

**Fishing Plan
for the
Ni-les'tun Unit of the Bandon Marsh National Wildlife Refuge**

August 2019

**U.S. Fish and Wildlife Service
Bandon Marsh National Wildlife Refuge**

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NI-LES'TUN UNIT of the BANDON MARSH NATIONAL WILDLIFE REFUGE FISHING PLAN

I. Introduction

The United States Fish and Wildlife Service's (hereafter referred to as the Service or USFWS, interchangeably) National Wildlife Refuges are guided by the mission and goals of the National Wildlife Refuge System (NWRS), the purposes of an individual refuge, Service policy, and laws and international treaties. Relevant guidance includes the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997, Refuge Recreation Act of 1962, and selected portions of the Code of Federal Regulations and Fish and Wildlife Service Manual.

Bandon Marsh National Wildlife Refuge (NWR) was authorized by Public Law 97-137, of December 29, 1981 "for the preservation and enhancement of the highly significant wildlife habitat of the area known as Bandon Marsh, in the estuary of the Coquille River in the State of Oregon, for the protection of migratory waterfowl, numerous species of shorebirds and fish, including Chinook and silver salmon, and to provide opportunity for wildlife-oriented recreation and nature study on the marsh." This purpose applies to all portions of Bandon Marsh NWR. The original 289 acres acquired from the Port of Bandon were also authorized by the Transfer of Certain Real Property for Wildlife Conservation Purposes Act of May 19, 1948, Public Law 80-537, (16 U.S.C. 667b-667d; 62 Stat. 240), as amended, because of its "particular value in carrying out the national migratory bird management program."

Refuge Purpose(s):

- "For the preservation and enhancement of the highly significant wildlife habitat ... for the protection of migratory waterfowl, numerous species of shorebirds and fish ... and to provide opportunity for, wildlife-oriented recreation and nature study on the marsh" [95 Stat. 1709, dated Dec. 29, 1981] and Public Law 97-137 Dec. 29, 1981 and H.R. 2241 March 2, 1981.
- "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)].
- "particular value in carrying out the national migratory bird management program" [16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife)].

Bandon Marsh NWR consists of the 307-acre Bandon Marsh Unit and the 582-acre Ni-les'tun Unit (Map 1). The total approved refuge boundary is 1,000 acres. The Bandon Marsh Unit was established in 1983 and is located near the mouth of the Coquille River with approximately 25% of the unit within the city limits of Bandon. The Ni-les'tun Unit was established in 2000 and is located on the east side of Highway 101 on the north bank of the Coquille River. The primary

purpose for establishing the Bandon Marsh Unit was to protect the physical and biological integrity of the tidal salt marsh, and to conserve the last substantial tract of salt marsh in the Coquille River estuary (USFWS 1981, USFWS 2013). The Ni-les'tun Unit was established to protect and restore intertidal marsh, freshwater marsh, and riparian areas to provide a diversity of habitats for migratory birds including waterfowl, shorebirds, wading birds and songbirds, and to restore intertidal marsh habitat for anadromous fish such as Chinook and chum salmon, steelhead, cutthroat trout, and the threatened Oregon Coast Evolutionarily Significant Unit (ESU) of the coho salmon (USFWS 1999, USFWS 2013). The Ni-les'tun Unit also contains sites that are culturally significant to the Coquille Indian Tribe and the Confederated Tribes of the Siletz Indians.

Over the past 100-150 years, logging, road building, dredging, and agricultural activities throughout the Coquille River watershed have resulted in periods of intense flooding and siltation. By the mid-1980s it was estimated that the total estuary received an average of 100,000 tons of sediment each year, consequently, resulting in a steady development of Bandon Marsh's current tidally influenced mudflat and salt marsh system (Brophy 2005, Byram and Witter 2000). During this period of accretion the Bandon Marsh Unit has not been significantly altered by humans; however, substantial filling of the tidelands south of the Refuge took place from the mid-1930s to the 1980s (USFWS 1985). In Oregon, the Coquille River estuary has suffered the greatest loss of tidal wetlands with a reduction of 94% of the historical total acreage by 1970 (Good 2000). The loss of tidal wetlands, through agricultural dike construction and subsequent draining, has been identified as a major factor contributing to the decline of fishery resources and overall estuarine productivity throughout coastal Oregon. Establishment of the refuge afforded permanent protection to one of the few remaining unspoiled salt marshes in Oregon.

The Ni-les'tun Unit's tidal marsh restoration project, completed in summer 2011, restored 418 acres of historic tidal wetlands within the lower Coquille River estuary and at the time, was the largest tidal wetlands restoration project ever accomplished in Oregon. Until completion of restoration activities in August of 2011, this site had not experienced natural tidal flooding events for approximately 100 years. Most of the artificial features in this historic wetland, including drainage ditches, dikes, and tide gates, were removed during the restoration project, allowing natural tidal exchange to take place. Since the restoration, the influx of varying levels of tidally driven brackish riverine water is promoting re-establishment of salt marsh plants, and development of sinuous interconnecting tidal channels providing wildlife habitat within the refuge unit. As the land and ecological processes return to a functioning intertidal marsh, young fish and flocks of resident and migratory birds have begun to use the restored habitat. The restoration represents a significant increase in habitat available to native salmonids, migratory birds and other wildlife in the lower Coquille River estuary.

Federally listed species utilizing Bandon Marsh NWR are the Oregon Coast ESU of the coho salmon (Threatened); the Southern Distinct Population Segment (DPS) of the Pacific smelt (eulachon) (Threatened); and the Southern DPS of the green sturgeon (Threatened).

The mission of the NWRS, as outlined by the National Wildlife Refuge System Administration Act of 1966 (NWRSA), as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd et seq.), 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.”

The NWRSA mandates the Secretary of the Interior in administering the System to (16 U.S.C. 668dd(a)(4):

- Provide for the conservation of fish, wildlife, and plants, and their habitats within the NWRS;
- Ensure that the biological integrity, diversity, and environmental health of the NWRS are maintained for the benefit of present and future generations of Americans;
- Ensure that the mission of the NWRS described at 16 U.S.C. 668dd(a)(2) and the purposes of each refuge are carried out;
- Ensure effective coordination, interaction, and cooperation with owners of land adjoining refuges and the fish and wildlife agency of the States in which the units of the NWRS are located;
- Assist in the maintenance of adequate water quantity and water quality to fulfill the mission of the NWRS and the purposes of each refuge;
- Recognize compatible wildlife-dependent recreational uses as the priority general public uses of the NWRS through which the American public can develop an appreciation for fish and wildlife;
- Ensure that opportunities are provided within the NWRS for compatible wildlife-dependent recreational uses; and
- Monitor the status and trends of fish, wildlife, and plants in each refuge.

Therefore, it is a priority of the Service to provide for wildlife-dependent recreation opportunities, including hunting and fishing, when those opportunities are compatible with the purposes for which the refuge was established and the mission of the National Wildlife Refuge System.

The refuge’s Bandon Marsh Unit was opened to waterfowl hunting, fishing, and clamming in 1985 (USFWS 1985b). The Ni-les’tun Unit, east of Highway 101, was opened to waterfowl hunting in 2012 (USFWS 2012). This plan expands the area open to fishing to include the Ni-les’tun Unit.

