

Island County Planning and Community Development Field Indicators Worksheet

The Field Indicators Worksheet will help you and the County determine if a wetland or wetland buffer is on your property. Applicants for permits for single family residential uses must either complete this Worksheet or, at their option, hire a wetland professional to complete a Wetland Report that includes the elements of the Worksheet. All other applicants (commercial or non-residential) must do the latter, if the County verifies that the development proposal is for land that contains or is affected by a wetland.

The comments section of this Worksheet may be used to record any particulars or information about your property. You may attach additional pages and photographs.

The County will verify the information provided in this Worksheet or related wetland report.

This Worksheet must be included with every application for development. Prospective purchasers may also ask the County to review the Worksheet to assist them in determining whether the property they are interested in purchasing contains wetlands.

Applicant Name (please print): _____

Date: _____

Parcel or Key Number: _____

Hydrology

The presence of water is the most obvious and common indicator of a wetland. There are several factors that must be considered in describing whether or not you have water on your property. Some wetlands have standing water all year long; others are soggy only during wetter months of the year; and, others appear wet only after storm events.

1. Is there ever standing water on the property?

Yes No

If No, proceed to question #3

If Yes, is it:

4 weeks - 4 months 4 months - 8 months - Seasonally 8 months - Year Round

2. If you answered yes to question #1, are the surrounding adjacent areas:

Topographically higher Yes No

Topographically lower Yes No

Topographically the same elevation Yes No

3. When you dug the hole, did you observe any water within 10 inches of the ground surface?

Yes No

4. Identify any features through which water flows onto your property (Check all that apply)

Stream Culverts Ditches Roadside Ditch

Storm Drains Ponds, lakes, estuaries Pumps Other _____

5. Identify any features through which water flows off of your property (Check all that apply)

Stream Culverts Ditches Roadside Ditch

Storm Drains Ponds, lakes, estuaries Pumps Other _____

6. Are there defined ditches/channels on, or near your property that have water?

Yes, there are ditches/channels that have occasional water flow (e.g. after storm events).

Yes, there are ditches/channels that have regular water flow during wet months.

Yes, there are ditches/channels that have water flow all year long.

No, there are no defined channels

If Yes, how wide is defined channel?

Large (>2 ft across) Small (<2 ft across) Grass Lined Swale (dried up pond)

Comments:

Hydrology Map

Please refer to the *Hydrology Map Example* found in the *Wetland Identification Guide* for instructions

Draw a close approximation of the features you listed in questions 1-6 of the Hydrology section of the Field Indicators Worksheet. Please label the features and approximate dimensions. You may also include areas where wetland vegetation was observed and sites where you performed your soil samples. An organized and informative drawing will help make our site visit more efficient. For greater accuracy, you may obtain an aerial map of your parcel from the Island County Planning and Community Development offices, and use it as the base layer for your map. The Hydrology Map section on page 8 of the *Island County Wetland Identification Guide* has further information.

Comments:

Vegetation

Only certain types of vegetation can survive in wetland conditions. In fact, some plants, trees and shrubs live nowhere else except in wetlands, e.g. skunk cabbage. Other types of vegetation are tolerant of both wet and drier conditions, e.g. salmonberry and alder. Most trees and plants look different depending upon the time of the year. This can make it difficult to identify exactly what's on your property. Numerous photographs of the more common types of wetland vegetation are shown during different seasons. **Please include these observations in your Hydrology Map.**

7. Are there any native wetland plants on the property that are identified in the Wetland Vegetation section of the Wetland Identification Guide? (Check all that apply)
- | | | | |
|---|--|--|--|
| <input type="checkbox"/> Slough Sedge | <input type="checkbox"/> Cooley's Hedge Nettle | <input type="checkbox"/> Crabapple | <input type="checkbox"/> Red Stemmed Dogwood |
| <input type="checkbox"/> Labrador Tea | <input type="checkbox"/> Water Parsley | <input type="checkbox"/> Skunk Cabbage | <input type="checkbox"/> American Speedwell |
| <input type="checkbox"/> Cat Tail | <input type="checkbox"/> Common Rush | <input type="checkbox"/> Willows | <input type="checkbox"/> Red Alder |
| <input type="checkbox"/> Salmonberry | <input type="checkbox"/> Nootka Rose | <input type="checkbox"/> Bull Rush | <input type="checkbox"/> Western Red Cedar |
| <input type="checkbox"/> Pacific Silverweed | <input type="checkbox"/> Sitka Spruce | <input type="checkbox"/> Hardhack | <input type="checkbox"/> Grasses (other than lawn) |
-
8. Are there any non-native wetland plants on the property that are identified in the Wetland Vegetation section of the Wetland Identification Guide?
- | | | | |
|--|---|--------------------------------------|---|
| <input type="checkbox"/> Creeping Buttercup | <input type="checkbox"/> Reed Canary Grass | <input type="checkbox"/> Yellow Iris | <input type="checkbox"/> Himalayan Blackberry |
| <input type="checkbox"/> Eurasian Milfoil | <input type="checkbox"/> Evergreen Blackberry | <input type="checkbox"/> Velvetgrass | <input type="checkbox"/> Yellow Iris |
| <input type="checkbox"/> Canadian Thistle/
Bull Thistle | <input type="checkbox"/> Hairy Willow-herb | | |

