



PLANNING COMMISSION AGENDA
March 23, 2010, 7:00 p.m.
Multipurpose Room/Council Chamber
Burien City Hall, 400 SW 152nd Street
Burien, Washington 98166

This meeting can be watched live on Burien Cable Channel 21 or streaming live and archived video on www.burienmedia.org

I. ROLL CALL

II. AGENDA CONFIRMATION

III. PUBLIC COMMENT PUBLIC COMMENT WILL NOT BE TAKEN THIS EVENING.

IV. APPROVAL OF MINUTES March 9, 2010

V. OLD BUSINESS Discussion and Possible Recommendation: Shoreline Master Program Update
BRING MATERIALS FROM MARCH 9TH PACKET
a. Shoreline vegetation
b. Critical Areas/Wetlands
c. Residential development
d. Other

VI. NEW BUSINESS a. None

VII. PLANNING COMMISSION COMMUNICATIONS

VIII. DIRECTOR'S REPORT

IX. ADJOURNMENT

Future Agendas (Tentative) March 30- Discussion and Possible Recommendation: Shoreline Master Program Update
April 13-To be determined

Jim Clingan (Vice Chair)
Rebecca McInteer

Planning Commissioners
Joe Fitzgibbon (Chair)
Rachel Pizarro

Janet Shull

City of Burien

BURIEN PLANNING COMMISSION MEETING

March 9, 2010

7:00 p.m.

City Council Chambers

MINUTES

Planning Commission Members Present:

Joe Fitzgibbon, Janet Shull, Jim Clingan, Rebecca McInteer

Absent:

Rachel Pizarro

Others Present:

David Johanson, senior planner; Scott Greenberg, planning director; Bob Fritzen, Department of Ecology; Nicole Faghin, Reid Middleton

Roll Call

Chair Fitzgibbon called the meeting to order at 7:02 p.m. Upon the call of the roll all commissioners were present with the exception of Commissioner Pizarro. Chair Fitzgibbon announced the resignation of Commissioner Grage from the commission.

Agenda Confirmation

Motion to approve the agenda as printed was made by Commissioner McInteer. Second was by Commissioner Shull and the motion carried unanimously.

Public Comment

Chair Fitzgibbon took a moment to thank the public for the comments made to date about the Shoreline Master Program. He noted that the commission would continue to receive written comments on the topic but not oral comments. He stressed that there will be additional opportunities for oral comments before the City Council and when the Department of Ecology reviews the final program.

Mr. Tadas Kisielius, an attorney with the firm GordonDerr, LLP, 2025 1st Avenue, Seattle, spoke representing the Burien Marine Homeowners Association, a group of marine shoreline property owners. He asked the commission to consider taking additional time to receive public comment on the substantive issues. The concern is that there has been a lack of adequate notice to some of the property owners who will be most affected by the proposed regulations. Many were given no direct notice of the hearings, and some who attended the open houses and specifically requested to be notified also received no notice and as such have not been permitted opportunity to provide substantive comment. The commission should take all the time it needs to make sure

everything is done right. The organization has prepared a petition and gathered more than 400 signatures of people who are supportive of giving more time to the process and allowing additional public comments to be made.

Approval of Minutes

A. February 23, 2010

Commissioner Shull called attention to the first full paragraph on page 8 and the last paragraph on page 9 and noted that both statements for which she was given credit in the minutes were in fact made by Commissioner Grage.

Motion to approve the minutes as amended was made by Commissioner McInteer. Second was by Commissioner Shull and the motion carried unanimously.

Old Business

A. Discussion and Possible Recommendation: Shoreline Master Program Update

1. Follow-up on Planning Commission Requests for Information

Senior planner David Johanson informed the commissioners that the table has been updated and clarified the changes. He noted first that a "modified" column had been added on the far left to indicate if changes had been to the row. He pointed out that item 15 on page 6 should have received a mark in the modified column. A column on the far right titled "PC Direction" also was added to capture the consensus of the commission for each item.

