

# **Columbian White-tailed Deer Translocation**

**from Tenasillahe Island  
to Columbia Stock Ranch**

*Final Environmental Assessment*



**U.S. Department of Energy - Bonneville Power Administration  
Department of the Interior - U.S. Fish and Wildlife Service**

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## Chapter 1 Purpose and Need

### 1.1 Introduction

Bonneville Power Administration (BPA or Bonneville) is proposing to help fund the U.S. Fish and Wildlife Service (Service or USFWS) to translocate up to 50 Columbian white-tailed deer (CWTD) (*Odocoileus virginianus leucurus*) from an island in the Columbia River to conservation lands in Columbia County, Oregon.

The Service would translocate up to 50 deer from Tenasillahe Island, a part of the Julia Butler Hansen Refuge for the Columbian White-tailed Deer (JBH), to a 935-acre parcel (called the Columbia Stock Ranch or CSR) that is being managed by Columbia Land Trust (CLT) for habitat and wildlife conservation. The CSR is located on the Oregon side of the Columbia River approximately 32 miles north of Portland, Oregon (see Figure 1). The translocations would help establish a new subpopulation of the CWTD listed as threatened under the Endangered Species Act (ESA) (16 United States Code (USC) § 1531 *et seq.*), and help BPA meet its commitments under the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act) (16 USC § 839b(h)(10)(A)).

BPA and the Service are cooperating agencies in the preparation of this Environmental Assessment (EA) pursuant to the National Environmental Policy Act of 1969 (NEPA) (42 USC 4321 *et seq.*) and its implementing regulations which require federal agencies to assess the impacts that their actions may have on the environment and make this impact analysis available to the public. This EA was prepared to determine if the Proposed Action would be likely to significantly affect the environment, warranting preparation of an environmental impact statement (EIS), or whether it is appropriate to prepare a finding of no significant impact (FONSI).

Figure 1 Proposed Action's capture and release locations



## **1.2 Purpose and Need**

Bonneville needs to respond to a request from the Service to help fund the proposal to translocate the CWTD. Funding the translocations would assist BPA in meeting its commitments under the Northwest Power Act (16 U.S.C. § 839b(h)(10)(A)) which requires BPA to fund fish and wildlife protection, mitigation, and enhancement actions consistent with the Northwest Power and Conservation Council's Fish and Wildlife Program. BPA's funding of the actions described in this EA would be consistent with the Council's Fish and Wildlife Program.

The Service needs to implement recovery actions described in the Revised Columbian White-Tailed Deer Recovery Plan (hereinafter, "CWTD Recovery Plan") (USFWS 1983) and to meet management objectives for the JBH Refuge as described in its Comprehensive Conservation Plan (USFWS 2010).

The purpose of the proposal to translocate the deer is to establish a new subpopulation of CWTD on suitable habitat within the historic range of the Columbia River Distinct Population Segment (DPS). Establishing new subpopulations through capture and translocation is a recovery action described in the CWTD Recovery Plan and is a management objective for the JBH Refuge. The Service considers establishing a new subpopulation to be a recovery action that shortens the time and increases the likelihood for future recovery of the Columbia River DPS. Helping increase the future likelihood of removing the CWTD from the list of endangered and threatened species also helps meet the Service's commitments under Section 7 of the ESA for carrying out conservation measures to recover species listed under the ESA.

While Tenasillahe Island supports a viable subpopulation of CWTD on secure habitat, the habitat is reliant on old dikes to keep waters from inundating the island. These dikes were constructed in the early 1900s, are very expensive to maintain, may be impacted by sea level rise and climate change, and are subject to failure. Creating a new subpopulation at Columbia Stock Ranch would help ensure CWTD recovery efforts if Tenasillahe Island habitat becomes unsuitable habitat overtime.

In addition, the current subpopulation of CWTD on the island is well over the Service's management goal. The island is actively managed by the Service to maintain a healthy and sustainable subpopulation of approximately 125 CWTD (USFWS 2010); however the island currently has almost 200 CWTD. The removal of surplus deer could help decrease competition for the limited resources on the island and help maintain the island subpopulation.

## **1.3 Background**

### **1.3.1 Bonneville Power Administration**

BPA is a federal power marketing agency within the U.S. Department of Energy with responsibility for marketing and selling power generated by the Federal Columbia River Power System (FCRPS). BPA's operations are governed by several statutes, including Northwest Power Act (16 U.S.C. § 839b (h) (10) (A)). Among other things, this act directs BPA to protect, mitigate, and enhance fish and wildlife affected by the development and operation of the FCRPS. To assist in accomplishing this, the act requires BPA to fund fish and wildlife protection, mitigation, and enhancement actions consistent with the Northwest Power and Conservation Council's Fish and Wildlife Program.

BPA's funding of the actions described in this EA would be consistent with the Council's Fish and Wildlife Program.

### **1.3.2 U.S. Fish and Wildlife Service**

The Service, an agency of the Department of the Interior (DOI), is the principal federal agency responsible for conserving, protecting, and enhancing fish, wildlife, and plants and their habitats for the continuing benefit of the American people. The Service is responsible under the ESA for recovery planning of CWTD (listed as threatened under the ESA) which includes identifying lands for protection and restoration to ensure viable, secure subpopulations of deer on secure habitat will persist into the future. The Service manages the Julia Butler Hansen Refuge for the Columbian White-tailed Deer (JBH), which includes Tenasillahe Island. The Service also holds an ESA Section 10(a) (1) (A) Recovery Permit for translocations and monitoring of CWTD as part of the proposed action. A Section 10(a) (1) (A) Recovery Permit is required for activities designed to enhance a listed species propagation or survival. As part of the permit process, a capture plan must be submitted and approved.

### **1.3.3 Columbian White-tailed Deer**

On March 11, 1967, the Secretary of the Interior identified the CWTD as an Endangered Species (32 FR 4001), under the authority of the Endangered Species Preservation Act (80 Stat. 926: 16 U.S.C. 668aa(c)). On October 13, 1970, CWTD were identified as an endangered subspecies (35 FR 16047) under the authority of the new regulations implementing the Endangered Species Conservation Act of 1969. Species listed as Endangered under the Endangered Species Conservation Act of 1969 were automatically included in the List of Endangered and Threatened Wildlife when the ESA was enacted in 1973. In 2003, the Service published a rule (68 FR 43647) that recognized the Douglas County and Columbia River populations as DPSs due to geographic isolation and removed the Douglas County population of CWTD from the List due to achieving recovery. In 2016, the Service reclassified the Columbia River DPS of CWTD from Endangered to Threatened and implemented a Section 4(d) rule under the ESA establishing take<sup>1</sup> prohibitions (USFWS 2016a).

The CWTD Recovery Plan, as discussed above, was developed for CWTD in 1976 and was revised in 1983 (USFWS 1983). For delisting the Columbia River DPS, the CWTD Recovery Plan recommended maintaining three viable subpopulations, all located on secure habitat with at least 50 individuals. Secure habitat was defined as free from adverse human activities in the foreseeable future and relatively safe from natural phenomena that would destroy the habitat's value to CWTD (USFWS 1983). The definition of secure habitat was broadened to also include lands that have supported viable subpopulations of CWTD for 20 or more years with no anticipated land management changes that would make the habitat less suitable to CWTD (USFWS 2013). Currently, the total population of the Columbia River DPS is estimated at about 1,200 animals with two viable subpopulations on secure habitat (Tenasillahe and Puget Islands). Translocating CWTD to CSR would help establish a new subpopulation on secure habitat that connects other subpopulations, which may bring this DPS closer to reaching delisting goals.

### **1.3.4 Columbia Land Trust**

CLT is a private, nonprofit, organization with a mission to conserve and care for the lands, waters, and wildlife of the Columbia River region. To date, CLT has conserved more than 43,000 acres of land. Their area of focus encompasses two states (Oregon and Washington) and 13,760 square miles around

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<sup>1</sup> "Take" is a specific term under ESA and is defined there as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect any threatened or endangered species" (ESA, 16 USC 1532(19)).

the Columbia River and its many tributaries, in an area stretching from The Dalles to the Pacific Ocean.

### 1.3.5 Columbia Stock Ranch

CSR, the destination for translocated CWTD, is located between the cities of Rainier and St. Helens, Oregon on the left bank of the Lower Columbia River between river miles 75 and 77, in Columbia County, Oregon. The property has supported agriculture and livestock grazing since the 1940's.

The CSR property consists of two parcels of land (divided by Oregon Highway 30) totaling 935 acres (Figure 2). Approximately 460 acres west of Highway 30 contain floodplain and lowland riparian habitats adjacent to the Columbia River, with 1.5 miles of frontage to the river. The remaining 475 acres consist of upland habitats dominated by mixed Douglas fir and hardwood forests located west and upslope of Highway 30.

CLT owns the CSR, purchased with funding from BPA in 2012, and manages the land for habitat and conservation. BPA has a perpetual conservation easement on the land. Protecting the habitat on the property for the benefit of CWTD in perpetuity is an integral part of the future land management of the CSR.

Figure 2 Columbia Stock Ranch (outlined in yellow).



## 1.4 Public Involvement

### 1.4.1 Scoping and Scoping Comments

To help determine issues to be addressed in the EA, BPA conducted public scoping outreach. BPA mailed letters on August 27, 2018 to landowners, tribes, government agencies, and other potentially affected or concerned citizens and interest groups. The public letter provided information about the Proposed Action and EA scoping period, requested comments on issues to be addressed in the EA, and described how to comment (mail, fax, telephone, the BPA website, and at scoping meetings). The public letter was posted on a project website established by BPA to provide information about the program and the EA process. The public comment period began on August 23, 2018, and BPA accepted comments on the project from the public until September 24, 2018. All project documents and comments received are available for public review on BPA's website at [www.bpa.gov/goto/CWTDtranslocation](http://www.bpa.gov/goto/CWTDtranslocation).

Eleven comments were received during the scoping period. The following issues were raised:

- Mortality risk to CWTD from OR Highway 30
- Potential for rapid dispersal of CWTD off of CSR, since no barriers exist to keep them contained
- Impact of CWTD on elk use of CSR and adjacent properties
- Impact of CWTD on adjacent property owners' income generation from elk hunters
- Impact on adjacent landowners' use of private property by presence of ESA-listed CWTD
- Concern that CSR, being smaller than Tenasillahe Island, may not support the translocated CWTD
- Planned closure of permitted remote-controlled-aircraft flying field on CSR

Mortality risk to CWTD from potential vehicle strikes on Highway 30 was raised by one commenter who observed multiple occurrences of this with CWTD formerly on their property. This potential is discussed in Section 3.1.5.

Potential for rapid dispersal of deer from CSR was raised as a concern by commenters for two reasons: there are no artificial or natural barriers to contain them, and the area is smaller than Tenasillahe Island. The dispersal of these deer from CSR was portrayed by the commenters as a translocation failure. Section 3.1.5 discusses the limited likelihood of CWTD dispersing from CSR and the smaller size of CSR in comparison to Tenasillahe Island. CSR has sufficient and suitable habitat to support all of the CWTD individuals that would be translocated there. The management goal for Tenasillahe Island is 125 deer, yet there are approximately 200 deer residing there. Rather than moving 75 deer immediately to meet management objectives on Tenasillahe Island, up to 50 deer would be translocated over the course of two years because that is likely the number of deer CSR habitat can reasonably sustain with growth from natural reproduction.

Two commenters raised concerns about elk populations on both CSR and on private lands where landowners generate income from hunters pursuing them. The potential effect of translocated CWTD on the resident elk population is discussed in Section 3.1.5. In that Section, research is cited as showing that in areas where interactions between white-tailed deer and elk have been studied, it is the deer that are displaced rather than the elk. The effect on elk is anticipated to be low.

Private landowners' use of their private property in the presence of an ESA-listed species such as CWTD was raised as a concern and is addressed in Section 3.2.6.1.1. The presence of CWTD would not prohibit current land management practice, and programs exist to assist private landowners should impacts occur from CWTD. Section 3.2.6.1.1 also discusses the lack of significant problems with landowners around prior successful translocation areas.

#### **1.4.2 Issues outside the Scope of this Environmental Assessment**

A number of respondents raised an issue concerning the planned closure of a radio-controlled aircraft field permitted in the past by prior and current landowners. The permitting of this use on CSR is not within the scope of the decisions being made here by BPA or the Service.

#### **1.4.3 Public Comments on the Draft Environmental Assessment**

BPA and the Service released the Draft EA in October 2018 for public comment. The EA or notification of its availability was sent to agencies and to potentially affected or interested parties. The public comment period extended from October 23, 2018 through November 26, 2018. Please see Appendix A for comments received on the Draft EA and responses to those comments.

An open-house style public meeting to discuss the comments received on the draft EA and the agencies' responses was held on March 21, 2019 with those who commented and other interested parties. No new information relevant to this analysis or the decisions being made was brought to light.

#### **1.4.4 Changes to the Environmental Assessment**

Revisions in response to public comments have been made to the EA since its draft was released and include the following:

- Numerous small, single-word additions and grammatical edits were made to help make the document clearer and easier to read.
- Section 1.2 - First paragraph, reference to "BPA's commitments in the FCRPS Biological Opinion, as amended in 2010 and 2014 (NMFS 2008a; 2010; 2014)" was removed.
- Section 1.3.1 - Reference to "BPA's commitments in the FCRPS Biological Opinion, as amended in 2010 and 2014 (NMFS 2008a; 2010; 2014)" was removed.
- Section 1.4 - Subsections were added to effectively organize discussions of the public involvement process.
  - Section 1.4.1 - The "Scoping and Scoping Comments" section was added.
  - Section 1.4.2 - The "Issues outside the Scope of this Environmental Assessment" section was added.
  - Section 1.4.3 - The "Public Comments on the Draft Environmental Assessment" section was added.
  - Section 1.4.4 - This "Changes to the Environmental Assessment" section was added.
- Chapter 3, Introductory paragraph - the phrase "and Fish" was added to the first bullet item.
- Sections 3.2.2 - Changes were made to the first and third paragraphs to correct erroneous references to CSR being a part of Deer Island.
- Sections 3.3.1 - Changes were made to third paragraph to correct erroneous references to CSR being a part of Deer Island.
- Appendix A was added to display the public comments on the Draft EA and the agency responses to them.

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## Chapter 2 Proposed Action and the No Action Alternative

### 2.1 Proposed Action

Under the Proposed Action, BPA would fund the Service to translocate up to 50 deer from Tenasillahe Island to CSR between 2019 and 2021. The Service would translocate about 30 deer in 2019 and about 20 deer in 2020. The specific number of deer transferred in 2020 would depend on the success of the 2019 effort.

CSR was selected as a release location because of its size, location, and habitat suitability. CSR has one of the larger blocks of suitable habitat along the lower Columbia River, the land is managed for conservation purposes, and the CLT (the fee owner of CSR) is a supportive partner in these deer translocations. In addition, the area is within the current population range, situated between two existing subpopulations.

Translocations would occur from December 1, 2019 to March 31, 2020 and from December 1, 2020 to March 31, 2021. This timeframe is the post-breeding season and would help ensure that most does will be pregnant, thereby increasing the effective translocated population size. Pregnant females have been found to remain closer to the release site than post-parturient does released without their fawns (Jones *et al.* 1997), and this practice eliminates chance hybridizations that could occur if deer were moved in estrus into an area that is insufficiently populated with CWTD bucks. In addition, deer moved at this time of year tend to disperse less than those moved in fall (Hawkins and Montgomery 1969, Pais 1987, Jones *et al.* 1997).

Capture and translocation would occur three to five times per week. The Service would employ several ground capture methods including corral traps, drop netting, darting, and drive netting. Once captured, deer would be transported in specially made crates by vehicle to a waiting boat, which would transport the deer to the Westport boat ramp. From there, deer would be transferred to a vehicle, driven to CSR and released in the lowlands there. Deer that pose a risk to themselves while in the transport crates may be released on Tenasillahe Island or at the Westport boat ramp to keep them from harm.

Approximately 25 to 33 percent of the deer relocated would be males and 67 to 75 percent females. This reflects the sex ratio of a normal population, and translocating a higher proportion of females allows for more rapid establishment of the subpopulation.

Care would be taken in these translocations to avoid separating fawns from does since it is possible that moving deer outside of family groups can adversely affect dispersal patterns (Nelson and Mech 1992).

Monitoring would commence immediately by agents authorized under the Service's Section 10(a)(1)(A) Recovery Permit (Service, Cowlitz Indian Tribe, Washington Department of Fish and Wildlife (WDFW), Oregon Department of Fish and Wildlife (ODFW), and CLT staff). Post-translocation monitoring would include the placement of Geographic Positioning System (GPS) collars on all the does translocated in this action. These collars would send multiple locations per day to a central server, and the information could be downloaded via the internet. Bucks would be fitted with VHF collars and monitored at least once per week for the first 6 months post-release and 2-4 times per month 6-12 months post-release. Monitoring would continue once per month from 1-3 years post release as funding allows.

Coyotes are one of the primary causes of mortality to white-tailed deer fawns. Therefore, predator control (lethal removal of coyotes on CSR) would occur prior to the translocations, and during the

fawning period to improve survival of fawns and thus improve the probability of establishing the new subpopulation. Predator control would continue as needed as described in the JBH Comprehensive Conservation Plan. Licensed trappers under contract to the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) would be used.

## **2.2 No Action Alternative**

Under the No Action Alternative, BPA would not fund the Service to translocate CWTD from Tenasillahe Island to CSR, and the Service would not translocate CWTD using other funding sources.

## **2.3 Mitigation Measures**

The following measures are proposed to reduce the potential adverse effects of the Proposed Action.

1. Restrict translocations to the period December 1 to March 31.
2. Comply with the Special Terms and Conditions of permits issued for deer capture and translocation.
3. Move entire family groups of CWTD together. Does would not be separated from fawns by translocation actions if at all possible.
4. Follow trapping guidelines in the capture plan (Section 1.2.3) to minimize stress and reduce time spent handling and transporting deer.
5. Release family groups into small shelters where they can calm down, regroup, and then exit volitionally.
6. Monitor translocations as described in Section 2.1.
7. Apply predator control through contract with APHIS to ensure it is conducted in an effective manner that minimizes harm to non-target species.
8. Conduct outreach and informative actions to inform local communities of the translocated CWTD.

## **Chapter 3 Affected Environment and Environmental Consequences**

This chapter describes the existing environmental resources that could be affected by the Proposed Action and the potential impacts the Proposed Action would have on those resources. The resources considered in detail include:

- Wildlife and Fish
- Land use
- Socioeconomics

The impact levels are characterized as high, moderate, low, or no impact. Impacts that were determined to be minimal or barely noticeable were characterized as “low”, those that were more than negligible were characterized as “moderate”, and those characterized as “high” were those considered to be noticeable, significant impacts. The impact levels are based on the analysis provided, which incorporates the considerations of context and intensity defined in the Council of Environmental Quality Regulations (40 Code of Federal Regulations [CFR] 1508.27). Mitigation measures that would help reduce or avoid impacts are identified in Section 2.3.

The area of focus of this analysis is on the CSR and adjacent landowners with the introduction of the CWTD, and to a lesser degree, on Tenasillahe Island with the removal of between 30 to 50 deer over a two year period.

Because the Proposed Action does not include ground-disturbing or site-modifying actions, the following resources were considered and eliminated from detailed analysis because there would be little to no impacts.

- Geology and soils
- Water (quality and quantity)
- Wetlands,
- Floodplains
- Vegetation
- Cultural resources
- Scenic values
- Transportation

Impacts to vegetation by browsing deer are not addressed, because browse effects by CWTD (the only foreseeable effects on vegetation) are likely indistinguishable from those already created by the Columbian black-tailed deer (CBTD) which currently occur on CSR and adjacent lands. For all of these resources, there would be no resource impact or change that could be discussed further than what is disclosed here.

### **3.1 Wildlife and Fish**

#### **3.1.1 Columbian White-tailed Deer**

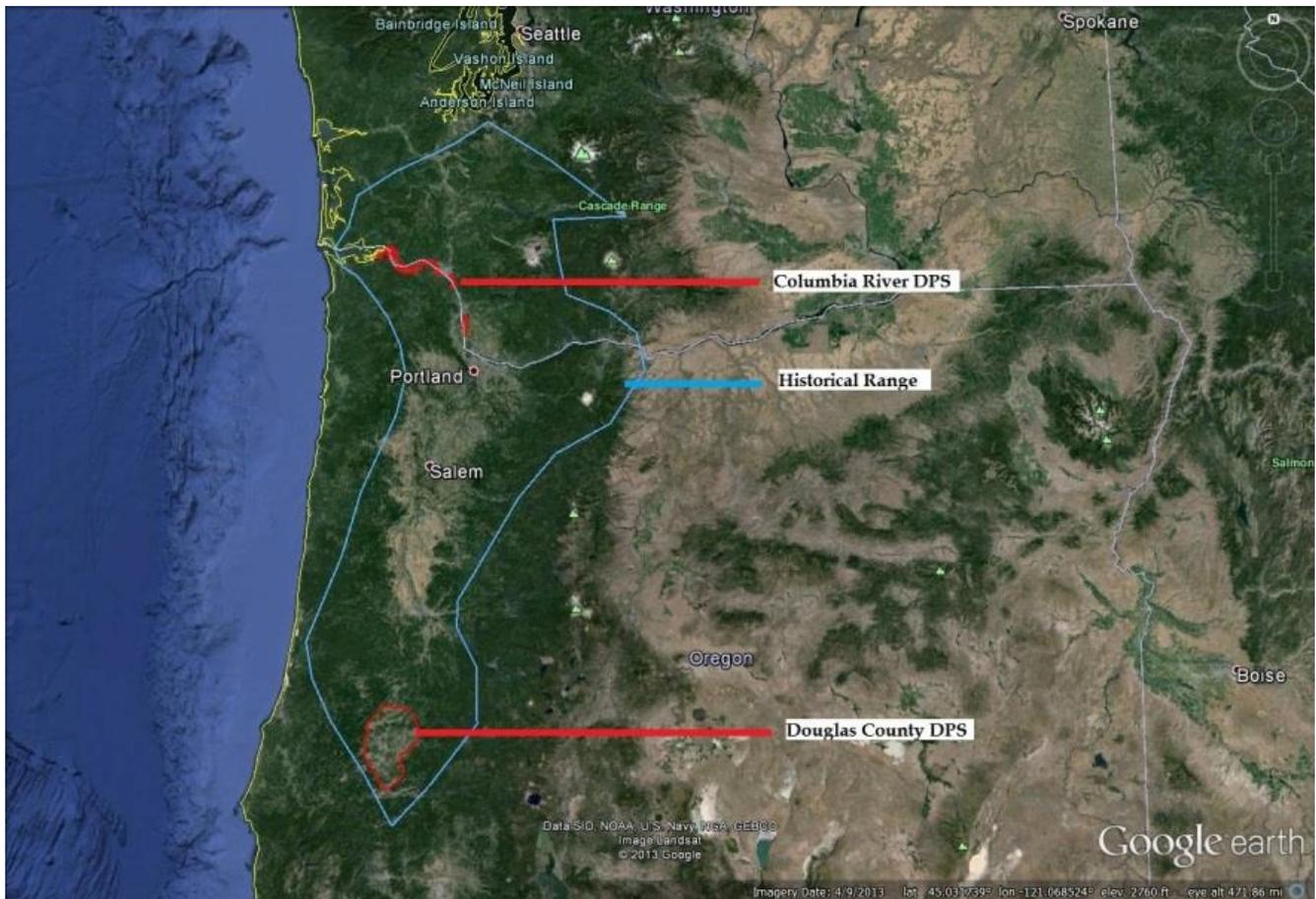
CWTD prefer parkland forest habitat (a mosaic of cover and meadow) and deciduous or mixed deciduous habitat with moderate canopy cover. As they utilize both browse and forage, they thrive where moderate cover, shrubs, and meadows are present. CWTD inhabit Tenasillahe Island; there is no known population of CWTD on CSR, but they may occur there occasionally in small numbers.

### 3.1.1.1 Population overview

CWTD were formerly distributed throughout the bottomlands and prairie woodlands of the lower Columbia, Willamette, and Umpqua River basins in Oregon and southern Washington (Bailey 1936; Verts and Carraway 1998). This subspecies of Eastern white-tailed deer (*Odocoileus virginianus*) occupied a range of approximately 23,170 square miles west of the Cascades Mountains: from the Dalles, Oregon, in the east, to the Pacific Ocean in the west; and Lake Cushman in Mason County, Washington, in the north, to Grants Pass, Oregon, in the south (Crews 1939, p. 3; Smithsonian 2014). Early accounts indicate that CWTD were locally common, particularly in riparian areas along major rivers (Crews 1939). Conversion of brushy riparian land to agriculture, urbanization, and uncontrolled sport and commercial hunting caused the extirpation of CWTD over most of its range by the early 1900s (Crews 1939).

Today, CWTD occur as two Distinct Population Segments (DPS) (Figure 3): the Douglas County DPS in Oregon which contains over 6,000 animals, and the Columbia River DPS which contains about 1,200 with about 30 percent occurring on JBH near Cathlamet, Washington. This EA will only discuss the Columbia River DPS because the Douglas County DPS is outside of the Proposed Action area.

