



ISLAND COUNTY PUBLIC HEALTH

Department of Natural Resources

PO Box 5000
Coupeville, WA 98239
P: 360.679.7350 F: 360.679.7390

To: Island County Board of Commissioners
Conservation Futures Citizen Advisory Board

From: Island County Department of Natural Resources

Re: 2020 Conservation Futures Funding Applications– DNR Evaluation

Date: May 28, 2020

Thank you for the opportunity to evaluate the 2020 applications for Island County Conservation Futures Funding. This document details how the Island County Department of Natural Resources (IC DNR) staff evaluated the Habitat and Water Resources sections of the Acquisition Project Technical Evaluation Criteria. The information in this memo is intended to provide technical guidance to the CFF Citizen's Advisory Board (CAB) on the habitat section of the CFF scoring. The following Island County Department of Natural Resources (IC DNR) staff evaluated the 2020 Conservation Futures Funding Applications:

Lori Clark, Natural Resource Manager
Doug Kelly, Hydrogeologist
Dawn Pucci, Lead Entity Program Coordinator

The IC DNR staff evaluated these proposed projects using the following Acquisition Project Technical Evaluation criteria:

A. Habitat

(Evaluated by Island County Natural Resources)

1. Biological function and environmental benefits, quality and importance of habitat type for specific species including salmonids.
 2. Connectivity to and enhancement of other protected lands and important water bodies.
 3. Site significance of habitat ecosystem: locally, regionally, or statewide.
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B. Water resources

(Evaluated by Island County Natural Resources)

1. Provides for protection of groundwater resources through aquifer recharge area protection. Groundwater susceptibility is currently mapped as Low, Medium or High susceptibility (as part of the county's CAO).
 2. Provides for protection of groundwater resources / seawater intrusion risk (ICC 8.09.099).
 3. Reduces impact of surface water discharge.
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Hun Wetland Protection

- A. Habitat**
1. Biological function and environmental benefits, quality and importance of habitat type for specific species including salmonids.

As stated in the application, protection of large and intact wetlands, provides for multiple benefits. This property is important because of its size (reduced edge effect) and its location in the headwaters of a major creek. It is known that water storage provided by beaver activity in associated wetlands provides the creek with a more reliable and sustainable source of creek flow. Associated wetlands buffer flashy hydrology by capturing and storing rain and then releasing the water in a more consistent and lower energy manner. This lower energy environment prevents scour of bank and streambed material, which is important to maintain aquatic habitats in the creek that support insects that feed juvenile salmon downstream. By holding and storing the water, infiltration is increased allowing filtration and temperature control in subterranean processes. Cool, clean water, metered out to streams in a measured manner over time provides sustainable and productive habitat for the whole ecosystem.

It will be important to prevent non-native species invasion. The proximity of the property to the road provides a higher likelihood of introduction of non-native species than if the property was isolated and not easily accessed.

2. Connectivity to and enhancement of other protected lands and important water bodies.

The Hun wetland is located at the headwaters of Glendale Creek, which outfalls into the Puget Sound and impacts recreational and commercial shellfish and fishery harvesting in Puget Sound.

3. Site significance of habitat ecosystem: locally, regionally, or statewide.

The Hun Wetland property provides wildlife habitat, and supports ecosystem functions that improve stream health and water quality improvements in the watershed. Wetlands also support carbon sequestering functions that benefit CO₂ impacts locally and regionally. Healthy wetlands improve surface water quality in Island County and prevent marine water quality contamination.

- B. Water resources**
1. Provides for protection of groundwater resources through aquifer recharge area protection. Groundwater susceptibility is currently mapped as Low, Medium or High susceptibility (as part of the county's CAO).

Twenty-two percent of the Hun property is classified as being high susceptibility, while the remaining seventy-eight percent is classified as being medium susceptibility. Protecting the property from future development protects the aquifer recharge area.

2. Provides for protection of groundwater resources / seawater intrusion risk (ICC 8.09.099).

All of the Hun property is classified as being low-risk for seawater intrusion. Protecting the property from future development reduces the demand in an area where groundwater resources may be limited.

3. Reduces impact of surface water discharge.

The Hun wetland is located at the headwaters of Glendale Creek, which outfalls to Puget Sound. Healthy wetlands improve surface water quality by slowing the surface water flow supporting infiltration which allows for the removal of nutrients. This also slows the surface flow in the watershed moderating the adverse water quality effects of soil erosion or storm water runoff.

Kristoferson Farm and Forest Conservation Easement

- A. Habitat** 1. Biological function and environmental benefits, quality and importance of habitat type for specific species including salmonids.

The Kristoferson property is likely the highest priority property for protection on Camano Island due to its significant size, diversity of habitats and connection to Kristoferson Creek. Partners have leveraged funding to remove barriers for fish passage. The large, intact wetland on the south of this property, known as the Beaver Pond, provides exceptional Coho salmon rearing habitat. The upstream portion of the creek that runs through the subject property is maintained in such a way that it likely provides insects and other prey resources including these juvenile salmonids. The wetlands, in particular the Beaver Pond, store, cool and filters surface water. The water is ponded by beavers which enables water to flow out in a more constant and less 'flashy' flow than if there was no beaver dams and wetlands. The stored water is able to infiltrate subsurface where it is cooled and filtered. It then enters into the stream as groundwater seeps and provides cool water to the spawning area used by chum salmon and the rearing areas used by multiple species of juvenile salmon. The property has multiple different habitats in well-managed conditions, supporting a wide variety of species of plants and wildlife.

2. Connectivity to and enhancement of other protected lands and important water bodies.

Kristoferson Lake, Kristoferson Creek, and the southern wetland are priority areas for Coho Salmon, Wood ducks, and several different types of sensitive aquatic habitats. Kristoferson Lake, which is the largest body of fresh water on Camano Island Kristoferson Creek is the Island's only salmon-bearing stream.

3. Site significance of habitat ecosystem: locally, regionally, or statewide.

The creek that originates north of this property flows south through Kristoferson Lake. The water flows through the riparian restoration plantings, passes through the beaver pond in the south of the property, then down to Triangle Cove. The creek downstream of the property is the only Camano stream in which 5 species of salmonids were found, including steelhead (Beamer et al, 2013). The beaver pond was described by WA Department of Fish and Wildlife as exceptional Coho rearing habitat during a stream survey conducted for Island County's 2015 culvert inventory project.

- B. Water resources** 1. Provides for protection of groundwater resources through aquifer recharge area protection. Groundwater susceptibility is currently mapped as Low, Medium or High susceptibility (as part of the county's CAO).

Eight percent of the Kristoferson property is classified as being high susceptibility, while sixty six percent of the property is classified as being medium susceptibility, and the remaining twenty six

percent is classified as being low susceptibility. Protecting the property from future development protects the aquifer recharge area.

2. Provides for protection of groundwater resources / seawater intrusion risk (ICC 8.09.099).

The majority of the Kristoferson property is classified as being low-risk for seawater intrusion, with the remaining portion having insufficient data to evaluate intrusion risk. Based on an understanding of the surrounding area and aquifer conditions, it is likely that nearly all of the property would be classified as low-risk if data were available. Protecting the property from future development reduces the demand in an area where groundwater resources may be limited.

3. Reduces impact of surface water discharge.

The Kristoferson Farm and Forest Conservation Easement project protects important riparian and forested wetland habitat along a significant Island County stream corridor. This easement would provide significant ecosystem services including storm water retention, flood prevention, filtration, and aquifer recharge.