U. S. FISH AND WILDLIFE SERVICE ENVIRONMENTAL ACTION STATEMENT FOR CATEGORICAL EXCLUSION

The U.S. Fish and Wildlife Service (USFWS; Service) is proposing to expand hunting opportunities for waterfowl at the Baskett Slough National Wildlife Refuge (Refuge; NWR) in accordance with the 2011 Hunt Plan for the Willamette Valley NWR Complex (USFWS 2011a), the 2012 Baskett Slough Supplemental Environmental Assessment (EA) for the Waterfowl Hunt Program (USFWS 2012), and the 2011 Compatibility Determination for Waterfowl Hunting, which was prepared concurrently with the Comprehensive Conservation Plan and Environmental Assessment (CCP-EA) for the Willamette Valley National Wildlife Refuge Complex (USFWS 2011b). The area open to September Canada goose hunting would be expanded and modified.

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA), and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and determined that the following proposed action is categorically excluded from NEPA documentation requirements consistent with 40 CFR 1508.4, 43 CFR 46.205, and 516 DM 8.5.

The Service has fully satisfied the other requirements for expanding this opportunity on the Refuge, including:

meruanig.	
☑ determining that the opportunities are compatible established and the mission of the National W Compatibility Determination);	
⊠ ensuring the opportunities are consistent with exist regulations (50 CFR § 32);	sting state, local, and Refuge-specific
*Use of signs and brochures may supplement	the Refuge-specific regulations
\boxtimes complying with the National Environmental Police	ey Act;
⊠ complying with the Endangered Species Act secti	ion 7 evaluation; OR
☐ not applicable because there are no threate	ened or endangered species present;
⊠ complying with the National Historic Preservation	n Act section 106 consultation; OR
\square not applicable because there are no cultural	al or historic resources present;
Signature	Date:
T;+1 ₀	

CATEGORICAL EXCLUSION

Proposed Action: The Service is proposing to expand recreational hunting opportunities for waterfowl (Western Canada geese, *Branta Canadensis moffitti*) on the Baskett Slough National Wildlife Refuge, Oregon. We would expand waterfowl hunting opportunities by expanding the area open to September Canada goose hunting from the 856 acres (34 percent of the Refuge) proposed in the 2012 Supplemental EA for the Waterfowl Hunt Plan, to 1059 acres (40 percent of the Refuge). The increase in acres represents 134 additional acres of croplands that would be open to Canada goose hunting. The proposed action represents a minor change in the amount or type of public use on Service or state-managed lands, and is in accordance with existing regulations, management plans, and procedures. Environmental effects related to recreational waterfowl hunting were analyzed in the Comprehensive Conservation Plan and Environmental Assessment for the Willamette Valley National Wildlife Refuges (CCP-EA) (USFWS 2011b) and the Supplemental Environmental Assessment for the Baskett Slough NWR waterfowl hunt program (USFWS 2012). Waterfowl hunting was found to be compatible with refuge purposes and the mission of the National Wildlife Refuge System (see Compatibility Determination for Waterfowl Hunting in USFWS 2011b).

Categorical Exclusion: These proposed actions are covered by the following categorical exclusion: 516 DM 8.5 B (7): Minor changes in the amounts or types of public use on Service or state-managed lands, in accordance with existing regulations, management plans, and procedures.

Discussion: An action by the Service that only results in "minor changes in the amounts or types of public use on Service or state-managed lands, in accordance with existing regulations, management plans, and procedures" is categorically excluded from further NEPA analyses, because it has been determined to be a class of action which does not individually or cumulatively have a significant effect on the human environment (516 DM 8.5 B (7)).

Under the Refuge's Waterfowl Hunting Plan (USFWS 2011a), hunting of ducks and geese is allowed on 856 acres of the Refuge, 6 days of the year (2 days during the State youth waterfowl season, and 4 days during the State early dark goose season). In 2013, the Refuge was formally opened to duck and goose hunting. Hunting during the State youth waterfowl hunting season was allowed on 498 acres of wetlands, while hunting during the State September Canada goose season was allowed on 856 acres, which included both the 498 acres of wetlands, and 358 acres of crop fields (Map 1). Under the 2011 Hunt Plan, both youth and September goose hunters were required to obtain a refuge waterfowl hunting permit using the Waterfowl Lottery Application (FWS Form 3–2355) and hunt from designated blinds. Blinds would be assigned by random drawing. Up to five parties of youth hunters were allowed to hunt from five designated sites per day during the youth hunt season, while up to ten parties per day were allowed to hunt during the September Canada goose season.

In 2016, the Service prepared a minor amendment to the 2011 Hunt Plan, which addressed only the youth waterfowl hunt. Under this plan, the area open to hunting during the State youth waterfowl hunting season was expanded from 498 acres to 597 acres (later mapping corrections adjusted this to 567 acres, or 21 percent of the Refuge). In 2017, refuge-specific hunting regulations were amended to increase the age limit for youth hunters (from age 15 to 17) and clarify permit requirements for youth hunters. The Refuge youth waterfowl hunt was first implemented in the 2018-19 season. Although the Refuge was opened to September Canada goose hunting in 2013, this hunt has not been implemented to date.

The Service proposes to implement the September Canada goose hunt, and expand the acres proposed for this hunt from 856 acres (567 acres of wetlands and 358 acres of crop fields), or 34 percent of the Refuge, described in the 2012 SEA (as amended by the 2016 Hunt Plan), to 1,059 acres (567 acres of wetlands and 492 acres of crop fields), or 40 percent of the Refuge. 1,612 acres would remain closed to all hunting. The September Canada goose hunt would be in line with the State season (9 days, generally starting the second Saturday in September), bag limits, and regulations for the ODFW Northwest Zone. No special Refuge permit would be required for the September Canada goose hunt. Free-roam hunting would be allowed in the 1,059 acres open to September Canada goose hunting; however, consistent with Refuge-specific regulations, hunters are required to space themselves no less than 200 yards (183 meters) apart from each other.

Hunting within the Refuge will be consistent with Federal and Oregon Department of Fish and Wildlife hunting regulations. The Baskett Slough NWR waterfowl hunt areas are accessible by foot access from five parking areas (Smithfield Road, Colville Road, Highway 22, and Refuge headquarters) and via public use trails (Map 1). Hunters would be informed of no hunt zones and regulations via posted signs, brochures, and online resources.