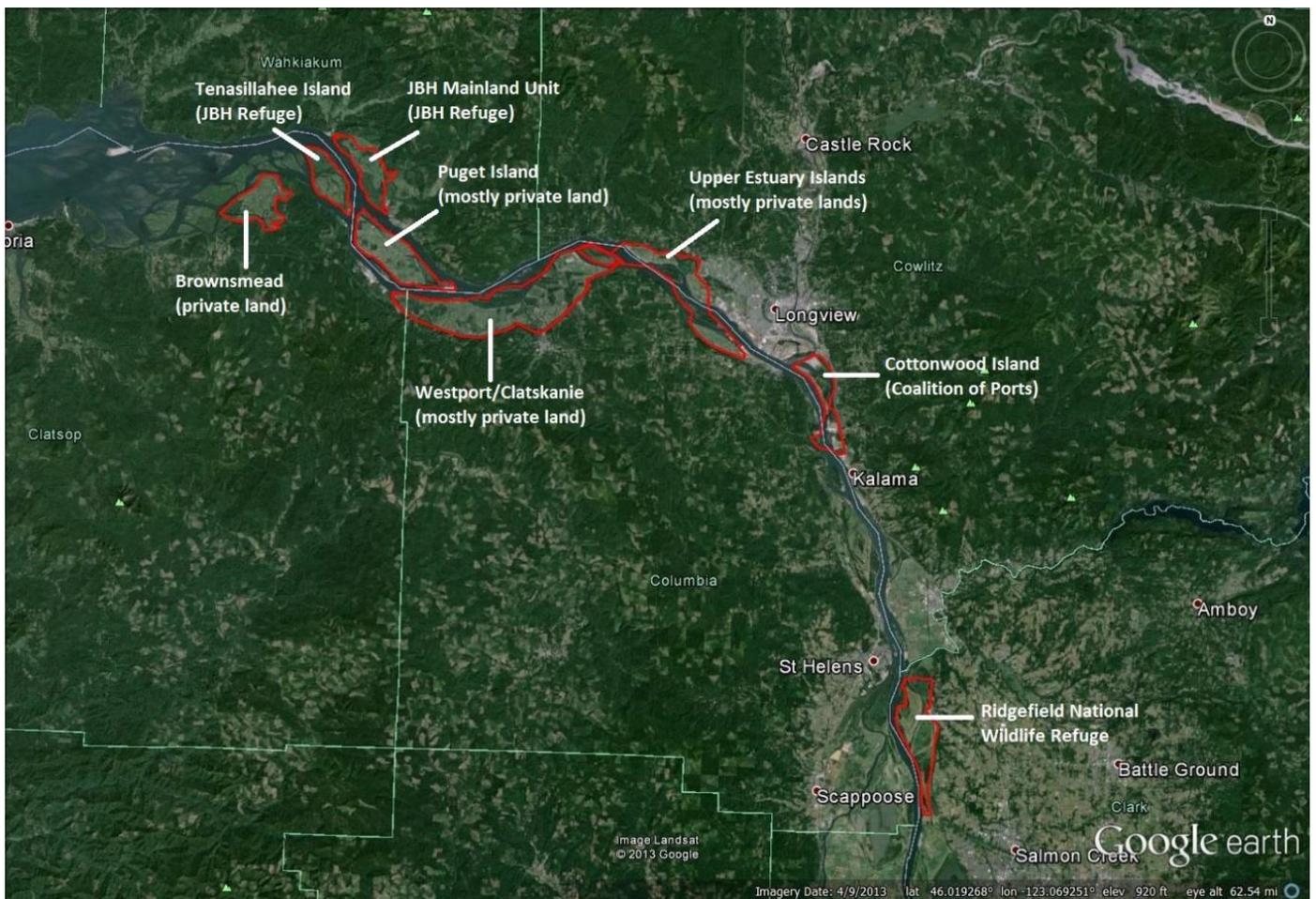
**Figure 3 Range of CWTD (current in red; historical in blue)**



### 3.1.1.2 Columbia River Distinct Population Segment

The Columbia River DPS has a discontinuous range of approximately 93 square miles (about 60,000 acres) in small areas of Clatsop, Multnomah, and Columbia Counties in Oregon, and Cowlitz, Wahkiakum, Pacific, Skamania, and Clark Counties in Washington. Within that range, CWTD currently occupy an area of approximately 16,000 acres (USFWS 2013). The CWTD population here is typified by small subpopulations along the lower Columbia River valley that reflect the fragmented habitat found here. These subpopulations are separated by both man-made barriers (e.g., roads and other human infrastructure) and habitat barriers (e.g., rivers and coniferous forests). The JBH Refuge supports over 320 CWTD, including approximately 200 CWTD on Tenasillahe Island. Another 880 CWTD occur on other public and private lands along the Columbia River between Tenasillahe and Ridgefield National Wildlife Refuge (Figure 4).

**Figure 4 Current Range of the Columbia River DPS and approximate subpopulation boundaries\*.**



**\* Two viable subpopulations on secure habitat exist at Puget Island and Tenasillahe Island.**

In population management, small numbers are more difficult to regulate and are more vulnerable to random events than large populations. Given the habitat fragmentation in the Lower Columbia River basin, a large contiguous population of CWTD is not possible, but population viability can still be

improved by increasing the number of small subpopulations that make up the overall population (metapopulation). As discussed above, the range for CWTD in the lower Columbia consists of a patchwork of lowland habitats that are separated by rivers and coniferous forests, which are barriers to movement. The increase in CWTD population size seen in the past 40 years has largely been due to translocation efforts, where deer are physically moved past barriers to new locations, and the new subpopulations have been allowed to grow on their own. For the most part, these efforts have been successful. All translocations intended for range expansion have resulted in new, enduring subpopulations, though deer have not always stayed exclusively at the intended site.

The goal of CWTD management is to create and maintain subpopulations that are self-sustaining and stable. This is generally interpreted to mean the creation and maintenance of subpopulations of over 50 animals in habitat where future development is not likely to adversely impact the herd. Establishing new subpopulations of CWTD off refuge lands upstream of Longview, Washington is a management objective for the JBH Refuge as described in its Comprehensive Conservation Plan (USFWS 2010).

Since the Columbia River DPS was listed, the number of subpopulations has increased from four (JBH Mainland, Tenasillahe Island, Puget Island, Westport) to six (Upper Estuary Islands, Ridgefield NWR). A translocation to CSR would represent a seventh new subpopulation that would expand the distribution of the overall population, populate a relatively large gap between subpopulations at Cottonwood Island and Ridgefield National Wildlife Refuge, and provide opportunity for additional population growth. Improved distribution, connectivity, and dispersal decreases extinction risk and improves the chance of eventual recovery of CWTD. See Figure 5.

Figure 5 Capture site (green), release site (red), and current range (blue)



### 3.1.2 Other Wildlife

All sites involved in the proposed translocation are located in the Columbia River floodplain and share similar wildlife species. While many birds (especially migrating and wintering waterfowl), amphibians, reptiles, and mammals occur at all sites, only a small number of wildlife species could potentially be affected by the CWTD translocations. These include CBTD and elk (*Cervus canadensis*), which likely compete with CWTD for resources; and coyote (*Canis latrans*), a predator species targeted for control during the early years after translocation. CBTD and elk are present on CSR, but not on Tenasillahe Island; coyotes are present at both sites.

CBTD currently occupy the habitat to which CWTD will be translocated. There is some niche overlap between these two species, but habitats occupied by CWTD are generally believed to be marginal for CBTD in the lower Columbia River basin and observations there have shown that CWTD and CBTD

generally do not occupy the same habitats at the same time. Little aggression (outside of mating season behaviors) between these two deer species has been documented (Suring 1975) though some interbreeding has been observed (Gavin 1984).

Elk are also found at CSR. There is a resident population of about 30 to 35 that occupy the area year-round, but the population swells to nearly 100 during the fall elk hunting seasons. These additional elk have learned that CSR is an area where they can escape hunting pressure so they migrate there when hunting pressure moves them out of their home territories in surrounding lands.

Coyotes are ubiquitous in the Lower Columbia River basin and are known to prey on young CWTD (USFWS 2008). When specific thresholds are exceeded, coyotes are controlled on JBH (USFWS 2008).

### **3.1.3 Fish**

The lower Columbia River, including the waters around Tenasillahe Island and CSR, is a critical migratory corridor for all anadromous salmonids in the Columbia River basin. This basin historically produced some of the world's largest runs of salmon, but today all are listed as threatened or endangered under the ESA.

Juvenile anadromous salmon and steelhead rear near, and migrate past, Tenasillahe Island and CSR with numbers peaking in spring and early summer. In a typical year, over 750,000 adult and 100,000,000 juvenile salmonids pass through the area. Although the presence of salmonids here has seasonal patterns, adults and juveniles of various species, runs, and life-history strategies are present throughout the year.

### **3.1.4 ESA-listed Species**

#### ***3.1.4.1 Columbian White-tailed Deer***

The Columbia River DPS of CWTD is listed as threatened under the ESA (81 FR 71386). The current range of this DPS consists of fragmented habitat within the Columbia River floodplain from Ridgefield, Washington to Brownsmead, Oregon. See Section 3.1.1.

#### ***3.1.4.2 Streaked Horned Lark***

The streaked horned lark is a threatened species (78 FR 61451) that nests on islands in the lower Columbia River. These birds nest in sandy areas with sparse vegetation. Most nesting sites in the lower Columbia consist of transitional habitats on dredge material sites. A nesting area occurs in a dredge material placement area at the south (upstream) end of Tenasillahe Island. The closest potential nesting habitat to CSR is on Sandy Island (immediately downstream of CSR and offshore from Kalama, Washington (visible in Figure 2).

#### ***3.1.4.3 Fish***

All runs of Chinook (*Oncorhynchus tshawytscha*), coho (*O. kisutch*), chum (*O. keta*), sockeye (*O. nerka*), and steelhead (*O. mykiss*) that migrate past CSR and Tenasillahe Island have been listed as either threatened or endangered under ESA (Table 1).

**Table 1 ESA-listed fish species in the Lower Columbia River**

Fish Species	ESA listing status	Critical Habitat status
Chinook salmon ( <i>Oncorhynchus tshawytscha</i> )		
Snake River spring/summer	Threatened 70 Federal Register (FR) 37160	Designated 58 FR 68543
Snake River fall	Threatened 70 FR 37160	Designated 58 FR 68543
Upper Columbia River spring	Endangered 70 FR 37160	Designated 70 FR 52685
Estuary	Threatened 70 FR 37160	Designated 70 FR 52685
Upper Willamette River	Threatened 70 FR 37160	Designated 70 FR 52685
Steelhead ( <i>O. mykiss</i> )		
Snake River	Threatened 70 FR 37160	Designated 70 FR 52685
Upper Columbia River	Threatened 74FR 42605	Designated 70 FR 52685
Middle Columbia River	Threatened 57 FR 14517	Designated 70 FR 52685
Estuary	Threatened 62 FR 43937	Designated 70 FR 52685
Upper Willamette River	Threatened 62 FR 43937	Designated 70 FR 52685
Chum Salmon ( <i>O. keta</i> )		
Columbia River	Threatened 70 FR 37160	Designated 70 FR 52685
Sockeye Salmon ( <i>O. nerka</i> )		
Snake River	Endangered 70 FR 37160	Designated 58 FR 68543
Coho Salmon ( <i>O. kisutch</i> )		
Estuary	Threatened 70 FR 37160	Designated 81 FR 9251
Pacific eulachon ( <i>Thaleichthys pacificus</i> )	Threatened 75 FR 13012	Designated 76 FR 65323
Southern DPS	Threatened 75 FR 13012	Designated 76 FR 65324
Green sturgeon ( <i>Acipenser medirostris</i> )		
Southern DPS	Threatened 71 FR 17757	Designated 73 FR 52088
Bull Trout ( <i>Salvelinus confluentis</i> )		
Columbia River DPS	Threatened 63 FR 31647	Designated 75 FR 63898

Other listed species that occur in the lower Columbia River but not known to use specific sites at Tenasillahe or CSR include bull trout (*Salvelinus confluentis*), green sturgeon (*Acipenser medirostris*), and Pacific Eulachon (*Thaleichthys pacificus*).

Both Tenasillahe Island and CSR interior fish habitats have limited access to the Columbia River. On CSR, all interior aquatic habitats are separated from the Columbia River by dikes with no interior use by listed salmonids. The interior sloughs of Tenasillahe Island are separated from the Columbia River by tide gates that open for only a few hours each day at specific tidal flows, with limited access and use by juvenile Chinook salmon (Johnson et. al. 2008).

The presence of coho, steelhead, coastal cutthroat trout and Pacific lamprey has been documented in off-channel habitats near CSR (USFWS 2009) and in the Lower Columbia River and estuary near Tenasillahe Island. These are important areas for anadromous fish migrating to spawning areas and for juveniles migrating downstream to the ocean. Adult ESA-listed anadromous salmonids use the lower

Columbia River and estuary as a corridor to migrate upstream to spawning habitats throughout much of the Columbia River Basin. Adults actively migrate past CSR, but are not expected to use the area adjacent to CSR for resting or feeding. Migrating adults may spend time in the estuary near Tenasillahe Island to physiologically acclimate to freshwater, especially if they find cool water areas during warmer summer months. Chum, coho, and Chinook salmon, and steelhead populations spawn in tributaries of the Columbia River; and chum and Chinook salmon spawn in the mainstem Columbia River in appropriately sized gravel. Spawning is not expected to occur near either Tenasillahe Island or CSR because the sites lack the appropriate spawning habitat and substrate.

### **3.1.5 Effects to Wildlife and Fish**

#### ***3.1.5.1 Effects of the Proposed Action on Wildlife and Fish***

##### ***Columbian White-tailed Deer***

Under the Proposed Action, the Service would translocate up to 50 deer from Tenasillahe Island to Columbia Stock Ranch between 2019 and 2021. The number of deer in the DPS would not immediately change; it would merely be redistributed.

The newly established group of CWTD, however, would be expected to grow into a new and viable subpopulation in an area that would provide connectivity between existing CWTD subpopulations. The new CSR subpopulation would be anticipated to link to the Ridgefield and Sauvie/Scappoose subpopulations (upstream) and the Cottonwood/Kalama subpopulation (downstream) through dispersing individuals<sup>2</sup>. This new subpopulation and the connectivity it would provide may have a moderate long-term effect on the recovery of CWTD.

Translocations would reduce the Tenasillahe Island subpopulation (200 deer) by up to 50 deer over two years - a 25 percent reduction. This reduction would be in line with JBH management objectives but would be temporary because the subpopulation is expected to rebound to some degree. A reduction in the CWTD subpopulation on the island decreases competition for available resources, which may improve physical condition of the remaining animals, potentially increasing survival and fecundity. In such cases, the net loss to the subpopulation would be less than the actual number of deer removed, and eventually numbers would be expected to return to prior levels.

Subpopulation numbers of CWTD have returned to prior levels quickly following translocations along the lower Columbia River in the past. Puget Island has been used as a source population ten times in the past 20 years. From 1985 to 1988, 80 deer were removed from Puget Island for translocations, and from 1999 to 2000, 60 deer were removed. From 2013-2015, 31, 37, and 32 deer were removed from Puget Island, JBH Mainland, and Westport, respectively. In all cases the donor subpopulations maintained robust subpopulation levels. The Service expects the subpopulation on Tenasillahe Island to rebound in a few years after deer removal. Deer numbers on Tenasillahe Island, however, are above management goals, and would be so even after the translocation reductions. There would be a low effect on the Tenasillahe Island subpopulation even if no rebound occurred.

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<sup>2</sup> Connectivity between subpopulations is essential in maintaining healthy genetic diversity of the overall population. It only takes a few migrants per generation moving between subpopulations to minimize the loss of genetic variation within subpopulations (Mills and Allendorf, 1996).

For deer being translocated, however, the stress of capture, handling, transport, and adaptation to a new location may lead to somewhat higher mortality than what is expected for a population that is not moved. This mortality is typically low and varies by technique, location, and year. White and Bartmann (1994) documented a 2-week mortality rate for mule deer fawns of five percent for net-gunning and 11 percent for drop-netting. This can be considered capture-related mortality as opposed to longer term overall mortality. Sullivan *et al.* (1991) reported a drive-netting mortality rate of 0.9 percent, compared to 23.5 percent for rocket-netting and 16.2 percent for corral trapping. DeYoung (1988) reported a mortality rate for net-gunning of 2.4 percent.

In coordination with WDFW, ODFW, Cowlitz Tribe, veterinarians, and other partners, the Service would implement measures to ensure low injury and mortality rates during translocation. In addition, transport protocols would be altered as needed to further reduce the chance of transportation-related mortality. The Willapa National Wildlife Refuge Complex currently holds an ESA Section 10(a)(1)(A) Recovery permit for translocating CWTD. All parties engaged in translocating CWTD would comply with the Special Terms and Conditions of this permit.

For lower Columbia CWTD captures, ground capture techniques (drop-netting, drive-netting, and darting) have averaged 4.5 percent capture-related mortality for six past translocation efforts (USFWS 2012). Helicopter net-gunning has averaged 12.3 percent capture-related mortality over four efforts, but two efforts have resulted in a rate of 29.8 percent (17.6 percent for all net-gunning combined).

In 2013-2015, the Service moved 88 deer to Ridgefield National Wildlife Refuge. Capture-related mortality for those three years averaged 8 percent, with a total two-week mortality (including vehicle strikes and predation) of 13.6 percent. The Service expects to reduce capture-related mortality rates through additional sedation during transport but anticipates similar post-release mortalities to occur from external factors. In total, the two-week mortality rate is expected to be in the range of 5-10 percent. Because deer are given supplements and deworming agents, it is not unusual for deer that survive this two-week window to have higher than normal survival rates, and total annual survival for the translocated group is expected to be similar to non-translocated deer. Assuming 5-10 percent translocation mortality on 50 deer, this would equate to 2-5 deer over the course of two years. This loss would not be expected to have a significant effect on the subpopulation.

To reduce post-release mortality, predator control would be implemented prior to translocation. This action would be expected to relieve predation pressure on does and fawns and reduce total annual mortality. Furthermore, habitat improvements, including reforestation and pasture rehabilitation<sup>3</sup>, would occur within two years of translocation. These improvements would be expected to provide additional benefits to the subpopulation in terms of more cover and forage, which could lead to higher fecundity and/or survival.

An additional risk to the translocated CWTD could come from hazards at CSR not experienced at Tenasillahe Island. The risk posed by fast-moving motor vehicles, such as on State Highway 30, is an example raised by the public during the scoping period. Some CWTD are anticipated to disperse from CSR and there is a potential for their encounter with highways and fast-moving vehicles. Some degree of mortality is anticipated, but the numbers and impact to the success of the translocation is unknown. Past translocations to other areas in the lower Columbia River basin have been successful despite similar

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<sup>3</sup> These habitat improvement actions are elements of CLT's ongoing land management plans for CSR and are not included in this BPA-funded action.

risk exposure to translocated deer, so it is anticipated that though some individuals may be lost, there would be low risk to the success of the translocation effort.

Restoring subpopulations of CWTD to the point where the DPS is meeting recovery goals (as defined in the Recovery Plan) is believed to be likely under both the Proposed Action and the No Action Alternative. This is based on the expectation that under either scenario the JBH Mainland and Ridgefield subpopulations would probably reach viable status as described in the Recovery Plan given more time and monitoring evidence. However, the Proposed Action would increase the health of the overall population by increasing numbers and distribution. Under the Proposed Action, CSR would likely support a persistent, subpopulation on secure habitat, though it is uncertain if it could achieve a verifiable “viable” status as defined by the recovery plan within the CSR property boundary. It is, however, expected to persist for the long term given the amount of suitable habitat within and surrounding CSR, and the limited human access and activity in the area. The addition of a subpopulation on secure habitat that increases connectivity would increase the robustness of the overall population regardless of its status as viable within the CSR property boundary. If and when the Ridgefield and JBH Mainland subpopulation attain a status of viable, this additional subpopulation would add to the likelihood of persistence of the overall population on secured habitat. Under this scenario, the recovery goal of three subpopulations located on secure habitat would be achieved along with an additional subpopulation on secure habitat.

### ***Other Wildlife***

CWTD and CBTD generally have different habitat associations, but there is overlap. In the absence of CWTD, CBTD have increased their numbers into former CWTD range. Competition and a partitioning of the habitat between these two species at CSR is expected, though they are likely to coexist for many years. CWTD are expected to eventually occupy habitat on CSR, which has more open areas and is more suitable for CWTD. Some CBTD are expected to be displaced from CSR but continue to dominate use of the more forested habitats west of Highway 30 which have higher cover percentages and steeper slopes.

Elk would likely be unaffected by the arrival of CWTD onto CSR lands. There could however be some interspecific competition between the two species. Waldrip (1977) reported that white-tailed deer appear to avoid elk and are not regularly seen in areas containing dense populations. His data suggest that elk may have forced whitetails into marginal habitat for fawning, predisposing fawns to predation. CSR, however, does not support a dense population of elk (except for that brief period of time when elk hunters drive them to this safe location) sufficient to generate this impact. There may be some overlap in their feeding on grasses and forbs, since CWTD are more grazers than browsers, as are elk.

Large mesopredators, such as coyotes, prey on deer fawns. Additional deer at CSR may increase the prey base for coyotes. Coyote numbers however, are probably more influenced by small mammal and bird abundance, as this is their prey base for most of the year. Coyote home range size varies from an average of 2 square miles up to 55 square miles depending on social demographics, habitat type, and prey abundance (Tesky 1995).

Coyote control would occur at CSR for both years of the translocation and may be implemented in subsequent years if fawn recruitment is low. While coyote control for CWTD in the Lower Columbia River has had little effect on long-term coyote populations (USFWS 1998), there may be local, short-term reductions in coyote numbers at CSR during years of coyote control.

No effects are expected on other small mammals, birds, amphibians, and reptiles.

### ***Fish***

The Proposed Action has no ground-disturbing activities, and would take no action within aquatic habitats. No fish or fish habitats would be affected by this action.

### ***ESA-listed Species***

Columbia White-Tailed Deer – see section 3.1.5.1 above.

Streaked Horned Lark – Streaked horned lark nesting habitat occurs adjacent to Tenasillahe Island and CSR. Larks have been documented to nest near Tenasillahe Island but there are no known nesting sites on Sandy Island near CSR. The nesting area near Tenasillahe would remain unchanged. If anything, the reduction in deer numbers may slightly reduce the chance of deer/lark interactions. At CSR, deer may cross the channel to Sandy Island. If deer do arrive at Sandy Island, they may occasionally wander through the nesting habitat in this area. However, they are expected to spend very little time there because of the sparse habitat and lack of cover. While it is possible that a deer could step on a nest or flush a nesting bird, it is highly unlikely to occur. Translocations will occur in winter, when streaked horned lark are not present. No effect is expected from translocation-associated human activity. Overall, the Proposed Action is unlikely to affect streaked horned larks or their habitat.

ESA-listed Fish - This action has no ground disturbing activities and will take no action within aquatic habitats. No fish or fish habitats will be affected by this action.

### ***3.1.5.2 Effects of the No Action Alternative on Wildlife and Fish***

Under this alternative no deer would be moved, so there would be no effects on wildlife habitat. Tenasillahe Island, which currently has a large population of deer, would be expected to drop slightly in numbers to a density that is closer to the management goal. CWTD may eventually reach CSR on their own, but given that this has not occurred since they were extirpated from that area at least 50 years ago, the probability of this happening is low.

No other wildlife or wildlife habitat would be affected by the No Action Alternative.

No additional subpopulation would be created and the recovery timeline would not be accelerated. Under this scenario, the increasing number of CWTD on Tenasillahe Island would likely increase competition for resources, potentially causing the subpopulation to decline over time due to lack of sufficient resources.

As discussed above, the recommended criteria for delisting would likely be met eventually, as four viable populations on secure habitat are expected to develop (JBH Mainland Unit, Tenasillahe Island, Ridgefield NWR, and Puget Island). This may lead to eventual delisting. However, the Ridgefield subpopulation would remain geographically isolated from the rest of the population, and future translocations to Ridgefield may be necessary to maintain genetic diversity. In addition, nearly the entire DPS exists on diked lands, which are more at risk from flooding from dike failure or sea-level rise than upland areas. Each additional subpopulation that is added to the overall DPS lowers the risk of extinction due to catastrophic events at one or more subpopulations. The No Action Alternative would maintain the status quo for this DPS, without lowering extinction risk or improving connectivity.

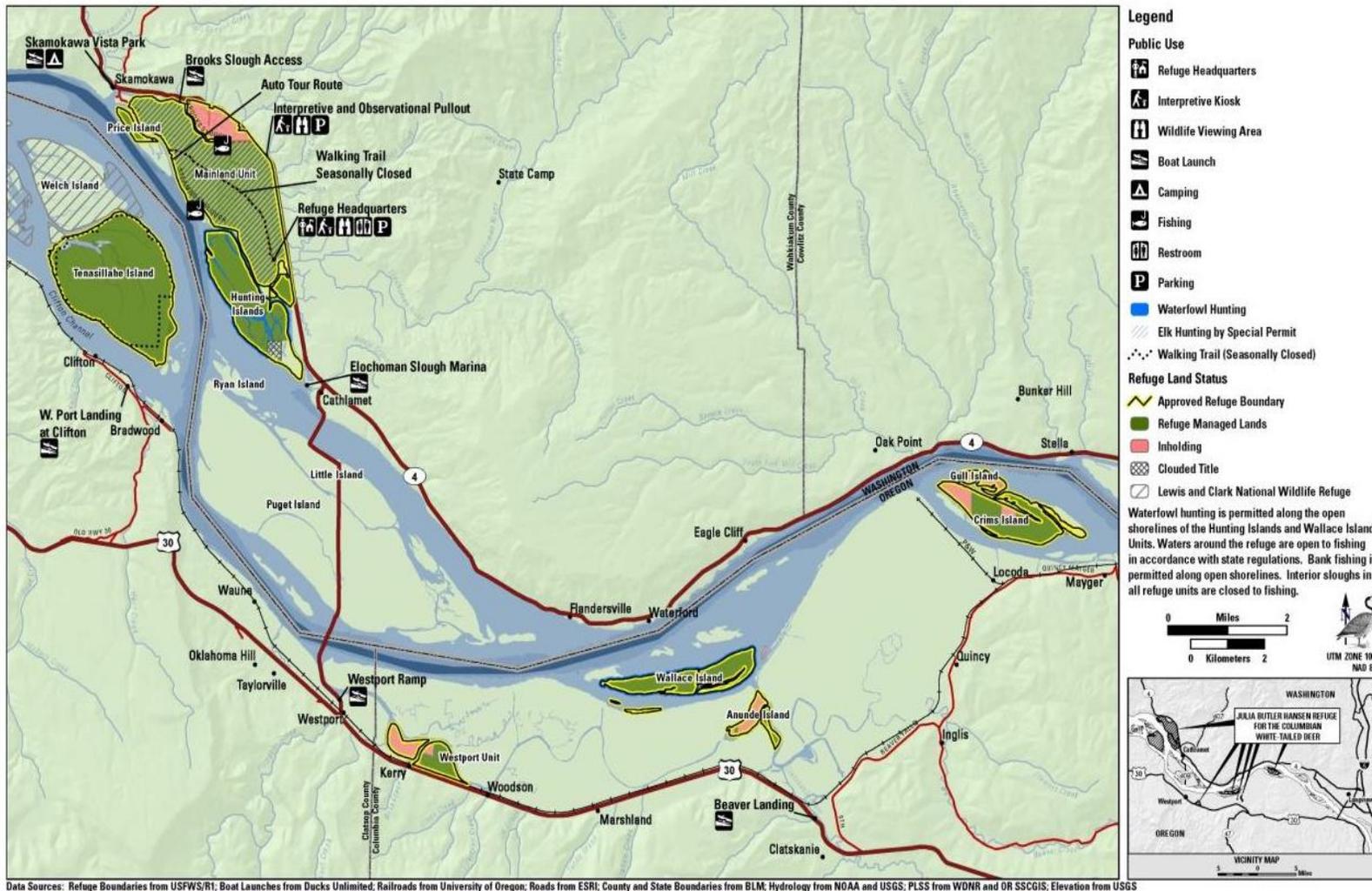
## **3.2 Land Use and Recreation**

### **3.2.1 National Wildlife Refuge System and Julia Butler Hansen Refuge**

The Service established the National Wildlife Refuge System 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 JBH Refuge, located in southwestern Washington and northwestern Oregon, was established in 1971 specifically to protect and manage CWTD. The JBH Refuge manages over 6,200 acres of pastures, forested tidal swamps, brushy woodlots, marshes, and sloughs along the Columbia River to benefit wildlife, primarily CWTD. The JBH Refuge is comprised of six principal units separated by waterways: Mainland, Tenasillahe Island, Hunting Islands, Price Island, Wallace Island, and Crims Island (Figure 6).