Recreational fishing is already a popular sport on the navigable waters of the Coquille River and takes place mainly from boats. The most likely species that anglers can currently catch on the Coquille River are Chinook salmon (*Oncorhynchus tshawytscha*), winter steelhead (*Oncorhynchus mykiss*), coho salmon (*Oncorhynchus kisutch*), cutthroat trout (*Oncorhynchus clarkia clarkii*), white sturgeon (*Acipenser transmontanus*), striped bass (*Morone saxatilis*), redbelt surfperch (*Amphistichus rhodoterus*), striped surfperch (*Embiota lateralis*), and shiner

surfperch (*Cymatogaster aggregata*). Cutthroat trout, surfperch, and occasionally smaller white sturgeon would be found in the larger tidal channels of the marsh at certain times of the year. Under the Oregon Department of Fish and Wildlife (ODFW) regulations, Chinook and coho salmon may only be fished on the mainstem Coquille River, and not tributaries or tidal channels. White sturgeon fishing is catch and release only. Fishing for coho salmon (wild) is only open under special regulations that require approval from National Marine Fisheries Service (NMFS) on an annual basis.

Sport fishing for coho salmon in waters of the refuge is an approved recreational activity by the NMFS under a Section 7 consultation of the Endangered Species Act within a Biological Opinion (PFMC 1999) and under ODFW's Oregon Coastal Coho, Coastal Rivers Coho Sports Fishery Fisheries and Management Plan (National Marine Fisheries Service concurred with under limit 4 of the Endangered Species Act 4(d) rule; ODFW 2009, NMFS 2009).

The ODFW is responsible for managing Oregon's fish and fisheries for the use and enjoyment of present and future Oregonians. In 2009, ODFW completed a 25-Year Angling Enhancement Plan (ODFW 2009a). The USFWS authorization of fishing on the Ni-les'tun Unit of Bandon Marsh NWR is in compliance and consistent with the ODFW 25-Year Angling Enhancement Plan. For fish species such as salmon, steelhead, and sturgeon, ODFW works closely with state and federal agencies to set regulations that protect native species and allow for equitable harvest opportunities. ODFW's 25-Year Angling Enhancement Plan's recreational fisheries enhancement directive is to enhance, develop, and promote diverse and productive recreational fishing opportunities that are consistent with the conservation needs of native species; provide balanced economic and social benefits; and connect Oregonians with fish, water and the outdoors.

II. Statement of Objectives

In 2013, the CCP for the Bandon Marsh NWR was approved (USFWS 2013). The CCP addressed future management of the refuge, including providing opportunities for wildlife-dependent recreation (hunting, fishing, wildlife observation and photography, environmental education, and interpretation). This fishing plan is a step down plan of the CCP, and as such contains more detailed information describing the fishing program on the Refuge's Ni-les'tun Unit.

Fishing is consistent with the refuge's CCP's goal to "Provide and manage safe, enjoyable, and high quality hunting and fishing opportunities for people of all ages that furthers the tradition of wildlife conservation and stewardship," and the CCP objective to "provide opportunities for visitors to dig for clams and fish from refuge lands in accordance with state and refuge fishing regulations, while minimizing impacts to other resources." Under the CCP's management direction, the tidal creeks and sloughs within the Ni-les'tun Unit south of North Bank Lane were to be opened to cutthroat trout fishing. The fishing plan amends the CCP by:

- Expanding the refuge's fishing area to include not only tidal creeks and sloughs within

the Ni-les'tun Unit, but the banks of the Coquille River on the unit (which are already open to other forms of public use);

- Expanding the area of the refuge where all finfish (e.g., salmon, etc.) can be taken to include the Ni-les'tun Unit. (In the CCP, fishing for cutthroat trout only was envisioned for the Ni-les'tun unit.); and
- Allowing foot access to the Ni-les'tun Unit, south of North Bank Lane, year-round. In the CCP, the unit was to be closed to walking Oct 1-Jan 31, except for established trails, to prevent conflicts with waterfowl hunting. However, in the CCP it stated that "The closure of the [Ni-les'tun] unit to all uses on non-hunting days during the waterfowl hunt season will allow the refuge to monitor and determine the areas of most value to waterfowl within this still-evolving restored marsh. After five years of monitoring, we will reevaluate the intermittent program and if warranted, we will consider additional wildlife observation access." Staff observations showed that most fishing occurs prior to the hunt season, and foot travel on the unit was infrequent enough that a seasonal closure to off-trail walking was not warranted.

Although the Bandon Unit is open to clamming, to protect cultural resources, clamming, crabbing, bait digging, or any activities that disturb sediments, subtidal or otherwise will continue to be prohibited on the Ni'les'tun Unit. Recreational fin fishing will be permitted in accordance with state, federal, and refuge-specific regulations and seasons to ensure that it does not interfere with the conservation of fish and wildlife and their habitats, or conflict with other public use activities.

Fishing Plan Goals

Goal 1: Provide diverse, stable, and productive angling opportunities. The Service strives to complement ODFW's goals which are to maintain and restore naturally-produced fish populations to provide opportunities for consumptive and non-consumptive recreational fisheries and to manage non-native fish and hatchery-based fisheries to optimize user benefits. ODFW is working to increase opportunities for fishing by increasing the quality and quantity of fisheries in Oregon, and access to those fisheries.

Goal 2: Increase angling participation. Diverse, stable and productive angling opportunities are the basis for increased angling participation. ODFW must work to increase the number of Oregonians and others participating in these fisheries. ODFW's goal is to both retain Oregon's current angler base and to recruit new anglers, especially young people. Programs should foster life-long participation in fishing and the outdoors based on simple, easily available opportunities and skills that can be learned at any age (ODFW 2009).

Fishing Plan Objective

The objective of a fishing program on the Ni-les'tun Unit of Bandon Marsh NWR is to provide a quality fishing program that allows opportunities for visitors to fish from refuge lands and waters in accordance with NWRS goals and ODFW fishing regulations.

The program will:

- Include clear and concise regulations that are readily available to visitors on the refuge website;
- Pose minimal conflict with overall wildlife and habitat objectives; and
- Pose minimal conflict with other priority public use activities.

Fishing Plan Strategies:

- a. Open access to fin fishing along the banks of the Coquille River on the Ni-les'tun Unit; and along the banks of, and in the waters of, tidal creeks and sloughs within the Ni-les'tun Unit south of North Bank Lane, including Fahy's, No Name, and Redd Creeks, in accordance with Oregon Department of Fish and Wildlife (ODFW) fishing seasons and regulations;
- b. Anglers may access the Ni-les'tun Unit by foot or boat. To reduce wildlife disturbance potential caused by anglers and to protect sensitive cultural resources, boats landing on the riverbank of the Coquille River within the Ni-les'tun Unit will be restricted to a designated area (see Map 1);
- c. Work with partners to periodically monitor populations of juvenile and adult fish using the estuarine system at both units within Bandon Marsh NWR to better understand the benefits of the marsh restoration and protection and to inform potential changes to the fishing program;
- d. The Service will provide fishing line recycling containers for anglers to discard their used monofilament line; and
- e. Fishing use on the Ni-les'tun Unit will be closely observed to ensure that levels of human activity are not at a level that may cause significant disturbance to wildlife, especially migratory birds or other sensitive resources. If the use is causing unacceptable levels of disturbance, it will be limited to prevent negative impacts.