Mr. Johanson clarified that the letters "NR" included in the third and four rows were intended to indicate that no response was needed at the current time.

Mr. Johanson called attention to item 4 and said the issue related to matching the terms in the table to the terms used in the zoning code. He noted that he had added a definition of "retail" and "office." According to the direction of the commission, both uses would be prohibited in the shoreline jurisdiction. He said the outstanding issues in item 4 were the Environmental Learning Center, the Marine Tech Lab, and the Ruth Dykeman Center; he indicated that he had included the definition from the zoning code that would be used. The commission previously discussed whether the uses should be allowed to obtain a conditional use or shoreline substantial development permit. Uses not specifically called out in the table automatically will default to the conditional use process.

Commissioner Shull asked staff what their recommendation would be relative to the uses. Mr. Johanson said each of the uses already exists. A shoreline conditional use permit entails both a local process and Department of Ecology approval. The City has a greater level of control over uses located in city parks. He suggested that the more appropriate

permit for the Environmental Learning Center and the Marine Tech Lab uses would be shoreline substantial development. The Ruth Dykeman Center property is subject to its own very specific zoning and as such would be more appropriate for a conditional use permit, especially if the site is reused as a community residential facility.

Commissioner Shull said no one was arguing that the existing uses should not be there. The real issue is the potential for other uses that might follow in the future that might fit in the categories.

Commissioner McInteer indicated her support for the conditional-use permit approach for the Ruth Dykeman property. She also agreed with staff that shoreline substantial development is the appropriate process for the Environmental Learning Center and Marine Tech Lab uses.

Chair Fitzgibbon and Commissioner Clingan concurred.

With regard to issue 7 in the table, Mr. Johanson said staff was recommending replacing the term "cell towers" with "personal wireless service facilities," which is the term used in the zoning code. He said additional information had been added to the table with regard to what would be allowed in the SPA-2 and RS zones relative to personal wireless service facilities.

Mr. Johanson noted that item 11 had to do with impact mitigation and reminded the commissioners that during their previous discussion it was observed that the suggested language could be either policy or regulation. He said the recommendation of staff was to recognize them as both and add the policy language and insert it into the regulations. As drafted, the language focuses first on degraded areas and then on areas of restoration in a mitigation plan.

There was consensus in favor of the proposal.

Mr. Johanson clarified that all of the text amendments would be folded into a Planning Commission draft for final discussion and approval.

Planning director Scott Greenberg called attention next to item 15 and the use of the term "critical fresh water habitat." He explained that the term is not specifically defined in either the Shoreline Management Act or the guidelines. However, there is a checklist that the Department of Ecology uses in reviewing amendments to critical area portions of already adopted Shoreline Master Programs. The checklist characterizes critical fresh water habitat as applying to streams, wetlands, lakes, channel migration zones, and floodplains designated as critical areas by the local government. The WAC simply uses the term "designated as such" and does not provide the additional guidelines. Following the checklist, Lake Burien and its wetlands would be considered critical fresh water habitat because both are designated as wetlands under the city's critical areas ordinance and the Shoreline Master Program. The wetlands regulations being proposed as a part of the Shoreline Master Program actually provide the protections the Department of

Ecology would be looking for by using the checklist. Accordingly, staff was not recommending any further action.

Commissioner Shull said it was her understanding that the Shoreline Master Program ultimately approved by the City Council will be reviewed by the Department of Ecology against the checklist. Bob Fritzen, shoreline planner with the Department of Ecology, explained that under the Growth Management Act critical areas are pretty specifically defined. In drafting the guidelines, consideration was given to areas in need of protection that do not technically fall under the critical area definition as defined by the Growth Management Act. One example would be the near shore area up to the 20-meter contour line of all shorelines of Puget Sound that NOAA Fisheries has designated as critical habitat for salmonids. The guidelines give local governments the authority to include such areas.

Commissioner Shull said the recommendation of staff for no additional change was reasonable. Chair Fitzgibbon and the other commissioners concurred.