Comments:

Soil

While water and vegetation can be identified by simply observing what is on your property, learning about your soils will take a little more work. Soil characteristics change as a result of the regular presence of water. Minerals in the soil will start to rust and organics are unable to decompose. By digging some holes you can see whether or not the area you are looking at is in fact a wetland. The Wetland Identification Guide's Soil section provides additional information that you may find useful in answering the following questions. You will need to dig a hole 12 inches deep in order to answer the following questions. **Please include the locations where you took your soil samples in your Hydrology Map.**

9. Indicate the color of the soil at the bottom of the 12 inch deep hole that you dug.
- | | | |
|-------------------------------------|--|--------------------------------|
| <input type="checkbox"/> Dark Black | <input type="checkbox"/> Grey w/rust spots | <input type="checkbox"/> Brown |
|-------------------------------------|--|--------------------------------|
-
10. Does the soil smell sulfuric? (like rotten eggs)
- | | | |
|------------------------------|-----------------------------|-----------------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> At Times |
|------------------------------|-----------------------------|-----------------------------------|
-
11. If you take a tablespoon size sample of the soil and squeeze it, is it saturated with water?
- | | | |
|------------------------------|--|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> Moderate/Soil is damp | <input type="checkbox"/> No. Soil is dry |
|------------------------------|--|--|

Comments:

Island County Planning and Community Development

WETLAND BUFFER WORKSHEET

This Wetland Buffer Worksheet must be submitted with any development proposal related to a Single Family Home that involves property containing or affected by a wetland; or, at the single family homeowner's option, a Wetland Report including the elements of this Worksheet can be prepared by a Wetland Professional hired by the Single Family homeowner/applicant. A wetland report containing the elements of this worksheet, and prepared by a private wetland professional, will be required of all other applicants (non-residential or commercial) when the proposed development is on land that contains or is affected by a wetland or wetland buffer.

The following questions are designed to help you identify important characteristics of the wetland and the area surrounding it. Your answers should apply to the **entire wetland**, not just the part that is on your property. This Worksheet, along with information from the Land Use Intensity Worksheet, will help County planners determine the buffer width for your wetland. A buffer is the vegetated area adjacent to the boundary of a wetland that protects it from disturbance and inputs to protect water quality and habitat.

Applicant Name (please print): _____ **Date:** _____

Habitat Score: _____ (from Page WBW:7 of this Worksheet)

Wetland Buffer: _____ feet

For County Use Only

Confirmation Date: _____ **Confirmed By:** _____

Describe and Score the Wetland and Its Surroundings

1. High Priority Wetland Type

Does all or part of your wetland meet the definition of any of the following wetland types? Maps showing known locations of these types are available from the County. However, not all locations are known, so you should evaluate your wetland independently to see if it meets these definitions.

~~___ **Bog:** A wetland comprised predominantly of plants that are listed as bog species in Table 3 of the 2004 Wetland Rating System prepared by the Washington State Department of Ecology:~~

~~<http://www.ecy.wa.gov/biblio/0406025.html> and which meet other criteria given in that document.~~

~~A relatively undisturbed Wetland with at least seventy percent (70%) ground cover of mosses; or with water with a pH of less than 5.0; or with more than thirty percent (30%) cover of Sitka Spruce, Western Red Cedar, Western Hemlock or Lodgepole Pine; and a preponderance of plants that are listed as bog species in Table 3 of the 2004 Wetland Rating System prepared by the Washington State Department of Ecology; and having Peat or Muck soils at least sixteen (16) inches deep. Many Bogs are fed largely by precipitation. County maps identify the location of some but not all Bogs. See also Relict Bog. If the criteria are met, put an "X" the space at the beginning of this definition. Many Bogs have acidic conditions, low nutrient levels; soils classified as peat or muck; and are fed largely by precipitation.~~