Figure 6 Julia Butler Hansen Refuge (green) and inholdings (pink)



The goals of the JBH Refuge (USFWS 2010) are to:

- Provide short-grass fields for the benefit of CWTD, dusky Canada geese, and other grassland-dependent wildlife.
- Restore and maintain riparian forests with diverse age and structural features characteristic of the historical lower Columbia River basin.
- Restore and maintain non-tidal wetlands and sloughs as a mosaic with other habitat types, especially riparian forest and short grass fields.
- Maintain and protect tidally influenced freshwater wetlands and swamp habitats characteristic of the historic lower Columbia River basin.
- Maintain a healthy, sustainable population of endangered CWTD to promote the recovery of this species.
- Provide and encourage establishment of aquatic habitat conditions that benefit salmonids and other native aquatic species of the lower Columbia River.
- Gather scientific information (inventories, monitoring, research, and studies) in support of adaptive management decisions on the JBH Refuge.
- Provide visitors with the opportunity to participate in wildlife observation, hunting, fishing, photography, interpretation, and environmental education.

Periodic removal of coyotes is practiced to maximize survival rates of adult and juvenile CWTD and to promote healthy deer herds on JBH refuge management units at objective levels.

### **3.2.2 Tenasillahe Island**

Tenasillahe Island is one of the principal units of the JBH Refuge. The island lies just across the main channel of the Columbia River and west of the Mainland, Hunting Island, and Price Island units. Historically, Tenasillahe Island was estuarine habitat with daily inundation caused by back-up of the Columbia River during high tides. The island is approximately 1,950 acres in size, of which 1,700 acres are now surrounded by a dike. The dike was built in the early 1900s and the area was farmed and grazed until the JBH Refuge was established in 1971.

The diked area is similar to the Mainland Unit in water drainage and land cover. The interior of the island is drained by ditches, sloughs, and four tide gates. The island's vegetation is a mix of woodlots, brush, pastures, and old grass fields. The southern tip of the island consists of a black cottonwood/Sitka spruce intertidal swamp that encompasses 175 acres and is not diked. A combination of land subsidence and increasing groundwater levels has led to increasingly wet soils and the proliferation of invasive reed canarygrass (*Phalaris arundinacea*).

The Tenasillahe Island Unit is actively managed by the JBH Refuge to maintain a healthy and sustainable subpopulation of CWTD (USFWS 2010). Given the size and habitat of the unit, the JBH Refuge's population objective for Tenasillahe Island is 125 deer. Intensive management actions to directly benefit CWTD are necessary to ensure herd health and genetic integrity necessary for a long-term sustainable population on the refuge. Active management of the habitat includes mowing, grazing, haying, and pasture improvements. About 200 acres are tilled and planted with pasture grasses and forbs on a 4-year rotation. Another 600 acres are under cattle grazing through management with cooperative farmers. Grazing from April through October is used to control invasive reed canarygrass and encourage the growth of understory forbs. About 50 acres of pasture are mowed each year during late summer to encourage forb growth, and another

105 acres of ephemeral wetlands are managed through water control structures.

Tenasillahe Island currently has a population of almost 200 CWTD, which is well over the management goal of 125. This unit supports one of two viable subpopulations<sup>4</sup> of CWTD on secure habitat, which facilitated the Service's 2016 reclassification of the CWTD from endangered to threatened (81 FR 71386).

### **3.2.3 Columbia Stock Ranch**

CSR is located between the cities of Rainier and St. Helens, Oregon on the left bank of the Lower Columbia River between river miles 75 and 77, in Columbia County, Oregon. The project site is downstream from the Lewis River confluence, between Sandy Island and Deer Island Slough, immediately downstream of the northern tip of Deer Island.

The 935-acre CSR property consists of two parcels of land separated by Highway 30. There are 460 acres of floodplain and lowland riparian habitats adjacent to the Columbia River, east and downslope of Highway 30; and 475 acres of upland dominated by mixed Douglas fir and hardwood forests west and upslope of Highway 30. CSR has 1.5 miles of frontage to the Columbia River.

Tide Creek flows through the middle of the property and historically carried all discharge from upland sources to the Columbia River. Most of the flows from upstream sources are now diverted to Deer Island Slough and its downstream pump station. A dilapidated tide gate at the downstream terminus of Tide Creek allows the site's interior runoff to drain through the existing levee into the Columbia River. CSR is disconnected from the mainstem Columbia River upstream by the existing flood control levee. The site is used for agriculture and livestock grazing.

The Columbia River Levee (1940s) and the Portland and Western Railroad grade (early 1900s) have blocked fish passage into the project area, functionally isolating the property from natural tidal and fluvial processes. In addition, management of the flood-protected area for agriculture and cattle grazing has allowed invasive plant communities to become firmly established; reducing habitat quality for CWTD. Many portions of CSR are dominated by non-native pasture grasses that were promoted for cattle grazing and agriculture and invasive species that have become established throughout the property.

### **3.2.4 Private lands adjacent to CSR**

The lands surrounding CSR are privately-owned rural properties with land uses ranging from large agricultural and forestry holdings to small private home lots. Apart from Highway 30, access is limited to county and private local access roads. There is no recreation site or commercial enterprise open to use or visitation by the general public. Land uses on both large and small holdings are rural in nature; there are no subdivisions that are suburban in appearance or function.

### **3.2.5 Recreation**

CSR is privately owned and is not open for recreation, including public hunting of CBTD. The shoreline along the CSR property is used by the public for boating, fishing and waterfowl hunting. Oregon state law provides for public access and use along rivers and streams below their ordinary high water mark. It is in this zone along CSR's Columbia River frontage where this recreation takes

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<sup>4</sup> The other viable subpopulation on secure habitat is on Puget Island.

place.

Recreation on lands adjacent to CSR is also limited because of the lack of public access, but hunting is a recreational pursuit on surrounding private lands.

Tenasillahe Island is closed to public use with the exception of a walking trail, accessible by boat, which is open June 1 through September 30.

### **3.2.6 Effects on Land Use and Recreation**

#### ***3.2.6.1 Effects of the Proposed Action on Land Use***

##### **3.2.6.1.1 Tenasillahe Island**

Deer would be trapped and removed from Tenasillahe Island under this alternative but there is no proposal for changes to habitat management or other land uses on this island. There would be no effect to land uses here; the mowing, grazing, haying, and pasture improvements for the benefit of CWTD would continue as described under Section 3.2.2.

##### **3.2.6.1.2 Columbia Stock Ranch**

Currently there is one rancher that grazes cattle at CSR. Grazing is employed to reduce invasive plants and create wintering waterfowl habitat. It also benefits the cattle owner financially. The translocation of CWTD and expected habitat improvements for them may decrease the acreage and the number of days that grazing occurs at CSR. Grazing would still be employed to maximize wildlife benefit, but the grazing prescription may change.

##### **3.2.6.1.3 Private Lands Adjacent to CSR**

Some deer that are translocated to CSR are expected to disperse beyond CSR's boundary. Translocated deer often spend the first few weeks exploring before settling into a home range. Establishment on nearby lands has occurred after most translocation efforts. Thus, some CWTD may establish home ranges on private lands surrounding CSR. Deer translocated to Ridgefield for example have resulted in a small number of deer on Sauvie Island, Shillapoo Wildlife Area, and near the Scappoose airport. Translocations to Lord and Fisher Islands resulted in ancillary subpopulations in Longview, Washington, and Rainier, Oregon.

#### ***Animal Damage Conflicts***

As the new CSR subpopulation grows, conflicts could arise between land uses and CWTD, though no animal damage management activities have yet been required for successfully translocated CWTD. Over decades, however, a small number of complaints from private landowners have been made regarding minor damage to commercial and private property from non-translocated CWTD. Similar to CBTD, most of these complaints pertain to vegetation damage of gardens, agricultural crops, and nurseries, though the listing of CWTD under ESA makes dealing with these conflicts more complex than with CBTD.

To increase the management options and flexibility for landowners, the Service developed an ESA Section 4(d) rule to allow landowners to take action in response to damage from CWTD. It also allows for misidentification during CBTD damage management or hunting. Specifically,

landowners may conduct intentional harassment of CWTD that would not be likely to cause mortality. They may take<sup>5</sup> CWTD if it is accidental and incidental to an otherwise permitted and lawful activity to control damage by black-tailed deer; or they may take a CWTD that is deemed a problem because:

1. It is causing more than *de minimus* negative economic impact to a commercial crop;
2. Previous efforts to alleviate the damage through nonlethal methods have been ineffective; and
3. There is a reasonable certainty that additional property losses will occur in the near future if a lethal control action is not implemented.

The Service expects, however, that most CWTD damage problems will be resolved using non-injurious or nonlethal deterrents so that lethal take of problem CWTD will rarely be necessary.

### ***Land Management and Land Use Conflicts***

Since CWTD is a federally-listed species, private landowners with CWTD on their lands must consider the effects their operations may have on the species. The landowner, however, does not need to change land use practices, assuming those practices do not intentionally “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect” CWTD<sup>1</sup>. This is consistent with Oregon state law concerning wildlife (ORS 498.006), under which private landowners currently operate, where, apart from lawful hunting, it is unlawful to “chase, harass, molest, worry, or disturb” their resident CBTD.

If a lawful land use is proposed that would unintentionally and incidentally harm CWTD, the Service is authorized under ESA Section 10 to allow that land use to harm CWTD providing the landowner develops and commits to a Conservation Plan showing, among other things how harm to CWTD would be effectively minimized or mitigated as much as practically possible. A permit to authorize harm to CWTD by this land use would be issued and could include terms and conditions for the land owner to apply during implementation of that use. Land use proposals around CSR with potential to be authorized under current state and local land use ordinances (e.g. resorts, large acreage subdivisions, etc.) could be considered reasonable candidates for successful Section 10 permits with CWTD Conservation Plans.

The Service also provides assistance to landowners through the Partners for Fish and Wildlife<sup>6</sup> program and through Safe Harbor Agreements<sup>7</sup> to encourage voluntary management for CWTD. The Natural Resource Conservation Service also has funded programs to assist private landowners with habitat improvement projects for CWTD on their lands in Columbia County<sup>8</sup>.

Private landowners and ESA-listed CWTD have coexisted successfully along the lower Columbia

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<sup>5</sup> See footnote # 1 on page 4 for definition of “take”.

<sup>6</sup> “Partners for Fish and Wildlife” is a voluntary partnership program administered by the Fish and Wildlife Service to provide financial and technical assistance to private landowners who wish to protect or restore wetlands, uplands, and riparian and instream habitats.

<sup>7</sup> A “Safe Harbor Agreement” (SHA) is a voluntary agreement involving private or other non-federal property owners whose actions contribute to the recovery of species listed under the ESA. In exchange for actions that contribute to the recovery of listed species on non-Federal lands, participating property owners receive formal assurances from the Service that if they fulfill the conditions of the SHA, the Service will not require any additional or different management activities by the participants without their consent. In addition, at the end of the agreement period, participants may return the enrolled property to the baseline conditions that existed at the beginning of the SHA.

<sup>8</sup> National Resources Conservation Service, Columbian White Tailed Deer Habitat Improvement, <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/or/programs/financial/?cid=nrcseprd1351831>.

River for decades and the Service's assistance and education efforts would help reduce impacts from the translocation of CWTD to CSR. For example, Puget Island contains one of the viable subpopulations of CWTD on secure habitat and it is comprised entirely of private land. It is anticipated that private landowners around CSR will continue to have management flexibility for their land use practices with CWTD presence.

The effect on land uses from CWTD translocations to CSR would be low to moderate.

### ***3.2.6.2 Effects of the Proposed Action on Recreation***

There are currently no recreational opportunities on CSR since it is closed to public uses. The Proposed Action would not provide public access or open the area for recreation, nor would the presence of CWTD on the property change the opportunities people have to use the property's Columbia River shoreline (below mean high water) as allowed by state law. Recreation on lands adjacent to CSR is also not anticipated to be affected.

Private landowners around CSR may allow hunting; and CWTD, which cannot legally be hunted, would now be seen in areas where hunters previously expected to see only CBTD. During past translocation efforts, the Service, WDFW and ODFW worked to educate hunters to reduce the potential effects on CBTD hunting, resulting in no changes to local hunting regulations. Similar responses would be expected in areas around CSR. It is anticipated that with each successive hunting season there would be more awareness by hunters of the presence of CWTD in the area and hunting closures would not be expected.

Some closures to hunting in the Lower Columbia River are presently in place where CWTD and CBTD coexist due to the status of CWTD, but hunters here have been differentiating between legal-to-hunt CBTD and protected CWTD for decades. Currently there are many hunting seasons and areas where both Washington and Oregon require hunters to clearly identify deer species. The Service, ODFW and WDFW have developed outreach information to provide education on proper identification of the species for the public, including neighboring landowners, visitors to the JBH refuge, and hunters. This education effort should further minimize the potential for accidental shooting of CWTD. Accidental shootings of CWTD in the pursuit of CBTD is exempt from the take prohibitions of the ESA as part of the 4(d) rule for the Lower Columbia DPS of CWTD.

The effects on recreation from translocations of CWTD to CSR would be low.

### ***3.2.6.3 Effects of No Action on Land Use***

#### ***Tenasillahe Island***

No deer would be trapped and removed from Tenasillahe Island under this alternative and the habitat management actions described in Section 3.2.2 would continue.

#### ***Columbia Stock Ranch***

No CWTD would be translocated to CSR under the No Action Alternative, but grazing would still be employed to reduce invasive plants, create wintering waterfowl habitat, and to maximize wildlife benefit. The number of grazing days and acreage may still be modified for wildlife habitat needs but those modifications would be driven by the needs of other species, not CWTD.

#### ***Private Lands Adjacent to CSR***

No changes are expected in current deer distribution under the No Action Alternative. Landowners would continue to manage their property in the presence of CBTD only and there would be no change in animal damage issues or impacts to private land uses. There would be no effect.

#### ***3.2.6.4 Effects of the No Action Alternative on Recreation***

Because no changes are expected in current deer distribution under the No Action Alternative, there would be no overlap of CWTD presence in areas where hunters have traditionally only seen CBTD. There would be no effect to recreation.

### **3.3 Socioeconomics and Environmental Justice**

#### **3.3.1 Socioeconomic conditions**

The economies and the lifestyles of the communities near Tenasillahe Island and CSR are rural in nature and have been compatible with CWTD protection since CWTD were listed under the ESA in 1973.

Tenasillahe Island is located in Clatsop County, Oregon near the town of Cathlamet, Washington. The population of Clatsop County is approximately 37,000 people. The principal industries of Clatsop County are manufacturing, travel (primarily tourism), and trade. Logging and commercial fishing have traditionally been the mainstays of the economy, but both have declined in recent years. Visitation to Tenasillahe Island is estimated to be less than 100 visits annually.

CSR is located in Columbia County, Oregon. The population of Columbia County is approximately 49,000 people and its population growth has been higher than Oregon's average. The nearest community to CSR is Goble, Oregon. Some of the primary industries of Columbia County are wood products and paper manufacturing, trade, construction, and horticulture. CSR and nearby Deer Island are largely agricultural; and livestock grazing is common.

#### **3.3.2 Environmental Justice**

Executive Order 12898 (1994), Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, was issued with the goal of achieving environmental protection for all communities. It focuses on identifying and addressing disproportionately high and adverse human health impacts on minority and low-income populations. Consideration of environmental justice acknowledges that our environment quality affects the quality of our lives, and that minority and low-income populations should not suffer disproportionately. The Executive Order directs federal agencies to identify and address any disproportionately high and adverse impacts from federal actions on environmental justice communities, and it provides minority and low-income populations with access to public information and public participation in the federal planning process (EPA 2015).

Tenasillahe Island and the CSR are unoccupied and generally closed to the public. There are no permanent or temporary residences there, nor are there communities near either that might be considered vulnerable to bearing a disproportional share of the negative environmental consequences of translocating CWTD to CSR.

The Proposed Action would not create income opportunities for local populations. Jobs would not

be created, tourist attractions would not be developed, and wildlife viewing and hunting opportunities would not increase. The translocation efforts may generate a few dollars in spending at nearby services while the translocation is being conducted, but this impact is low.

Translocations of CWTD to CSR would not result in displacements of human activity or land uses and would not generate any human health or environmental effects to minority or low-income populations, or others.

The socioeconomic effect of the Proposed Action would be low.

### **3.3.3 Effects of the No Action Alternative on Socioeconomics and Environmental Justice**

Under the No Action Alternative, no actions are taken and no changes are expected to human activities in and around CSR. There is no income-generating socioeconomically-beneficial opportunity lost by taking no action. There would, however, be no opportunity for even the smallest of economic inputs from short-term translocation actions as discussed above. Conversely, there would no potential for any animal damage conflicts. There would be no socioeconomic effect from the No Action Alternative.

## **3.4 Cumulative Impacts**

Cumulative impacts are the impacts on the environment that result from the incremental impact of the project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

As stated above, the Proposed Action makes no physical changes to land conditions at Tenasillahe or CSR. There are thus no ground-disturbing activities that might contribute to cumulative effects of past present or ongoing actions that have physically modified the environment. The only change relevant to cumulative effects would be the change in numbers of CWTD at, and around, CSR. As stated earlier, the loss of 30 to 50 deer at Tenasillahe is likely a temporary matter for that subpopulation since it is known to be able to rebound quickly. Therefore, the discussion that follows focuses on the cumulative effects of establishing a CWTD subpopulation at CSR along with the effects of other past, present, and foreseeable future recovery actions for CWTD.

The cumulative effects of establishing a CWTD subpopulation at CSR could be environmental (as they relate to the natural environment in the area); and they could be socioeconomic (including land use), as they relate to the recovery of CWTD under ESA.

### **3.4.1 Cumulative Effects of establishing a CWTD population at CSR**

The translocation of CWTD to CSR under the Proposed Action is intended to establish a new subpopulation on CSR. Over time, a connection with effective genetic exchange would be possible with the subpopulation on the Ridgefield National Wildlife Refuge upriver to the southeast.

Currently, CBTD occur in nearly all areas of CSR and adjacent lands that CWTD may eventually reoccupy. As CWTD expand, it is expected that a certain level of habitat partitioning would occur, and that CBTD would be replaced in some areas that are more suited to CWTD. Historically, these species partitioned the habitat as they evolved together in the Pacific Northwest, and the envisioned

partitioning would be a restoration of that historical condition.

Effects on other wildlife species from this restored population and resource partitioning by these two deer species are anticipated to be low and indistinguishable. The effects to other species would simply be one deer species replacing another with occupancy of a very similar niche.

Similarly, there would be no cumulative impact to the vegetative resource. CWTD are native to this area, not invasive, and resource use would not be imbalanced with native food resources as is often the case with invasive species. Additionally, impacts to vegetation are currently occurring from CBTD and those impacts would simply be replaced by those from CWTD.

The cumulative environmental effect of the Proposed Action would be low.

Under the No Action Alternative, the Service would not conduct a deer translocation to CSR. CWTD may eventually find their way to Deer Island, but so far this has not occurred on its own and is unlikely. A large gap would remain between Cottonwood Island and Ridgefield, and the Ridgefield subpopulation would continue to act as a relatively isolated herd. The cumulative environmental effect of the No Action Alternative would be low.

### **3.4.2 Cumulative Socioeconomic and Land Use Effects**

The success of the subpopulation at CSR under the Proposed Action could lead to a range expansion of CWTD in off-refuge landscapes and contribute to recovery goals, and potentially delisting, sooner than the No Action Alternative. A new subpopulation on secure habitat at CSR would lower the risk of DPS extinction by creating connectivity between subpopulations, adding to the overall population of the DPS, and increasing the distribution of the species. This subpopulation growth and expansion could occur through the natural expansion of the CSR subpopulation, and by circumventing the natural and human-made barriers by multiple future translocations to other off-refuge sites.

The Service expects this DPS to achieve recovery goals regardless of whether this project occurs. However, the recovery goals could be achieved sooner under the Proposed Action. It is likely that areas currently closed to CBTD hunting because of the presence of CWTD, would be opened. While hunting of CWTD may remain prohibited for some time after delisting, CWTD would likely become a legal game species in the lower Columbia River Valley, with regulated hunts managed by state agencies.

Under the No Action Alternative, a large gap would remain between Cottonwood Island and Ridgefield National Wildlife Refuge, and the Ridgefield subpopulation would continue to act as a relatively isolated herd.

Expansion of the CSR subpopulation along with other foreseeable translocations and recovery efforts may lead to increased human/CWTD interaction in nearby areas. However, both CBTD (which currently occupy areas of likely future CWTD expansion) and CWTD are expected to present the same potential for human/deer interaction, and as such, there is no expectation of an increased cumulative impact from increased human/CWTD interactions.

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## **Chapter 4 Coordination, Consultation, and Compliance**

### **4.1 Agency Coordination and Public Involvement**

Meetings and monthly conference calls among WDFW, ODFW, the Cowlitz Indian Tribe, CLT, Ecological Services, Ridgefield NWR, Bonneville Power Administration, and JBH Refuge have long been ongoing for technical coordination and planning of actions to benefit CWTD and for restoration of estuary habitats in the lower Columbia River. CWTD translocations and this project specifically have been included in these conferences.

Input from nearby landowners and other members of the public who may have an interest in this Project have been contacted during the public scoping effort described in Section 1.6. Outreach to landowners surrounding CSR has occurred and will continue. BPA has also contacted elected officials at the county and federal levels.

### **4.2 Environmental Review and Coordination**

In conducting a translocation effort, the Service and BPA would comply with applicable Federal laws, regulations, and executive orders. The following section describes how the proposed action is in compliance with the National Environmental Policy Act; Endangered Species Act; National Historic Preservation Act; Comprehensive Environmental Response, Compensation, and Liability; and other relevant Federal executive orders.

#### **4.2.1 National Environmental Policy Act**

As Federal agencies, BPA and the Service must comply with provisions of the 1969 National Environmental Policy Act, as amended (42 USC 4321-4347). This environmental analysis (EA) was prepared to comply with NEPA and serve as the basis for determining whether implementation of the proposed action would constitute a major Federal action significantly affecting the quality of the human environment. The planning process for developing the environmental assessment facilitates the involvement of government agencies and the public.

In this EA, the agencies evaluated two alternatives to meet the purpose and need as described in Chapter 1: The Proposed Action and the No Action Alternative. The Proposed Action would involve the translocation of deer from Tenasillahe Island to the CSR to establish a new subpopulation.

#### **4.2.2 Endangered Species Act**

A Section 7 consultation will be completed by the Service to determine effects of the translocation on threatened and endangered species. The Service also holds a Section 10(a)(1)(A) Recovery Permit for translocations and monitoring of CWTD as part of the Proposed Action. A Section 10(a)(1)(A) Recovery Permit is required for activities designed to enhance a listed species propagation or survival.

#### **4.2.3 National Historic Preservation Act**

This action has no potential to impact cultural resources since it has no ground-disturbing activities. However, the Service would follow established procedures for protecting archaeological and cultural resources if encountered during the translocation process. The Service would avoid

damaging cultural and historic resources and would comply with the National Historic Preservation Act of 1966 (16 U.S.C. 469) and other cultural resource preservation laws.

#### **4.2.4 Comprehensive Environmental Response, Compensation, and Liability Act**

Under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 U.S.C. 9601 *et seq.*), the Service and BPA has determined that the proposed project areas are not on the Environmental Protection Agency's National Priority List.

#### **4.2.5 Executive Order 12372. Intergovernmental Review**

Coordination and consultation with affected Tribal, local and State governments, other Federal agencies, and local interested persons has been completed through personal contact by Refuge staff, and Refuge Supervisors and by the formal scoping process conducted for this EA.

#### **4.2.6 Executive Order 13186. Responsibilities of Federal Agencies to Protect Migratory Birds**

This Executive Order directs departments and agencies to take certain actions to further implement the Migratory Bird Treaty Act. A provision of the Executive Order directs Federal agencies to consider the impacts of their activities, especially in reference to birds on the Fish and Wildlife Service's list of Birds of Conservation (Management) Concern. It also directs agencies to incorporate conservation recommendations and objectives in the North American Waterbird Conservation Plan and bird conservation plans developed by Partners in Flight into agency planning. This action includes no ground-disturbing or bird-habitat altering actions, thus no actions specified by this Executive Order are necessary.

#### **4.2.7 Other Federal Executive Orders**

In implementing the Proposed Action, the Service would comply with the following Executive Orders: Protection of Historical, Archaeological, and Scientific Properties (Executive Order 11593); Management and General Public Use of the National Wildlife Refuge System (Executive Order 12996); Departmental Policy on Environmental Justice (Executive Order 3127); and Consultation and Coordination with Indian Tribal Governments (Executive Order 13175).

### **4.3 Tribal Consultation**

#### **USFWS Secretarial Order #3206: American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act**

The Cowlitz Indian Tribe was notified of this Proposed Action prior to, and during, the scoping effort described in Section 1.4. They provided no comments. The Service has also been coordinating closely with the Tribe throughout the planning process.

The JBH Refuge 2010 Comprehensive Conservation Plan includes Tribal Consultation in section 2.3.11, reading: "Tribal Coordination: Coordination with Native American Tribes that have an interest in the refuges will occur. The Service will coordinate and consult with the Cowlitz Tribe and the Shoalwater Bay Tribe regarding issues of shared interest." The Service may expand and seek assistance from other Tribes for future issues related to cultural resources education and interpretation, special programs, the National Historic Preservation Act, and the Native American Graves Protection and Repatriation Act.

#### **4.4 Distribution and Availability**

A press release was sent to media outlets near Columbia Stock Ranch or Tenasillahe Island (in both Washington and Oregon) announcing the availability of the EA.