The expansion of the hunting season on the refuge provides a quality hunting experience that meets Refuge guidelines and policies and provides sufficient wildlife sanctuary, while aligning hunting seasons with the State's September Canada goose season and assisting the State at meeting population management objectives for Western Canada geese.

Extraordinary Circumstances (43 CFR 46.215): Could This Proposed Action:

<u>Yes</u>	<u>No</u>		
	\boxtimes	a.	Have significant adverse effects on public health or safety?
		b.	Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (EO 11990); floodplains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas?
		c.	Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?
		d.	Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?
		e.	Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?
		f.	Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects?
		g.	Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau?
	\boxtimes	h.	Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?
	\boxtimes	i.	Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment?

	j.	Have a disproportionately high and adverse effect on low income or minority populations (EO 12898).
	k.	Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007).
	1.	Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and EO 13112).
\boxtimes	m.	Have material adverse effects on resources requiring compliance with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act?

(If any of the above exceptions receive a "Yes" check (X), an EA/EIS must be prepared.)

There are five federally ESA-listed threatened bird and mammal species where the current species ranges overlap with Baskett Slough NWR: the marbled murrelet (T), northern spotted owl (T), Pacific marten (T), streaked horned lark (T), and yellow-billed cuckoo (T). The federally ESA-listed endangered Fender's blue butterfly's (E) current range also overlaps with the Baskett Slough NWR. The range of the monarch butterfly, a Federal candidate species, also overlaps with the Refuge. The Refuge does not contain critical habitat for the marbled murrelet, northern spotted owl, Pacific marten, and yellow-billed cuckoo. The Refuge contains critical habitat for streaked horned lark and Fender's blue butterfly. Fender's blue butterflies are found on upland prairies on Baskett Butte and other remnant prairie habitat, which are not in the hunt area. No hunting activity would occur in locations supporting Fender's blue butterfly. Streaked horned lark winter in the Willamette Valley, and are known to occur on Baskett Slough NWR. They would be most likely to occur on open agricultural lands, prairies, and roadsides. The streaked homed lark occurs in locations that would be open to waterfowl hunting, and therefore may be disturbed by hunting activity. However, breeding/nesting activities are over at the time of the hunts (September) and there is abundant other grassland available to meet its foraging needs during the hunt period. Moreover, the limited number of hunting days limits disturbance impacts to streaked horned lark. Expanding the area where goose hunting may occur therefore may affect, but is unlikely to adversely affect, or adversely modify critical habitat for, streaked horned lark.

The Refuge does not contain suitable habitat for marbled murrelet, northern spotted owl, and Pacific marten; and these species have never been documented on the Refuge. Therefore, the presence and activity of hunters would not affect marbled murrelet, northern spotted owl, and Pacific marten.

Four listed plant species occur on the Baskett Slough NWR: Willamette daisy (E), Kincaid's lupine (Threatened), Nelson's checker-mallow (Threatened), and golden paintbrush (Threatened). Willamette daisy, Kincaid's lupine, and golden paintbrush occur in upland prairie habitat on Baskett Butte, which lies outside of the hunt area. The Refuge contains critical habitat for Willamette daisy. Nelson's checkermallow is found on wetland edges, ditchbanks and roadside edges, depressions, and wet prairies across the refuge, and therefore may occur within the hunt area. However, waterfowl hunting is unlikely to pose more than a negligible impact to threatened and endangered plant species. No hunting activity would occur in locations supporting Willamette daisy, golden paintbrush, and Kincaid's lupine. Some trampling of areas supporting Nelson's checkermallow could occur along wetland edges, dikes, and ditches, but impacts to soils and vegetation from trampling would be negligible due to the limited number of people walking in the hunt zones (low number of users and days of use expected). In addition, plants will have set seed and are largely senesced by the

beginning of hunting season, such that they are not vulnerable to damage this time of year (occupied sites are generally mowed in September). Therefore, expanding the area where early season dark goose hunting may occur may affect, but would be unlikely to adversely affect, these species. There would be no adverse modification to critical habitat for the Willamette daisy (see attached ESA Section 7 Consultation).

The Baskett Slough NWR does contain suitable habitat for yellow-billed cuckoo. Although cuckoos have not been observed on the Refuge, they may potentially occur there. Yellow-billed cuckoos are unlikely to occur on the Baskett Slough during the September early goose and youth waterfowl hunt seasons. They are primarily seen in forested riverine habitat during migration and may use this habitat for breeding. Expanding the area where goose hunting may occur therefore may affect, but is unlikely to adversely affect, or adversely modify critical habitat for, yellow-billed cuckoo.

The Service has determined that expanding the area for recreational waterfowl hunting is the type of undertaking that does not have the potential to cause effects on historic properties (36CFR800.3.a.1. the implementing regulations of Section 106 of the National Historic Preservation Act - NHPA). No ground disturbing activities are proposed and opening the area would not alter, directly or indirectly, any characteristic of a historic property. The undertaking may proceed without further consideration of NHPA Section 106.

References

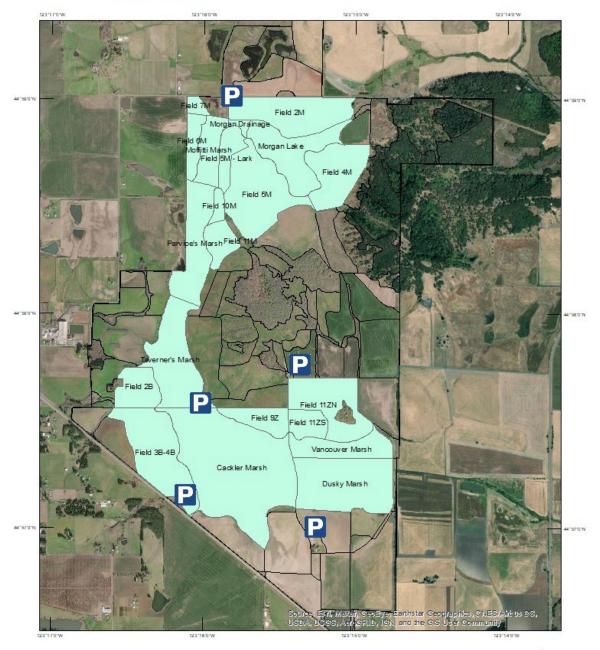
- U.S. Fish and Wildlife Service. 2016. Baskett Slough National Wildlife Refuge, Waterfowl Hunt Plan.
- U.S. Fish and Wildlife Service. 2012. Baskett Slough National Wildlife Refuge, Waterfowl Hunt Program Supplemental Environmental Assessment.
- U.S. Fish and Wildlife Service. 2011a. Appendix G, Hunting Plan for the Willamette Valley National Wildlife Refuge Complex. <u>In</u>: USFWS 2011, Willamette Valley National Wildlife Refuges Final Comprehensive Conservation Plan and Environmental Assessment. Available at: https://ecos.fws.gov/ServCat/DownloadFile/164246
- U.S. Fish and Wildlife Service. 2011b. Willamette Valley National Wildlife Refuges Final Comprehensive Conservation Plan and Environmental Assessment. Available at: https://ecos.fws.gov/ServCat/DownloadFile/164246