~~___ **Coastal Lagoon Wetland:** A wetland located within a shallow water body adjacent to marine waters that is partly or completely separated from Puget Sound by a barrier beach. A Coastal Lagoon receives periodic influxes of salt water which may occur from storm surges or flow through porous beach sediments. The water in a Coastal Lagoon is saline or brackish (>0.5 ppt measured near the bottom) during most of the year. If the criteria are met, put an "X" in the space at the beginning this definition.~~

~~___ **Delta Estuary Wetland:** An Estuarine wetland located directly adjacent to or within a Delta Estuary. These wetlands are located on the north end of Camano Island adjacent to the mouth of the Skagit and Stillaguamish Rivers. If the criteria are met, put an "X" in the space at the beginning of this definition.~~

~~___ **Estuarine Wetland:** A tidal wetland containing emergent vegetation that is usually semi-enclosed by land but has open or partly obstructed access to Puget Sound. If the criteria are met, put an "X" in the space at the beginning of this definition.~~

If the wetland meets one of the above, your buffer can be determined from the chart below; if not, please continue to the remaining questions.

The type of wetland you marked above gives a preliminary determination of the width of the buffer that may be recommended for a new Development Proposal. Select the largest applicable buffer from Table 1 below. **You are then done with this assessment.**

Table 1				
Intensity Level (Intensity Worksheet)	Bog	Coastal Lagoon wetland	Delta Estuary wetland	Estuarine
Low	125 ft	100 ft	40 ft	35 30 ft
Moderate	190 ft	150 ft	90 ft	55 ft
High	250 ft	200 ft	125 ft	90 ft

2. Vegetation Forms (maximum of 4 points):

Which kinds of plant forms cover more than 10% of the wetland's vegetated area? *Mark each kind with a "1" in the line next to it.*

- Aquatic Plants (e.g., coontail, pond lily) _____
Herbs (e.g., grasses, wildflowers, ferns) _____
Shrubs (e.g., willow, elderberry, alder, salmon berry) _____
Trees (e.g., cedar, sitka spruce, hemlock) _____

Sum the numbers and insert here (Maximum of 4 points): _____

3. Non-native Plant Cover (maximum of 6 points)

Are non-native plants present in your wetland? *Check all that apply.*

Non-native Shrubs and Vines (a partial list):

- ___ Himalayan Blackberry
___ Evergreen Blackberry
___ Holly
___ Others. List: _____

Non-Native Herbs (a partial list):

- ___ Reed Canary Grass
___ Velvetgrass
___ Creeping Buttercup
___ Yellow Iris
___ Hairy Willow-herb
___ English Ivy
___ Canada Thistle, Bull Thistle
___ Eurasian Milfoil
___ Others. List: _____

* Note: This list is not comprehensive. You may wish to consult *Flora of the Pacific Northwest* (C. Leo Hitchcock and Arthur Cronquist, University of Washington Press)

*Now estimate the approximate percent of the entire wetland's **vegetated area** covered by non-native species:*

- ___ Less than 5% (6 points; put "6" in the space to the left)
___ From 5 to 50% (3 points; put "3" in the space to the left)
___ More than 50% (0 points; put "0" in the space to the left)

Insert the point value here (Maximum of 6 points): _____

4. Dead Wood (maximum of 2 points):

What kind of dead wood is found in the wetland? *Insert the points at the beginning of all lines where applicable.*

- ___ Multiple large fallen logs greater than 4 inches in diameter at their base and longer than 6 ft (1 point)
___ Multiple large standing dead trees greater than 4 inches in diameter at chest height (1 point)
___ Neither of the above (0 points)

Sum the numbers and insert here (Maximum of 2 points): _____

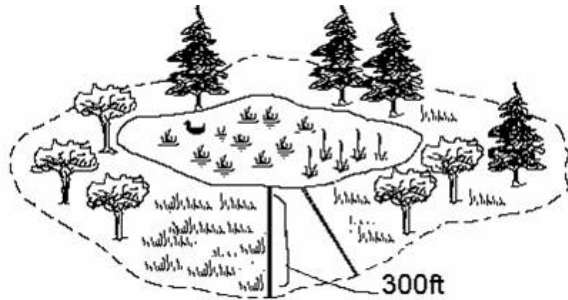
The following questions describe how wetlands on your property are connected with other natural areas. These questions are important because they help describe how your wetlands fit into larger ecosystems, and that in turn partly determines their importance to wildlife and plants. Maps and aerial photographs available online or at the counter of the Planning Department can assist you in answering these questions.