Copies of the EA are available on both the BPA ([www.bpa.gov/goto/CWTDtranslocation](http://www.bpa.gov/goto/CWTDtranslocation)) and Refuges' websites: [www.fws.gov/jbh](http://www.fws.gov/jbh). Hardcopies of the document are also available at the following locations:

Julia Butler Hansen Refuge for the Columbian White-tailed Deer  
46 Steamboat Slough Road  
Cathlamet, WA 98612  
360/795-3915

Willapa National Wildlife Refuge  
3888 SR101  
Ilwaco, WA 98624  
360/484-3482

A copy of the EA is available on request from BPA by calling the toll-free document request line at 1-800-622-4520.

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## Chapter 5 References

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## Appendix A Public Comments on the Draft EA

BPA received comments from four entities in writing. Each comment letter contains both information and comments. Comments within the letters were identified as such if they stated an opinion, made a statement concerning the proposal, or commented on the content of the Draft EA. Each comment is circled and given a number, and at the end of the letter, each of those numbered comments is provided a response.

Table 2 displays the sources of the comments received and the number of comments identified for response in that submittal.

**Table 2 Comments received**

<b>Comment Number</b>	<b>Comment Source</b>
CWTD 18180002	Susie Kem / Trustee, Deer Island Stock Ranch Trust
CWTD 18180003	Chase Christensen / President, Deer Island Drainage Improvement Co.
CWTD 18180004	Marion Christensen / Deer Island Stock Ranch
CWTD 18180006	Agnes Marie Petersen / John Allan Petersen Estate
CWTD 18180005	Agnes Marie Petersen / John Allan Petersen Estate (attachment to comment CWTD18180006)

## Deer Island Stock Ranch Trust

### Columbia White-tailed Deer Translocation Project (DOE/EA-2088)

#### Columbia County, Oregon

The following comments are made on the behalf of Deer Island Stock Ranch Trust (DISRT), which owns Deer Island. No portion of Columbia Stock Ranch (CSR) is located on Deer Island. CSR, located adjacent to Deer Island’s NW edge but is separated from our property by Deer Island slough. Deer Island is, by far, the largest holding with 3100 acres but many other private properties comprise the region surrounding Columbia Stock Ranch. Deer Island and adjacent properties to CSR will be “significantly and adversely impacted” by the proposed translocation of CWTD.

#### Summary

1. As a foundation for delisting, the plan is flawed because it will never meet the requirement of locating a subpopulation on secure, suitable habitat with no management changes. The proposed EA is clear that the site lacks a secured CSR boundary.

CWTD18180002-01
2. The site is inadequate from the start, providing less acreage, fewer resources and more competition than the originating site. Any claim to the contrary is unsubstantiated.

CWTD18180002-02
3. The proposed EA fails to adequately address the impact on surrounding properties as the expected dispersal undermines now permitted land use activities on those properties. If no protections are available, the EA should so state and the text should say that Deer Island and other properties will be “significantly and adversely impacted.”

CWTD18180002-03
4. The direct impact on Deer Island Stock Ranch, and the uses permitted there, will undermine the value of the property causing a major financial loss to the DISRT. This impact should be identified and addressed.

CWTD18180002-04
5. The proposed EA is unresponsive to the concern over the impact of dispersal, addressing the topic with only a comment on the short term behavior of pregnant females.

CWTD18180002-05
6. The reference to “would also assist in meeting BPA’s commitments in the FCRPS Biological Opinion” should be stricken. The commitment to improve fish habitat quantity is unrelated to the deer translocation project. The statement is misleading and unsubstantiated.

CWTD18180002-06

## Part 1: DISRT Comments regarding the proposed Translocation and Property Rights and land management:

The draft Environmental Assessment (EA) has not addressed all concerns raised by the proposed translocation of CWTD deer to the CSR and surrounding areas. The most critical question of “How property rights and land management practices will be affected by the translocated presence of CWTD to private land and proposed government remedies, remains unaddressed in the report. The second part of our comments will deal with the viability of the environmental plan followed by our final remarks.

CWTD18180002-07

The stated intentions of the draft EA for the proposed translocation to CSR is to establish a new subpopulation of CWTD on suitable habitat within the historic range of the Columbia River and to develop connectivity between subpopulations. This translocation will fulfil the USFWSs **“need to implement recovery actions described in the Revised Columbian White-Tailed Deer Recovery Plan (Hereinafter, “CWTD Recovery Plan”)( USFWS 2010).” (Pg. 3).**

BPA is funding the proposed CWTD translocation to a property to fulfil commitments required by government statutes and mandates; **“Northwest Power Act (16 U.S.C 839b(h)(10)(A)) which requires BPA to fund fish and wildlife protection, mitigation, and enhancement actions consistent with the Northwest Power and Conservation Council’s Fish and Wildlife Program. BPA’s funding of the actions described in this draft EA would be consistent with the Council’s Fish and Wildlife Program. This would also assist in meeting BPA’s commitments in the FCRPS Biological Opinion (BiOp), as amended in 2010 and 2014 (NMFS 2008a; 2010; 2014), which directs BPA and other FCRPS Action Agencies, which include BPA, the Corps and the Bureau of Reclamation, to develop projects that improve fish habitat quality and fish survival in the Columbia River Estuary” (EA pg. 3).** Please note that the second mandate, listed as a purpose and need for the proposed CWTD relocation project does not relate to wildlife but only to the improvement of fish habitat and fish survival in the Columbia River Estuary.

CWTD18180002-08

The below statement provides the federal recovery plan criteria for delisting and the design basis for a successful plan of establishing a third subpopulation of CWTD on CSR. The draft EA reports 2 viable and secure subpopulations, Tenasilah and Puget Islands. The Ridgefield and JBH Mainland CWTD subpopulations are targeted as the 3<sup>rd</sup> and 4<sup>th</sup> viable and secure subpopulations for delisting the species. Please note that on three are needed for delisting. The Federal Recovery Plan Criteria for delisting is used throughout the as the design basis of the proposed translocation. See below:

CWTD18180002-09

### Federal Recovery Plan Criteria for Delisting:

**“For delisting the Columbia River DPS, the CWTD recovery plan recommended maintaining three viable subpopulations, all located on secure habitat with at least 50 individuals. Secure habitat was defined as free from human adverse activities in the foreseeable and relatively safe from natural phenomena that would destroy the habitat’s value to CWTD (USFWS 1983) and that has supported viable subpopulations of CWTD for 20 years with no anticipated land**

**management changes that would make the habitat less suitable to CWTD (USFWS 2013)” ,(EA pg.4).**

BPA is funding the proposed CWTD translocation to a property to fulfil commitments required by government statutes or mandates; **“Northwest Power Act (16 U.S.C 839b(h)(10)(A)) which requires BPA to fund fish and wildlife protection, mitigation, and enhancement actions consistent with the Northwest Power and Conservation Council’s Fish and Wildlife Program. BPA’s funding of the actions described in this draft EA would be consistent with the Council’s Fish and Wildlife Program. This would also assist in meeting BPA’s commitments in the FCRPS Biological Opinion (BiOp), as amended in 2010 and 2014 (NMFS 2008a; 2010; 2014), which directs BPA and other FCRPS Action Agencies, which include BPA, the Corps and the Bureau of Reclamation, to develop projects that improve fish habitat quality and fish survival in the Columbia River Estuary.” (EA pg. 3).** The second mandate, listed as a purpose and need to fund the proposed CWTD relocation project, does not relate to wildlife but only to the improvement of fish habitat and fish survival in the Columbia River Estuary. It should be deleted because deer translocation does not relate to the commitment to improve fish habitat.

Identical to CWTD18180002-08

Columbia Stock Ranch is the starting point of this proposed translocation. According to the EA **“there is no known population of CWTD on CSR,...”** (EA. pg. 10). This small property is comprised of two parcels, separated by US Highway 30. The lower portion is 460 acres of lowland riparian habitat. The upland section located, west and across HWY 30, is 475 acres and is dominated by mixed Douglas fir and hardwood forests. Per the report, CWTD will prefer the lower section because that portion is more suitable to CWTD (EA pg. 19) and **“CWTD prefer parkland forest habitat (a mosaic of cover and meadows and mixes deciduous habitat with easy moderate canopy cover”, (pg10).** and **“Although CWTD use a variety of floodplain forested habitat, they generally avoid conifer forests (Ricca et al. 2003)”**. Effectively, the 50 translocated deer will have a new home on CSR of only 460 acres or 9.2 acres per animal and not 935 acres as stated page 1. ). The unlikely claim that **“CSR has sufficient and suitable habitat to support all the deer”, (EA pg. 6),** is unsubstantiated and also not consistent with the logic for moving the deer from their originating site. Tenasillahe Island (T-Island) is 1700 diked acres. With the translocation, the deer population will be reduced to 150 animals, or 11.33 acres per animal. Aside from attempting to establish a new subpopulation, removing deer from T-Island will **“help decrease competition for limited resources”, (EA pg3).** The fact that CSR will provide less acreage and thus, fewer resources and more competition between the CWTD, not to mention other animals, defeats the plan of developing a new sustainable population on this inadequate refuge property.

CWTD18180002-10

During the initial comment period, issues were raised regarding the impact the ESA-Listed CWTD on adjacent properties. The EA ostensibly addresses the dispersal question of deer with the following comments; **“Pregnant females have been found to remain closer to the release site than post-parturient does released without their fawns (Jones et al, 1997) ... In addition, deer moved at this time of year tend to disperse less than those moved in the fall (Hawkins**

CWTD18180002-11

and Montgomery 1969, Pais 1987, Jones et al, 1997)", (EA Pg.8). And this fact is unresponsive to the problem that has been identified.

CWTD18180002-12

Deer may stay close to their starting point on arrival and/or while pregnant but these statements don't address their movement, even within the same year. The deer's probable dispersal, however, is abundantly acknowledged elsewhere in the Draft EA. With the CWTD dispersal and herd growth, use of private property seems to be an important design component of the

CWTD18180002-13

translocation plan, offsetting the lack of resources available at CSR. The EA should identify the impact on surrounding properties as unaddressed.

CWTD18180002-14

The CSR has no barriers such as rivers or deer fences to impede CWTD movement to neighboring lands. As animals don't see invisible land boundaries, they can easily spread out. The report confirms the likelihood of this; **"All translocations intended for range expansion have resulted in new, enduring subpopulations, though deer have not always stayed exclusively at the intended site."** (EA pg. 13), and later in the report, use of private property for establishment of the new subpopulation is consistently alluded to or directly referred to:

**"...effects on vegetation) are likely indistinguishable from those already created by the Columbia Black-tailed Deer (CBTD) which occur on CSR and adjacent lands."** (EA Pg. 10); Adjacent lands are mentioned with the expectation that CWTD will eat the same vegetation as the CBTD or CSR and private property.

CWTD18180002-15

**"All translocations intended for range expansion have resulted in new, enduring subpopulations, though deer have not always stayed exclusively at the intended site"** (EA pg. 13); Range expansion is expected to expand beyond CSR boundaries onto private property.

**"Establishing new subpopulations of CWTD off refuge lands upstream of Longview, Washington is a management objective for the JBH refuge as described in the Comprehensive Conservation Plan."**, (EA pg. 13); The intention of JBH refuge, as described in its Comprehensive Conservation plan is to establish refuges on nonpublic lands.

CWTD18180002-16

**"The newly established group of CWTD, however, would be expected to grow into a new and viable subpopulation in the area that would provide connectivity between existing CWTD subpopulations. The new CSR subpopulation would be anticipated to link to the Ridgeview and Sauvie/Scappoose subpopulations (upstream) and the Cottonwood/Kalama subpopulation (downstream) through dispersing individuals. This new subpopulation and the connectivity it would provide may have a moderate long-term effect on the recovery of**

**CWTD."**, (EA Pg. 17). Dispersing Deer will presumably use private land, progressing "Venn diagram" style to reach or swim to the Ridgeview, Sauvie Island/Scappoose and cottonwood/Kalama subpopulations for connectivity.

CWTD18180002-17

**"Some CWTD are anticipated to disperse from CSR and their encounter with highways and fast moving vehicles is likely"**, (EA pg. 18); Dispersal beyond CSR boundaries is likely. Encounters with fast moving vehicles will pose survival problems to both the CWTD and humans.

CWTD18180002-18

***“Under the Proposed Action, CSR would likely support a persistent, secure, subpopulation, though it is uncertain if it can achieve a verifiable “viable” status within the secured CSR Boundary, (Please note that there is no “secured CSR boundary”), as defined by the recovery plan. It is however, expected to persist for the long term given the amount of suitable habitat within and surrounding CSR, and the limited human access. The addition of a secure subpopulation that increase connectivity would increase the robustness of the overall population regardless of its status as “viable “within the CSR boundary.....”, (EA Pg. 19).***

CWTD18180002-19

Acknowledgement is made that the CSR property may not be adequate to sustain a CWTD subpopulation but that with the use will be made of the surrounding, suitable habitat on private property for the dispersal if the deer.

CWTD18180002-20

***\*“Two main channels transect the project area; Deer Island Slough and tide creak.” (EA pg.24)*** Deer Island slough does not transect CSR but separates CSR from Deer Island. In this statement, the EA identifies Deer Island in the “Project Area” for the Translocation.

CWTD18180002-21

***\*“Some deer that are translocated to CSR are expected to disperse beyond CSR’s boundary. Translocated deer often spend their first few weeks exploring before settling into a home range. Establishment on nearby lands has occurred after most translocation efforts. Thus, some CWTD may establish home ranges on private land surrounding CSR”. (EA pg. 25);***

This comment acknowledges the use of private land for deer dispersal within the translocation plan. With that acknowledgment comes the obligation to adequately address the likely impact. No program or plan to address the impacts of dispersal has been included in the proposed EA.

CWTD18180002-22

***\*“As the new CSR population grows, conflicts may arise between land uses and CWTD.”, (EA pg. 25);*** The deer subpopulation is expected to expand beyond CSR boundaries and this may effect land uses on adjacent properties.

***\*“The only change relevant to cumulative effects would be the change in the numbers of CWTD at and around, CSR.”, (EA pg.28);*** This statements confirms the CWTD dispersal from CSR to surrounding private lands. Where there are no CWTD, this ESA listed species will likely populate the surrounding private properties after the proposed translocation.

***\*“The translocation of CWTD to CSR under the Propose action is intended to establish a new subpopulation on CSR. Over time, a connection is with expected genetic exchange would be possible with the subpopulation on the Ridgeview National Wildlife Refuge upriver to the southeast.”,(pg. 28).*** Deer Island and surrounding lands are expected to provide passageway the connection to Ridgeview genetic exchange. Please note that Cottonwood Island and Scappoose /Sauvie Island are absent from this statement for genetic exchange, though mentioned for connection in other statements.

CWTD18180002-23

***“Under the No Action Alternative, the Service would not conduct a deer translocation to CSR. CWTD deer may eventually find their way to Deer Island, but so far this has not occurred on its own and is unlikely”, (EA pg. 29).*** Deer Island, which is entirely owned by

DISRT, is intended as the destination home range for the translocation of CWTD for development of a new subpopulation. Without government intervention, the deer would not find DISRT property. (Please note: CSR is not located on or part of Deer Island as per the following statement: ***“Deer Island, of which CSR is a part....”, (EA pg 27)***).

CWTD18180002-24

The success of the proposed translocation CSR is predicated on a small, questionably sustainable starting point (CSR refuge), with the knowledge and intention that the deer will disperse to and expand their herd to the surrounding suitable, supposedly secure and privately owned land. Deer Island is specifically named in the EA but all the surrounding properties will be impacted. With the translocation to CSR and adjacent properties of a listed deer that is not currently present on these properties, ESA rules will apply. Therefore, private properties rights and management practices will likely be severely and adversely impacted by the proposed action.

CWTD18180002-25

The criteria for delisting the deer requires that the subpopulations be located on secure, suitable habitat with no land management changes. Per the proposed EA, ***“This is generally interpreted to mean the creation and maintenance of subpopulation over 50 animals in habitat where future development is not likely to adversely impact the herd.”, (EA pg. 13)*** and ***“Under the Proposed Action, CSR would likely support a persistent, secure, subpopulation, though it is uncertain if it can achieve a verifiable “viable” status within the secured CSR Boundary, (Please note that there is no “secured CSR boundary”), as defined by the recovery plan. It is however, expected to persist for the long term given the amount of suitable habitat within and surrounding CSR, and the limited human access. The addition of a secure subpopulation that increase connectivity would increase the robustness of the overall population regardless of its status as “viable “within the CSR boundary....”, (EA Pg. 19)***

CWTD18180002-26

The proposed action is predicting, with the wish of fulfilling the recovery plan, that there will be no development or change in land management practices, or human access that would adversely affect CWTD on Deer Island. This assumption is emphatically incorrect! Developments for Deer Island, have been, (which is not to say they won't be again), and are under consideration which will likely adversely impact CWTD on Deer Island. This contradicts the assumption that this adjacent property to CSR, will remain undeveloped and secure for CWTD. See the following:

CWTD18180002-27

### Development Uses for Deer Island:

#### SBU Credits:

SBU credits are the highest valued environmental credits available in the Columbia estuary for endangered or threatened species.

\*SBU's, a fish habitat credit, are required by BPA to satisfy the 2014-18 BiOp.

\*ERTG's Project #2012-04 appraisal of Deer Island and surrounding properties provides 42.08 SBU credits. This is the highest rating of any property in the Columbia Estuary.

\*Both BPA and USFWS are familiar with this development for Deer Island because they've been party to the talks with both BPA and USACE as the purchasers of the SBU credits.

CWTD18180002-28

\*Development of these of credits require dike breaching, flooding and the construction of new dikes to protect homes.

CWTD18180002-29

Translocating deer to Deer Island would eliminate the opportunity to develop environmental credits for endangered or threatened fish species. The land would be flooded for fish habitat and dike construction would provide tremendous ground disturbance, both conditions which are not conducive to a thriving, translocated, CWTD deer population.

CWTD18180002-30

### Wetland Mitigation bank:

Deer Island has been evaluated for the purposes of a wetland Mitigation bank development which would include both “Restored Wetland Mitigation credits” and “Enriched Wetland mitigation credits”.

A wetland mitigation bank is a very rich environmental use. The unauthorized use of Deer Island for the translocation of CWTD would likely eliminate this type of development. Deer don't like very wet conditions or disturbed ground which would be a result of this development.

CWTD18180002-31

### Destination Resort:

DISRT has recently received an offer of a resort development on Deer Island.

This type of development would include large construction projects, disturbed ground and access to consistent and large numbers of humans. Once a threatened species is translocated to Deer Island, it's unlikely that this development would be allowed.

CWTD18180002-32

The above are high value land uses and developments, both in environmental terms (fish habitat for endangered and threatened species and wetland habitat restoration) and dollar amounts. These land uses are allowed by Oregon Land Use laws. Deer Island is currently used cattle grazing, duck and elk hunting. Translocation of CWTD to Deer Island may affect our property rights for development and land management practices for our current uses. The draft EA confirms this: ***“Since CWTD is a federally-listed species, private landowners with CWTD on their lands must consider the effects their operations may have on the species.” (EA pg. 25), and “The cumulative effects of establishing a CWTD subpopulation at CSR could be environmental (as they relate to the natural environment in the area); and they could be socioeconomically (including land use) as they relate to the recovery of CWTD under ESA” (EA pg. 28”).***

CWTD18180002-33

To provide management flexibility and also encourage owner's voluntary management for CWTD, the ESA 4(d) rule and Safe Harbor Agreement (SHA) are offered as protections against incursions of property rights. But, neither of these offers protection of property rights or current land management practices. The ESA 4(d) is concerned with “the take” of deer. The Safe Harbor Agreement by stating “formal assurances from the FWS that if they fulfil the conditions of the SHA, the FWS will not require any different or management activities by the participants without their approval” (USFWS Safe Harbor Agreements for Private landowners),

CWTD18180002-34

implicitly acknowledges that land management practices may be required unless a SHA is developed between the USFWS and the landowner. There are no solid agreements offered by the draft EA that protect our rights of development or current land management practices. Thus, translocating a new and ESA- listed deer species to Deer Island could result in substantial damages to DISRT.

CWTD18180002-34 continued

Deer Island is a working cattle ranch. The bulk of our properties income is earned by cattle grazing. A secondary amount is earned with duck and elk hunting. ***“The translocation of CWTD and the expected habitat improvements may decrease the acreage and the number of days of that (cattle) grazing occurs. Grazing would still be employed to maximize wildlife benefit, but the grazing prescription may change” (EA pg. 25).*** Cattle grazing on CSR will be used for wildlife benefit, specifically deer, but cattle grazing is the primary business of and animal on Deer Island. Any changes in their grazing “prescription” would be extremely detrimental to the properties ability to support itself and its owners. The draft EA does not offer any financial protections for loss of current and future income due to required management practices or a solid agreement that they won’t be required to change as result of the proposed CWTD translocation.

CWTD18180002-35

CSR, Deer Island and the surrounding properties are all members of the Deer Island Dike District. As well known by BPA, the Dike district protects the properties by maintaining the dikes and running pumps, as needed, to remove water from the interior lands. The dike district is financially supported solely with member’s monies. By mutual consent, our properties are kept very wet. The pumps run on a “need to” basis as their operation is prohibitively expensive and the current use of the properties is cattle grazing and not crops. The land doesn’t need to be kept dry. How will the translocation of CWTD to CSR and surrounding properties effect the management practices of the dike district? The draft EA does not offer solutions for the remuneration of dike district costs associated with possible management changes due to translocation of this threatened species.

CWTD18180002-36

## Part 2- Viability of the draft EA for translocating the deer:

The stated intentions of the draft EA is to establish a new subpopulation of CWTD on suitable habitat within the historic range of the Columbia River and to develop connectivity between subpopulations. With these goals in mind, the proposed translocation has significant design flaws aside from inadequacy of the CSR property to support the deer and the unauthorized use of Deer Island and other private lands for their likely dispersal and herd growth. The new deer subpopulation will have problems with competition from the existing elk and CBTD, hybridization, coyote predation, and reaching the goal of connectivity to other subpopulations. These issues have not been satisfactory addressed in the draft EA.

CWTD18180002-37

Elk are found at both CSR and on Deer Island. The EA states ***“Elk would likely be unaffected by the arrival of CWTD onto CSR lands. There could however be some interspecific competition between the two species. Waldrip (1977), reported that white-tailed deer appear to avoid elk***

*and are not seen regularly in areas that contain dense populations. His data suggest that elk may have forced whitetails into marginal habitat for fawning, predisposing the fawns to predation. CSR, however, does not support a dense population of elk (except for that brief period of time when elk hunters drive them to this secure location) sufficient to generate this*

*impact, (EA pg.19).* We have observed on Deer Island, with 3100 acres and a much larger property than CSR, a reduced visibility of CBTD and that their population has seemed to be in decline due to the presence of elk. CSR already provides a starter home of inadequate acreage for the CWTD deer and with this hardship, they are also expected to cohabitate and flourish with 30 elk in the best case scenario and 100 elk during the worst. The first quote mentions that ***“The effect on elk is anticipated to be low”, (EA Pg. 6).*** Elk survival will not be the issue but their impact on the survival of CWTD definitely will be a potential problem! The draft EA does not address this likelihood.

CWTD18180002-38

In addition elk, CBTD will compete with CWTD for limited resources. The EA states ***“CWTD and CBTD generally have different habitat associations, but there is overlap. In the absence of CWTD, CBTD have increased their numbers into the former CWTD range. Competition and a partitioning of habitat between these two species is expected, though they are likely to coexist for many years. CWTD are expected to eventually occupy habitat on CSR, which has more open areas and is more suitable for CWTD. Some CBTD are expected to be displaced from CSR but continue to use of the more forested habitats west of highway 30 which has higher***

***percentages and steeper slopes”, (EA pg.19).*** Some of the claims within this statement are unsubstantiated in the EA. The following research presents different information; ***“Competition for resources with other ungulates is a potential problem. A study in Douglas County, Oregon showed CWTD and Black-tailed Deer maintaining spatial segregation within interior valleys of the Umpqua River with at least one of the two species demonstrating interspecific avoidance (Smith 1987). The relative paucity of high quality habitat along the lower Columbia River may mean that chances for direct interspecies competition along the lower Columbia River is higher than what was observed in Douglas County (Washington Department fish and Wildlife, Periodic Review for the Columbian White Tailed Deer, July 2016, pg16.)*** This study supports the ideas of competition and partitioning but does not provide research regarding different habitat associations, habitat overlapping, coexistence or which species will dominate in competition for habitat. Evidence is lacking in the EA supporting the idea that CWTD will thrive or even survive on CSR and surrounding properties with the presence of CBTD, not mention the more foreboding animal, Elk.

CWTD18180002-39

Towards the beginning of the proposed EA, the statement is made, ***“Pregnant females have been found to remain closer to the release site than post-parturient does released without their fawns (Jones et al, 1997), and this practice eliminates chance hybridizations that could occur if deer were moved in estrus into an area that is insufficiently populated with CWTD bucks.”, (EA pg. 8).*** The potential of inter-species breeding is acknowledged with this

statement and also is implicitly recognized as a threat to the species. If the purpose of the translocation is to establish a new subpopulation of the threatened deer, how will the genetic pool be protected from the CBTD? This problem of hybridization and its genetic effect on the threatened has not been touched by the EA.

CWTD18180002-40

Coyotes run rampant in the lands of CSR, Deer Island and surrounding areas. Though a program of predator control will be instigated at CSR for the translocation. No such program is in place on Deer Island. While coyotes are occasionally shot, if a rifle is handy, there's no intention to actively hunt them. They rarely pose a threat to calves. Without imposition of management practices on Deer Island, how will this predator population be controlled, thus the survival of fawns?

CWTD18180002-41

Though connectivity is not part of the "Federal Recovery Plan Criteria for Delisting", connectivity plays a large part in the CWTD translocation plan. CSR and surrounding properties, are viewed as centrally located for potential connectivity to the subpopulations Ridgefield NWR, Scappoose/Sauvie Island and Cottonwood Island/Kalama through dispersal. Presumably, CWTD will eventually connect with these distant locations. But this goal is difficult to support.