III. Description of Fishing Program

A. Areas to be Opened to Fishing

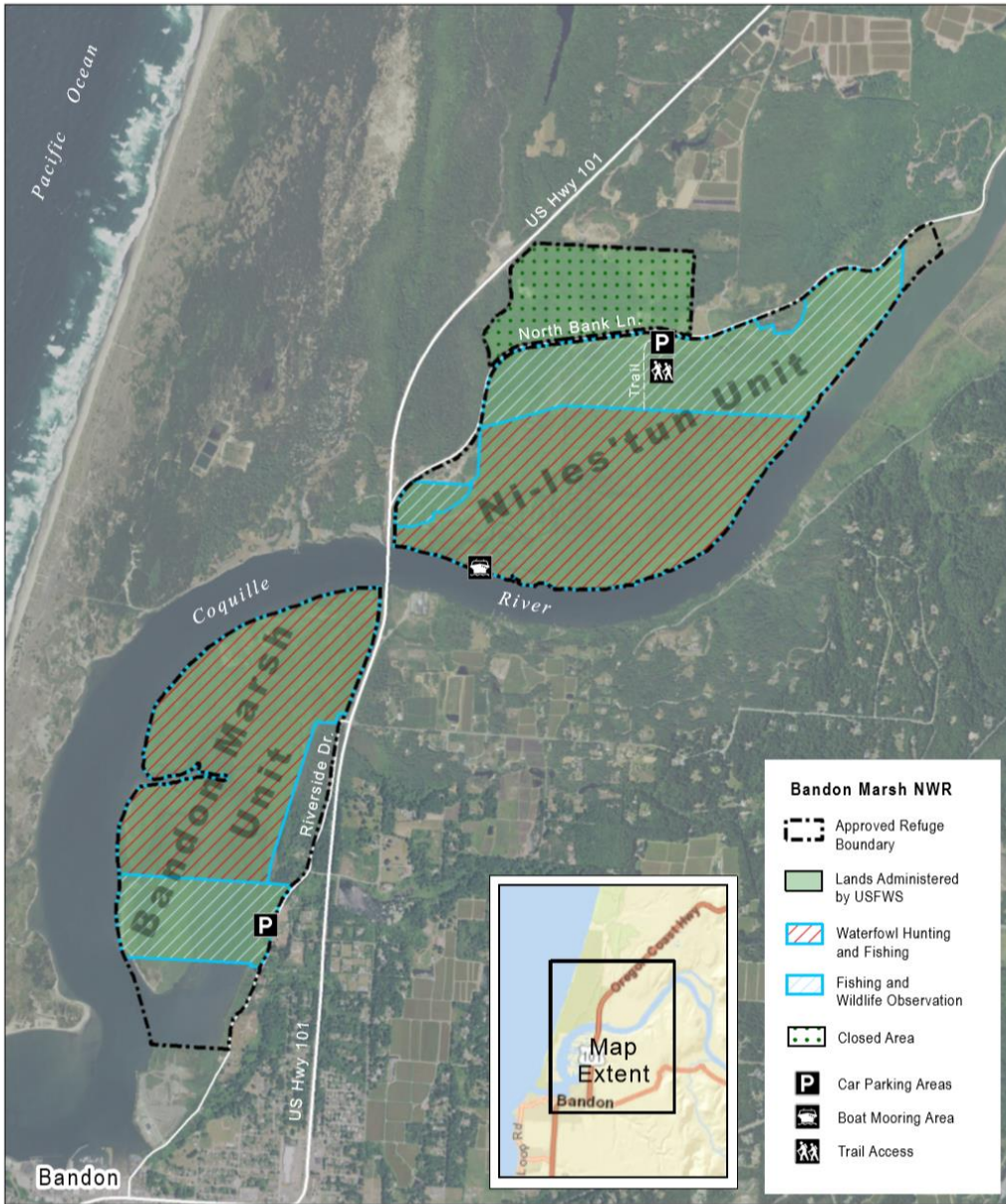
The Service will allow fin fishing on the Ni-les'tun Unit as follows: along the bank of the Coquille River, and in the tidal creeks south of North Bank Lane, including the waters within Redd, No Name, and Fahy's Creeks. See attached map.

Map A – Bandon Marsh National Wildlife Refuge, and Fishing Access Locations

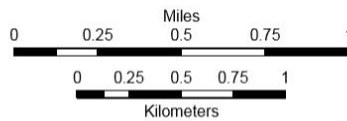


U.S. Fish & Wildlife Service
Bandon Marsh National Wildlife Refuge

Hunting and Fishing Access Locations



Produced in the Lands Division
Portland, Oregon
Produced: January 22, 2019
Basemap: OR NAIP 2016
File: R1_NWRS_FY19_134_1.mxd



B. Species to be Taken, Fishing Periods, and Fishing Access

FISHING: Anglers are required to comply with species and take limits as defined in the ODFW fishing regulations.

Fishing Periods: The area will be open for anglers to access during daylight hours only (legal sunrise to legal sunset), year-round, 7 days per week, during state seasons.

Access Ni-les'tun Unit: As other visitors currently do, anglers may access the Ni-les'tun Unit via boat or on foot. To access fishing opportunities at the Ni-les'tun Unit by boat, anglers can use the boat launches at Bullards Beach State Park, the Port of Bandon, or Rocky Point County Park. Boats landing on the riverbank of the Coquille River within the Ni-les'tun Unit will be restricted to a designated area (see Map A). Due to the natural progression of the marsh restoration project, the creeks are expected to widen. Over time, this will allow easier access by small motor boat, kayak, or canoe.

To access bank fishing opportunities at the Ni-les'tun Unit by foot, anglers can use the refuge parking lot located on North Bank Lane across from the refuge office and access trails into the Unit. Both bank fishing on the Coquille River and fishing in the entrance to Fahy's Creek are best accessed by boat, but they can be accessed by foot at low tide. Currently, pedestrian access to these tidally influenced creeks south of North Bank Lane, with the exception of the mouth of Fahy's Creek at high tides, is limited due to tidal conditions and the presence of large woody debris or driftwood. Fishing activity is not expected to occur in these areas except during high tides when the channels are inundated.

There are no special entry or access procedures for anglers using the refuge. For specific access questions contact the Refuge Manager at:
Bandon Marsh National Wildlife Refuge
83673 North Bank Lane
Bandon, OR 97411

or

Oregon Coast National Wildlife Refuge Complex
2127 SE Marine Science Drive
Newport, OR 97365-5258
(541) 867-4550
Oregoncoast@fws.gov

C. Fishing Permit Requirements

Anglers who are eligible to fish under Oregon law are eligible to fish on refuge units. They must obtain an Oregon fishing license and follow Oregon state laws, limits, and regulations.