Mr. Johanson said the revision to item 45 is intended to clarify where non water-dependent accessory structures can be located. He explained that the language makes it clear that accessory structures should not be located in the required shoreline setbacks where feasible. The language would not affect existing structures.

Commissioner Shull zeroed in on the phrase "where feasible" and asked if someone could propose a new construction accessory structure within a buffer area based on a determination of feasibility. Mr. Johanson said the phrase is intended to allow for some flexibility. The primary objective is to ensure that the buffer areas are maintained, but there could be a scenario in which an accessory structure could be appropriate in a buffer area. In all cases, however, the standard of no net loss will apply.

Chair Fitzgibbon asked if a property owner would need to seek a variance or go through some specific process in order to be allowed to construct an accessory structure in a buffer area. Mr. Johanson said the task of staff will be to review all such applications with an eye on keeping the buffers sacrosanct. If no feasible alternative can be demonstrated, staff could approve the request. No special process would be required.

Commissioner McInteer voiced concern over including the "where feasible" phrase. She said it could become a loophole through which a buffer area could be impacted by new construction. She proposed removing "where feasible" from the proposed language. Mr. Johanson pointed out that if "where feasible" is not included, any proposal to construct an accessory structure in a setback would require a variance.

Commissioner Shull said she could envision a situation in which it would be a compelling reason to allow an accessory structure in a buffer. She added that the variance process could be very onerous, particularly for a single-family homeowner. She asked if some other process could be implemented. Mr. Fritzen said Whatcom County

2-232

created what they termed an administrative variance process that is less costly and entails far less process but which still requires the criteria and the need must be met.

Mr. Johanson said staff would do a little more research and provide additional options at the next commission meeting.

Commissioner Clingan allowed that because the section applies only to new construction, a little flexibility might be appropriate. He said he would welcome additional information from staff at the next meeting.

With regard to item 47, Mr. Johanson said the suggested revision is intended to provide clarification as to where the common-line riparian buffer and building setback standards apply and what they apply to, which are single-family primary residential structures. The commissioners agreed with the proposed revision.

Mr. Johanson said item 49 related to residential development would be dealt with later under a separate discussion topic.

Calling attention to item 52 and the issue of nonconforming structures, Mr. Johanson noted that the commissioners had asked for additional information regarding the percentage threshold. He said staff reviewed all of the Shoreline Master Programs shown on the Department of Ecology website as having been adopted and included in the packet materials a table showing how other jurisdictions have used a percentage threshold. The draft used the 50 percent threshold, which is in line with the existing nonconforming section of the zoning code. The prevailing percentage threshold in the adopted plans from other jurisdictions is closer to 75 percent. Additionally, one jurisdiction bases the percentage on assessed value while all of the others use replacement cost.

Commissioner Shull asked if staff had found anything in doing the research that would warrant using a threshold other than 50 percent. Mr. Johanson said the rationale for using that threshold from the start has been to assure consistency with other city codes, and that argument is not swayed by the thresholds used by other jurisdictions.

Commissioner Clingan recognized the need to be consistent but suggested that the more appropriate action might be to change the other city codes to reflect the 75 percent threshold. He voiced support for using the 75 percent threshold in the Shoreline Master Program and have it be based on replacement cost rather than assessed valuation.

Chair Fitzgibbon suggested that if the threshold were predicated on replacement cost, the restrictions (a), (b), (c), (d) and (e) would likely not apply to as many structures. Mr. Johanson said that is possible. Key to the section is the fact that the language allows structures damaged or destroyed to be rebuilt. The provisions of (a), (b), (c), (d) and (e) only kick in when the threshold is crossed, and all of them are focused on meeting the vegetation conservation standards for the area between the structure and the shoreline. If the threshold were increased, there is less likelihood that the additional vegetation provisions would be applied.