v	and wildlife resources, I have established the following mined:	administrative record and have		
\boxtimes		oosed action is covered by a categorical exclusion as provided by 43 CFR or 516 DM 8.5. No further NEPA documentation will therefore be made.		
	An Extraordinary Circumstance (43 CFR 46.215 and, so an EA/EIS must be prepared.) could exist for the proposed action		
Serv	ice signature approval:			
Signa	ature	Date:		
Title				

Within the spirit and intent of the Council of Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) and other statutes, orders, and policies that protect

Proposed Sept. Goose Hunt Boundary

Baskett Slough National Wildlife Refuge Polk County, Oregon



PRODUCED AT THE WILLIAM FINLEY WILDLIFE REFUSE ORNAULS, ORSOON MAP CATE: THYSOTIS BASEMEN HERDICAN WILLIAMSTIE FILE WINNING, SKITLPOTTRAIT MIXED





Notification: proposed expansion of waterfowl hunting at Baskett Slough NWR - Sept. Canada goose season

Evans-peters, Graham R < graham_evans-peters@fws.gov>

Tue 1/25/2022 1:39 PM

To: gregory.c.reed@odfw.oregon.gov < gregory.c.reed@odfw.oregon.gov >

Cc: Miller, Damien <damien_miller@fws.gov>; Pausch, Eddy <Eddy_Pausch@fws.gov>

1 attachments (646 KB)

Draft_BKS_Hunting_HuntWaterfowl_CD_2022.docx;

Hi Greg,

I'm writing to inform you and Oregon Dept. of Fish and Wildlife of our proposal to expand waterfowl hunting opportunities at Baskett Slough NWR to include Sept. Canada Goose hunting consistent with State regulations.

Similar to what Eddy provided you last year with Snag Boat Bend, we are seeking input from ODFW on the Service's proposal to open a portion of Baskett Slough National Wildlife Refuge to Sept. Canada geese in the fall of 2022. Currently ~600 acres of wetlands support 5 blinds for our Youth Waterfowl Hunt that is during the Statewide youth weekend the 3rd weekend in Sept. The Sept. goose hunt will include those wetlands and approximately 500 acres of adjacent upland croplands, totaling ~40% of the refuge.

The attached draft hunt package includes a categorical exclusion, section 7, and a draft compatibility determination. It is a minor ammendment to the 2011 Hunt Plan for the Willamette Valley NWR Complex and 2012 Supplemental Environmental Assessment for Waterfowl Hunting Baskett Slough. These are internal draft documents that you may review prior to them being released in April for a 60 day public review and comment period. ODFW will also have the opportunity to comment during the public comment period.

If you have any questions, please feel free to contact me.

Regards,

Graham Evans-Peters Refuge Manager Ankeny and Baskett Slough NWR U.S. Fish and Wildlife Service 10995 Hwy. 22 Dallas, OR 97338 503-623-2749 (o) / 541-760-2872 (c) graham evans-peters@fws.gov

Notification: proposed expansion of waterfowl hunting at Baskett Slough NWR - Sept. Canada goose season

Evans-peters, Graham R < graham_evans-peters@fws.gov>

Tue 1/25/2022 2:18 PM

To: colby.drake <colby.drake@grandronde.org>

Hello Colby,

My name is Graham Peters and I'm the refuge manager for Baskett Slough and Ankeny National Wildlife Refuges. I've been here for about 8 years. I've worked with your predecessor, Mike Wilson, in years past on development of our Ankeny Hill Nature Center and opening a small weekend long youth waterfowl hunt here at Baskett. It would be great to set up a meeting or call soon to meet each other and discuss mutual interests and collaborative opportunities.

I'm also writing to inform you and The Confederated Tribes of Grand Ronde of our proposal to expand waterfowl hunting opportunities at Baskett Slough NWR to include Sept. Canada Goose hunting consistent with State regulations.

We are seeking input from The Confederated Tribes of Grand Ronde on the Service's proposal to open a portion of Baskett Slough National Wildlife Refuge to Sept. Canada geese in the fall of 2022. Currently ~600 acres of wetlands support 5 blinds for our Youth Waterfowl Hunt that is during the Statewide youth weekend the 3rd weekend in Sept. The Sept. goose hunt will include those wetlands and approximately 500 acres of adjacent upland croplands, totaling ~40% of the refuge.

The attached draft hunt package includes a categorical exclusion, section 7, and a draft compatibility determination. It is a minor ammendment to the 2011 Hunt Plan for the Willamette Valley NWR Complex and 2012 Supplemental Environmental Assessment for Waterfowl Hunting Baskett Slough. These are internal draft documents that you may review prior to them being released in April for a 60 day public review and comment period. You will also have the opportunity to more formally comment during the public comment period.

If you have any questions, please feel free to contact me.