D. Consultation and Coordination with the State

The refuge reviewed state fishing regulations and the operations and regulations for neighboring state wildlife management areas and refuges to find consistency where possible. The refuge first reached out to the State of Oregon in 2010 to discuss this fishing plan. We worked with the local state biologist and conservation officers early in the development of the plan as part of the CCP preplanning efforts. In 2018 the Service asked for a review by the ODFW's district office that covers our area to help adjust our plan to align, where possible, with ODFW's management goals. We specifically asked the State if they could include the refuge in the state fishing regulations program to ensure consistency and reduce operation costs. We have continued to consult and coordinate on specific aspects of the fishing plan. The ODFW is in agreement with the refuge's fishing plan, as it will help meet state objectives.

The refuge staff is actively consulting with the Coquille Indian Tribe, the Confederated Tribes of the Siletz Indians, and ODFW regarding this plan. It was through this collaboration that we determined shell fishing and other possible sediment disturbing activities would not be opened on the Ni-les'tun Unit under this plan. The Ni-les'tun Unit contains many known and unknown sites of significant cultural resources that must be protected. Limiting disturbance to the soil will lessen the interactions of the public with these resources. The designated boat landing has been located such that anchoring will not disrupt known fish weirs that are located on the bank of the Coquille River along the Ni-lestun unit. The Service will continue to consult with the tribes on an annual basis to monitor and protect sensitive resources of mutual interest on the refuge.

This fishing plan is a step down plan from the Bandon Marsh CCP. Public involvement was sought throughout its development. Public involvement strategies included face-to-face meetings or phone conversations with key agencies, federally elected officials (or their aides), Tribal representatives, and local refuge users. The refuge staff also held open houses and sent planning updates to inform the public, invite discussion, and solicit feedback. The Bandon Marsh CCP was developed concurrently with CCPs for two other refuges within the Oregon Coast NWR Complex (OCNWRC; Nestucca Bay and Siletz Bay NWRs), consequently, briefings and planning updates covered all three refuges.

In December 2010, representatives from the Region 1 Regional Office and Refuge Project Leaders met with the ODFW to discuss the CCP process and other issues of interest in Sherwood, OR. In January 2012, Project Leader Roy Lowe and refuge staff met with ODFW representatives Mike Gray, Stuart Love, and Scott Groth at the ODFW's Charleston Field Office in Charleston, OR to discuss the ODFW's comments regarding draft alternatives for hunting and fishing at the Oregon Coast NWR Complex

Further assistance was recently sought during the development of this step down plan including informal consultation between the Refuge Manager, the OCNWRC Project Leader, and the ODFW habitat protection biologist. These meetings were held at the Charleston Field Office in December 2018 and January 2019 with a focus on current fishing activities on the Coquille River and potential future fishing opportunities on the refuge.

In summary, the OCNWRC:

- Coordinated with ODFW Charleston Field Office on development of access and regulations from 2016-2019;
- Will utilize ODFW specifications of design and materials for fishing line-recycling containers;
- Will continue to coordinate with Oregon State police and the ODFW district office to work together to ensure safe and enjoyable recreational fishing opportunities. Fishing participation and harvest data are collected by the State and law enforcement officers; and
- Will continue to consult with the tribes on an annual basis to monitor and protect sensitive resources of mutual interest on the refuge.

E. Law Enforcement

Enforcement of refuge violations normally associated with management of a National Wildlife Refuge is the responsibility of commissioned Federal Wildlife Officers. Other officers, special agents, state game wardens, and the local Sheriff's Department may assist the refuge's full time federal wildlife officer.

The following methods are used to control and enforce fishing regulations:

- Refuge fishing area boundaries will be clearly posted;
- The refuge will post fishing regulations on the refuge website, refuge information kiosks, and at refuge offices;
- The refuge will provide a brochure or tear sheet that shows fishing areas at refuge kiosks and at the refuge office (also available for downloading on the refuge website);
- Oregon Coast NWR Complex law enforcement staff will randomly check anglers for compliance with federal and state laws; and
- The refuge will monitor and protect sensitive cultural resources covered under the National Historic Preservation Act (NHPA).

The refuge shares a fish and wildlife officer with the Willamette Valley Refuges. The officer will conduct patrols on a regular basis to ensure compliance with state, federal, and refuge regulations. The refuge law enforcement officer will also monitor and collect data on fishing activities in the field to ensure it does not interfere with other wildlife-dependent uses. If necessary, the program will be modified accordingly.

F. Funding and Staffing Requirements

Annual costs to administer the fishing program at Bandon Marsh NWR, including salary, equipment, law enforcement, brochures, and maintenance, totals approximately \$10,500. Expenses will consist primarily of law enforcement patrols, retrieval of monofilament line deposited in waste containers, and printing and dissemination of materials regarding fishing

access and regulations. Onetime costs include the development of the fishing plan and production of a fishing brochure/tear sheet.

Table 1. Costs to Administer and Manage a Fishing Program on Bandon Marsh NWR

Activity or Project	One-time Expense (secured)	Recurring Expense
Develop a Fishing Program opening package	\$5,000	
Brochures	\$2000	\$500
Law enforcement patrols		\$5,000
Staff		\$5,000
Total	\$7,000	\$10,500

IV. Conduct of the Fishing Program

A. Fishing Permit Application, Selection, and/or Registration Procedures

No special application or registration process is required.

B. Refuge-Specific Fishing Regulations

Listed below are refuge-specific regulations that pertain to fishing on Bandon Marsh NWR as of the date of this plan. These regulations may be modified as conditions change or if refuge expansion continues/occurs.

Sport Fishing: We allow sport fishing on designated areas of the refuge.

C. Relevant State Regulations

Applicable State regulations can be found at:

- <http://www.eregulations.com/oregon/fishing/marine-zone/>
- <http://www.eregulations.com/oregon/fishing/southwest-zone/>

D. Other Refuge Rules and Regulations for Fishing

- Fishing is allowed only during daylight hours (legal sunrise to legal sunset).
- Anglers will be permitted to use pole and line or rod and reel. Anglers must attend their line.

- Anglers should discard used monofilament line in containers provided at the Ni-les'tun Unit and Bandon Marsh Unit parking areas.
- Camping, overnight use, unmanned aircraft systems (UAS or drones) and fires are prohibited. Overflights of UAS or drones that are operated from off-refuge are prohibited.
- Pets and dogs will only be allowed outside of vehicles while in the parking lot and must be kept on-leash any time they are outside of a vehicle. Pets will be prohibited outside of the parking lot.
- Visitors shall not destroy or remove property including natural objects from a national wildlife refuge.

V. Public Engagement

A. Outreach for Announcing and Publicizing the Fishing Program

The refuge maintains a mailing list, for news release purposes, to local newspapers, radio, and websites. Special announcements and articles may be released in conjunction with fishing seasons. In addition, information about fishing will be available at Oregon Coast NWRC headquarters or on the Bandon Marsh NWR website:
https://www.fws.gov/refuge/bandon_marsh/.