5. Surrounding Vegetation (Maximum of 10 Points):

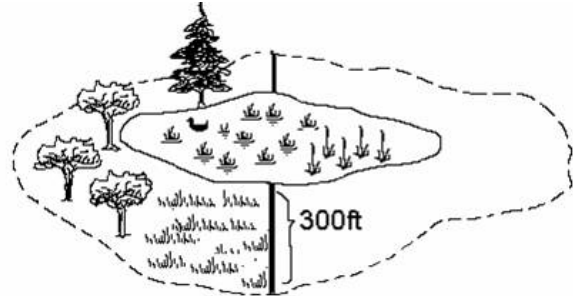
How much of the area surrounding the wetland is "naturally vegetated"?

"Naturally vegetated" means no pavement, buildings, lawns, bare soil, tilled soil, bedrock, or heavily-grazed pasture. Lightly-grazed or infrequently-mowed pasture is OK (mowed fewer than 4 times a year). Vegetation does not need to consist of native species.

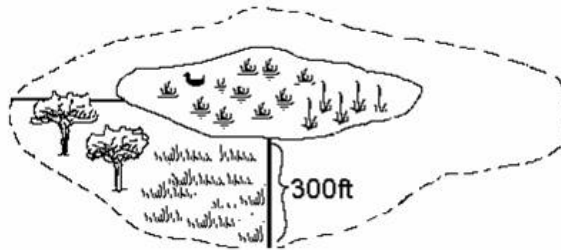
Circle the diagram below that best describes the **surrounding vegetation** of your wetland. If more than one diagram applies choose the one with the higher point score. **If none apply, give the wetland a 0.** Maps and aerial photographs available online or at the counter of the Planning Department can assist you in answering this question.



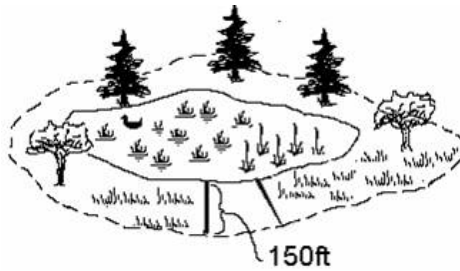
95% of 300ft upland area is naturally vegetated:
10 points



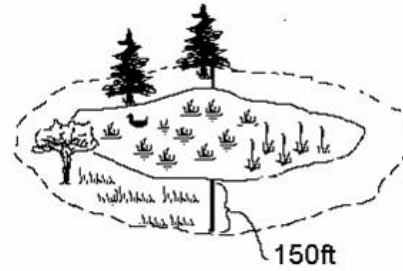
50% of 300ft upland area is naturally vegetated:
8 points



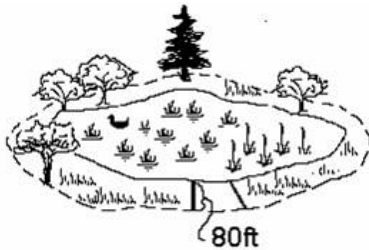
25% of 300ft upland area is naturally vegetated:
6 points



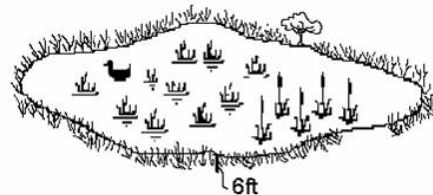
95% of 150ft upland area is naturally vegetated:
8 points



50% of 150ft upland area is naturally vegetated:
6 points



95% of 80ft upland area is naturally vegetated:
4 points



95% of 6ft upland area is naturally vegetated:
1 point

Insert the point value here (Maximum of 10 points): _____

6. Large Woodlands (Maximum of 10 Points):

“Woodlands” are areas of trees or shrubs.

“Connected to” includes areas that are separated from each other or from the wetland by distances less than 100 ft. Include wooded areas within the wetland when summing the acreage.

a. How much woodland is connected to your wetland? Ignore all Roads

- More than 100 acres (5 points) _____
- Greater than 9 to 100 acres (3 points) _____
- From 1 to 9 acres (1 point) _____
- None of the above/any other condition (0 points) _____

b. Assess this again, but this time consider roads as a disconnection. Roads don't include private driveways.