Regards,

Graham Evans-Peters Refuge Manager Ankeny and Baskett Slough NWR U.S. Fish and Wildlife Service 10995 Hwy. 22 Dallas, OR 97338 503-623-2749 (o) / 541-760-2872 (c) graham evans-peters@fws.gov

FINDING OF APPROPRIATENESS OF A REFUGE USE

Use of this form is required for documenting all appropriate use findings (603 FW 1)

R	efuge Name:		
	Use:		
	This is a:	New Use	Existing Use
	Does this use qu	ualify for an appropriatene	ss review exemption?
	_	exempted from an appropriations are documented through the	ateness review [603 FW 1.2; 603 FW 1.2(A)]. Appropriate se use of this form.
	Examples inclu	de the use of snow machines,	otherwise provided for under law or regulation. airplanes, or motorboats on Alaska refuges under certain iustification as to how this use qualifies for this particular
	This could be a subsurface Nor		t orders, consent decrees, pre-existing rights (such as al rights, grandfathered easements, etc.). Provide a written
	Right-of-way re	t-of-Way Permit request quests are subject to 340 FW to how this use qualifies for thi	3 and compatibility determinations (603 FW 2). Attach a brief s particular exemption.
		S NOT qualify for an appropraluate the use under Part B.	oriateness review exemption.
deterr		rts B, C, D and E and compl	tions above, then it is exempt from an appropriate use ete Parts F and G, sign and date, and submit a copy to
	s the use admin (Please Check One)	istratively determined as a	appropriate in law or policy?
		ses are appropriate because atute or policy [603 FW 1.11	they have been administratively determined as (A)(1); 603 FW 1.6(A)(3)].
		vildlife-dependent recreatior g, Wildlife Observation, Wildlife	nal use. e Photography, Environmental Education, or Interpretation.
		ves the take of fish and wild forms of state-regulated take t	life under state/territorial regulations. beyond hunting and fishing.
		NOT been administratively valuate the use under Part C.	determined as appropriate by statute or policy.

If the use meets one of the two qualifying definitions above, then it is appropriate. Complete Parts E, F, and G, sign and date, and submit a copy to the Refuge Supervisor.

C. Is the use appropriate because it contributes to the refuge's purpose(s), goals, or objectives or Refuge System mission?

(Please check one.)

Refuge managers, in their sound professional judgement, may determine a refuge use to be appropriate if it contributes to fulfilling the refuge purpose(s), goals, or objectives described in the refuge's comprehensive conservation plan, or the Refuge System mission [603 FW 1.11 (A)(2)]. Urban wildlife refuges have the additional goal of fostering environmental awareness through outreach programs and activities that develop an informed and involved populace that supports fish and wildlife conservation [110 FW 1.5].

This use contributes to the refuge purpose(s), goals, or objectives, or Refuge System mission. Provide a written justification of how the use contributes to the qualifying purpose(s), goals, or objectives or Refuge System mission. Complete Parts E, F, and G, sign and date, and submit a copy to the Refuge Supervisor.
This use DOES NOT contribute to refuge purpose(s), goals, objectives, or Refuge System mission.
Proceed to evaluate the use under Part D.

D. Is this use appropriate?

Decision Criteria:		
(1) Does the use comply with applicable laws and regulations (Federal, State/Territorial, tribal,and local)?		
(2) Is the use consistent with applicable Executive orders and Department and Service policies?		
(3) Is the use consistent with public safety?		
(4) Is the use consistent with the goals and objectives of approved management plans or other management document?		
(5) If this is the first time the use has been proposed or if it was previously found appropriate, check Yes. If the use was previously analyzed but denied, check No.		
(6) Is the use manageable within available budget and staff?		
(7) Will the use be manageable in the future with existing resources? [603 FW 1.11 (A)(3)(h)].		
(8) Does the use contribute to the public's understanding and appreciation of the refuge's natural and cultural resources?		
(9) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality [603 FW 1.6 (D)], compatible, wildlife-dependent recreation into the future?		
(10) Is the use on an urban wildlife refuge [110 FW 1.15] and/or will it help new audiences become familiar and comfortable with fish, wildlife and their habitats?		

If the answer is "NO" to (1), (2), or (3), mark the use as "Not Appropriate" under Part G. If the answer is "NO" to any of (4) through (10), the use will generally be "Not Appropriate." Refuge managers may, however, check one or more of boxes (4) through (10) and still find the use "Appropriate" by providing a written justification of the finding and how the factor(s) are mitigated or of minimal effect.

Complete Parts E, F, and G, sign and date, and submit a copy to the Refuge Supervisor.

E. Consultation with State/Territorial Fish and Wildlife Agency

(Please check one.)

Refuge managers must consult with the applicable State/Territorial fish and wildlife agency when a request for a use could affect fish, wildlife, or other resources that are of concern to a State fish and wildlife agency [603 FW 1.7E(3) and 1.12]. Consultation WAS required. Consultation took place on: ___ Proceed to Part F. Consultation WAS NOT required. Proceed to Part F. F. Is the use significantly complex or potentially controversial? (Please check one.) Yes If Yes, date the Regional Chief was briefed: Proceed to Part G. No Proceed to Part G. **Finding** G. Based on my review of all relevant factors, I find the refuge use identified above: Not Appropriate Exempted Appropriate* [* Includes findings that a use is administratively determined as appropriate (Section B and C) or is found appropriate through the use of the decision tool (Section D).] Refuge Manager* *Upon signature, all fields except date, Refuge Supervisor signature and date, will be locked as "read only". Concurrence The Refuge Supervisor MUST concur and sign a finding of "Not Appropriate" for an EXISTING use if the designation is made OUTSIDE of the Comprehensive Conservation Plan process. The Refuge Supervisor MUST concur and sign a finding of "Appropriate" for any proposed NEW use. Signature from the Refuge Supervisor WILL NOT be necessary for a finding of "Not Appropriate" with a proposed NEW use. Refuge Supervisor*

Any use found to be "Appropriate" will require the development of a compatibility determination before the use may be allowed on Refuge lands.

*Upon signature, all fields except date will be locked as "read only".

Draft Compatibility Determination

Title

Draft Compatibility Determination for Waterfowl Hunting, Baskett Slough National Wildlife Refuge

Refuge Use Category

Hunting

Refuge Use Type(s)

Hunting (waterfowl)

Refuge

Baskett Slough National Wildlife Refuge

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

"for use as an inviolate sanctuary, or for any other management purpose, for migratory birds...to conserve and protect migratory birds...and to restore or develop adequate wildlife habitat." (Migratory Bird Conservation Act of 1929, 16 U.S.C. 715 et. seq.).

"managed primarily for dusky Canada geese...uplands managed as wildlife habitat and for watershed protection." (MBCC Memo #3, March 25, 1965). All tracts of land acquired prior to 10/1967.

"To provide (1) feeding and resting areas for migratory waterfowl; (2) wintering range primarily for the dusky Canada goose; (3) a production habitat for several species of ducks." (MBCC Memo #8, October, 1967). All tracts of land acquired subsequent to 10/1967.

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 reviews and replaces the 2011 compatibility determination for waterfowl hunting, which was prepared concurrently with the CCP and Hunt Plan for Willamette Valley National Wildlife Refuges (USFWS 2011).