B. Anticipated Public Reaction to the Fishing Program

Wildlife-dependent recreational uses, including fishing, received consideration during development of the CCP. A Visitor Services and Facilities Review was conducted in April of 2010 to provide insight and conceptual plans for the future of administrative and visitor facilities at Bandon Marsh NWR. In 2010 and 2011, the Service consulted with ODFW Director and Charleston Field Office, Oregon Parks and Recreation Department, Oregon State Police, Port of Bandon, City of Bandon, and Shoreline Education for Awareness (friends group) regarding proposed fishing opportunities at Bandon Marsh NWR previously described in the CCP. All of these groups and individuals expressed support for the proposed use and facilities associated with fishing access. Therefore, the Service does not anticipate any controversy as a result of opening this use on Bandon Marsh NWR.

Bank fishing access on the Coquille River will create a greater awareness among anglers about the importance of estuaries and unimpeded coastal creeks for salmonids. Fishing provides visitors with the joy of experiencing wildlife on their public lands, and as such, helps fulfill the mission of the NWRS.

C. How Anglers Will Be Informed of Relevant Rules and Regulations

General information regarding fishing and other wildlife-dependent public uses can be obtained at Oregon Coast NWRC headquarters at 2127 SE Marine Science Drive, Newport, OR 97365 or by calling (541) 867-4550. Maps and regulations (Tear Sheet) will be available on the station website at: www.fws.gov/refuge/bandon_marsh/map.html, the Refuge Headquarters, and on

Bandon Marsh NWR office at 83673 North Bank Lane, Bandon, OR 97411 and information kiosks. The 2019 Oregon Sportfishing Regulations can be found at www.eregulations.com/oregon/fishing/general-statewide-regulations/# or call the Refuge Manager at (541) 867-4550.

The Service will have an informational kiosk that contains information about fishing and other available wildlife-dependent recreational uses. Information about these opportunities will also be available through the internet via the Bandon Marsh NWR website and/or its social media site. These forms of interpretive material will help educate the public on refuge regulations and how they can minimize wildlife and habitat disturbance.

VI. Compatibility Determination

Fishing and all associated program activities proposed in this plan are compatible with the purposes of the refuge. See attached Bandon Marsh NWR Compatibility Determination for Fishing and Clamming.

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Appendix A

Compatibility Determination for Fishing and Clamming at Bandon Marsh NWR

Appendix A

Compatibility Determination for Fishing and Clamming at Bandon Marsh NWR

Use: Fishing and Clamming

Refuge Name: Bandon Marsh National Wildlife Refuge

County and State: Coos County, Oregon

Establishing and Acquisition Authorities:

Bandon Marsh National Wildlife Refuge (NWR) was authorized by Public Law 97-137, of December 29, 1981 and established by the authority of the Fish and Wildlife Act of 1956, as amended [16 U.S.C. 742a-742j] to protect migratory bird habitat. Additional lands were added to the Refuge in the 1990s through the Refuge Recreation Act of 1962, as amended [16 U.S.C. 460k-4]. Public Law 105-321 (95 Stat. 1709; Oregon Public Lands Transfer and Protection Act of 1998) amended P.L. 97-137 to authorize boundary expansion of Bandon Marsh NWR from 300 to 1,000 acres. Legal authorities used for establishment of the Refuge include the Endangered Species Act of 1973, as amended [16 U.S.C. 1531-1544] and the Migratory Bird Conservation Act of 1929, as amended [16 U.S.C. 715-715d, 715e, 715f-715r].

Refuge Purpose(s):

- “For the preservation and enhancement of the highly significant wildlife habitat ... for the protection of migratory waterfowl, numerous species of shorebirds and fish ... and to provide opportunity for, wildlife-oriented recreation and nature study on the marsh” [95 Stat. 1709, dated Dec. 29, 1981] and Public Law 97-137 Dec. 29, 1981 and H.R. 2241 March 2, 1981.
- “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)].
- “particular value in carrying out the national migratory bird management program” [16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife)].

National Wildlife Refuge System Mission:

"... 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 National Wildlife Refuge System Improvement Act of 1997 defined six wildlife-dependent recreational uses as appropriate and required that they receive priority consideration in refuge

planning when they are compatible with the refuge mission. Fishing is one of the six wildlife-dependent recreational uses. Because there is often substantial overlap between activities associated with fishing and clamming, they will be evaluated together in this compatibility determination.

Since this wildlife-dependent recreational use is supported by boating, boating impacts will also be considered in this review.

Under the management direction described in the Comprehensive Conservation Plan (CCP; 2013) for Bandon Marsh NWR, the U.S. Fish and Wildlife Service (hereafter referred to as Service or USFWS, interchangeably) continued to allow recreational bank fishing and clamming on the Bandon Marsh Unit. In addition, under the CCP's management direction the Service would have opened tidal creeks and sloughs within the Ni-les'tun Unit to cutthroat trout fishing. This CD is being prepared in conjunction with the fishing plan for Bandon Marsh NWR (USFWS 2019), which would amend the CCP to expand the area of the refuge where all finfish (e.g., salmon, trout, etc.) can be taken to include tidal creeks and sloughs within the Ni-les'tun Unit and the banks of the Coquille River on the unit (which are already open to other forms of public use). In addition, foot access to the Ni-les'tun Unit south of North Bank Lane would be allowed year-round. Although the Bandon Unit is open to clamming, to protect cultural resources on the Ni-les'tun Unit, clamming, crabbing, bait digging, or any activities that disturb sediments, subtidal or otherwise would continue to be prohibited.

The area will be open for anglers to access during daylight hours only (legal sunrise to legal sunset), year-round, 7 days per week, during state seasons. Anglers are permitted to use pole and line or rod and reel while bank fishing, and in accordance with ODFW regulations for fishing in the Coquille River, and are allowed to use either bait or artificial lures. Because of the potential safety hazard posed by boating in an area with strong tidal influence, anglers may use either motorized or non-motorized boats to access fishing areas on both refuge units.

All recreational fishing and clamming will be conducted in accordance with state, federal, and refuge-specific regulations and seasons to ensure that these activities do not interfere with the conservation of fish and wildlife and their habitats, or conflict with other public use activities.

On the Bandon Marsh Unit two types of recreational fishing occur: bank fishing and clamming. Bank fishing for salmonids, perch, cutthroat trout, etc. is allowed along the south bank of the Coquille River on the Bandon Marsh Unit. Clamming is allowed within the mudflats of the Bandon Marsh Unit and provides a recreational experience to harvest softshell clams by digging by hand, with a shovel, or using a tube or clam gun (i.e., aluminum or PVC pipe suction device). The harvest of marine invertebrates for bait (e.g., sand and mole crabs, kelp and sand worms, mud and ghost shrimp) is included within the term "clamming." The entire mudflat habitat within the unit is open to clamming under ODFW sport fishing regulations. The continuation of fishing access within the Bandon Marsh Unit along the southern bank of the Coquille River provides an opportunity for people who do not own or have access to a boat. Access to both of these fishing activities (bank fishing and clamming) on the unit is not on designated trails and will require users to walk across mudflats, over tidal creeks with large woody debris or driftwood, or along the narrow edge of the Coquille River. All of these estuarine habitats are affected by tidal waters which limits access and availability of mudflat habitat for clamming. Anglers will access the Bandon Marsh Unit by using the paved public parking lot located on the west side of Riverside Drive. Anglers may also access the Bandon Marsh Unit by boat from the Coquille River. There are two boat launches nearby. One launch is at Bullards Beach State Park and the other is located further south at the Port of Bandon.