- More than 100 acres (5 points) _____
- Greater than 9 to 100 acres (3 points) _____
- From 1 to 9 acres (1 point) _____
- None of the above/any other condition (0 points) _____

The above two questions can be answered most easily by consulting maps and aerial photographs at the Planning Department.

Add up the points from (a) and (b) and insert here (maximum of 10 points): _____

7. Distance to Lake or Saltwater (maximum of 5 points):

How far is this wetland from the nearest lake or saltwater area? Select only the one condition with the highest score.

- ___ Within 300 ft (5 points)
- ___ Between 300 ft and 1/2 mile (3 points)
- ___ More than 1/2 mile (0 points)

This can be answered most easily by consulting maps and aerial photographs at the Planning Department

Insert the point value here (Maximum of 5 points): _____

8. Nearby Wetlands (maximum of 5 points):

How many other County-mapped wetlands are within 1/2 mile of your wetland? This can be answered most easily by consulting maps and aerial photographs at the Planning Department. Insert the points on the line next to the one condition that gives the highest applicable points.

- ___ three or more, and **none** are separated from this wetland by paved roads, lawns, bare soil, tilled soil, or heavily-grazed pasture (5 points)
- ___ three or more, but **some** are separated from this wetland by paved roads, lawns, bare soil, tilled soil, or heavily-grazed pasture (4 points)
- ___ one or two, and **none** are separated from this wetland by paved roads, lawns, bare soil, tilled soil, or heavily-grazed pasture (3 points)
- ___ one or two, but **some** are separated from this wetland by paved roads, lawns, bare soil, tilled soil, or heavily-grazed pasture (1 point)
- ___ none (0 points)

Insert the point value here (Maximum of 5 points): _____

9. Water Persistence and Pattern (maximum of 6 points):

Check and complete the section that describes your wetland in a normal year. Then add the additional points immediately beneath it if applicable.

More than 10% of wetland (or more than 1/4 acre) contains more than 4 inches of standing water during the **entire year**. (4 points)

Add 2 points if:

- Water is mostly scattered throughout the wetland in multiple patches and most of it floods herbs, grasses, or the thin stems of shrubs during the growing season.

More than 10% of wetland (or more than 1/4 acre) contains more than 4 inches of standing water for **part of the year, but not year-round**. (2 points)

Add 1 point if:

- Water is mostly scattered throughout the wetland and most of it floods herbs, grasses, or thin stems of shrubs during the growing season.

Other. (0 points)

Insert the total point value here (Maximum of 6 points): _____

Now add the points from questions 2 through 9 and record the total HERE: _____. This is your Habitat Score.

Are the points 22 or greater?

___ Yes. Answer the Wetland Outlet question below and proceed to *Table 2 below to make a preliminary determination of the width of the buffer that may be recommended for a new Development Proposal. You are then done with this assessment.*

___ No. Answer the Wetland Outlet question below and proceed to question #10.

Wetland Outlet?

An outlet is a location where there is visible evidence of the discharge of surface water from a wetland at any season of the year. Although the presence or lack of an outlet does not affect habitat directly, wetlands without outlets tend to be more sensitive because any pollution that reaches them becomes confined and is not diluted significantly. If the presence of an outlet is unclear or uncertain, the wetland should be presumed to not have an outlet.

Does the wetland have an outlet? *Select one:*

- _____ No
- _____ Yes

Table 2					
Intensity Level (Land Use Intensity Worksheet)	Wetland Outlet	Habitat Score (Wetland Buffer Worksheet)			
		40 or higher	32-39	29-31	22-28
Low	Yes	125 ft	75 ft	75 ft	75 ft
	No	150 ft	125 ft	100 ft	75 ft
Moderate	Yes	200 ft	110 ft	110 ft	110 ft
	No	225 ft	175 ft	150 ft	110 ft
High	Yes	250 ft	150 ft	150 ft	150 ft
	No	300 ft	200 ft	175 ft	150 ft

10. Other Priority Wetland Types

Does all or part of the wetland meet the definition of any of the following wetland types? Maps showing known locations of some of these types are available from the County. However, not all locations are known, so you should evaluate your wetland independently to see if it meets these definitions.