What is the use?

We propose to allow waterfowl hunting on the Refuge to enhance visitor experience. The waterfowl hunting program would include a youth hunt and September Canada goose hunt during the State seasons in crop fields and wetlands on the Refuge.

Is the use a priority public use?

Yes

Where would the use be conducted?

Waterfowl hunting would occur on specific wetlands and in crop fields. Of the 2,671 acres that comprise the Refuge (GIS estimate), 1,059 acres would be open for the September Canada goose hunt, and 567 acres for the youth waterfowl hunt. Hence, 21 percent of the Refuge would be open to waterfowl hunting for 2 days per year, and 40 percent of the Refuge would be open to waterfowl hunting for 9 days per year. This acreage does not exceed the 40 percent guideline for Refuge lands referenced above. 567 acres of Refuge wetlands, including Cackler, Dusky, Vancouver, Taverner, Parvipes, and Moffitti Marshes, and Morgan Lake would be open for both the youth waterfowl hunt and the early season dark goose hunt. 492 acres of crop fields adjacent to these wetlands would be open to early season dark goose hunting only (see map).

When would the use be conducted?

Waterfowl hunting would occur in September. The youth hunt would occur one weekend/year, generally the last weekend in in September; and the September Canada goose hunt would occur for 9 days in September, generally from the second Saturday through the third Sunday. Therefore, the Refuge would be open to waterfowl hunting for a total of 11 days in September.

How would the use be conducted?

Hunting within the Refuge will be consistent with Federal and Oregon Department of Fish and Wildlife hunting regulations. The Baskett Slough NWR waterfowl hunt areas are accessible by foot from five parking areas (Smithfield Road, Colville Road, Highway 22, and Refuge headquarters) and via public use trails. Hunters would be informed of no hunt zones and regulations via posted signs, brochures, and online resources.

Youth waterfowl hunting is by advance reservation only. Youth hunters are required to obtain a refuge waterfowl hunting permit using the Waterfowl Lottery Application (FWS Form 3–2355) and hunt from designated blinds. Applications are accepted from August 1 through the last Friday in August. Sites are assigned by random drawing. Up to five parties of youth hunters are allowed to hunt from five designated blinds per day during the youth hunt season. Blinds will be selected during check-in on the day of the hunt, in order by blind selection number. All hunting must take place within the assigned blind. A maximum of four (4) people may occupy a blind. Only two hunting youth may occupy the same blind, and must be accompanied by at least one (1) non-hunting adult 21 years of age or older. All youth hunt participants must check-in at the Hunter Check Station located at the Baskett Slough National Wildlife Refuge office (10995 Hwy 22, Dallas, OR 97338) to obtain a refuge permit that they must possess and carry. Check-in and blind selection is 1-1/2 hours before legal hunt time. Hunters must be checked out no later than 1:00 PM and must complete a harvest report.

Under the proposed amendment to the Willamette Valley NWRs Hunt Plan and Supplemental EA, no special Refuge permit would be required for the September Canada goose hunt. Free-roam hunting would be allowed in the 1,059 acres open to September Canada goose hunting; however, consistent with Refuge-specific regulations, hunters are required to space themselves no less than 200 yards (183 meters) apart from each other. A maximum of three hunters would be permitted per party. September goose hunt participants must check-in at the Hunter Check Station located at the Baskett Slough National Wildlife Refuge office (10995 Hwy 22, Dallas, OR 97338). Check-in and blind selection is 1-1/2 hours before legal hunt time. Hunters must be checked out no later than 1:00 PM and must complete a harvest report.

Facilities that would be used for the hunt include the Refuge office, which would serve as the check station, and various existing roads, vehicle pull-outs, trails, and parking lots needed for access. Hunters may use five parking areas to access hunt areas: one on Smithfield Road; two on Colville Road; one on Highway 22; and one at the Refuge office (see map). Permanent blinds would not be established for the September goose hunt; temporary blinds would be allowed to be set up by hunters with removal at the end of the hunting day. Up to 290 hunt days per year are expected to accrue in this use annually.

Why is this use being proposed or reevaluated?

In accordance with the National Wildlife Refuge System Administration Act of 1966, as amended, hunting is a priority wildlife-dependent public use. Public land for waterfowl hunting is in limited supply, especially near large metropolitan areas (U.S. Department of the Interior [USDOI] et al. 2007) such as Portland. In general, there has been a static or declining trend in hunting participation relative to population growth in the United States (USFWS 2004) since 1985. The trend also indicates a declining

number of young hunters. From 1991 to 2001, the number of Americans 16 years of age and older who hunted declined by 7 percent. However, in Oregon from 1991 to 2001, hunter participation increased by 2 percent (USFWS 2004). According to Raftovich et al. (2019) there were approximately 29,300±8% active waterfowl hunters in Oregon during 2018.

Opportunities to hunt in Oregon are increasingly scarce due to an ever-growing population, urbanization, and a relative lack of public lands open to these uses. Waterfowl hunting at Baskett Slough NWR was reviewed and approved as part of the Willamette Valley National Wildlife Refuges Comprehensive Conservation Plan (CCP) (USFWS 2011). Waterfowl hunting on the Refuge provide the public an opportunity to hunt in proximity to an urban area (Corvallis), in uncrowded and relatively natural environments, and at a reasonable cost.

Hunters have helped buy land for the Refuge System for nearly 70 years through the purchase of Migratory Bird Hunting and Conservation Stamps, also known as Duck Stamps, and continue to support and advocate for refuges and conservation. Hunters also participate and share in wildlife photography, education, and interpretation while hunting. Waterfowl hunting is being reevaluated due to a minor hunt expansion to implement the September Canada goose hunt, expand the area open to this hunt, and streamline regulations.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. Estimated costs for operating the waterfowl hunting program under the Willamette Valley NWRs Hunt Plan, as amended, are displayed in the following table. Recurring expenses include estimated annual salaries for recreation and maintenance personnel involved in administering the program.