The Service will allow fin fishing on the Ni-les'tun Unit along the bank of the Coquille River, and in the tidal creeks south of North Bank Lane, including the waters within Redd, No Name, and Fahy's Creeks. As other visitors currently do, anglers would access the Ni-les'tun Unit via boat or on foot. To access fishing opportunities at the Ni-les'tun Unit by boat, anglers can use the boat launches at Bullards Beach State Park, the Port of Bandon, or Rocky Point County Park. Boats landing/mooring on the riverbank of the Coquille River within the Ni-les'tun Unit would be restricted to a designated area (see Fishing Plan, Map A). Fishing access to these tidally influenced creeks south of North Bank Lane is limited and challenging due to tidal conditions and the presence of large woody debris or driftwood within the tidal creeks. Due to the natural progression of the marsh restoration project on the Ni-les'tun Unit, these creeks are expected to widen. Over time, this will allow easier access by small motor boat, kayak, or canoe.

To access bank fishing opportunities at the Ni-les'tun Unit by foot, anglers can use the refuge parking lot located on North Bank Lane across from the refuge office and access trails into the unit. Both bank fishing on the Coquille River and fishing in the entrance to Fahy's Creek are best accessed by boat, but they can be accessed by foot at low tide. Currently, pedestrian access to these tidally influenced creeks south of North Bank Lane, with the exception of the mouth of Fahy's Creek at high tides, is limited due to tidal conditions and the presence of large woody debris or driftwood.

Opening the Ni-les'tin Unit to fishing, by boat or on foot, provides a wildlife-dependent form of recreation to all age groups and additionally provides an opportunity for people who do not own or have access to a boat.

Anglers must comply with all state and federal regulations regarding fishing and clamming including refuge-specific provisions outlined in the Code of Federal Regulations (50 CFR 32.5).

Availability of Resources:

Annual costs to administer the fishing program at Bandon Marsh NWR, including salary, equipment, law enforcement, brochures, and maintenance, totals approximately \$10,500. Expenses will consist primarily of law enforcement patrols, retrieval of monofilament line deposited in waste containers, and printing and dissemination of materials regarding fishing access and regulations. One-time costs include the development of the fishing plan and production of a fishing brochure/tear sheet.

Table 1. Costs to Administer and Manage a Fishing Program on Bandon Marsh NWR

Activity or Project	One-time Expense (secured)	Recurring Expense
Develop a Fishing Program opening package	\$5,000	
Brochures	\$2000	\$500
Law enforcement patrols		\$5,000
Staff		\$5,000
Total	\$7,000	\$10,500

Anticipated Impacts of the Use(s):

The Service is committed to providing quality opportunities for fish and wildlife-oriented recreation at Bandon Marsh NWR. As part of the Service mission and refuge goals for Bandon Marsh, all six of the Refuge System's priority wildlife-dependent uses will be offered at Bandon Marsh including fishing, hunting, wildlife observation, photography, environmental education, and interpretation. Offering fishing and clamming will help fulfill refuge purposes and goals and does not conflict with the mission of the refuge system.

Impacts to Wildlife and Habitat:

Effect of disturbance intensity: Some researchers have attempted to correlate disturbance events in wildlife to the intensity, proximity, or loudness of human disturbance. While studying shorebirds on an eastern coastal refuge, Burger (1986) found that the level of disturbance in the shorebirds increased (fewer remained, more flew) as the total number of disturbances and the number of children, joggers, people walking, dogs, aircraft, and boats increased. However, there was a direct correlation between the duration of the disturbance and distance from the disturbance. That is, the shorter the duration of the disturbance or the further the disturbance is away a decrease in the impact was observed.

Effect of human proximity: Other researchers have studied the effect of human proximity on wildlife. At what distance do humans on foot elicit a disturbance response? From an examination of the available studies, it appears that the distance varies dramatically from species to species. Burger and Gochfeld (1991) found that sanderlings foraged less during the day and more during the night as the number of people within 100 meters (328 feet) increased. Elk in Yellowstone National Park were disturbed when people were at average distances of 573 meters (1,880 feet; Cassirer 1990). These elk temporarily left the drainage and their home range core areas and moved to higher elevations, steeper slopes, and closer to forested areas. Average return time to the drainage was two days. Erwin (1989) studied colonial wading and seabirds in Virginia and North Carolina. Mixed colonies of common terns-black skimmers responded at the greatest distances, with respective means of 142 meters and 130 meters (466 feet and 427 feet); mixed wading bird species were more reluctant to flush (30-50 meters average, or 98-164 feet). There were few relationships between flushing distance and colony size. Similarly, there were few differences between responses during incubation compared to post-hatching periods.

Miller *et al.* (2001) defined an "area of influence" as the area that parallels a trail or line of human movement within which wildlife will flush from a particular activity with a certain probability. In a study analyzing response distance from hiking and mountain biking in sagebrush-grassland habitat in Utah, Taylor and Knight (2003) found that at 100 meters (328 feet) from the line of movement of an off-trail trail, mule deer showed a 96 percent probability of flushing. That probability did not drop to 70 percent until the perpendicular distance increased to 390 meters (1,280 feet).

Taylor and Knight (2003) also found that the area of influence around a recreationist on a trail did not differ between mountain biking and hiking. This may mean that wildlife do not differentiate between hikers and bikers, but are instead reacting to the presence of a moving human on a trail, regardless of the person's activity. However, the area of influence differed considerably between on-trail and off-trail trials.

An analysis of over 4,000 human activity events near bald eagle nests in Central Arizona (Grubb and

King 1991) found distance to disturbance to be the most important classifier of bald eagle response, followed in decreasing order of discriminatory value by duration of disturbance, visibility, number of units per event, position relative to affected eagle, and sound.

Breeding bald eagles in north-central Minnesota (Fraser et al. 1985) flushed at an average distance of 476 meters (1,562 feet) at the approach of a pedestrian. Skagen (1980), also studying bald eagles in northwest Washington, found a decrease in the proportion of eagles feeding when human activity was present within 200 meters (656 feet) of the feeding area in the previous 30 minutes. A between-season variation occurred in the use of feeding areas relative to human presence, which correlated with food availability. Eagles appeared more tolerant of human activity in the season of low food availability. In a review of several studies of the reaction of waterfowl and other wetland birds to people on foot, distances greater than 100 meters (328 feet) in general did not result in a behavioral response (DeLong 2002).

Effects from pedestrian access: Wildlife is frequently more sensitive to disturbance from people on foot than in vehicles (Skagen 1980, Grubb and King 1991, MacArthur *et al.* 1982). Numerous studies have confirmed that people on foot can cause a variety of disturbance reactions in wildlife, including flushing or displacement (Erwin 1989, Fraser et al. 1985, Freddy 1986), heart rate increases (MacArthur *et al.* 1982), altered foraging patterns (Burger and Gochfeld 1991), and even, in some cases, diminished reproductive success (Boyle and Samson 1985). These studies and others 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). Taylor and Knight (2003), analyzing mule deer, pronghorn antelope, and bison response to mountain biking and hiking on- and off-trail found that the variables best explaining wildlife response included wildlife species, perpendicular distance of animals to trail (closest distance of animal to trail, regardless of recreationist position), trail position (on-trail or off-trail), and degree of vegetation cover.