CWTD18180002-42

CWTD deer are remarkably sedentary. They're not a migratory animal and their home range is small; ***"Mean lifetime home range on Mainland JBH Unit was estimated at 192 ha (474 acres) for male deer (N=20) and 159 ha (393) for females (N=32; Gavin et al. 1984)...On the Mainland JBH Unit, Suring (1974) estimated an average home range of 92 ha (227 acres) for bucks (N=3) and 39 ha (96 acres) for does (n=7)". (Washington Department fish and Wildlife, Periodic Review for the Columbian White Tailed Deer, July 2016, pg 5.)*** To make connection to other subpopulations, the deer will be forced to travel long, un-deer-like distances and overcome significant geographical and manmade barriers.

CWTD18180002-43

CWTD18180002-44

Ridgefield NWR is located across the Columbia River, approximately 14 miles SE of CSR and Deer Island. Though the EA lists Ridgefield as a potential connection subpopulation, it also acknowledges that the deer may not make that connection; ***"However, the Ridgefield subpopulation would remain geographically isolated from the rest of the population, and future translocations to Ridgefield may be necessary to maintain genetic diversity", (EA pg. 20).*** Traveling miles and crossing the Columbia River makes connection to CSR and Deer Islands unlikely.

CWTD18180002-45

Scappoose is 15 miles south of CSR and Deer Island and Sauvie Island is beyond Scappoose. Columbia County is experiencing some highest population growth in Oregon. Survival of existing CWTD deer and potential connectivity to these subpopulations will be difficult because of encroaching urban growth, presence of humans and reduced habitat. Deer would also need to circumvent the community of Columbia City and the city of St Helens to make connection. Connection to the Scappoose and Sauvie Island population will be very difficult.

CWTD18180002-46

Cottonwood Island/Kalama is approximately 6 miles northwest of CSR and Deer Island on the WA side of the Columbia River. This inhospitable environment for CWTD as it is made up mostly of Corps-deposited Columbia River Dredge materials. Translocations of 15 deer in 2010 and 12 deer in 2013 have not produced a thriving subpopulation. ***"The service currently estimates a population of 10 to 20 deer in the area in and around Cottonwood Island". (Washington Department fish and Wildlife, Periodic Review for the Columbian White Tailed***

*Deer, July 2016, pg. 11.)* Since the translocations, this subpopulation has decreased in size and may not be extant even if deer from CSR and Deer Island could successfully cross the Columbia River to make connection. Connection to the Cottonwood/Kalama subpopulations probably isn't realistic.

CWTD18180002-47

The EA recognizes the improbability of "Connectivity" with the following statements; ***"Given the habitat fragmentation in the lower Columbia River Valley, a large contiguous population of CWTD is not possible, but population viability can still be improved by increasing the number of small subpopulations that make up the overall population", (EA pg13) and; This new subpopulation and the connectivity it would provide may have a moderate long-term effect on the recovery of CWTD."***, (EA Pg. 17).

CWTD18180002-48

Small home ranges, large travel distances, and the significant travel barriers that include urban growth, Columbia River, Highway systems and Conifer forests make connections between subpopulation very difficult. Proposing CSR because of its centralized location for connection to other subpopulations is not likely. The connection goal looks good on paper but it has severe impediments on the map.

One of the arguments for translocating CWTD to CSR, developing a new subpopulation is to improve survival chances in case of catastrophic events. Tenasillahe Island, in particular was mentioned as having old dikes, expensive to maintain and may be impacted by sea level rise and climate change and subject to failure. ***"Creating a new subpopulation at Columbia Stock Ranch would ensure CWRD recovery effort if Tenasillahe Island habitat becomes unsuitable over time", (EA pg. 3).***

JBH mainland had an "imminent breach" issue in 2012 for which emergency translocations were enacted. That dike issue has since been resolved and the CWTD population is thriving. Tenasillahe supports one of two "viable CWTD populations", needed for de-listing. It has had great success in protecting and growing the CWTD herd. JBH Mainland and Ridgefield are targeted for the third and fourth "Secure and Viable" of CWTD subpopulations to meet the

delisting criteria (only three are required for delisting). JBH Mainland, Tenasillahe and Ridgefield refuges are publically owned properties with access to public funds. Just as the JBH Mainland dike issue was resolved, wouldn't dike or habitat issues on these important public refuge properties be addressed to protect their subpopulations of CWTD deer, delisting requirements and to fulfil government mandates?

CWTD18180002-49

Deer Island Dike District (DIDD) is facing the same issues- aging dikes, rising sea levels, climate change and possible dike failures. DIDD, is a small and self-funded dike district. Ours, in particular will have considerable financial trouble in dealing with dike issues in face of climate change. Translocating deer to CSR and Deer Island for establishing a new subpopulation does not recognize the fact that CSR and Deer Island will be less financially able to defend dikes in face of the same catastrophic events that face Tenasillahe Island.

CWTD18180002-50

Though, the draft EA focuses on the translocation of CWTD for the survival of that species, a secondary theme of the report concerns endangered and threatened fish and their survival.

The draft EA mentions that BPA’s funding would be consistent with Conservations Council’s Fish and Wildlife program and **“also assist in meeting BPA’s commitments in the FCRPS Biological Opinion (BiOp), as amended in 2010 and 2014 (NMFS 2008a; 2010; 2014), which directs BPA and other FCRPS Action Agencies, which include BPA, the Corps and the Bureau of Reclamation, to develop projects that improve fish habitat quality and fish survival in the Columbia River Estuary” (EA pg. 3).** In the report, CSR and Tenaisillahe Islands are identified important areas for the survival of endangered and threatened Fish;

**“The lower Columbia River, including waters around Tenasillahe Island and CSR , is a critical migratory corridor for all anadromous salmonids in the Columbia River Basin. The basin historically produced some of the world’s largest runs of salmon, but today all are listed as threatened or endangered under the ESA.”** (see Sections 3.1.3 Fish and 3.1.4.3 Fish, pgs. 15- 16).

CSR is ideally located for the improvement of high quality fish habitat and fish survival.

CWTD18180002-51

The high value of CSR, Deer Island and surrounding areas to fish habitat restoration was confirmed by the 2012 ERTG evaluation of Deer Island, CSR and surrounding lands. This study identified our properties as providing 42.08 SBUs and the highest rating of any property in the

Columbia River Estuary for benefiting salmonids. Our properties do not host the threatened CWTD. Therefore, these deer are not a potential impediment to a SBU or fish habitat development. Translocating another, unwarranted, subpopulation of CWTD to CSR, Deer Island and surrounding properties for unconvincing reasons, would likely eliminate this development opportunity to benefit environment for ESA listed endangered and threatened fish and the chance to assist BPA meeting its commitments to the FCRPS Biological Opinion (BiOp).

CWTD18180002-52

### Final Remarks:

The USFWS is responsible for recovery planning of CWTD which includes identifying lands for the protection and restoration to ensure viable, secure populations of deer will persist into the future. For fulfilment of the ESA, the USFWS is authorized to purchase land.

### **ESA Sec 5. (a):**

**(1) shall utilize the land acquisition and other authority and other authority under the Fish and Wildlife act of 1956, as amended, the Fish and Wildlife coordination Act, as amended and the Migratory Bird Conservation Act, as appropriate; an**

**(2) is authorized to acquire by purchase, donation or otherwise, lands, waters, or otherwise, lands or interest therein, and such authority shall be in addition to any other land acquisition vested in him.**

CSR, and ostensibly Deer Island and surrounding private properties have been identified for fulfilling the requirements of ESA-listed CWTD. But the service has not fulfilled the ESA requirement of land acquisition.

CWTD18180002-53

By providing funding for the proposed translocation of the CWTD to CSR, BPA is attempting to fulfil requirements outlined in Northwest Power and Conservation Council’s Fish and Wildlife Program and will also assist in the fulfillment of commitments in the FCRPS Biological

Opinion(BiOp), as amended in 2010 and 2014 (NMFS 2008a; 2010; 2014). The use of Deer Island and other private properties is crucial to the success of the translocation and survival of CWTD for BPA to fulfil government statutes and mandates. To date, DISRT has received no offers of remuneration for property use or no offers of agreements to protect private property rights on Deer Island.

CWTD18180002-54

On Deer Island, we are in favor of supporting endangered and threatened fish and threatened CWTD. We don't, however, support the unauthorized use of private land and imposition on private property rights for the fulfillment of government agencies to government statutes and mandates.

CWTD18180002-55

On August 23, 2018, BPA sent a public request, eliciting comments to help determine the issues surrounding the proposed Translocation of CWTD to CSR. Those issues were identified by DISRT as inadequate property available on CSR for survival of the CWTD, interactions with other ungulates (Elk and CBTD), predator control outside of CSR, and the unauthorized use of private property and likely imposition on property rights (Development rights) and land management practices. Without addressing these issues, the proposed translocation will cause substantial damages to DISRT-owned Deer Island. Absent addressing these issues and nor offering any concrete agreement to protect private property rights, the Environmental Assessment will not be a valid process.

CWTD18180002-56

Comments respectfully submitted,  
Susie Kem, Trustee  
Deer Island Stock Ranch Trust

## **Responses to Deer Island Stock Ranch Trust Comments**

Thank you for your comments. Responses to your specific comments are addressed below.

### **CWTD18180002-01**

There were numerous comments from DISRT concerning the lack of a secured boundary. The comment portrays the secured boundary to be one that effectively confines CWTD on CSR. The label, “secure”, when used throughout the EA, does not refer to a boundary that confines animals, but rather one that maintains habitat in a condition suitable for supporting CWTD into the foreseeable future. This is defined clearly in the EA in Section 1.3.3 as “free from adverse human activities in the foreseeable future and relatively safe from natural phenomena that would destroy the habitat’s value to CWTD (USFWS 1983)”. The term “secure” does not intend to physically constrain CWTD to a specific property.

### **CWTD18180002-02**

The Service has determined CSR is an appropriate site for translocation of CWTD. CSR is currently unoccupied by CWTD, so any sustainable presence by CWTD would be considered a net numerical gain to the population. Tenasillahe can sustain removal of deer, and that subpopulation would be expected to grow back to a level the habitat can support. The ultimate goal is to have a new subpopulation without adversely affecting the donor subpopulation. This has been done numerous times in the past, with the donor subpopulation rebounding after a few years. The issue is whether CSR can sustain a subpopulation of CWTD. The Service has determined that the habitat on CSR is sufficient to do so and believe its proximity to other subpopulations will help support it. Currently there is no competition from other CWTD on CSR so moving deer here would provide an open space where the subpopulation can develop to a density the habitat can support.

### **CWTD18180002-03**

This comment is based on a premise that translocated CWTD, as an ESA-listed species, would hinder or prevent landowners from engaging in current land use practices and prevent them from changing to less CWTD-friendly practices in the future. Private landowners are not required to change their land use practices if a listed species takes up occupancy, and BPA and the Service do not foresee a situation where landowners seeking to utilize their property would encounter additional restrictions due to the presence of federally-listed deer. Current land management in areas surrounding CSR is similar to those surrounding other CWTD translocation sites in the Lower Columbia River basin and are not known to create such conflicts. As disclosed in Section 3.2.6.1.3, the conflicts that have arisen are those relating to CWTD eating plants from gardens, agricultural crops, and nurseries; and such conflicts have been effectively resolved without land use changes.

In 2013 (prior to the translocations to Ridgefield NWR) the Service developed a strategy for education, technical assistance, and effective response to damage caused by translocated CWTD and their progeny. The Animal Damage Management Plan was a tiered response plan that begins with (1) outreach, then graduates to (2) advice/education, (3) technical assistance (repellants/deterrents/hazing), and, finally, (4) capture/relocation of CWTD that have failed to respond to other ADM actions. After the deer were translocated to Ridgefield NWR, several moved off the refuge to suitable habitat on both public and private lands, however, since 2013, only steps 1 and 2 were implemented. The need for steps 3 and 4

never occurred.

In addition, the Service implemented a 4(d) rule under the ESA in 2016 to allow landowners to take action in response to damage from CWTD and also allows for take due to misidentification during black-tailed deer damage management or hunting. Thus, these actions are no longer prohibited. The intent of the 4(d) rule for CWTD is to provide for the conservation of the deer by allowing greater regulatory flexibility under the ESA.

#### **CWTD18180002-04**

For the reasons discussed in response to CWTD18180002-03, above, there is no support for the premise that land use prohibitions would be required or that restrictions would be applied to any degree sufficient to “undermine the value of the property causing a major financial loss”. Such an impact is not envisioned and is therefore not addressed in the EA.

#### **CWTD18180002-05**

The claim in this comment is that the effects of deer dispersal onto adjacent private properties are only addressed in a section discussing pregnant females (Section 2.1). However, the EA in Sections 3.1.1.2, 3.1.5.1, and 3.2.6.1.3 sufficiently discloses and discusses effects of such dispersal, as this comment acknowledges on pages 4 and 5 of the comment. The impacts of dispersing CWTD are adequately disclosed in the EA.

#### **CWTD18180002-06**

The irrelevant text has been removed from the EA.

#### **CWTD18180002-07**

The effect of CWTD occupying lands surrounding CSR is addressed in Section 3.2.5. There is no discussion in the EA of the loss of property rights as described in this comment, because the premise that property rights, current land uses, or future changes in land use will be affected as described in this comment letter is not supported. Please see response to CWTD18180002-03.

#### **CWTD18180002-08**

The irrelevant text has been removed from the EA.

#### **CWTD18180002-09**

There may be a misunderstanding in this comment that the proposal intends for CSR to be the 3rd viable subpopulation on secured habitat as defined in the recovery plan. This is not the case. The creation of this subpopulation would increase overall population numbers by redistributing the population of the DPS, providing connectivity between current subpopulations, and lowering the risk of extinction by spreading out the risk of local catastrophic events. This would increase the likelihood of eventual delisting even if CSR doesn't meet the “viable” criteria.

As the comment states, it is expected that JBH Mainland and Ridgefield NWR will be the 3rd and 4th viable subpopulations on secure habitat, which would meet recovery criteria. However, meeting the recovery criteria does not automatically confer delisting; it only leads to the consideration of delisting. When delisting is considered, larger issues of population dynamics are evaluated, including total population, population connectivity, and extinction risk. Even a small subpopulation at CSR greatly increases the overall health of the population and the likelihood of eventual delisting.

When a species is able to survive on its own in the wild, the species is considered to be “recovered,” and protection of the ESA is no longer necessary. Recovery plans are developed to provide guidance on how best to help listed species achieve recovery, but they are not regulatory documents. They provide a road map with detailed site-specific management actions for conserving listed species and their ecosystems. Recovery plans outline threats to the species; possible ways to control those threats through beneficial activities; and they identify benchmarks for delisting, such as number of individuals and quality of habitat. Delisting does not automatically occur once recovery plan benchmarks have been met. From a recovery standpoint, the translocation of CWTD to CSR would represent an expansion of the DPS, a lowering of the extinction probability, and a significant advancement toward delisting.

To delist a species, the Service is required to determine that threats have been eliminated or controlled, based on several factors including population sizes and trends; the stability of its habitat; and that habitat’s quality and quantity. When determining if delisting is warranted, the Service follows a process similar to what is used in considering whether to list species. The Service assesses populations and recovery achievements in eliminating or reducing threats, and seeks peer-review. If the Service determines that the threats have been eliminated or sufficiently reduced, then they may consider delisting the species.

#### **CWTD18180002-10**

Please also see response to CWTD18180002-02.

When conducting translocations, the effective population size must be considered, not just the number of deer moved. Natural annual mortality for CWTD is about 26%<sup>9</sup> (Gavin 1984). If 50 deer are moved, that equates to a loss of about 13 animals. Mortality of a recently translocated population is often somewhat higher. In addition to mortality, we can also expect some emigration off the site. Offsetting this mortality and emigration is fawn survival, which is an unknown. In addition, small populations are much more vulnerable to extinctions and hybridization. Moving a larger number of deer increases the likelihood of success. Finally, 50 deer is the maximum number and not necessarily the number that will ultimately be moved. The first year up to 30 deer will be moved. Depending on the success of that initial effort, an appropriate number will be moved the following year.

Comparing competition between the two sites is not relevant, as habitat varies between these sites and we do not know what the eventual density on CSR will be. The goal is to produce a new subpopulation at CSR and allow that subpopulation grow to a number the area can support. Tenasillahe Island is expected to rebound in a few years after translocation. In essence, a new subpopulation would have been created without impacting the donor subpopulation.

#### **CWTD18180002-11**

The reference to “pregnant females” cited in this comment as being a response to public comments concerning effects of CWTD translocations on adjacent properties is incorrect. The “pregnant females” citation is from Section 2.1 of the EA which is a description of what is being proposed and how it would be implemented.

The dispersal of CWTD and possible impacts to land uses on adjacent properties was covered fully in Section 3.2.6.1.3 “Effects of the Proposed Action on Land Use”.

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<sup>9</sup> According to Gavin 1984, expected natural annual mortality of CWTD is 20 percent for does and 40 percent for bucks.

#### **CWTD18180002-12**

As noted in the comment, the discussion of “pregnant females” in Section 2.1 of the EA is unresponsive to the issue concerning impacts to lands uses, and it was not intended to do so. The responsive discussion of that issue is found in Section 3.2.6.1.3.

#### **CWTD18180002-13**

Dispersal of CWTD is acknowledged in the draft EA, and such dispersal is an important consideration in the translocation action. Dispersal from CSR (and all other locations where CWTD now exist) that is effective in providing genetic interchange between subpopulations is a goal for population recovery.

#### **CWTD18180002-14**

The intended goal for CWTD dispersal among subpopulations is for genetic interchange among the subpopulations as discussed in the EA at Sections 3.1.5.1 and 3.4.1. It is not intended to offset inadequacies of CSR, nor is it described as such in the EA.

The potential for egress off the site was considered in designing the translocation and was acknowledged in the EA, and steps to minimize egress were integrated into the translocation plan. The time of year moved, and the transfer of family groups both tend to reduce off-site migration. However, it is the nature of wildlife to move freely, and some egress is expected. These off-site individuals, however, are not necessary for the survival of the CSR subpopulation.

The impact of these deer is expected to be similar to what is currently occurring with CBTD. As the partitioning of resources occurs over time, the total number of deer is expected to be similar to current numbers. In areas that favor white-tails, however, the proportion of white-tailed deer vs black-tailed deer should be higher. Things such as vegetation damage or grazing of pastures related to deer are not expected to significantly change.

#### **CWTD18180002-15**

Dispersal of CWTD from CSR is referenced in the EA, Sections 3.1.1.2, 3.1.5.1, and 3.2.6.1.3. See, also, responses to CWTD18180002-03, CWTD18180002-13, and CWTD18180002-14.

#### **CWTD18180002-16**

The intent of the Comprehensive Conservation Plan (CCP) for JBH Refuge is not to establish “refuges on nonpublic lands” or to “establish new subpopulations of CWTD off refuge lands”. The CCP provides long-term guidance for management decisions and sets forth goals, objectives, and strategies needed to accomplish refuge purposes on JBH Refuge. Expansion of the Refuge was not discussed in either the EA or the CCP. The process for expanding national wildlife refuges is described at <https://www.fws.gov/refuges/realty/faq.html>; and this process includes many opportunities for the public to participate.

#### **CWTD18180002-17**

This comment uses the phrase “Venn diagram style” as a descriptor for how the goal of subpopulation connectivity is intended to be achieved. It is not fully clear what is meant by “Venn Diagram style” but the idea of a connection of overlapping home ranges fits that image, and fits the discussion of problems with such a plan in upcoming comments.

That concept of connectivity however is not what is envisioned nor represented in the EA. As discussed

in Section 3.1.5.1, the vision is to establish connectivity through dispersing individuals and that such connectivity only requires a few migrants per generation to minimize the loss of genetic variation. Subpopulations that are close to each other have a higher likelihood of exchanging genes from dispersing animals. The EA does not portray a development of overlapping CWTD home ranges as the framework necessary for establishing the desired connectivity between subpopulations. And in fact, the population exists on such fragmented habitat that one contiguous population is impossible.

#### **CWTD18180002-18**

This comment is correct in that dispersal of CWTD beyond CSR is likely, encounters with motor vehicles are likely, and such encounters can “pose survival problems to both CWTD and humans”. Collisions between CWTD and vehicles do occur, but the number of collisions in the Columbia River DPS has not prevented the DPS from increasing over time and meeting downlisting criteria (USFWS 2016a). Vehicle strikes are known to occur in almost all deer populations. While they often are a source of mortality, deer herds can thrive in areas of roads. Such encounters and their effect on CWTD and the translocation effort are discussed in the EA in Section 3.1.5.1.

#### **CWTD18180002-19**

As discussed in the response to CWTD18180002-01, the comment portrays the secured boundary to be one that effectively confines CWTD on CSR. The label, “secure”, when used throughout the EA, however, does not refer to a boundary that confines animals, but rather one that maintains habitat in a condition suitable for supporting CWTD into the foreseeable future. This is defined clearly in the EA in Section 1.3.3 as “free from adverse human activities in the foreseeable future and relatively safe from natural phenomena that would destroy the habitat’s value to CWTD (USFWS 1983)”. No need for physically constraining CWTD to a specific property is intended by the use of the term “Secure”, nor is it portrayed as such in the EA.

#### **CWTD18180002-20**

The text cited from the EA at page 19 in this comment does not acknowledge that CSR “may not be adequate to sustain a CWTD subpopulation”. The cited text simply addresses whether or not the sustainable subpopulation would achieve a verifiable “viable” status, i.e. supporting at least 50 animals (Section 3.1.5.1 at page 19 in the Draft EA).

As used in the recovery plan “viable” has a specific definition of 50 deer. Regardless of this narrow definition, a herd may be sustainable long-term with fewer animals. Crims Island, for example, has fluctuated between 18 and 43 deer since shortly after deer were translocated there. In addition, deer are present less than 2 miles away in the Port of Kalama area, which may increase long-term sustainability of a small subpopulation at CSR. While it is acknowledged that deer will probably move off-site, these off-site deer are not crucial to the success of a herd on CSR.

#### **CWTD18180002-21**

This comment is correct that Deer Island slough does not transect CSR but separates CSR from Deer Island. The EA’s use of the term “Deer Island” throughout the document is in reference to the geographical feature named Deer Island, not the business entity or private property identified as Deer Island Stock Ranch. The apparent inclusion of Deer Island in the “Project Area” in the draft EA text cited in this comment was an error stemming from a misunderstanding that the geography of Deer Island included CSR when in actuality it does not, but rather, ends at Deer Island Slough. Deer Island Slough

does not bisect the Project Area, but rather separates the project area from Deer Island. The error has been corrected in the EA in Section 3.2.2.

**CWTD18180002-22**

As discussed in the response to CWTD18180002-03 the impacts of CWTD dispersing onto lands surrounding CSR were adequately addressed in Section 3.2.5.

**CWTD18180002-23**

The fact that Cottonwood Island and Scappoose/Sauvie Island are not mentioned in the text cited in this comment (draft EA page 28) is noted. The text there was intended to note the extent of achievable genetic interchange rather than to identify all the links in the connection between CSR and Ridgefield.

**CWTD18180002-24**

CSR is the intended designated home range for the translocation of CWTD; not Deer Island. The EA however, does acknowledge that adjacent lands with suitable habitat would likely also become occupied by CWTD that would disperse from CSR. It should be noted that the deer would not use all habitat equally. Typically, the large open fields like those that occur on Deer Island are not preferred habitat for CWTD. However, the forested habitat adjacent to these fields may be suitable. As noted in the response to comment CWTD18180002-21, the reference to Deer Island as being part of the project area is an error that has been corrected in the Final EA.

**CWTD18180002-25**

As discussed in responses to CWTD18180002-02 and CWTD18180002-10, the EA raises no question about CSR's capability to support a subpopulation of CWTD, nor does it label CSR as a "refuge", nor does it suppose that surrounding private lands are secure (as defined by the EA in Section 1.3.3). As discussed in responses to CWTD18180002-03, CWTD18180002-04, and CWTD18180002-07 there are no application of "ESA rules" that would "severely and adversely" impact private property rights or management practices.

**CWTD18180002-26**

See responses to CWTD18180002-01 and CWTD18180002-19.

**CWTD18180002-27**

The EA makes no statement regarding predictions or wishes (as described in this comment) about land use practices on surrounding properties. Neither does the EA make assumptions about land uses on Deer Island Stock Ranch as determinant of the success of the proposed translocations in establishing a persistent subpopulation. When talking about secure habitat, the EA is only considering lands within the CSR boundary.

**CWTD18180002-28 and CWTD18180002-29**

The representation of SBU credits as displayed in this comment is correct.

**CWTD18180002-30**

The Proposed Action does not include a proposal to translocate CWTD to Deer Island. The proposal is to translocate CWTD to CSR, which may eventually occupy suitable habitat on surrounding lands, including Deer Island. For the reasons given in response to comments CWTD18180002-03,

CWTD18180002-04, and CWTD18180002-07, this translocation would not eliminate the opportunity for developing Deer Island for anadromous fish habitat improvements. However, modifying Deer Island for fish habitat benefits would reduce its suitability for CWTD.

#### **CWTD18180002-31**

As discussed above, the Proposed Action does not include translocations of CWTD to Deer Island. The proposal is to translocate CWTD to CSR, which may eventually occupy suitable habitat on surrounding lands, including Deer Island. For the reasons given in response to comments CWTD18180002-03, CWTD18180002-04, and CWTD18180002-07, this translocation would not eliminate the opportunity for developing Deer Island for wetland mitigation. Modification of Deer Island for wetland mitigation, however, would simply reduce its suitability for CWTD. Introduction and management for CWTD on CSR does not confer any requirement on adjacent landowners to provide a similar level of conservation or recovery actions.

#### **CWTD18180002-32**

For the reasons given in response to comments CWTD18180002-03, CWTD18180002-04, and CWTD18180002-07, translocation of CWTD to CSR would not eliminate the opportunity for developing a destination resort on Deer Island, but such a development could possibly reduce a portion of Deer Island's suitability for CWTD.

#### **CWTD18180002-33**

For the reasons given in response to comments CWTD18180002-03, CWTD18180002-04, and CWTD18180002-07, translocation would not eliminate the opportunities for changing land uses on Deer Island for SBUs, wetland mitigation or a destination resort, but such developments would likely reduce portions of Deer Island's suitability for CWTD. The EA on page 28 in Section 3.2.6.1 does provide a description of the Conservation Plan-centered incidental take authorization that is available via Section 10 of the ESA. However, Section 10 permit pursuit would be necessary only if CWTD take of individuals resulting from a planned/proposed development was completely unavoidable, and that is nearly impossible to envision.