Table 1: Costs associated with Waterfowl Hunting Use

Proposed Activity or Project	One Time Expense	Recurring Expenses
	(\$)	(\$/year)
Develop hunt opening	\$10,000	N/A
package		
Administer Sept. Goose hunt	\$2,000	\$1,000
Administer Youth hunt	\$10,000	\$5,000
Construct hunt blinds	\$20,000	\$2,000
Develop new publications,	\$6,000	\$1,000
signage, kiosk at Refuge office		
associated with new hunt		
Total One Time Expenses for the Complex (\$)		\$48,000
Total Recurring Expenses for the Complex (\$/year)		\$9,000

Anticipated Impacts of the Use

The effects and impacts of the proposed use 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

Baskett Slough 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)). We propose to expand the hunt area from 856 acres (34 percent of the Refuge) to 1,059 acres (40 percent of the Refuge) leaving 1,612 acres as sanctuary for migratory birds. In addition, we limit migratory bird hunting to the month of September, which is prior to the waterfowl migration peak. Therefore, 100 percent of the Refuge acts as sanctuary for migratory birds during the peak migration and wintering period.

Direct Take to Hunted Wildlife – Population Effects: Although hunting directly impacts individuals within a population, the Service and state wildlife agencies regulate hunting in concert with Canada, Mexico, and multi-state flyway councils, so that harvest does not reduce populations to unsustainable levels. The hunting of waterfowl in the United States is based upon a science-based regulatory setting process that involves numerous sources of waterfowl population and harvest monitoring data. Waterfowl populations throughout North America are managed through an administrative process known as flyways, of which there are four (Pacific, Central, Mississippi, and Atlantic). Oregon is included in the Pacific Flyway.

In North America, the process for establishing waterfowl hunting regulations is conducted annually. Each year, the Service promulgates regulations establishing the Migratory Bird Hunting Frameworks, which provide season dates, bag limits, and other options for the states to select that should result in the level of harvest determined to be appropriate based upon Service-prepared annual biological assessments of the status of migratory game bird populations. Thus, the level of

hunting opportunity afforded each state depends on the annual status of waterfowl populations. Season dates and bag limits for national wildlife refuges open to hunting are never longer or greater than state regulations and may be more restrictive than the state allows.

Short-term impacts

Direct mortality stemming from Refuge hunts: The estimated refuge duck harvest from the youth hunt is less than 100 ducks during the youth hunt. This estimated harvest represents a tiny fraction of a percent of the total midwinter population of wintering ducks in the State of Oregon and an even smaller fraction of the Pacific Flyway population.

Similarly, the number of resident Canada geese projected to be taken is less than 1,125 geese, which compared with area population is negligible. The September goose hunt would confine harvest to the Pacific Population of Western or Great Basin Canada geese (*Branta canadensis moffitti*), which are currently above population objectives in the Flyway (Subcommittee on Pacific Population Western Canada Goose 2000). The hunt would contribute to current state and federal efforts to manage this population.

At this time, dusky geese would not be impacted as they arrive later in the fall. If dusky arrival time shifted to earlier in the fall, these hunts would be re-evaluated.

Given the small amount and season of the expected take, the hunt as designed will not adversely affect the refuge's ability to sustain optimum population levels for meeting other refuge objectives, specifically maintaining wintering populations of migratory waterfowl, and maintaining enough wildlife to provide for wildlife viewing enjoyment.

Disturbance Effects: In addition to direct take, hunting causes disturbances to feeding and resting waterfowl as well as nontarget species because of the noise (shotgun), movement, vehicular activity, and use of dogs for this activity. Studies cited by Korschgen and Dahlgren (1992) indicate that water-related activities by humans, including boating, hunting, and shoreline activities, do cause disturbance to waterfowl, manifested by alertness, fright (obvious or unapparent), flight, swimming, disablement, or death. Human disturbance can compel waterfowl to change food habits, feed only at night, lose weight, or desert feeding areas (Korschgen and Dahlgren 1992). Although disturbance from hunting is noted to have effects directly on waterfowl, US DOI (2009) concluded that hunting disturbance is of less impact than the direct mortality caused by hunting. Further, since the direct impacts of hunting cannot be clearly demonstrated to be detrimental at most population levels, then disturbance will not have any pronounced population level effects on waterfowl (US DOI 2009).

As described above, the hunt program would occur in up to 1,059 acres (40 percent of the Refuge) for nine days each year, and on up to 567 acres for two days each year. It is designed to pose minimal disturbance over the course of the year. However, due to disturbance that will occur on the days of hunt, hunting could result in some redistribution of Western Canada geese at Baskett Slough refuge. Disturbance effects associated with hunting were examined in the SEIS 2009 for waterfowl and some other migratory bird species. On the basis of a review by Dahlgren and Korschgen (1992), the SEIS 2009 noted that disturbance has its most pronounced detrimental effect during the nesting period. Hence the SEIS 2009 noted that hunting related disturbance does not have any pronounced population level effects (US D0I 2009).

The effects of disturbance to non-hunted birds and other species under the proposed action are expected to be minor for the following reasons. Hunter education courses will be required for youth hunters. Orientation will be provided to youth hunters at the start of each hunting day. These measures will help to reduce effects to non-target species. In addition, hunting seasons do not coincide with the nesting season, thus reproduction will not be reduced by hunting. Disturbance to the foraging or resting activities of migrating or resident birds might occur, but would be minor because of the small amount of area available for these hunts, relative to the sizes of the Refuge, and the limited time parameters for hunting. There would not be disturbance to wintering wildlife because the hunts would be conducted prior to the wintering period.

Impacts to Non-hunted Wildlife: Non-hunted wildlife would include any non-target waterfowl and any other birds; small and medium-sized mammals; reptiles, amphibians, and invertebrates. Occasionally, nontarget species are illegally killed by hunters by accident or intentionally. However, the potential effect to non-hunted wildlife is largely in the realm of disturbance (see discussion above). Disturbance to other taxa would be unlikely or negligible for the following reasons. Encounters with reptiles and amphibians in the early fall would be few and should not have cumulative negative effects on reptile and amphibian populations. Refuge regulations further mitigate possible disturbance by hunters to non-hunted wildlife. Vehicles would be restricted to roads and the harassment or taking of any wildlife other than the game species legal for the season would not be permitted.

Some species of bats, butterflies, and moths are migratory. Cumulative effects to these species would be negligible. Although hunting would be allowed during September when these species are migrating, hunter interaction would be commensurate with that of non-consumptive users.