Effects on migrant birds versus resident birds: Klein (1989) studied the effect of visitation on migrant and resident waterbirds at Ding Darling National Wildlife Refuge and found that resident birds were less sensitive to human disturbance than migrants. Migrant ducks were particularly sensitive when they first arrived on-site in the fall. They usually remained more than 80 meters (262 feet) from a visitor footpath on a dike, even at very low visitor levels. Herons, egrets, brown pelicans, and anhingas were most likely to habituate to humans, thus exposing them to direct disturbance as they fed on or near the dike. Shorebirds showed intermediate sensitivity. Strauss (1990) observed piping plover chicks spent less time feeding (50 percent versus 91 percent) and spent more time running (33 percent versus 2 percent), fighting with other chicks (4 percent versus 0.1 percent), and standing alert (9 percent versus 0.1 percent) when pedestrians or moving vehicles were closer than 100 meters (328 feet) than when they were undisturbed. In addition, plover chicks spent less time out on the feeding flats (8 percent versus 97 percent) and more time up in the grass (66 percent versus 0.1 percent) during periods of human disturbance.

Predictability of disturbance (habituation): Dwyer and Tanner (1992) noted that wildlife habituate best to disturbance that is somewhat predictable or 'background.' Investigating 111 nests of sandhill cranes in Florida, Dwyer and Tanner found that nesting cranes seemed to habituate to certain forms of human disturbance and nested within 400 meters (1,312 feet) of highways, railroads, and mines; cranes also were tolerant of helicopter flyovers. Visits to nests and development-induced alterations of surface water drainage were implicated in 24 percent of the nest failures. Taylor and Knight (2003) found that for mule deer, the area of influence around off-trail trails was much greater than

that for on-trail trials, suggesting habituation to trails. However, the time it takes for wildlife to habituate, and what wildlife use is like compared to pre-disturbance uses, remains a fertile question. A study by Fairbanks and Tullous (2002) measured the distance of pronghorn from recreational trails on Antelope Island State Park in Utah. The study gathered data the year before the trails were opened for public use, and compared these to data gathered in three consecutive years after recreational use began. Groups of pronghorn were observed significantly farther from trails in years with recreational use than in the year before recreational areas were opened.

Fishing-specific impacts: Fishing, when practiced as a solitary and stationary activity, tends to be less disturbing to wildlife than hunting or motorized boating (Tuite et al. 1983). Direct habitat impacts include a certain amount of litter and general garbage left at fishing sites. Installation and use of parking areas and access trails can decrease impacts to vegetation and soil adjacent to fishing areas, by concentrating visitors on hardened surfaces.

Fishing will cause minor and localized disturbance to birds and other wildlife using refuge mudflats and tidal marsh. Fishing activities may influence the composition of bird communities, as well as distribution, abundance, and productivity of waterbirds (Tydeman 1977, Bouffard 1982, Bell and Austin 1985, Bordignon 1985, Edwards and Bell 1985, and Cooke 1987). 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 from using otherwise suitable habitat (Jahn and Hunt 1964). In Britain, anglers displaced waterfowl from their preferred feeding and roosting areas and caused wigeon, green-winged teal, pochard, and mallard to depart from a reservoir prematurely (Jahn and Hunt 1964). On fishing days, anglers influenced the numbers, behavior, and diurnal distribution of avian scavengers present at sites in Washington when compared to nonfishing days (Knight *et al.* 1991). Shoreline activities, such as human noise, could cause some birds to flush and go elsewhere. In addition, vegetation trampling, and deposition of human waste are expected to occur (Liddle and Scorgie 1980). Disturbance and destruction of riparian vegetation, and impacts to bank stability and water quality, may result from high levels of bank fishing activities.

Effects from boat proximity: Boating, both motorized and non-motorized, can alter the 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 disturbance increase (Skagen *et al.* 1991, Pfister *et al.* 1992). However, disturbance to birds in general was reduced when boats traveled at or below a five mph speed limit.

Motorized boats can generally have more impact on wildlife than non-motorized boats because motorboats produce a combination of movement and noise (Tuite *et al.* 1983, Knight and Cole 1995). Motorized boats can also cover a larger area in a relatively short time, in comparison to non-motorized boats. Motorized boats introduce noise and pollution, in the form of gas and oil, and particulates in the air, in estuarine and riverine habitats of the refuge. Hydrocarbon pollution has been found to bio-accumulate with the complex food web, posing a serious threat to the marine environment (Tjarnlund *et al.* 1993). Hydrocarbons can also be transferred to eggs from the plumage of incubating birds. Extremely small amounts of petroleum hydrocarbons can be toxic to eggs and birds that ingest these contaminants (Hoffman 1989).

Canoes and kayaks can cause significant disturbance effects based on their ability to penetrate into shallower marsh areas (Speight 1973, Knight and Cole 1995). In the Ozark National Scenic Riverway, green heron activity declined on survey routes when canoes and boat use increased on the main river channel (Kaiser and Fritzell 1984). Canoes or slow moving boats have also been observed to disturb nesting 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 (Jahn and Hunt 1964, Huffman 1999, DeLong 2002).

The total number of boats and people can be an inappropriate measure of recreational intensity because the presence of a single boat might be just as disturbing as that of many (Tuite *et al.* 1983, Knight and Knight 1984). Even a low level of boating activity affects the duration and pattern of use by wildlife (Bratton 1990).

Refuge-specific Impacts:

People engaging in fishing and clamming generally access the refuge by motorized vehicles travelling on public roads, and using pullouts and parking lots. Pullouts, parking lots, and public roads have minimal direct impacts because they occupy a relatively small acreage. A limited group of individuals access the refuge via boat from the Coquille River.

Currently the Bandon Marsh Unit provides fishing and clamming opportunities. Under the CCP's management direction, as amended by the fishing plan, the refuge complex would add fishing in tidal creeks/sloughs and the bank of the Coquille River within the Ni-les'tun Unit south of North Bank Lane by foot or boat access. Along creek/slough edges, foot travel will result in a minor amount of habitat degradation (vegetation modification and soil compaction) from fishing activities. Direct habitat impacts will likely include a certain amount of litter and general garbage left at fishing sites.

Pedestrian access: Pedestrian access for fishing on the refuge creates the highest potential for disturbance or damage to natural resources. Foot travel associated with bank fishing and clamming could potentially result in temporary and minor vegetation trampling and local erosion affecting stream and tidal channel structure, stability, and sedimentation. Due to the low number of anglers expected to fish on the refuge, these impacts are expected to be minor.

Boat access: Boat access to the Ni-les'tun Unit for fishing creates a potential for disturbance to migratory and resident birds. This may cause birds that use the waters of the river and the estuary creek edges to flush. The disturbance to wildlife is expected to be localized and of short duration, resulting in a minor impact. Nearby resting and feeding areas will be available for use by any displaced wildlife. Boats landing on the riverbank of the Coquille River within the Ni-les'tun Unit will be restricted to a designated area.