#### **CWTD18180002-34**

Both the ESA 4(d) rule and the SHAs were designed specifically to assist landowners in exercising their rights to use and protect private property in the presence of ESA-listed species as described in the EA in Section 3.2.6.1.3. The ESA 4(d) rule is concerned with the "take" of deer, as stated in this comment, but it is designed specifically to allow landowners to take CWTD to protect their private property. Similarly, the SHAs are intended to provide assurances for landowners for their land uses when negotiated in light of ESA-listed species' presence. The EA is clear that landowners may have additional responsibilities to consider impacts to CWTD in their land uses, with perhaps modifications of proposed practices if warranted, but the mere presence of CWTD on surrounding lands does not confer a greater protection status on that land. There is no example in the Lower Columbia River where landowners on whose land CWTD have located have been prevented from using their land as they had been previously or as they propose.

The Comment is correct in stating that there "are no solid agreements offered by the draft EA that protect our rights of development or current land management practices". No such offering is made in the EA for two reasons: first, an EA is not the appropriate legal instrument for such offerings; and

second, no such need is envisioned for reasons outlined in responses to comments CWTD18180002-03, CWTD18180002-04, and CWTD18180002-07.

For reasons discussed above, there should be no “substantial damages” as referenced by the comment.

#### **CWTD18180002-35**

The EA text cited in this comment (draft EA page 25) relates only to grazing practices on CSR. The EA makes no claim (and ESA does not require) that such practices be applied on adjacent properties. Since such practices are not required on surrounding properties there would be no need for “financial protections for loss of current and future income” as described in the comment.

#### **CWTD18180002-36**

For the reasons stated in responses to comments CWTD18180002-03, CWTD18180002-04, CWTD18180002-07, CWTD18180002-34, and CWTD18180002-35 there would be no requirement for the diking district to change its pumping practices from the current pattern. Additionally, CSR was determined to be a suitable location for CWTD translocation while recognizing the current inundation frequencies. There is therefore no need to alter pumping practices, and there would thus be no need for remunerations to the diking district. The Service, BPA, and CLT would welcome coordination with the DIDICo and if the need should arise, mutually cooperate in the future on management actions to benefit CWTD on CSR.

#### **CWTD18180002-37**

The EA adequately assesses the likely competition between CWTD and CBTD and elk, and the predation from coyotes. This comment displays a different opinion regarding these interactions, but those opinions as expressed in this comment letter are not consistent with long-term observations by the Service of such interactions on JBH or at past CWTD translocation sites. The EA’s characterization of these interactions is consistent with those long term observations by the Service.

#### **CWTD18180002-38**

This comment provides an observation of a seeming decline in CBTD on Deer Island and attributes it to the presence of elk. The EA acknowledges that in habitat competition with elk, CWTD would likely be at a disadvantage, especially if the elk population was large (EA Section 3.1.5.1). As discussed in this section of the EA, competitive pressure between CWTD and elk is anticipated, with CWTD being at a disadvantage to the elk. Such competition, however, would not be so complete as to preclude translocated CWTD occupancy from CSR for reasons discussed in the response to CWTD18180002- 02, above; and CSR provides adequate habitat to support CWTD and thus competition with elk does not add a cumulative effect that would render the translocation ineffective.

The comment makes note that the EA’s characterization of the CWTD translocation’s effect on elk being “low” is not an issue. This is true, but the EA must assess both the effect of the translocation on the existing elk population as well as the effect of the existing elk population on the translocation effort to ensure an adequate analysis.

#### **CWTD18180002-39**

The text of the EA (draft EA page 19) as cited in this comment includes the facts that:

- CWTD and CBTD use somewhat differing habitats
- Competition between the two species is anticipated

- CWTD use more open areas while CBTD use more forested areas
- Habitat partitioning between these species is anticipated
- Both species will coexist on CSR for a while as the partitioning occurs
- Some CBTD will be displaced as partitioning occurs

The text of the Washington Department of Fish and Wildlife document cited in the comment includes the facts that:

- Competition between ungulate species can be a problem
- Spatial segregation of CBTD and CWTD has been shown in the Douglas County, OR population
- There is a potential for higher competition between CBTD and CWTD in the Lower Columbia River than what was seen in Douglas County

There is agreement between these documents rather than disagreement as portrayed in the comment. Both cite competition between these species and both cite “habitat partitioning” (“spatial segregation” in the Washington document). The fact that the Washington Department of Fish and Wildlife document does not go into detail concerning habitat associations, habitat use overlap, co-existence in the short term, or which species might dominate which habitat type in the long run is no indication that these are not accurate and widely understood and observed realities concerning CWTD and CBTD.

#### **CWTD18180002-40**

Piaggio and Hopken (2010) concluded that although hybridization can occur between CWTD and blacktailed deer, it is not a common or current event. The two species will preferentially breed within their own taxa, and their habitat preferences differ somewhat. Therefore, hybridization does not constitute a threat now, and there is no reason to expect it will become a threat in the foreseeable future (USFWS 2016a).

While hybridization can occur, it is relatively rare. The EA recognizes the possibility of such hybridization and proposes the only reasonable effective action available: timing of translocation to be after the breeding season to avoid any such potential in the only year such control is possible. Placing a large number of deer on CSR the first year reduces the chance of hybridization. While natural processes like this cannot be completely controlled, we can reduce the likelihood of hybridization by moving pregnant females and providing an adequate number of breeding animals. CWTD and CBTD have historically co-existed in the environment. Our intention is not to artificially separate these species but to promote CWTD in habitats that favor the species. Comment CWTD18180002-40 makes the conflicting points that 1) the EA acknowledges the potential for hybridization and recognizes its threat; and 2) that “the problem of hybridization and its genetic effect on the threatened [sic] has not been touched by the EA”. However, the EA addresses the possibility of hybridization in Section 2.1.

#### **CWTD18180002-41**

The EA proposes coyote control on CSR before translocation and during the first fawning period to improve fawn survival and improve the probability of subpopulation establishment (EA at Section 2.1). Coyote control would also be applied on CSR as needed if fawn recruitment is low (EA at Section 3.1.5.1). There is no proposal for coyote control actions on lands surrounding CSR.

Depredation of fawns by coyotes is common in the Columbia River DPS; however, many factors, such as food availability, work in conjunction with each other to determine the overall level of fawn recruitment (USFWS 2016a). Even with predation occurring on private lands (where the extent of predator control occurring is unknown), the populations of Puget Island and Westport still demonstrate a

positive growth rate over time (USFWS 2016a).

Coyote control has little effect on long term coyote populations (EA at Section 3.1.5.1), so targeted control when necessary during fawning seasons on properties managed for CWTD is the strategy being applied.

#### **CWTD18180002-42**

A CWTD subpopulation at CSR would be a valuable connection between CWTD subpopulations upstream and downstream. The comment here that the goal is “difficult to support” would be true if the vision for connectivity required an interconnecting linkage of CWTD home ranges. The connectivity goal, however, is not difficult to support when it is simply seeking periodic genetic interchange from dispersing individuals from subpopulations spaced strategically along the Lower Columbia River. Such is the connectivity goal envisioned here.

#### **CWTD18180002-43**

The description in this comment of CWTD being sedentary, non-migratory, and with small home ranges, is accurate. This largely describes animals that have settled into a home range, however. It is not uncommon for yearlings to wander more widely when they have been forced to leave their maternal parent during fawning.

#### **CWTD18180002-44**

The description in this comment of deer having to overcome geographical and manmade barriers is accurate. The description that the distances are “un-deer-like” and that the barriers are “significant” is less so. CWTD are known to cover such distances when dispersing and seeking home ranges; and the barriers they would encounter in the lower Columbia River are commonly and successfully negotiated by CWTD and other white-tailed deer subspecies across the western hemisphere.

#### **CWTD18180002-45**

CWTD are known to travel for miles and to cross the Columbia River (USFWS 2016b).

#### **CWTD18180002-46**

The Service’s experience with translocations of CWTD and management of CWTD across the JBH properties affirm that individual CWTD can successfully negotiate around or through human population centers such as St. Helens and Columbia City.

#### **CWTD18180002-47**

The Service’s experience with the Lower Columbia River population of CWTD, affirms the EAs assumption that effective connectivity (genetic interchange) between subpopulations at Cottonwood/Kalama and CSR is not unrealistic. More current information on Cottonwood Island shows that this subpopulation has expanded into the Port of Kalama area and has grown to over 40 animals.

#### **CWTD18180002-48**

As discussed in the response to CWTD18180002-17, the comment appears to envision connectivity as a connection of overlapping home ranges, which, as the EA citation (draft EA page 17) included in this comment declares, is not possible given the fragmentation of habitat.

That concept of connectivity however is not what is represented in the EA. As discussed in Section 3.1.5.1, the vision is to establish connectivity through dispersing individuals. And that such connectivity only requires a few migrants per generation to minimize the loss of genetic variation. The EA does not portray a development of overlapping CWTD home ranges as the framework necessary for establishing the desired connectivity between subpopulations. As such, connectivity is not an improbability as described in this comment.

**CWTD18180002-49**

This comment appears to conclude that this translocation is not necessary because the JBH Mainland and Ridgefield subpopulations will suffice to delist, and that those levees are more likely to be protected. However, as stated in the response to CWTD18180002-08, recovery criteria are targets but do not automatically lead to delisting. Having deer in more places lowers overall extinction risk by increasing the overall population and reducing the effects of catastrophic events that may occur in localized areas. In addition, compared to Tenasillahe Island, the levee on CSR is higher and appears to be in better condition. Finally, levee repair on an accessible unit such as CSR is less costly than repairs would be on an island such as Tenasillahe. See the response to CWTD18180002-08 for additional discussion on the delisting process.

**CWTD18180002-50**

Dependence on private funding for infrastructure repair or maintenance necessary for protection of ESA-listed species in the case of catastrophic events on CSR and/or adjacent lands is not proposed as part of the Proposed Action.

**CWTD18180002-51**

CSR is well-situated for the improvement of high quality fish habitat. The costs of infrastructure modifications, however, make such a habitat conversion on CSR difficult for the habitat values achieved and such plans have therefore been abandoned for the foreseeable future. Management of CSR will benefit CWTD in perpetuity if deer are translocated as proposed.

**CWTD18180002-52**

Translocating deer to CSR does not foreclose the option to restore those lands for fish habitat since that option was already considered, determined to be cost prohibitive, and abandoned for the foreseeable future. Opportunities for fish habitat restoration on lands surrounding CSR are not foreclosed because the presence of this listed species on those lands does not preclude such development as described in the responses to CWTD18180002-03, CWTD18180002-04, and CWTD18180002-07.

**CWTD18180002-53**

There is no requirement under ESA for land acquisition. Land acquisition is a tool available for species recovery; it is not a requirement.

**CWTD18180002-54**

No “offers of remuneration for property use” or “agreements to protect private property rights on Deer Island” have been proposed as part of the Proposed Action because the translocation of CWTD to CSR would not prevent adjacent landowners from continuing with their current land uses or from changing those uses in the future as described in responses to CWTD18180002-03, CWTD18180002-04, and CWTD18180002-07.

**CWTD18180002-55**

See responses to CWTD18180002-03, CWTD18180002-04, and CWTD18180002-07.

**CWTD18180002-56**

The comment here does not accurately list the comments raised during the scoping process. As discussed in the responses above and in the EA, the EA addresses the comments raised by the public during scoping (as listed in Section 1.4.1) and from review of the draft EA (Appendix A).

## Deer Island Drainage Improvement Company

Columbian White Tailed Deer Translocation Project DOE/EA 2088

Columbia County, Oregon

As the current president of the Deer Island Drainage Improvement Company (DIDICo) or (Company) I have some concerns I would like addressed regarding the proposal to translocate Columbian White Tailed Deer (CWTD) to the properties within the DIDICo boundaries. The Columbia Stock Ranch (CSR) that is owned by the Columbia Land Trust (CLT) and is a member of the DIDICo along with CSR lands identified as the translocation site are within the levee boundaries of the DIDICo.

The board of Directors of the DIDICo has not had an opportunity to meet or conduct a meeting of members and therefore is unable to take an official position on the proposed project. These concerns are from me as acting president of the Company. These concerns are not regarding the necessity of this translocation project or the perceived outcome. These concerns are related directly to DIDICo operations.

The first concern I have, is the lack of attention in the draft environmental assessment (EA) that this translocation project would have on the DIDICo. As you have noted in your draft EA the CWTD thrives in the habitat provided by the protection of levee systems. You have also noted that the current levee system at Tenasillahe Island may encounter failure during catastrophic events. The levee system at Tenasillahe Island is under public ownership and control of one public entity. You also note that the proposed relocation habit at the CSR would provide a location for a subpopulation of CWTD that is safe from the waters of the Columbia River. The EA overlooks the fact that the CSR and its owner are not solely responsible for this habit. The CSR owned by the CLT are members of a Drainage Improvement Company with multiple other members who provide financial support to maintain these levees and the drainage systems associated with them. The way the drainage system was designed, it would be nearly impossible for any one member to be isolated by either function or risk. Though the CLT serves as the translocation property and habitat, the land and its protection are not of isolation within this system. The protection these deer will receive will only be a fraction the financial burden of the CLT, this financial burden as an entirety will continue to be that of all current members.

CWTD18180003-01

The second and greatest concern I have is the current management of water levels within the DIDICo. As you have noted in your EA; the properties within our boundaries consist mostly of agricultural pasture lands intermixed with wetlands and heavily treed areas. There are very few homes or farm land or industry within our boundaries. This allows the Company to manage the water levels within our boundaries differently than some levee districts where the CWTD currently reside. Comparing the lands within the DIDICo to those of others is setting a false pretense. DIDICo does not have a standard elevation to which we hold water levels. The Company relies on most of our dewatering capabilities to be done through gravity tide gates. The Company pumps are very rarely turned on before the water reaches a base elevation of 12' NAVD 88. Even then it is taken on a case by case basis. It is not uncommon for the pumps to never run in a given year. The result of this is very dike heavy flooding in low lands and frequent inundation of fields especially in the spring during the Columbia River's annual freshet. The only means to lower the water levels within our Company during the times the Columbia River is running high is to use the Company pumps. The member's realize that using these pumps to effect the water levels comes at a large financial cost to them and therefore are

CWTD18180003-02

accustomed to these natural cycles and have learned to accept the high water. The levee districts mentioned in your EA as currently having a population of CWTD, aside from Tenasillahe Island, have a much larger housing density along with heavy industry and active farming operations. These districts must maintain a much lower water inundation level than the DIDICo. As I mentioned earlier the DIDICo will not turn on our pumps before the water reaches a base elevation of 12' NAVD88 as a point of reference, Sauvie Island never allows their water levels to rise above 6' NAVD 88; Scappoose, OR and Consolidated Diking Improvement District #2 (Woodland, WA) are very much the same. Consolidated Diking Improvement District #1 (Longview, WA) around the industrial areas by the Columbia River have a pump "on" scenario of 1-2' NAVD 88. I was unable to determine the base elevation for Puget Island Drainage, but would assume it is close to those mentioned previously. These levee districts utilize large pumping capacities to maintain these levels at a great financial cost. They also have the ability to spread these costs out over many different land owners and large industry with the financial capability to absorb these costs.

CWTD18180003-03

As you have noted in your EA, the former Tide Creek channel that flows through the CSR serves as the main gravity drainage point for the properties on the West side of the Deer Island Slough. What you don't note is that the north end of the Deer Island Slough immediately east of the CSR serves as the main gravity drainage point for the rest of the properties. This location also serves as the water collection point for the Company pumps. This makes the Columbia Stock Ranch properties where the deer are proposed to be introduced the lowest elevation and wettest land within our levee system and most susceptible to inundation when water levels are allowed to rise. I am concerned that these water levels would not be tolerable to the CWTD as this annual flooding lowers the amount of available dry land within our boundaries during the spring fawning season, resulting in the potential for conflict between CWTD and the current management practices.

CWTD18180003-04

It is my belief that once the CWTD (an endangered species) are located within our boundaries, any and all entities that feel a need to monitor these animals witness the management practices of the DIDICo in regards to water levels, it will be judged that those practices are uncondusive to the life cycle of the CWTD. It is also my belief that these practices could be legally challenged by any entity, not just current members, under the Federal Endangered Species Act. A possible scenario would be to force the DIDICo to maintain a level of water inundation similar to the levee districts where the CWTD currently inhabit. The only way to achieve this would be to pump more water out of the levee system. These pumping cots would place a very large financial burden on the all the members of the DIDICo, not just the CLT. Please address the heavy financial burden that could be placed on all the members of the DIDICo for forced changes in levee operations due to the proposed translocation.

CWTD18180003-05

I thank you for your attention to this matter.

Sincerely;

Chase Christensen

President

Deer Island Drainage Improvement Company

## **Responses to Deer Island Drainage Improvement Company comments**

Thank you for your comments. Responses to your specific comments are addressed below.

### **CWTD18180003-01**

The Draft EA does not describe the Columbia Stock Ranch as “safe from the waters of the Columbia River”. The EA (Section 3.2.3) acknowledges the site as being a “flood-protected area” by dikes and pumps and tide gates.

This comment states that the “EA overlooks the fact that the CSR and its owner are not solely responsible for this habit [sic]”. It is understood that the Columbia Land Trust is a member of the diking district and that no member is isolated. The suitability of CSR as a translocation site was determined considering CSR’s existing condition (as a flood-protected area) under the existing dewatering practices, and under the existing arrangements with the diking district. The success of the proposed CWTD translocations is not dependent on any changes to levees, pumping practices, or maintenance schedules (e.g. dikes, levees, pumps, tide gates, emergency or disaster planning etc.) nor are any such changes proposed.

The comment states the “The protection these deer will receive will only be a fraction [sic] the financial burden of the CLT, this financial burden as an entirety will continue to be that of all current members.” The translocation of CWTD to CSR and thus onto drained lands managed collectively by diking district members, requires no additional protections (or financial burden) than has been provided to CSR (in agreement with the members of the diking district) in the past decades.

For example, in at least a decade, JBH Refuge has not requested Wahkiakum County Diking District #4 to pump or pay for pumping, even during extreme high water events. In addition, both the Army Corps of Engineers and the Refuge have assisted the district by replacing tide gates. The tide gates allow for better drainage for deer habitat as well as improved passage for fish. The tide gates are also a mutual benefit to deer, fish and to all district members. The Service, BPA & CLT would welcome coordination with the DIDICo and if the need should arise, mutually cooperate in the future on management actions to benefit CWTD on CSR.

### **CWTD18180003-02**

Management of water levels within the CSR property is not discussed in the EA since no changes in water level management would be expected or proposed. As described in response to CWTD18180003-01, above, the existing condition of CSR, and the water-level management practices that maintain it, is acceptable. This includes its reliance on tide gates, the infrequent pumping, the maintenance of water levels generally below a base elevation of 12’ NAVD 88, and thus frequent inundation of fields (especially in the spring). It has been, and continues to be, acceptable practice for cattle grazing, and is determined to be suitable for CWTD.

The EA makes no comparison between lands under DIDICo drainage practices and those of others, and is therefore not “setting a false pretense” as stated in this comment.

### **CWTD18180003-03**

The EA does not mention other levee districts and does not compare between lands under DIDICo

drainage practices to those of other diking districts. Such a comparison is not needed because the Proposed Action does not include, nor foresee, changes to current practices concerning management of water levels.

JBH Refuge contains a large subpopulation of CWTD and is within the Wahkiakum County Diking District. This district does not have a large housing density and does not maintain a lower water inundation level; yet the deer subpopulation is stable. It also should be noted that the districts mentioned in the comment have a large housing density as well as CWTD and are not maintaining the lower water levels for CWTD. They are maintaining them for people and the deer are also benefitting.

#### **CWTD18180003-04**

This comment mentions a concern that water levels on CSR would not be tolerable to CWTD, that annual flooding would lower the amount of available dry land during the spring fawning season, and that such water levels would result in the potential for conflict between CWTD and pumping practices. The high water on the property occurs in the spring, and not during the summer fawning season, which peaks in mid- to late June. The existing condition of habitat at CSR, including high water conditions during winter and spring, is still suitable for translocating CWTD and establishing a new subpopulation in this area.

#### **CWTD18180003-05**

This comment states that a third party may successfully challenge the management practices of DIDIC as being in violation of the ESA and then imposing a heavy financial burden to be borne by private parties. This scenario is not a known effect, nor one that is reasonably foreseeable.

For this scenario to occur, a violation would need to occur under section 9 of the ESA, which makes it unlawful for any person, including private and public entities, to “take” individuals of an endangered animal species. The term “take” under the ESA means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The term “harm”, mentioned as part of the definition of “take”, is further defined by regulation to include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, rearing, migrating, feeding, or sheltering. These prohibitions also apply, by regulation, to threatened species as well, unless a 4(d) rule under the ESA exists<sup>10</sup>.

The existing water management practices at CSR would not be considered take under Section 9 of the ESA because the existing condition of habitat at CSR under the current water management practices is suitable habitat for CWTD to perform essential behaviors. Since maintaining those practices is not a violation of the ESA, the litigation scenario described is considered unlikely to occur.

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<sup>10</sup> A 4(d) rule narrows the scope of prohibitions as being only those necessary and advisable for conservation of the species.

**Marion Christensen, Deer Island Stock Ranch**

Columbia White-Tailed Deer Translocation Project

It does not make sense to relocate the CWTD to the CSR property. The numbers, the acreage, existence of native elk and coyotes, and infringement on surrounding private properties and their owner rights certainly outweighs the benefits of the translocation of the CWTD for the government agencies involved. Please see following:

CWTD18180004-01

1. CWTD studies said 30 to 35 deer per square mile is ideal. 40 to 54 deer in a square mile is over-population. There is 640 acres in a square mile. Only 460 acre or 72% of a square mile of CSR are suitable to CWTD. The remaining land of CSR is across Hwy 30, is fir timberland, and not suitable habitat for CWTD. Using those number, only 21-25 CWTD could be supported on the limited amount of acreage. Translocating 35 to 50 deer which would immediately over populate the CLT property.
2. USFWS knows the CWTD will not remain on the CSR land, which has no natural borders except for the Columbia River. The intent of the translocation is clear- the use surrounding private land to support USFWS and BPA's mandates.
3. The major landowners have already told the government that they do not want these threatened species, CWTD, on their land. The endangered species laws would affect their property rights and use of land.
4. USFWS knows that studies have shown elk will push out deer. There are two large (30 to 70 head) elk herds that occupy the Deer Island Dike District area lands. They calve here regularly and have been for years. CSR lands also play host to these herds.
5. The service knows that there are many coyotes that populate these lowlands. Predator control on the small amount of acreage of CSR probably will have little impact on the overall population that exist.

CWTD18180004-02

CWTD18180004-03

CWTD18180004-04

CWTD18180004-05

CWTD18180004-06

I have no problem with the government doing what they want with CLT land as long as it doesn't affect other landowners. But the present proposal will have a direct and negative affect on surrounding property owners as well as on the CWTD. The only reasonable thing would be to deer fence the entire property to contain the CRWT within CSR. This would protect the deer from elk, coyotes, and the private lands that the government doesn't own.

CWTD18180004-07

CWTD18180004-08

Please address in the final version of the EA how the service will deal with the following issues; lack of acreage on CLT land to support the proposed CWTD translocation and future growing herd, the potential movement of the deer to neighboring lands and infringement on property rights due to the presence of an endangered species and how the service will deal with the elk/deer interface and predator control for the survival of the deer in the greater area.

CWTD18180004-09

Sincerely, Marion Christensen, Deer Island Stock Ranch

## **Responses to Marion Christensen, Deer Island Stock Ranch comments**

Thank you for your comments. Responses to your specific comments are addressed below.

### **CWTD18180004-01**

Thank you for your comment.

### **CWTD18180004-02**

Deer densities per square mile will always be a function of the quality of habitat available to support those deer. The figure of 30 to 35 per square mile may be accurate under certain circumstances; however, those numbers are not universally applicable. Habitat quality and other limiting factors for CWTD are variable over time and space. Some habitat areas may support higher densities, some lower; and each will change over time. The translocation of 35 to 50 of deer is proposed in the draft EA with the understanding that there would be mortality and dispersal of deer and that the ultimate number of deer occupying CSR would likely be lower than the 50 initially translocated, but the exact number would be unknown. Also see CWTD18180002-02

### **CWTD18180004-03**

The EA acknowledges that adjacent lands with suitable habitat would likely also become occupied by CWTD that would disperse from CSR (EA Sections 2.1 and 3.2.5.1); and that CWTD would periodically disperse to genetically interact with other subpopulations (EA Sections 3.1.1.2 and 3.1.5.1.) See responses to CWTD18180002- 03, 04, 07, 33, 34, 35, and 36.

### **CWTD18180004-04**

Private landowners are not required to change their land use practices if a listed species takes up occupancy, and BPA and the Service do not foresee a situation where landowners seeking to utilize their property would encounter additional restrictions due to the presence of federally-listed deer. Current land management in areas surrounding CSR are essentially the same as those surrounding other CWTD translocation sites in the Lower Columbia River basin and are not known to create such conflicts. As disclosed in Section 3.2.6.1.3, the conflicts that have arisen are those relating to CWTD eating plants from gardens, agricultural crops, and nurseries; and such conflicts have been effectively resolved without land use changes.

These potential effects and provisions were discussed in Sections 3.2.5 of the draft EA. See CWTD18180002-03 & 34.

### **CWTD18180004-05**

The EA acknowledges that in habitat competition with elk, CWTD would likely be at a disadvantage, especially if the elk population was large (EA Section 3.1.5). Such competition, however, would not be so complete as to preclude translocated CWTD occupancy from CSR for reasons discussed in Section 3.1.5 of the EA; and CSR provides adequate habitat to support CWTD and thus competition with elk does not add a cumulative effect that would render the translocation ineffective. See response to CWTD18180002-38

### **CWTD18180004-06**

The EA proposes coyote control on CSR before translocation and during the first fawning period to improve fawn survival and improve the probability of subpopulation establishment (EA at Section 2.1). Coyote control would also be applied on CSR as needed if fawn recruitment is low (EA at

Section 3.1.5.1). There is no proposal for coyote control actions on lands surrounding CSR.

Coyote control for CWTD in the Lower Columbia River has had little effect on long-term coyote populations (EA at Section 3.1.5.1), so targeted control when necessary during fawning seasons on properties managed for CWTD is the strategy proposed.

See response to CWTD18180002-41.

**CWTD18180004-07**

The effects of CWTD dispersal on land uses on properties surrounding CSR are adequately assessed in the EA in Section 3.2.6.1.3. The discussion there differs from the opinions expressed in this and other comment letters, but the EA discusses that surrounding land uses would not be negatively impacted.

See response to CWTD18180004-04 and responses to CWTD18180002- 03, 04, 07, 33, 34, 35, and 36.