Chair Fitzgibbon said none of the provisions (a), (b), (c), (d) and (e) are all that onerous. He said it would be difficult to envision a situation in which (a), (c) or (d) would disadvantageously impact the ability of the property owner to reconstruct a damaged structure. Paragraph (e) could be onerous, but 18 months is a reasonable amount of time for a reconstruction project to be under way. It is reasonable for the City to ask property owners to comply with the vegetation conservation standards. He said his inclination was to keep the threshold at 50 percent, adding that he could be persuaded to change from assessed valuation to replacement cost.

Commissioner McInteer pointed out that assessed value is a fixed mark that gives certainty to the homeowner. The replacement cost figure could be the foundation for what amounts to a guessing game. Shoreline property owners have testified before the commission about their interests in serving as stewards of the shoreline, and the vegetation conservation standards offer ecological function and value. Increasing the threshold will reduce compliance with those standards. With regard to paragraph (e), Commissioner McInteer said she was somewhat bothered by the notion of having to have an application filed within 18 months; it may be very difficult for a property owner to get all of their ducks in a row in that short amount of time. They should be given enough time to act.

Commissioner Shull said she would agree if paragraph (e) read that the reconstruction project had to be completed within 18 months. However, the requirement is that an application must be submitted within 18 months, which seems very reasonable. She voiced her support for the proposed revision to issue 52 in its entirety as it appeared on page 25 of the packet, including the reference to assessed value.

Commissioner Clingan said he would support having staff go back and review the Shoreline Master Programs of the six or so cities that have chosen to go with a 75 percent threshold to see if there is a variation between their regular zoning code and their Shoreline Master Program. Chair Fitzgibbon said he would support having staff gather that information. Commissioner Shull said she also was amenable to taking that approach.

Chair Fitzgibbon observed that the Whatcom County Shoreline Master Program states that reconstruction must begin within 18 months, which is somewhat different from the proposed language for Burien that only calls for an application for reconstruction to be filed within 18 months. He suggested the Burien language is more lenient and flexible.

Mr. Johanson called attention to item 52B and said the proposed revision is intended to clarify that the context of the section is alteration or reconstruction of nonconforming structures. The section allows for expansions up to certain thresholds within the buffer or setback.

The commissioners were in agreement with the proposed change.

2. Public Access

Mr. Fritzen explained that the Shoreline Management Act dictates all master programs must include a public access element making provision for public access to publicly owned areas, both physical and visual, within the qualifiers of health, safety and protecting the environment. Every shoreline development project done by a public entity must include public access measures, unless it would be unreasonable to do so for reasons of safety, security or impact to the shoreline environment. Development on privately owned lands must provide public access where appropriate within the limitations set out by the guidelines.

Mr. Johanson referred to item 20 and the language from the guidelines regarding the issue of providing public access while still achieving no net loss. He noted that the guidelines recognize that the policy goals of the Shoreline Management Act harbor the potential for conflict. The guidelines also state that the act's policy of achieving both shoreline utilization and protection is reflected in the provision that "permitted uses in the shorelines of the state shall be designed and conducted in a manner to minimize, in so far as practical..." The Burien document includes several specific policies that talk about how to achieve the desired outcomes.

Mr. Johanson reminded the commissioners how the proposed policy language was developed. He said an open house was conducted in May 2008 in which the public was encouraged to highlight the issues. Those comments were taken before the Shoreline Advisory Committee; the committee reviewed each issue and determined what the appropriate policy should be. The group used policy language from other jurisdictions, policy language from the City's adopted Comprehensive Plan, and created some of its own policy language. In the majority of cases, the committee concluded that the City's existing access-related policies should be included; in only one instance did the committee determine the existing policy language should be modified.

Mr. Greenberg called attention to items 21A through 21L and noted that many of the comments propose a very simple change to the language of the advisory committee to add the notion that all of the public access policies should apply only to public lands, not private lands. He suggested the commission should come to agreement on that issue first.