Disturbance from Dogs: Dogs elicit a greater response from wildlife than people on foot alone (MacArthur et al. 1982, Hoopes 1993). The presence of dogs may disrupt foraging activity in shorebirds (Hoopes 1993) and disturb roosting activity in ducks (Keller 1991). Despite thousands of years of domestication, dogs still maintain instincts

to hunt and chase. Given the appropriate stimulus, those instincts can be triggered. Dogs that are unleashed or not under the control of their owners may disturb or potentially threaten the lives of some wildlife. In effect, off-leash dogs increase the radius of human recreational influence or disturbance beyond what it would be in the absence of a dog.

The role of dogs in wildlife diseases is poorly understood. However, dogs host endoand ectoparasites and can contract diseases from, or transmit diseases to, wild animals. In addition, dog waste is known to transmit diseases that may threaten the health of some wildlife and other domesticated animals. Domestic dogs can potentially introduce various diseases and transport parasites into wildlife habitats (Sime 1999).

Habitat and Vegetation: No facilities will be constructed expressly for the waterfowl hunting program, therefore there would be no direct loss of habitat. Minor impacts to vegetation would occur through minor trampling and the potential of hunters and dogs spreading invasive species. The small number of hunters and hunt days per year would result in a minor impact to vegetation.

Impacts to listed species: Waterfowl hunting is unlikely to pose more than a negligible impact to threatened and endangered species. There are four federally ESA-listed threatened bird species where the current species ranges overlap with Baskett Slough NWR: the marbled murrelet (T), northern spotted owl (T), Pacific marten (T), streaked horned lark (T), and yellow-billed cuckoo (T). The federally ESA-listed endangered Fender's blue butterfly's (E) current range also overlaps with the Baskett Slough NWR. The range of the monarch butterfly, a Federal candidate species, also overlaps with the Refuge. The Refuge does not contain suitable habitat for marbled murrelet, northern spotted owl, and Pacific marten; and these species have never been documented on the Refuge. The Refuge does contain suitable habitat for yellow-billed cuckoo. Although cuckoos have not been observed on the Refuge, they may potentially occur there. However, cuckoos are unlikely to occur on the Baskett Slough during the September early goose and youth waterfowl hunt seasons.

The Refuge contains critical habitat for streaked horned lark and Fender's blue butterfly. Fender's blue butterflies are found on upland prairies on Baskett Butte and other remnant prairie habitat, which are not in the hunt area. No hunting activity would occur in locations supporting Fender's blue butterfly. Streaked horned lark winter in the Willamette Valley, and are known to occur on Baskett Slough NWR. They would be most likely to occur on open agricultural lands, prairies, and roadsides. The streaked homed lark occurs in locations that would be open to waterfowl hunting, and therefore may be disturbed by hunting activity. However, breeding/nesting activities are over at the time of the hunts (September) and there is abundant other grassland available to meet its foraging needs during the hunt period.

Moreover, the limited number of hunting days limits disturbance impacts to streaked horned lark. Expanding the area where goose hunting may occur therefore may affect, but is unlikely to adversely affect, or adversely modify critical habitat for, streaked horned lark.

Four listed plant species occur on the Baskett Slough NWR: Willamette daisy (E), Kincaid's lupine (Threatened), Nelson's checker-mallow (Threatened), and golden paintbrush (Threatened). Willamette daisy, Kincaid's lupine, and golden paintbrush occur in upland prairie habitat on Baskett Butte, which lies outside of the hunt area. The Refuge contains critical habitat for Willamette daisy. Nelson's checker-mallow is found on wetland edges, ditchbanks and roadside edges, depressions, and wet prairies across the refuge, and therefore may occur within the hunt area. However, waterfowl hunting is unlikely to pose more than a negligible impact to threatened and endangered plant species. No hunting activity would occur in locations supporting Willamette daisy, golden paintbrush, and Kincaid's lupine. Some trampling of areas supporting Nelson's checker-mallow could occur along wetland edges, dikes, and ditches, but impacts to soils and vegetation from trampling would be negligible due to the limited number of people walking in the hunt zones (low number of users and days of use expected). In addition, plants will have set seed and are largely senesced by the beginning of hunting season, such that they are not vulnerable to damage this time of year (occupied sites are generally mowed in September). Therefore, expanding the area where early season dark goose hunting may occur may affect, but would be unlikely to adversely affect, these species. There would be no adverse modification to critical habitat for the Willamette daisy (see attached ESA Section 7 Consultation).

Impacts to other priority public uses. Hunting has the potential to disturb Refuge visitors engaged in other priority public uses. To minimize this potential conflict, the waterfowl hunt season would be limited in time to a total of 11 days – nine days during the September Canada goose season and the one weekend for the youth hunt. During this time, hunting locations would be limited to designated wetlands and crop fields. The month of September is not a particularly popular month for attracting non-hunters to view wildlife. Because of this and the fat that the Refuge is open to hunting only 11 days per year, the direct impacts to other users are expected to be minor. To minimize user group conflicts, general public entry will be limited to the Rich Guadagno Memorial Trail, which lies outside the hunt area, until noon on hunt days. After 12 pm the entire Refuge is again open to the public.

Providing waterfowl hunting opportunity at Baskett Slough Refuge helps to better provide a "Big Six" use. Providing opportunities for youth is an important initiative in the Service and helps address a public desire to see more hunting opportunities for youth.

No significant effects to roads, trails, or other infrastructure from the hunting program are foreseen. Normal road, trail, and facility maintenance will continue to be necessary. Additional facility construction or upgrade, if needed, is addressed in the Availability of Resources section.

Long-term impacts

There would be indirect beneficial impacts of Refuge hunting over the long term. Hunting can contribute to wildlife and habitat conservation and provide educational and sociological benefits. The hunting community in general remains the largest support base for funding land acquisitions in the Refuge System through the purchase of Duck Stamps. Refuges provide an opportunity for a high quality waterfowl hunting experience to all citizens regardless of economic standing. Many Refuges have developed extensive public information and education programs bringing hunters into contact with Refuge activities and facilitating awareness of wildlife issues beyond hunting.

Public Review and Comment

This Draft Compatibility Determination will be released for public review and comment in conjunction with the release of the 2022-2023 Sport Hunting and Fishing Regulations (Proposed Rule) in order to comply with the National Environmental Policy Act and with Service policy, before implementing the changes to the Refuge's migratory bird hunting program. The public will be made aware of this comment opportunity through our social media outlets and letters to potentially interested people such as cooperative farmers and partner agencies. A hard copy of this document will be posted at the Refuge Headquarters (26208 Finley Refuge Road, Corvallis, OR 97333). It will be made available electronically on the refuge website: www.fws.gov/refuge/baskett_slough/ and in the Federal Register as part of the 2022-2023 Sport Hunting and Fishing Regulations (Proposed Rule). Please let us know if you need the documents in an alternative format. Concerns expressed during the public comment period will be addressed in the final Compatibility Determination.