**CWTD18180004-08**

A deer-proof fence surrounding CSR would not protect deer from coyotes or elk. Therefore, it was not considered as a reasonable action. Similarly, private landowners would not need a deer-proof fence to protect their rights to use their private property as discussed in responses to comments CWTD18180004-04 and CWTD18180004-07, above. See responses to CWTD18180002- 03, 04, 07, 33, 34, 35, and 36.

**CWTD18180004-09**

The EA currently addresses the concerns for land uses on adjacent properties in Section 3.2.6.1.3, CWTD competition with elk in Section 3.1.5, and the need for coyote control in Section 3.1.5.1, and these are further discussed in the responses to the comments above. See responses to CWTD18180002- 03, 04, 07, 33, 34, 35, and 36.

Agnes Marie Petersen

***RESPONSES AND COMMENTS***  
***TO THE***  
***Proposed and Draft***  
**Environmental Assessment**

**Columbia White-tailed Deer Translocation Project (DOE/EA-2088)**

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**Columbia County, Oregon**

**FOR THE**

**COLUMBIA STOCK RANCH SECTION 536**

**Noticed: None Given to Petersen**

**Comments due: November 24, 2018**

**From:**

**Estate of John Allan Petersen**

**by Agnes Marie Petersen,**

**Personal Representative**

**33625 Tide Creek Road**

**Deer Island, Oregon 97054**

**Phone: 503. 397.3872**

**RESPECTING OUR HERITAGE**

By: Agnes Marie Petersen Personal  
Representative of  
John Allan Petersen

Map of the Project Area showing boundaries of Columbia River  
Stock Ranch

For the previous Project for Fish Enhancement  
Note the location of US Highway 30 and the  
and close proximity to John A. Petersen property shown on the next  
page and Map

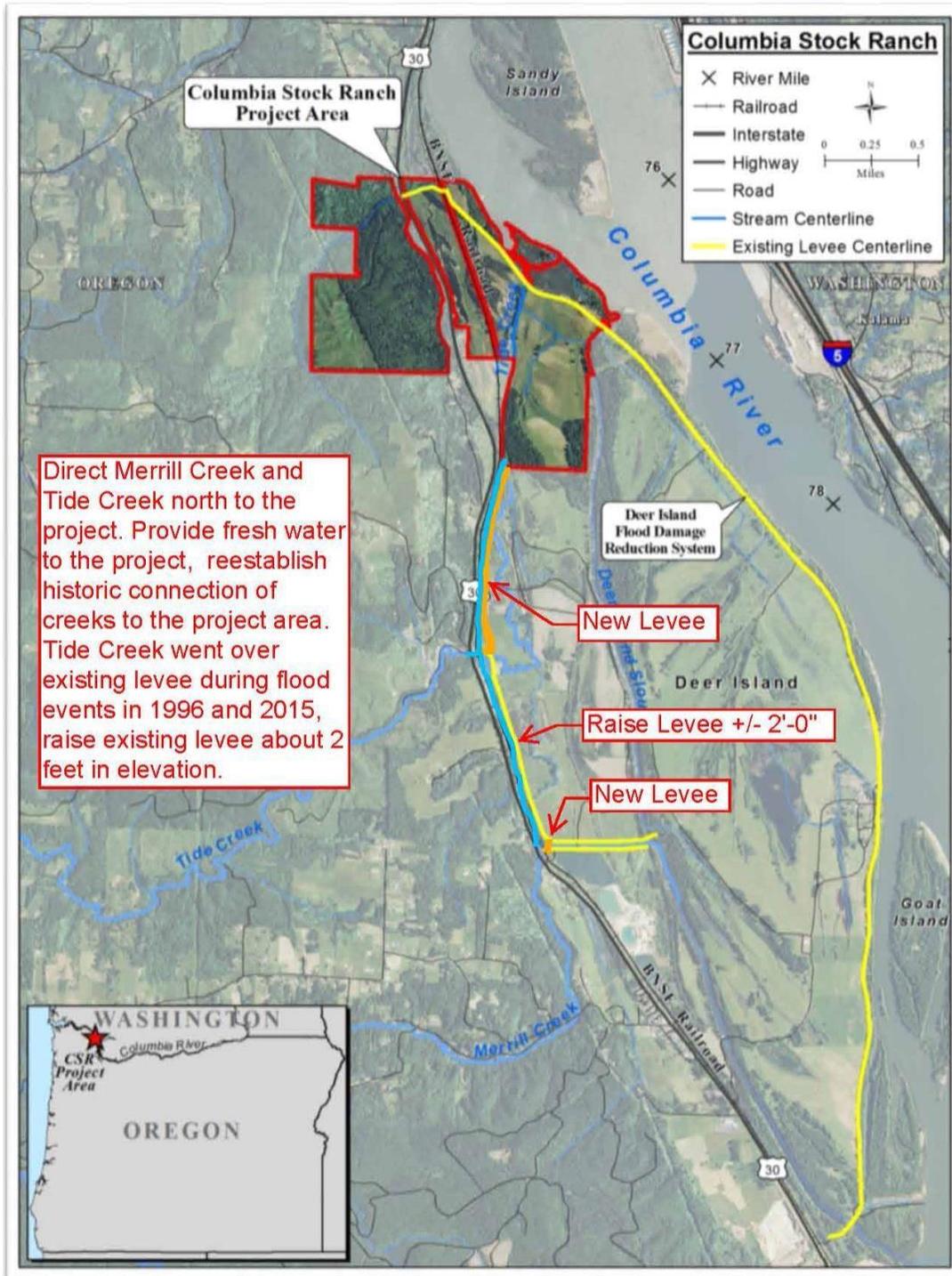
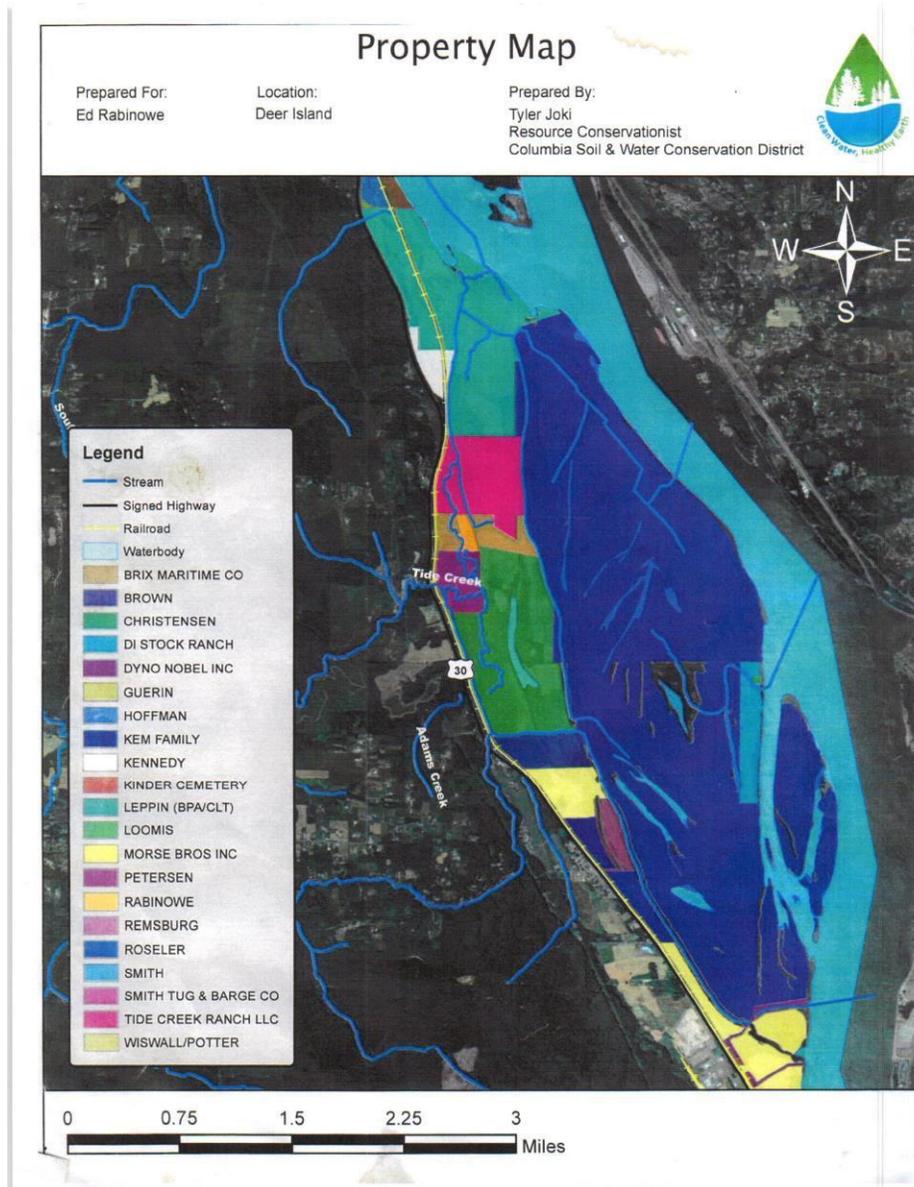


Figure 1: Deer Island and the CSR project site

John A. Petersen property and close private properties near this project



**The John Allan Petersen Background and property:**

His property is shown in purple on this Map, known as TAX Lot 6N1W31-00-0300. Since 1974 our family has owned and operated an Oregon Corporation known as Tide Creek Rock, Inc. This property has been leased by or owned by John A. Petersen since 1974. He also owns another approximate 130 acres on the other side of US Highway 30.

There he had conducted a small surface mining operation which furnished crushed and pit run rock to customers. The rock pit is upstream alongside Tide Creek. John A. Petersen worked at this operation nearly every day since 1974 until the date of his death, May 29, 2018.

John was very familiar with the Columbia Stock Ranch, was a good friend of Arnold Leppin who was the former owner of the project property and was a member of The Deer Island Drainage District Company. He regularly attended annual meetings of the district and believed before his death that the proposed Draft proposal falls short of what it is purportedly for in many respects.

CWTD18180006-01

The quarry site is not located on the map but is upstream on Tide Creek. In November, 2017 John leased the property where the rock pit is located to Tide Creek Aggregates L. L. C. which is now mining on the site where the previous quarry operation was active. So far as is known to us, no notice was given to John A. Petersen, nor his Estate, nor the company of which he was the manager (Tide Creek Rock, Inc) nor Tide Creek Aggregates (the present operator) of the proposal.

CWTD18180006-02

The location of the Draft proposal constantly refers to the project as “on Deer Island”. None of the property involved in the proposal is “on Deer Island”. It is near the community of Deer Island and more than 400 acres of it are within the diking district of the Deer Island Drainage Improvement Company, also known as the Deer Island Diking District.

CWTD18180006-03

Before his death Mr. Petersen was aware that some such project as this might be in the works but he heard it through the local gossip and believed it is a project which is likely to fail and will adversely impact his property rights and those of his neighbors. In addition, it will be of no benefit to the white-tailed deer. John A. Petersen and the author live/ lived just up the hill from this project and can tell you the elk and black tailed deer are numerous along with being overrun by coyotes and cougars.

CWTD18180006-04

John would ask:

1. Why are we doing this?
2. Why does BPA ignore the historical significance of the site: and put 50 deer there instead of maintaining the history of the site and its remaining heritage:
  - a. For Prior Human activities at the site which contains historic buildings, and
  - b. For the history of the railroad at the and the landing for both river and railroad traffic crossing the Columbia River
3. Will it truly benefit the deer?
4. What would the Deer think of this plan? Let us speak for them.
5. Why does BPA ignore the property rights of the others who have owned and farmed the lands closely adjacent to the proposed project in such a cavalier way?

CWTD18180006-05

#### RESPECTING OUR HERITAGE

By: John Allan Petersen Estate through Agnes Marie Petersen, Personal Representative.

## 1. Why are we doing this?

A. According to an article in the *Columbian* <https://www.columbian.com/news/sports/preps/>

There are about 900 Columbian white-tailed deer around the Lower Columbia River. That's a 10-year high, and about double the historic low point when the species was listed as endangered, said Paul Meyers, a wildlife biologist at the Julia Butler Hansen Refuge.

The population has seen sudden jumps and crashes in the past, which isn't unusual for many species, including deer, Meyers said. The recent gains have been more gradual, he said, and that's generally a good thing.

"This population increase looks a lot more sustainable than the last one," Meyers said.

The Julia Butler Hansen Refuge, near Cathlamet, was established largely as a haven for Columbian white-tailed deer. More recently, the Ridgefield National Wildlife Refuge and surrounding area has become home to dozens of the animals. Most came during a three-year relocation project that moved the deer from the Julia Butler Hansen Refuge, where habitat was in danger of flooding due to a dike failure. That issue has since been fixed, Meyers said. There are **Many factors to consider**

The deer at the Ridgefield refuge don't always stay within its boundaries, said refuge biologist Alex Chmielewski. Some wander into private land, or even swim across the Columbia River to Sauvie Island, he said. The number of fawns born in the area has more than made up for losses due to mortality, Chmielewski said. "So far we've been successful, and I'm hopeful we'll be able to maintain a secure population here into the future," Chmielewski said. The factors involved in a down-listing process include threatened habitat range, disease or predation, natural or human activities affecting its existence and other considerations, according to Fish and Wildlife. Changing the white-tailed deer's status from endangered to threatened would change the rules on interacting with them, Chmielewski said. If a deer caused agricultural damage, for example, a private landowner would have more options to haze or relocate the animal, he said.

This article clearly sets out the problems with the project proposal, including, but not limited to: a) They do not stay within the human-established boundaries, and b) they trespass upon private lands, but ignores other factors, such as: c) competition for food with other species already there (elk and black-tailed deer, d) predators which will be glad to eat the deer, e) the actual range that such deer are known to travel, f) the dangers of death by being hit by automobile, truck and railroad traffic.

CWTD18180006-06

**B.** The Oregon Department of Fish and Wildlife web site says they are not endangered. <https://www.fws.gov/oregonfwo/articles.cfm?id=149489413>

CWTD18180006-07

### Historical Status and Current Trends

The Columbian white-tailed deer is the western-most subspecies of white-tailed deer which occurs throughout North America. Early records indicate that Columbian white-tailed deer

once quite numerous over its historic range, from the western slopes of the Cascade Mountains to the ocean and from Puget Sound in Washington southward to the Umpqua River Basin in southern Oregon. This subspecies of white-tailed deer became endangered throughout its range due to habitat modification by human activities, such as farming and logging, as well as commercial and residential development. Overhunting and poaching also contributed to the decline. The remaining Columbian white-tailed deer occur in two separate populations. The Lower Columbia River population is found in Wahkiakum and Cowlitz Counties, Washington, and Clatsop and Columbia Counties, Oregon. The Douglas County population is found in the Umpqua River Basin, Douglas County, Oregon. When the Columbian white-tailed deer was listed, the number of deer remaining was estimated to be less than 1,000 individuals. Under the protection afforded by the Endangered Species Act, the Douglas County population has increased to over 5,000 animals. The Lower Columbia River population suffered heavy losses due to extensive flooding of its habitat in 1996; however, it is

CWTD18180006-08

C. National Geographic has a summary description of White-tailed deer and their populations and tendencies. According to National Geographic, “In the wild, white-tails, particularly the t outrun predators, sprinting up to 30 miles per hour and leaping as high as 10 feet and as far as 30 feet in a single bound. Although previously depleted by unrestricted hunting in the United States, strict game-management measures have helped restore the white-tailed deer population.” White-tailed deer, the smallest members of the North American deer family, are found from southern Canada to South America. In the heat of summer they typically inhabit fields and meadows using clumps of broad-leaved and coniferous forests for shade. During the winter they generally keep to forests, preferring coniferous stands that provide shelter from the harsh elements. Although previously depleted by unrestricted hunting in the United States, strict game-management measures have helped restore the white-tailed deer population.” <https://www.nationalgeographic.com/animals/mammals/w/white-tailed-deer/>

CWTD18180006-09

D. Biokids is on the University of Michigan site: which is found at: [http://www.biokids.umich.edu/critters/Odocoileus\\_virginianus/](http://www.biokids.umich.edu/critters/Odocoileus_virginianus/)

CWTD18180006-10

What eats them and how do they avoid being eaten?

White-tailed deer have good eyesight and acute hearing, but depend mainly on their sense of smell to detect danger and their ability to run and bound quickly through dense vegetation to escape danger. White-tailed deer are preyed on by large predators such as humans, wolves, mountain lions, bears, jaguars, and coyotes.

#### Known Predators

- humans (*Homo sapiens*)
- gray wolves (*Canis lupus*)
- mountain lions (*Puma concolor*)
- coyotes (*Canis latrans*)
- bears (*Ursidae*)
- jaguars (*Panthera onca*)
-

What roles do they have in the ecosystem?

White-tailed deer can greatly influence the composition of plant communities through their grazing, especially where they are abundant. **In severe winters white-tailed deer can be responsible for girdling and killing large numbers of trees. White-tailed deer are also important prey animals for a number of large predators.**

**Do they cause problems?**

**White-tailed deer will eat and destroy crops, vegetable gardens and fruit trees if they come into contact with them. When their numbers become too high, white-tailed deer can cause serious damage to forest vegetation because there are so many deer eating the plants. They are also involved in accidents with cars, often resulting in serious injury to the human occupants of the vehicles.**

How do they interact with us?

White-tailed deer are commonly hunted for meat and sport. Early settlers and Native Americans also used deer hides to make buckskin leather. White-tailed heads are also commonly mounted on the walls of lodges and other places of outdoor recreation.

- Ways that people benefit from these animals:

- food

Are they endangered?

White-tailed deer are common throughout their habitats. Exact counts of their numbers have not been made, but there are probably somewhere between 8 and 15 million on this continent. Although they were in danger of extinction at the turn of the century due to overhunting, they have recently reached their highest numbers.

In talking to persons who live in the Roseburg, Oregon area we were told that the White-tailed Deer in that area are in constant conflict with the vehicles that use a much less-traveled road than US 30, and it is common to have as many as 2 wrecks with deer every day. The Roseburg folks say that these deer do not seem to appreciate the danger of motor vehicles and spend enough time on the highway to be a danger to themselves and everyone traveling on it.

CWTD18180006-11

## II. IGNORING PRESERVATION OF HISTORY

Why does BPA ignore the historical significance of the site:  
and wants to transfer 50 deer there  
instead of maintaining the history of the site and its remaining heritage:

- A. For Prior Human activities at the site which contains historic buildings, and
- B. For the history of the railroad at the and the landing for both river and railroad traffic crossing the Columbia River

This amounts to history destruction rather than helping the deer.

CWTD18180006-12

## The Columbia Stock Ranch – A Place of History

The Leppin property is an historical site that should be preserved. The buildings include part of the old hotel that served rail passengers in the 1880s and 1890s. The Barns and outbuildings are fine historical examples for the years from 1890 to the 1960s. The organization, Restore Oregon, is trying to save such records of Oregon history from destruction. This present project, as planned, is destructive and negative to this community and gives the impression that the preservation of history is not a priority for some federal agencies.



Picture of Large Barn, which dates back before the 1920s.

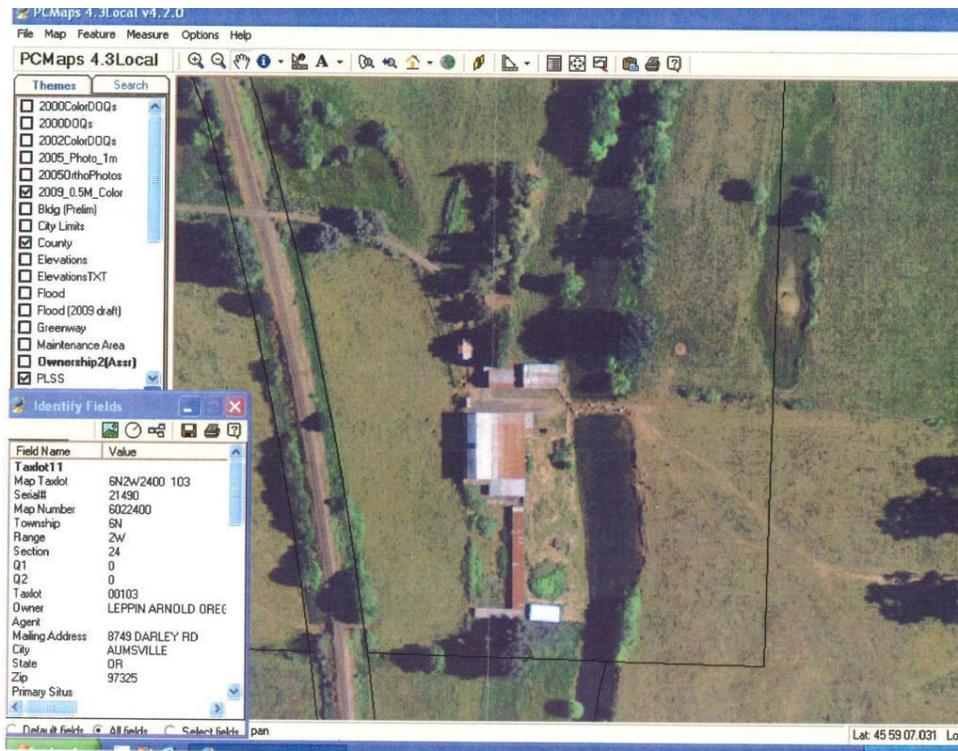
In addition to all the buildings which are set forth herein in detail, the proposal potentially ruins some evidence of the railroad using this area to cross the Columbia river. Why do this? There is no valid reason. At pages 42-43 of the Draft Environment Assessment for the Columbia Stock Ranch Section 536 study for that previous project studies were made and therein is admission of the many historical remains on the site. A copy of that Responses and Comments to that draft will be attached as **Exhibit A** to this document.

“Preliminary findings suggest that at least four cultural resources are located within the project area which may be considered potentially eligible for inclusion on the NRHP. These include the existing levee, which was constructed in 1942; the Peacher DLC farmstead, a farm complex of early-20th Century buildings and structures located immediately west of Tide Creek in the west-central portion of the project area; the John H. Jones DLC, a subsurface assemblage of early-20th Century homestead remains and debris located near the north-central portion of the project area; and an early-20th Century railroad grade stretching north-south along the project area's westside

boundary (the Portland & Western Railroad). While each of the four historic site areas meet the 50-year-old 'rule of thumb' for eligibility to the NRHP, all require further evaluation and assessment to determine whether any retain significant historic qualities and meet any of the necessary criteria for NRHP eligibility. Those evaluations are expected to be completed by June 2016. An undetermined number of additional historic features and structures may also be present within the project area and require further assessment. Those assessments and evaluations are expected to be completed by June 2016.”

Pages 42- 43

Here is a view from the air of the Leppin buildings with a clear view of the barns and outbuildings. The barns on the property date from at least the early 1900s . Photo located in the Columbia County Assessor’s records of this property.





<u>I</u>	1	14	300	0312		1950	FEEDER BARN	6960
<u>I</u>	1	15	300	0312		1950	GP BUILDING	512
<u>I</u>	1	16	300	0312		1970	MACHINE SHED	2625
<u>I</u>	1	17	300	0312		1970	MACHINE SHED	1275
<u>I</u>	1	18	300	0312		1990	MACHINE SHED	800
<u>I</u>	1	19	300	0312		1920	GP BUILDING	512
<u>I</u>	1	20	300	0312		1920	MULTI-PURPOSE SHED	416

### Historic Barns

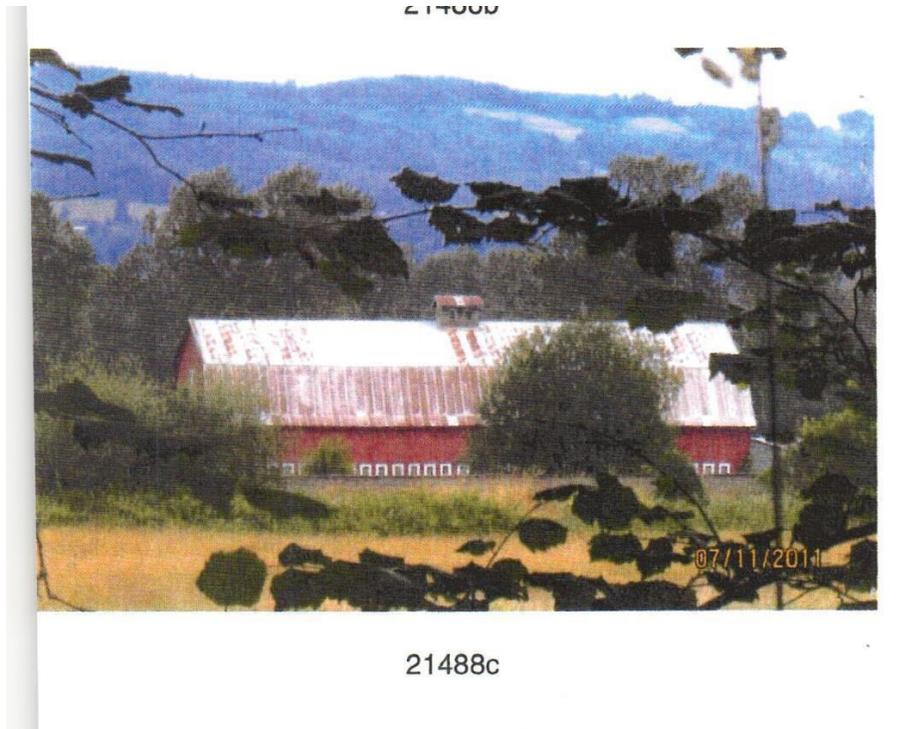
Restore Oregon says: “Agriculture has driven Oregon’s economy and shaped its history since before the 1840s. With an estimated 11,400 barns built prior to 1960, Oregon needs to identify and protect those rural buildings, structures, and landscapes that define its agricultural heritage.

The Restore Oregon board formed the Heritage Barn Task force in 2011 to lead its efforts in that field. They say:

**“ Barns are iconic, easily recognized structures that are common on Oregon farms and ranches. Barns are also utilitarian structures that are often outmoded on modern farms. Because they were built for very specific purposes, they are frequently difficult to repurpose in today’s agricultural operations.”**

Then Restore Oregon quotes:

*“Inside a barn is a whole universe, with its own time zone and climate and ecosystem, a shadowy world of swirling dust illuminated in tiger stripes by light shining through the cracks between the boards.” — Carolyn Jourdan, Heart in the Right Place.*



The National Park Service of Department of the Interior of the United States on their web site says: <https://www.nps.gov/tps/how-to-preserve/briefs/20-barns.htm>

**“From the days when Thomas Jefferson envisioned the new republic as a nation dependent on citizen farmers for its stability and its freedom, the family farm has been a vital image in the American consciousness.** As the main structures of farms, barns evoke a sense of tradition and security, of closeness to the land and community with the people who built them. “Historic barns are preserved for a number of reasons. Some are so well built that they remain useful even after a hundred years or more. Many others are intimately connected with the families who built them and the surrounding communities. Others reflect developments in agricultural science or regional building types.

