough, and Willapa Art and Cutthroat Climb trails. Ebikes, ATVs and UTVs are not permitted.
10. All waterfowl hunters are required to use only federally approved nontoxic shot while waterfowl hunting. Use of possession of lead shot is prohibited while hunting waterfowl.
11. Distribution of bait and hunting over bait is prohibited.

### **Justification**

The proposed use is one of the priority wildlife-dependent uses that refuges are

encouraged to facilitate, where compatible, in the National Wildlife Refuge System Improvement Act of 1997. Hunting is one of the six designated wildlife-dependent public uses of the National Wildlife Refuge System. Refuges grant these six uses special consideration in planning and management. When on a refuge-specific basis one or more of these uses is determined compatible with the refuge purpose(s) and the NWRS mission, the refuge is to strongly encourage (facilitate) the use(s). Providing a quality hunting program contributes to achieving Willapa NWR's goals outlined in the CCP (USFWS 2011). The program as described has been determined to be compatible. Potential impacts from proposed and existing waterfowl hunting within these specified units on other birds and wildlife would be minimal and not materially interfere with or detract from achievement of the NWRS mission or from the Service's ability to achieve Refuge wildlife, habitat, or other public-use-related purposes and goals.

By implementing the waterfowl hunt program, no habitat degradation would be anticipated; disturbance to birds and other wildlife, if any, would be temporary and localized; and ample amounts of additional quality habitat for these wildlife species exists on the Refuge. Thus, it is anticipated that wildlife populations would find sufficient food resources and resting places such that their abundance and use of the Refuge and local area would not be measurably lessened from waterfowl hunting activities. The relatively limited number of individuals expected to be removed from the waterfowl populations due to hunting would not cause overall wildlife populations to materially decline; the physiological condition and production of hunted species would not be impaired; and their behavior and normal activity patterns would not be altered dramatically. Expanded hunt opportunities in the Nemah Unit may reduce the number waterfowl, coot and snipe in these areas. WDFW adjusts annual hunting season regulations based on survey information, harvest, and other factors so overall impacts to these populations either locally or regionally, from waterfowl hunting on the current and proposed Refuge lands are not expected.

The areas of Refuge lands designated for waterfowl hunting compliments activities permitted by Washington State on adjacent waters and provides distinct, manageable hunt units that can be more easily delineated, posted, and enforced, resulting in less confusion for the waterfowl hunting public.

## Signature of Determination

Refuge Manager Signature and Date

## Signature of Concurrence

Assistant Regional Director, NWRS, Pacific Region 1 Signature and Date

## Mandatory Reevaluation Date

2040

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<https://iris.fws.gov/APPS/ServCat/DownloadFile/165919> and  
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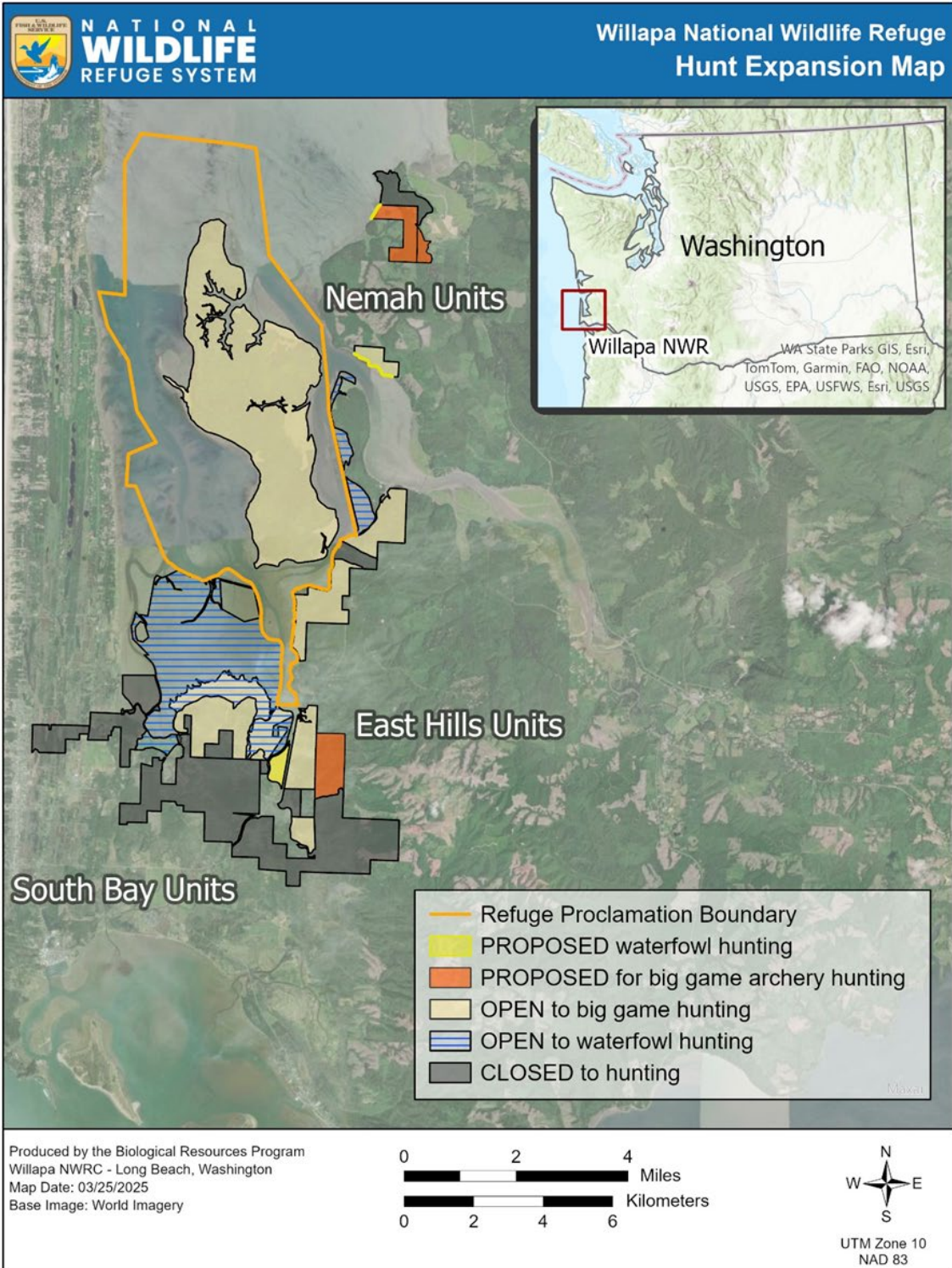


Figure 1. Hunt Expansion Map

Figure 2. Waterfowl Hunt Expansion Map