Determination

Yes

Stipulations Necessary to Ensure Compatibility

- 1. Only shotguns are permitted and all shot must be federally approved non-toxic shot.
- 2. We allow only hunters age 17 and younger to participate in the youth waterfowl hunt. Youths must be accompanied by an adult age 21 or older.
- 3. We require youth hunters to obtain a refuge waterfowl hunting permit (Waterfowl Lottery Application, FWS Form 3–2439, Hunt Application—National Wildlife Refuge System). All hunting must take place within the assigned blind. A maximum of four (4) people may occupy a blind. Only two hunting youth may occupy the same blind, and must be accompanied by at least one (1) non-hunting adult 21 years of age or older.
- 4. You must remove blinds, decoys, and other personal property at the end of each day's hunt.
- 5. We allow the use of dogs when hunting.
- 6. Waterfowl and goose permit hunters must check in and out at the Hunter Check Station (refuge office), which is open from 1-1/2 hours before legal hunting hours to 8 a.m. and from 11 a.m. to 1 p.m., and complete a harvest report. Hunting after 12 p.m. (noon) is prohibited.
- 7. Free-roam hunting is permitted during the September Canada goose season. Hunters must space themselves no less than 200 yards (183 meters) apart from each other during the early September goose hunt.
- 8. Hunting parties during the September goose season are limited to three (3).
- 9. All vehicles are restricted to designated motorized routes of travel and parking areas. Trails lead from the parking areas to the blind sites. Use of ATVs and other off-road vehicles is prohibited.
- 10. Non-motorized watercraft (including boats, layout-type vessels, and float tubes) may only be used to set decoys and retrieve downed birds. Watercraft may not be used to access hunting locations.
- 11. Law enforcement patrols will be conducted on a regular basis to assure compliance with State, Federal, and Refuge regulations.
- 12. The Refuge will ensure safety and minimize conflict with other priority public uses by providing information about hunting boundaries and seasons to the general public and those utilizing other Refuge programs. Information will be provided at interpretive kiosks, on the Refuge website, and in Refuge offices.
- 13. Camping, overnight use, and fires are prohibited.

Justification

The stipulations outlined above would help ensure that the use is compatible at Baskett Slough National Wildlife Refuge. Waterfowl hunting, as outlined in this compatibility determination, would not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge. Based on available science and best professional judgement, the Service has determined that the waterfowl hunting at Baskett Slough National Wildlife Refuge, in accordance with the stipulations provided here, would not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purpose of the Baskett Slough National Wildlife Refuge. Rather, appropriate and compatible waterfowl hunting would be the use of the Refuge through which the public can develop an appreciation for wildlife and wild lands.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

2037

Literature Cited/References

Henry, W.G. 1980. Populations and behavior of black brant at Humboldt Bay, California. M.S. thesis, Humboldt State University, Arcata, CA. 111 pp.

Hoopes E.M. 1993. Relationships between human recreation and piping plover foraging ecology and chick survival. MS Thesis, University of Massachusetts, Amherst, Massachusetts, 106 pp.

Keller, V.E. 1991. Effects of human disturbance on eider ducklings Somateria mollissima in an estuarine habitat in Scotland. Biological Conservation 58:213-228.

Korschgen, C.E. and Dahlgren, R.B. 1992. Human disturbances of waterfowl: Causes, effects, and management. Fish and Wildlife Leaflet 13.2.15. 8 pp.

MacArthur, R.A., V. Geist, and R.H. Johnston. 1982. Cardiac and behavioral responses of mountain sheep to human disturbance. J. Wildl. Manage. 46:351-358. C.W. Servheen, eds. 1980. Proceedings of the Washington bald eagle symposium; Seattle, Washington.

Oregon Department of Fish and Wildlife. 2021a. Youth Hunting Opportunities. Available at: Youth Hunting Opportunities - Oregon Game Bird Hunting | eRegulations

Oregon Department of Fish and Wildlife. 2021b. Migratory Game Bird Seasons. Available at: Migratory Game Bird Seasons - Oregon Game Bird Hunting | eRegulations

Raftovich, R.V., K.A. Wilkins, K.D. Richkus, S.S. Williams, and H.L. Spriggs. 2009.

Migratory bird hunting activity and harvest during the 2007 and 2008 hunting seasons. U.S. Fish and Wildlife Service, Laurel, Maryland, USA.

Sime, C.A. 1999. Domestic Dogs in Wildlife Habitats. Ch 8 in Effects of Recreation on Rocky Mountain Wildlife: A Review for Montana. Montana Chapter of the Wildlife Society: Missoula, MT. 17 pp.

Subcommittee on Pacific Population of Western Canada Geese. 2000. Pacific Flyway Management Plan for the Pacific Population of Western Canada Geese. Pacific Flyway Study Committee. (c/o USFWS, MBMO) Portland, Oregon. Unpubl. rept.

Trost and Sanders. 2008. 2008 Pacific Flyway Data Book: Waterfowl Harvests and Status, Hunter Participation and Success in the Pacific Flyway and United States. U.S. Fish and Wildlife Service, Division of Migratory Bird Management: Portland, OR. 120 pp.

US DOI. 2009. Draft Supplemental Environmental Impact Statement: Issuance of Annual Regulations Permitting the Hunting of Migratory Birds. U.S. Fish and Wildlife Service, Department of Migratory Bird Management. Portland, Oregon.

U.S. Fish and Wildlife Service. May 2011. Willamette Valley National Wildlife Refuge Complex Final Comprehensive Conservation Plan and Environmental Assessment. https://ecos.fws.gov/ServCat/DownloadFile/164246

U.S. Fish and Wildlife Service. 2012. Baskett Slough National Wildlife Refuge, Waterfowl Hunt Program Supplemental Environmental Assessment. Available at:

U.S. Fish and Wildlife Service. 2016. Baskett Slough National Wildlife Refuge, Waterfowl Hunt Plan. Available at:



Baskett Slough National Wildlife Refuge Polk County, Oregon

Proposed Sept. Goose Hunt Boundary