The Columbia County Assessor’s records includes a photo from above and 2 maps of the buildings on the Leppin property dated August 1990 and replaced it in 2011.

In the file are also pictures of the massive barn they call #9 and what I believe to be #2, the Horse barn.

They indicate 17 buildings on the property and several of them are very old barns. #2 is the “Horse Barn”. #9 is the “Barn” and #11 the “Loafing Shed” which John A. Petersen previous said that he knew that Arnold Leppin added to Barn #9 while he owned and farmed the property.

Mr Petersen commented before about the waste. He loved the barns on the Leppin property. And he said: "As now proposed the project amounts to a massive waste of a great deal of money for very little benefit to the fish and creates major impacts to the community surrounding it, and to the integrity of the history of the American west and its development through railroads, travel and agriculture." The same applies to this except in the name of deer, rather than fish.

The previous project # 536 planned to destroy the structures, which they set forth as follows: "Residential buildings (houses, barn, out-buildings), cattle grates, and fences would be removed from the CSR project site as part of the initial construction activities. The area where the buildings are located would be used as a staging and stockpile area for the duration of construction." and the present project apparently just intends to let them fall down lack of maintenance.

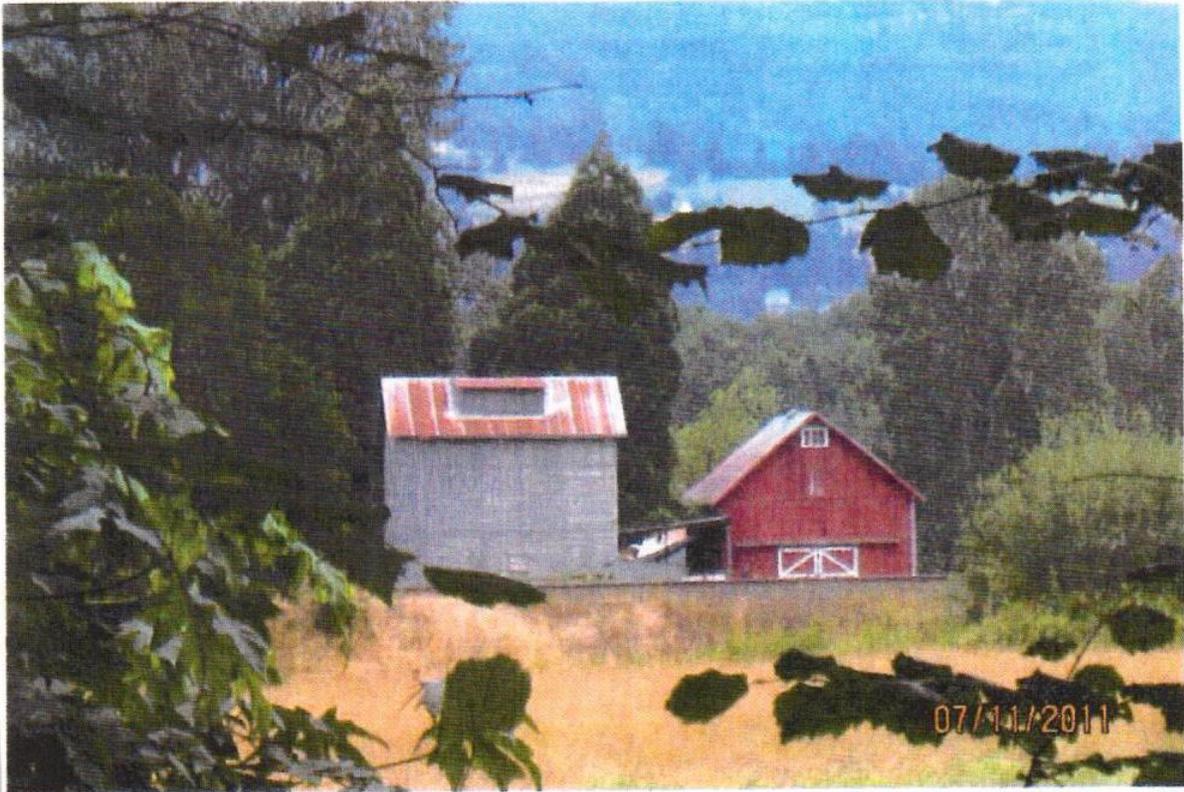
John A. Petersen in Exhibit A said :

"Barn # 9 makes the point about all the structures on the property. Based upon the photos included here from Columbia County's tax records and the Columbia Historical Museum I believe #9 Barn was in existence before 1920. I was on the property when I was a child in the 1940s. It was there then. It is massive, made of very large beams and is like a cathedral inside. Such proposed destruction is a waste of money, history, preservation of our heritage and should not be allowed. "

As the National Park Service says:

" Just as many farmers built their barns before they built their houses, so too many farm families look to their old barns as links with their past. Old barns, furthermore, are often community landmarks and make the past present. Such buildings embody ethnic traditions and local customs; they reflect changing farming practices and advances in building technology. In the imagination they represent a whole way of life."

Horse Barn # 2 is in this photo along with the Grainery From county assessor's records. They are additional classic farm buildings that should not be destroyed.



21488b

**John A Petersen also discussed the 2-story house on the property.**

### **The Two-Story House**

Note that the two-story house was built in 1890 or 1910, more than 105 years ago. Why should this all be destroyed. This was a full working ranch and upon it is the hotel which served the railroad passengers who traveled the railroad which ended on the Oregon side at Hunter's Landing. At one time the railroad ferries which hauled train passengers from Hunter's Landing (which was at the end of Sand Island and I believe was at the location of the Leppin property) from the Columbia River used this to dock, and the hotel housed passengers who travelled across the river. Such important historical places should not be destroyed and used for a "staging area" to shovel and push dirt around, including into the Columbia River. The original doors from the hotel were in the loft of one of the buildings and I believe they are still there.

These buildings are vital and important to understand the history of this community and a century of farming in the area. They were built before the turn of the century and in the 1920s, 1930s, 1940s, 1950s, 1960s, 1970s, and 1988 and 1990. Why should this visually vital and rich historical information be lost to our heritage and future generations? They all should be preserved. Once gone - gone

Homes in Columbia County, Oregon which are on the National Registry of Historic Places include the Caples house and the Cox House. The details about these are interesting since the Columbia Stock ranch main house is as old or older than the ones detailed from the National Registry as follows:

**Caples, Dr. Charles G. and Lucinda McBride, Farmstead**

(added 2005 - - #05001060)

Also known as **Caples House DAR Museum**

1925 First St. , Columbia City

Historic Significance: Person, Event  
 Historic Person: Caples, Dr. Charles G.  
 Significant Year: 1906, 1870  
 Area of Significance: Exploration/Settlement, Health/Medicine  
 Period of Significance: 1900-1924, 1875-1899, 1850-1874  
 Owner: **Private**  
 Historic Function: Agriculture/Subsistence, Domestic, Health Care  
 Historic Sub-function: Agricultural Outbuildings, Medical Business/Office, Secondary Structure, Single Dwelling  
 Current Function: Recreation And Culture  
 Current Sub-function: Museum

**Cox-Williams House** (added 1982 - - #82001501)

280 S. 1<sup>st</sup> St. , St. Helens

Historic Significance: Architecture/Engineering  
 Architect, builder, or engineer: George, Arthur  
 Architectural Style: Italianate, Shingle Style  
 Area of Significance: Architecture  
 Period of Significance: 1875-1899  
 Owner: **Private**  
 Historic Function: Domestic  
 Historic Sub-function: Multiple Dwelling, Single Dwelling  
 Current Function: Domestic

## History of the Railroad and its crossing of the Columbia River

### Another Historical Significance of the Site:

The “Leppin” Property where the Hunter’s Landing, also known historically as Enterprise Landing. Hunters was the railroad ferry site on the Oregon side of the Columbia River and was also the site of the first post office in the area called “Hunters”, which was established May 29, 1888.<sup>1</sup> Hunters was a location about two miles (3 km) south of present-day Goble, and was soon abandoned by the Northern Pacific Railroad in favor of a new ferry slip at Goble. There is no good record of when the move was made, but the Hunters post office was closed in October 1893, and Goble was platted in 1891. Hunter’s Landing was the end of the railroad in Oregon. The rest of the trip was taken by ferry to Kalama and then on to Tacoma.

According to Wikipedia the history of the railroad was:

The history of the area begins with the selection of Kalama, Washington, as the beginning point for the construction of the Pacific Division of the Northern Pacific Railroad in 1870. At least by 1879, there was a landing on the Oregon side of the Columbia River across from Kalama known as Enterprise Landing.<sup>4</sup> Reuben, which is a post office name assigned to the location when a post office was sought in 1890 and it was found that the name “Enterprise” was already taken. The physical location is given to be about a mile south of the present day Goble. Reuben was named for the brother of the first postmaster, Reuben R. Foster. Scheduled Rail service of the Northern Pacific Railway from Tacoma to Kalama began on January 5, 1874. It connected to regular riverboat traffic on the Columbia River. However the Northern Pacific Railroad was chartered to construct transcontinental railroad and telegraph lines between Lake Superior and Puget Sound and completing the connection required a Portland to Kalama route. In 1877, Oregon Senator John Mitchell sponsored legislation calling for the Northern Pacific to forfeit 7,000,000 acres (28,000 km<sup>2</sup>) of land grants unless they completed a line to Kalama “as far as practicable along the Oregon side of the Columbia River”. The bill didn’t pass congress, but on September 8, 1883, the Last spike was driven at Gold Creek, Montana to close the gap in the Rocky Mountain Division section of the Northern Pacific Railroad. A special train celebrating the opening of the transcontinental line arrived in Tacoma on September 13, 1883, which had traveled over the Portland-Hunters line. The Train Ferry Tacoma would go in service the following year.

Hunters, being the railroad ferry site, was also the site of the first post office in the area called "Hunters", which was established May 29, 1888. Hunters was a location about two miles (3 km) south of present-day Goble, and was soon abandoned by the Northern Pacific Railroad in favor of a new ferry slip at Goble. There is no good record of when the move was made, but the Hunters post office was closed to Reuben in October 1893 and Goble was platted in 1891.

Following is a copy of the Northern Pacific Railroad No 7A Time Schedule to take effect at 2:30 a.m. Sunday January 17, 1886 which shows the stops at Portland, Linnton, Holbrook, Scappoose, Warren, Milton, Columbia, Deer Island, **HUNTERS**, and Kalama.

This schedule lists Deer Island, Hunters and then Kalama as the stations along the way in January, 1886. This was once the location of a small community called Hunters and a

ferry terminal for the Northern Pacific Railroad. Hunters Station was No. 1926 on the line and the next station was Kalama Washington.

# NORTHERN PACIFIC RAILROAD.

**PACIFIC AND CASCADE DIVISIONS.**

## NO. 7A TIME SCHEDULE NO. 7A

To Take Effect at 2.30 O'clock A. M.,

SUNDAY, JANUARY 17, 1886.

For the government of Employees only. The Company reserves the right to vary therefrom at pleasure. Be positive that you have the current card, and destroy all previous numbers. Read carefully the Special Rules, and always have for reference a copy of the Transportation Rules.

T. F. OAKES,  
Vice-Pres't and Gen'l Manager.

J. M. BUCKLEY,  
Ass't General Manager.

PACIFIC DIVISION.

South Bound.

Pacific, or 120th Meridian Time One Hour Slower than Mountain, or 105th Meridian Time.

STATIONS.	MILES FROM PORTLAND.	CAPACITY OF SIDINGS IN CARS.	PASSENGER.		FREIGHT.	
			No. 2.	No. 16.	No. 2.	No. 16.
† Portland AR.		97	ar 2.30 pm	ar 5.25 pm		
7.7 Linton *	7.7	44	2.05	4.55		
5.2 Holbrook *	12.9					
6.4 Scappoose *	19.3	43	1.35	4.05		
5.1 Warren *	24.4	43	1.19	3.40		
3.4 Milton *	27.8					
3.2 † Columbia	31.0	42	1.00	3.11		
2.0 Deer Island *	33.0					
4.6 † Hunters	37.6	106	12.40 pm mtl	2.40		
2.6 † Kalama	40.2	150	11.55	lv { 1.25 mt } ar { 1.15		
4.5 Carrolls *	44.5					
3.5 Monticello *	48.0					
1.7 Wallaces *	49.7					
1.2 Cowlitz *	50.9	17	11.29	12.20 pm		
6.1 Stockport *	57.0					
2.7 Silver Lake	60.7	24	11.04	11.25		
7.3 Olequa	68.0	26	10.45 pass 16	lv } 10.45 2 pass ar } 10.35		
3.3 Sopelah *	71.3					
2.6 Mill Switch *	73.9	14	10.32	10.03		
2.9 † Winlock	76.8	30	10.25 mt 15	9.45 mt 15		
6.4 Napavine *	83.2	17	10.07	9.10		
4.7 Newaukum	87.9	33	9.55	8.46		
2.4 † Chehalis	90.3	36	9.50	8.33		
3.9 Centralia	94.2	26	9.40	8.12		
5.5 Skookum Chuck *	99.7	33	9.27	7.45		
1.4 Seato *	101.1	2	9.22	7.35		
4.9 † Tenino	106	25	lv { 9.10 ar { 9.00	lv { 7.10 ar { 7.00		
9.1 Rainier *	115.1					
4.5 Yelm Prairie	119.6	26	8.25	5.54		
6.2 Media *	125.8	15	8.10	5.25		
5.4 Hillhurst *	131.2					
5.1 Lakeview	136.3	26	7.45	4.84		
7.7 Pacific Ave.	144		7.20	3.55		
1.0 † Tacoma LV.	145.2	250	lv 7.10 am	lv 3.45 am		

Speed of all trains within yard limits must not exceed 6 miles per hour.  
 All trains on this card will carry passengers.  
 Engineers of all trains not on schedule must sound a long blast of the whistle before approaching curves, where the view is obstructed, to warn trackmen and others of the approaching train.  
 The Automatic Brakes and Safety Chais must in all cases be used on inclines at Columbia River transfer.  
 All trains will take their date from Portland and Tacoma.  
 All trains must register at Portland and Tacoma.

\* FLAG STATIONS.  
 OTIS SPRAGUE, Superintendent.

Specific concerns of the John A. Petersen Estate

1. Lack of written notice to affected persons: because of the lack of notice to the John A. Petersen estate, and to Tide Creek Rock, Inc. and to Agnes Marie Petersen and to Tide Creek Aggregates LLC, we ask that public hearings be

CWTD18180006-13

held on this project so the affected neighboring private properties and the general public can be heard on whether the project should go forward, and

2. Timing was such that it was not possible to put together a better response and comments.

CWTD18180006-14

3. The BPA should get together with other federal and state agencies interested in history preservation such as the US Parks department and Restore Oregon and work toward spending their money on saving history, not destroying it by either active or passive actions that lead to its destruction or degradation,

CWTD18180006-15

4. The Deer will have the opportunity to be crated up and hauled off to a location they do not know which is filled with other competing species, and alive with predators that will eat them unless they get hit on the highway or by a train, where they are not being protected by distance or fences or anything else in a place foreign to them.

CWTD18180006-16

5. The travelling public is put in danger on a highway that is a nightmare to travel during certain hours of the day, with additional wildlife that is unfamiliar with the area and not restricted from getting on the highway and hit.

CWTD18180006-17

6. The likelihood of trespassing animals and their impacts on private property has not been addressed.

CWTD18180006-18

**Conclusions:**

John A. Petersen knew Arnold Leppin well. He was a neighbor and friend. He regularly got rock products from Tide Creek Rock, Inc. while he was farming the ranch that is the subject of the Draft proposal. John did not believe that he nor his predecessors in title would like this proposal.

CWTD18180006-19

**1. The entire matter should be set for a series of public hearings in Columbia County, Oregon where taxing districts and concerned citizens can voice their comments about this proposal and resolutions can be developed for the good of all.**

CWTD18180006-20

**2. The notice requirements of the federal laws for such a project may not have been complied with as I found that the public certainly was not aware of the implications of this project, and notice was not given to the affected property owners by mail.**

CWTD18180006-21

**3. Many more need to be made aware, particularly the United States Parks and any organization that is interested in historical preservation.**

CWTD18180006-22

**4. Nothing in the project goes toward keeping the historical site of long time human habitation, buildings that are those that should be preserved, and it makes no allowance for keeping the history of the railroads in the northwest intact.**

CWTD18180006-23

**5. The concerns of the Company and the owners of land most closely associated with this property need to be carefully addressed.**

CWTD18180006-24

**6. A huge outlay of federal monies should not be spent in the name of relocating deer to a place where they will be competing for food, be likely trespassers upon private property, they will be subject to predation by many animals, and likely to get killed or kill travelers on the highway which is within the project property when the benefit likely is so small and the other damages created are so vast.**

CWTD18180006-25

**7. Reimbursement should be planned for future losses as a result of this planned Project.**

CWTD18180006-26

Respectfully submitted:

*/s/ Agnes Marie Petersen*

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**Agnes Marie Petersen Personal  
Representative for Estate of  
John Allan Peters**

## **Response to Agnes Marie Petersen comments**

Thank you for your comments. Many of the comments provided in this letter, above, appear as though they were initially provided in response to another, earlier action proposed for the CSR property that likely involved land uses, vegetation management, and other property management actions. This Proposed Action does not include any such actions, but simply the translocation of CWTD onto CSR. Such comments are outside the scope of the action being evaluated here, and the responses to them, below, are noted accordingly.

### **CWTD18180006-01**

Thank you for your comment.

### **CWTD18180006-02**

John A. Peterson is on the mailing list for this action and a scoping notice concerning this action was mailed to his address on August 23, 2018. Notice concerning the Draft EA was mailed to Mr. Peterson's address on October 23, 2018.

### **CWTD18180006-03**

The apparent inclusion of Deer Island in the "Project Area" in the EA text cited in this comment is an error stemming from a misunderstanding that the geography of Deer Island included CSR when in actuality it does not, but rather, ends at Deer Island Slough. Deer Island Slough does not bisect the Project Area as stated in the Draft EA, but rather separates the project area from Deer Island. The error has been corrected in the Final EA.

### **CWTD18180006-04**

The EA acknowledges the likelihood of CWTD dispersing onto suitable habitat on lands surrounding CSR and the reasonably foreseeable effects the presence of CWTD may have there. Adverse impacts to property rights is not one of the effects assessed because no such effect was deemed as reasonable given the known requirements of the ESA, the known behaviors of CWTD, the experience with past CWTD translocations, and the long history of private property owners with CWTD on their properties in the Lower Columbia River basin.

The EA likewise acknowledges the presence of elk, CBTD, and coyotes on the CSR property and discloses effects accordingly in Section 3.1.5. The effects of CWTD interaction with these species on CSR and surrounding lands was determined to be consistent with such interactions elsewhere in the Lower Columbia River basin and not adverse to a degree that would threaten the success of the proposed translocation.

### **CWTD18180006-05**

The answers to the questions listed in this comment are as follows:

1. The action is proposed for reasons discussed in Section 1.2 of the EA, "Purpose and Need".
2. The Service and BPA are not ignoring the historical significance of the site, but such a consideration is not necessary since there are no reasonably foreseeable effects of the translocation of CWTD on the historical values listed here. This comment is only relevant to actions that might alter those features and is thus not within the scope of this action.
3. Yes, this translocation would benefit the population of CWTD as discussed in Section 3.1.5.1 of the EA.

4. The EA describes the effects to individual CWTD as well as to the population of CWTD in the Lower Columbia River basin in Section 3.1.5.1 and in Section 3.4.1. The EA, however, does not speculate on what the deer might think, nor presume to speak for them.
5. The Service and BPA have discussed the potential impacts to land uses and property rights of landowners adjacent to CSR. The comment presumes an impact to property rights; however, given the known requirements of the ESA, the known behaviors of CWTD, the experience with past CWTD translocations, and the long history of private property owners with CWTD on their properties in the Lower Columbia River basin, the EA concludes that landowners could continue to use their properties. The reasonably foreseeable effects of CWTD on surrounding private lands are discussed in Section 3.2.6.1.3.

#### **CWTD18180006-06**

The comment here lists the dispersal of deer from CSR as a “problem”. Dispersal is described in these comments as CWTD not staying “within the human-established boundaries” and that they “trespass upon private lands”. Section 2.1 of the EA discloses the likelihood of deer dispersal from CSR and that success of the translocation is not dependent on deer staying on CSR. CWTD dispersal over time is also recognized in the EA as a desired outcome of the translocation as discussed in Sections 3.1.1.2 and 3.1.5.1. The idea of CWTD “trespass” on private lands is not discussed in the EA because the EA recognizes a transition in the deer population currently occupying private lands today from one that includes only CBTD to one that would include both CBTD and CWTD but at roughly the same deer densities. Since CBTD are not known to be considered unwanted trespassers on private properties around CSR today, the EA does not describe either species of deer as such when describing the expected future condition with both of them on those properties.

The comment here also states that the EA ignores competition with other species, predation, the travel distances of deer, and the impact of automobiles. The EA discloses all of these matters in Section 3.1.

#### **CWTD18180006-07**

This comment describes an “Oregon Department of Fish and Wildlife web site” article as stating that CWTD are not endangered. The citation shown in the comment, however, is from a U.S. Fish and Wildlife Service website that does state in the last sentence of its first paragraph that “the population has met the criteria [*sic*] for downlisting from endangered to threatened” under the ESA.

#### **CWTD18180006-08**

The text cited in this comment is from the website discussed under the response to CWTD18180006-07, above, and accurately describes the historical status and current trends of CWTD. The content here is consistent with that found in the EA at Sections 3.1.1.1 and 3.1.1.2.

#### **CWTD18180006-09**

The information cited in this comment and the text that follows concerns white-tailed deer in other parts of North America, but not CWTD. It is accurate, but not relevant to CWTD, and does not contradict any discussion of CWTD life history in the EA at Section 3.1.1.

#### **CWTD18180006-10**

As in the response above, the information cited in this comment and the text that follows concerns white-tailed deer in other parts of North America, but not CWTD. It is accurate, but not relevant to CWTD and does not contradict any discussion of CWTD life history in the EA at Section 3.1.1.

### **CWTD18180006-011**

The potential for CWTD to encounter moving vehicles to the detriment of both the deer and the driver is discussed in the EA at Section 3.1.5.1. Behavioral differences between CWTD and CBTD in relation to motor vehicles have not been observed and vehicle strikes are familiar to property owners along OR Highway 30. It also should be noted that the Roseburg population of CWTD were delisted in 2003 and the number of deer in that population far exceed the number of deer in the Columbia River DPS by roughly six-fold.

### **CWTD18180006-12**

The Service and BPA are not ignoring the historical significance of the site, but such a consideration is not necessary since there are no reasonably foreseeable effects of the translocation of CWTD on the historical values listed in the comment. This comment is only relevant to actions that might alter historical features and is thus not within the scope of this action.

The content in the comment letter from CWTD18180006-12 at the bottom of page 7 to the bottom of page 18 includes historical information on lands near CSR with no comments. This content appears as though it was initially provided in response to another, earlier, action proposed for the CSR property that likely involved land uses, vegetation management, or other property management actions. This Proposed Action does not include any such actions, but simply the translocation of CWTD onto CSR. The information provided on these pages is outside the scope of the action being evaluated here.

### **CWTD18180006-13**

John A. Peterson is on the mailing list for this action and a scoping notice concerning this action was mailed to his address on August 23, 2018. Notice concerning the Draft EA was mailed to Mr. Peterson's address on October 23, 2018.

### **CWTD18180006-14**

John A. Peterson is on the mailing list for this action and a scoping notice concerning a 30 day comment period on this action was mailed to his address on August 23, 2018. Notice concerning the Draft EA was mailed to Mr. Peterson's address on October 23, 2018 with the 30-day review period available up to November 23.

### **CWTD18180006-15**

There is no action in this proposal that would modify historical structures or compromise the preservation of the historical features described in this letter. The proposal to spend money on historical preservation rather than the translocation of CWTD is not responsive to the purpose and need for this action, and is thus outside the scope of this action.

### **CWTD18180006-16**

The comment's description of effects to the individual CWTD being translocated are largely consistent with the effects as described in Section 3.1.5.1.

### **CWTD18180006-17**

The potential for CWTD to encounter moving vehicles to the detriment of both the deer and the driver is discussed in the EA at Section 3.1.5.1. Behavioral differences between CWTD and CBTD in relation to motor vehicles have not been observed and vehicle strikes are familiar to property owners along OR Highway 30. See response to comment CWTD18180006-11.

**CWTD18180006-18**

The effects of translocated CWTD on lands uses at CSR and nearby properties are discussed in the EA at Section 3.2.6.1.

**CWTD18180006-19**

Thankyou for your comment.

**CWTD18180006-20**

An informational meeting was held January 16, 2019 at the Columbia PUD Community Room at 64001 Columbia River Highway, Deer Island, OR 97054.

**CWTD18180006-21**

A scoping notice concerning a 30 day comment period on this action was mailed to 49 local residents; 11 tribal contacts; federal, state, and county elected officials in Oregon and Washington; and 29 businesses and other organizations on August 23, 2018. Notice concerning the Draft EA was mailed to these same parties on October 23, 2018 with the 30-day review period available up to November 23. The notification requirements of the National Environmental Policy Act have been met. An informational meeting was held January 16, 2019.

**CWTD18180006-22**

Notification of this action was provided to 49 local residents; 11 tribal contacts; federal, state, and county elected officials in Oregon and Washington; and 29 businesses and other organizations. The National Park Service, Lewis and Clark National Historic Park, was included in the notifications described under CWTD18180006-21.

**CWTD18180006-23**

This project has no effect on the historical features identified in this comment, as it makes no change to land uses nor proposes the removal or modification of any structure or improvement on the CSR. This comment appears to have been initially provided in response to another, earlier, action proposed for the CSR property that likely involved land uses, vegetation management, and other property management actions, but is outside the scope of the action considered here.

**CWTD18180006-24**

The effects of translocated CWTD on lands uses at CSR and nearby properties are discussed in the EA at Section 3.2.6.1.

**CWTD18180006-25**

Thankyou for your comment.

**CWTD18180006-26**

Thankyou for your comment.