Both fishing and clamming visitation are projected to increase under the CCP's management direction. Given this, future disturbance effects are likely to be somewhat higher than present. Most studies cited above have demonstrated immediate, rather than long-term responses to disturbance. Long-term responses are inherently more difficult and expensive to determine. Because the access to tidal sloughs within the Ni-les'tun Unit is difficult, numbers of anglers would be limited and effects on refuge wildlife from opening this unit to creek/slough fishing are expected to be minor.

Bank fishing and clamming currently occur within the Bandon Marsh Unit and, under the management direction of the CCP, as amended by the fishing plan (USFWS 2019), fishing will be allowed within the Ni-les'tun Unit of the refuge. Over the life of the CCP, none of these uses is expected to threaten research, wildlife observation, photography, interpretation, waterfowl hunting or environmental education activities due to the limited numbers of individuals engaged in fishing and clamming, limited areas where the use will be allowed and the amount of sanctuary otherwise available to wildlife.

Impacts to listed species: The listed species found on Bandon Marsh NWR is the threatened coho salmon, Pacific smelt (eulachon), and green sturgeon. The highest potential for impacts to coho salmon and green sturgeon is from accidental capture by anglers fishing for other species. Impacts to these fish species is limited by the small scope and limited size of this fishing opportunity. Anglers will also be expected to comply with state fishing regulations which are designed to prevent adverse effects to coho salmon, green sturgeon, and other listed fish. In addition, specific public education (e.g., handouts, website) can assist in raising awareness and preventing undue impacts to this species. It is expected no impact or a neutral effect on eulachon will occur because of fishing activities. Effects from bank fishing and clamming access on coho, green sturgeon, and eulachon are expected to be negligible.

Sport fishing in waters of the refuge is an approved recreational activity by the National Marine Fisheries Service under a Section 7 consultation of the Endangered Species Act within a Biological Opinion (PFMC 1999) and under ODFW's Oregon Coastal Coho, Coastal Rivers Coho Sports Fishery Fisheries and Management Plan (National Marine Fisheries Service concurred with under limit of the Endangered Species Act 4(d) rule; ODFW 2009, NMFS 2009).

Impacts to other priority public uses:

Bandon Marsh NWR is committed to providing quality opportunities for wildlife-dependent recreation. The refuge will continue to support all six of the Refuge System's priority wildlife-dependent uses: hunting, fishing, wildlife observation, photography, environmental education, and interpretation. The direct impacts to refuge visitors engaged in the other priority public uses from fishing are expected to be negligible.

Fishing from boats or banks and clamming generally result in little disturbance to other visitors. However, some anglers may inadvertently flush waterfowl being pursued by hunters. This conflict will be expected to be minimal because waterfowl hunting will occur only during late fall and winter, a time of year when visitors engaged in fishing and clamming are fewer in number.

Other Effects:

No significant effects to roads, trails, or other infrastructure from the fishing programs are expected. Normal road, trail, and facility maintenance will continue to be necessary. There will be a minor impact on some members of the refuge staff as overseeing the maintenance of the site, and increased compliance patrols will increase staff workload.

Public Review and Comment:

Fishing and clamming were discussed at two public meetings held in conjunction with the CCP process. To initiate the CCP process, a Notice of Intent was published in the Federal Register on November 29, 2010 (Volume 75, Number 228). Written comments were solicited from the public

about proposed wildlife-dependent recreational uses including fishing and clamming. A compatibility determination (CD) for fishing and clamming was submitted for public review and comment as an appendix to the Draft CCP and Environmental Assessment for Bandon Marsh NWR (USFWS 2012).

This Compatibility Determination includes changes to the refuge fishing program as described in the CCP, and supersedes the 2012 Fishing CD. Public review and comments for the Draft CD were solicited in conjunction with release of the draft fishing plan for the Ni-les'tun Unit of Bandon Marsh NWR (USFWS 2019) in order to comply with the National Environmental Policy Act and with Service policy, before implementing changes to the fishing program. No comments were received.

Determination:

_____ Use is Not Compatible

 X Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

- Fishing is allowed only during daylight hours.
- Anglers will be permitted to use pole and line or rod and reel. Anglers must attend their line.
- The refuge will provide signs and brochures to promote appropriate use of refuge lands to minimize wildlife and habitat disturbance, including boating practices such as no-wake and slower speeds. These materials will clearly state pertinent refuge-specific regulations.
- The refuge will ensure safety and minimize conflict with other priority public uses by providing information about fishing and clamming to the general public and those utilizing other refuge programs. These materials will clearly state pertinent State, Federal, and refuge- specific regulations. Information will be provided on the refuge website, in a fishing tear sheet and in refuge offices.
- On the Ni-les'tun Unit fishing is allowed by foot or by boat on lands south of North Bank Lane, including the bank of the Coquille River. Boats landing/mooring on the riverbank of the Coquille River within the Ni-les'tun Unit will be restricted to a designated area.
- Anglers will be permitted to use either bait or artificial lures per ODFW regulations.
- Camping, overnight use, unmanned aircraft systems (UAS or drones) and fires are prohibited. Overflights of UAS or drones that are operated from off-refuge are prohibited.
- Visitors shall not destroy or remove property including natural objects from a national wildlife refuge.
- For the Bandon Marsh Unit anglers will access the area by using the paved public parking lot associated with this unit located on the west side of Riverside Drive or they may access the Unit by boat using nearby public boat launches.
- For the Ni-les'tun Unit anglers will access the site using nearby public boat launches, the refuge parking lot located on North Bank Lane
- Pets and dogs will only be allowed outside of vehicles in parking areas (not on trails) and must be kept on-leash any time they are outside vehicles.
- The ODFW monitor fish population numbers and habitat use and reserves the right to modify existing regulations to accommodate existing or changing conditions.
- Periodic monitoring and evaluation of sites and programs will be conducted to assess if objectives are being met and the resource is not being unacceptably degraded. If disturbance to wildlife or damage to habitat or other sensitive resources reaches unacceptable levels, the Refuge will further restrict fishing activities in areas where unacceptable impacts occur.

Justification:

Wildlife-dependent recreational uses including fishing receive enhanced consideration in the CCP process. Given the limited locations of where fishing and clamming will occur, and the relatively limited number of anglers expected to use the refuge, these uses will be expected to have a minor direct impact on refuge resources. The associated disturbance to wildlife from these activities, though larger than at present, is also expected to be minor. 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 allowing these activities to occur. The relatively limited number of individual animals and plants expected to be adversely affected will not cause wildlife populations to materially decline, the physiological condition and production of refuge 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 fishing and clamming under the stipulations described above will not materially detract or interfere with the purposes for which the Refuge was established or the refuge mission. Furthermore, fishing on the Ni-les'tun Unit will create the opportunity for greater awareness among anglers about the importance of estuaries and unimpeded coastal creeks for salmonids. Fishing provides visitors with the joy of experiencing wildlife on their public lands, and as such, helps fulfill the mission of the National Wildlife Refuge System.

Signature:

Refuge Manager: _____ Date: _____

Concurrence:

Regional Chief: _____ Date: _____

Mandatory Re-Evaluation Date:

2034 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)

X 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

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