 Mature Forested Wetland: ~~A Wetland in which the tree canopy within the vegetated part of the Wetland is comprised predominantly of trees having diameters twenty-one (21) inches measured at 4.5 feet above ground level or the oldest trees are 80-200 years old; crown cover may be less than 100%; and, decay, decadence, number of snags and quantity of downed material is generally less than found in old-growth forests.~~ A Wetland one (1) acre or larger in size in which the tree canopy within the vegetated part of the Wetland is comprised predominantly of trees having diameters eighteen (18) inches or larger measured at 4.5 feet above ground level or the oldest trees are 80-200 years old; crown cover may be less than 100%; and, decay, decadence, number of snags and quantity of downed material is generally less than found in old-growth forests. County maps will identify Mature Forested Wetlands as they are located through review of Development Proposals. If the criteria are met, put a "A" in the space that began this definition.

 Large Poned Wetland: A non-Estuarine Wetland with visible evidence of at least five (5) acres of standing surface water in any part of the Wetland during most of the Growing Season for a normal year. If the criteria are met, put a "B" in the space that began this definition.

 Wetland Associated With a Bog, Coastal Lagoon, or Delta Estuary: A Wetland that has a wetland outlet that connects the Wetland directly to a Bog, Coastal Lagoon or Delta Estuary, or is within 500 feet of a Bog, Coastal Lagoon or Delta Estuary in a n uphill direction and within the same Contributing Area. If the criteria are met, put a "B" in the space that began this definition.

 Anadromous Fish Stream Wetland: A Wetland that has a Wetland Outlet that connects the Wetland directly to an Anadromous Fish Stream or is within 500 feet of an Anadromous Fish Stream in an uphill direction and within the same Watershed. If the criteria are met, put a "B" in the space that began this definition.

 Resident Salmonid Stream Wetland: A Wetland that has a Wetland Outlet that connects the Wetland directly to an Resident Salmonid Stream or is within 500 feet of an Resident Salmonid Stream in an uphill direction and within the same Watershed. If the criteria are met, put a "C" in the space that began this definition.

 Mosaic Wetland: A group of two or more Wetlands, each less than one (1) acre in size; located, on average, less than one hundred (100) feet apart; and at least fifty percent (50%) of the surface area of Wetland and upland, taken together, is comprised of Wetlands. The group of Wetlands, including the upland area between the Wetlands, will be regulated as one Wetland. If the criteria are met, put a "C" in the space that began this definition.

 Small Poned Wetland: A non-Estuarine Wetland with visible evidence of water forming a contiguous surface area of at least one (1) acre in any part of the Wetland during most of the Growing Season for a normal year. If the criteria are met, put a "D" in the space that began this definition.

 Native Plant Wetland: A Wetland with visible evidence that at least a majority of its vegetated surface area is covered by Native Species at some time of the year. If your wetland received a score of "6" or "3" for question 3 and if the criteria are met, put a "D" in the space that began this definition.

 (None of the Above). Put an "E" in the space to the left.

11. Using Table 3 below, do a preliminary determination of the width of the buffer for a new Development Proposal. Do so by considering its Wetland Type (from question 10), whether it has an outlet, and the assessment you did using the Land Use Intensity Worksheet. If more than one letter (column headings) applies, select the one resulting in the largest buffer.

Table 3						
Intensity Level (Intensity Worksheet)	Wetland Outlet	Wetland Type Category (from question 10)				
		A	B	C	D	E
Low	Yes	40 ft	35 ft	30 ft	25 ft	20 ft
	No	75 ft	50 ft	40 ft	35 ft	25 ft
Moderate	Yes	90 ft	65 ft	55 ft	45 ft	30 ft
	No	105 ft	90 ft	75 ft	60 ft	40 ft
High	Yes	125 ft	110 ft	90 ft	65 ft	40 ft
	No	175 ft	150 ft	125 ft	90 ft	50 ft

12. For Development Proposals on lots that are sloped between the proposed development and the wetland, increase the buffer recommendation in Table 3 using the multipliers in Table 4. However, a buffer wider than 300 feet will not be required.

Table 4	
Slope Gradient	Additional Buffer Multiplier
5-14%	1.3
15-40%	1.4
>40%	1.5

Buffers may be decreased, averaged or increased based upon the buffer's condition and ability to perform its functions. The buffer as initially determined from the Land Use Intensity and Wetland Buffer Worksheets is subject to confirmation by the County.

If the wetland and/or buffer size leaves no room for the use of the property, there are options available to make sure that the wetland can be protected and still make your land usable for uses allowed under the zoning code. If this is your situation, please contact the Island County Critical Areas Planner to discuss your options.