Commissioner Clingan asked if the City has the authority to require public access on private land. Mr. Greenberg allowed that it does under some of the criteria in the master program, the Shoreline Management Act, and the guidelines. He informed the commission that for 30 years or so the City of Kirkland has had policy and regulation that requires a public access trail from Lake Washington Boulevard through private properties to Lake Washington, which requires a trail easement along Lake Washington with access to the general public as part of any multifamily development. Kirkland's policies and regulations require the same public access but only under certain circumstances. The proposed policy language for Burien would require private subdivisions of five lots or

more to provide public access to the shoreline under the same authority the City uses to require sidewalks, sewer lines and water lines.

Chair Fitzgibbon said the only instance in which the City should want to require public access on private property would be a new subdivision on the waterfront of five or more homes.

Mr. Fritzen said if city code were to allow the development of a restaurant on the shoreline, the non-water-dependent use would need to provide public access. If there is no opportunity for commercial or industrial development along the marine shoreline, there may not be any opportunity to require public access on private lands. The guidelines do call for local jurisdictions to provide standards for the dedication and improvement of public access, and that may apply to subdivisions.

Commissioner Shull allowed that there is no commercial or industrial zoning along any of Burien's shorelines, and suggested it would be highly unusual for anyone to come forward with a rezone request. She said the only instance in which she could potentially envision requiring public access on private property would be a subdivision of five or more lots.

Mr. Greenberg said the Ruth Dykeman site could potentially be redeveloped for a non-single-family use, though currently there would be a zoning issue involved in trying to accomplish that. Assuming the current use was to cease and the new property owner stepped forward with a proposed rezone, there is the potential that the City might want to require public access. Absent having a provision in the master program, it would be difficult if not impossible for the City to require public access.

Chair Fitzgibbon asked if there are currently lots on Lake Burien that are large enough to allow for a subdivision into five or more lots. Mr. Johanson said the anecdotal evidence is that there are some lots on the lake that are large enough based solely on their total area. The minimum lot size under the zoning in place around the lake is 7,200 square feet, so a property would have to have a minimum of 36,000 square feet. Access easements are excluded from the total, so generally it would take even more land. However, because Lake Burien is considered a critical area, clustering is allowed, and that could reduce the amount of access needed.

Mr. Greenberg clarified that staff was recommending changing the draft language of item 31A to refer to subdivisions of more than four parcels.

There was consensus in favor of making the change as recommended by staff.

Commissioner Shull expressed concern over limiting the ability of the City to require public access only on public lands. She allowed that while the opportunities to require public access on private lands are very limited, the fact is that the Shoreline Master Program, once approved, will live for a very long time. There could conceivably be a circumstance in the future in which the City may want to require public access in

association with a privately proposed project. She said she was clear on the fact that nothing in the proposed language would allow the City to require public access on any existing developed privately owned property.

Commissioner Clingan argued that there would be no harm in including the phrase "on public lands" in the various policies referenced by item 21 given the limiting factor of subdivisions having more than four parcels.

Commissioner Shull called attention to 21C and the proposed language "Public access to shoreline areas on public lands within the City must protect private property rights, public safety, and individual privacy." She suggested the addition of "on public lands" could be interpreted as meaning the City will not seek to protect shoreline access on private lands. Mr. Greenberg said if the decision of the commission is not to require public access on private lands, the proposed language would not matter.

Chair Fitzgibbon voiced concern over use of the word "shall" in item 31A. He suggested that if the language were to be adopted, the City Council would need to take the additional step of clarifying which shorelines should be in play. All new developments that meet the criteria would be required to provide public access; the City would not have the leeway of being able to determine that public access may not in fact be appropriate in any specific instance, such as where a subdivision of more than four lots has only one lot on the water and the rest located in the upland area away from the water. Mr. Greenberg said regulation language is always more directive. Policy language more often uses words such as "should" or "may." He allowed that as written the City would require public access in all instances where the criteria were met, but he stressed that public access can be either physical or visual, and that where it is physical certain design standards apply.

Commissioner McInteer commented that Bunen is not a city that excludes people; it is a city that welcomes people and wants people to be able to enjoy the outdoors. There are limitations that may come by way of public safety or private property rights as well as environmental standards. She said she would not support focusing the City's right to require public access only on public lands; that would be too limiting.

Chair Fitzgibbon concurred. He said there are provisions in the document that ensure the protection of private property rights and ecological functions. He noted, however, that including the phrase "on public lands" could be appropriately included in some of the policies, especially in PA 4. Adding the phrase liberally would limit the ability of the City to be flexible.

Commissioner Shull said she would resist making changes to any language taken from the existing Comprehensive Plan, absent a compelling reason to do so.

Mr. Greenberg reviewed the proposed changes to item 21A. He said the notion of using the word "promote" in place of "increase" would make the language inconsistent with the

Shoreline Management Act. There was consensus to leave the language of 21A as proposed by the advisory committee.

Mr. Greenberg said the recommendation of staff for 21B was to keep the original language and not make any changes. The proposed change would change the language from applying to existing developments to applying to new developments, and would apply only to existing public access and not potential future public access.

Chair Fitzgibbon asked how the proposed language would impact property owners on Lake Burien where there is currently no public access. Mr. Greenberg said the language applies to access to the water, and where there is no existing public access, there is nothing to impair or detract from. By using the term existing public access, one could argue that the starting point would be the date of adoption of the master program. If there is an approved legal public access in the future, no one should be allowed to impair or detract from access to the water, either physical or visual. Chair Fitzgibbon said he could see the intent but suggested there might be another way to word it to make it easier to interpret.

Commissioner Shull proposed replacing "...not impair or detract from the public's existing public access to the water" with "...not impair or detract from public access to the water." Chair Fitzgibbon said he could support that. Commissioner McInteer concurred.

Commissioner Clingan asked if an issue would be created should a property owner plant a tree that blocks the view of the water from the roadway under the language as proposed by Commissioner Shull. Mr. Greenberg polices PA 11 and PA 12 are applicable to that situation. Depending on the situation, the planting of a tree that blocks a view corridor could in fact result in an issue.

Nicole Faghin with Reid Middleton suggested that the issue would be whether or not the tree was planted on private property or in a designated public access or view corridor.

Staff agreed to give the issue additional consideration and come back with a recommendation.

Mr. Greenberg said the intent of item 21C is to address the balancing act the Shoreline Management Act talks about. He said the proposed change was to revise the language from "Public access to the city's shorelines should be designed to provide for public safety and to minimize potential impacts to private property and individual privacy" to "Public access to shoreline areas on public lands within the city's shorelines should be designed to provide for public safety and to minimize potential impacts to private property and individual privacy."

Chair Fitzgibbon suggested the proposed language change would actually weaken the protections of private property rights, public safety and individual privacy. He said he

would not support the language change, but would support using the word "should" rather than "shall."

The consensus opinion was in favor of leaving 21C unchanged.

With regard to item 21D, there was consensus to not include "on public lands" and to include "with no net loss of shoreline ecological function."

Mr. Johanson said item 21E was heavily discussed by the advisory committee. He said the idea is that public access should be spread out to make it available to all neighborhoods. If the City should decide to pursue new public access, it should look first at reaches that do not have existing access. He pointed out that the proposed policy language was originally taken from the Comprehensive Plan but was modified by the advisory committee.

Chair Fitzgibbon said the policy is not one that needs to stay the way it is. He said there has been a lot of concern voiced that has been reasonable. Responding to the concerns will not lessen the overall thrust of the plan toward improving the public's access to the water. By including the phrase "...highest priority..." may create an impression that is not accurate relative to the intent of the plan.

Commissioner Shull concurred. She stressed that the potential for any new public access is highly limited given that the shoreline is mostly built out. Ideally, every stretch should have some sort of public access. Future possibilities for public access will be rare and they could be adjacent to existing public access points. She said she would be open to eliminating or modifying the "highest priority" language.

Commissioner Clingan suggested that access should not be valued more than the quality of the lake. He said the "highest priority" language is not particularly useful, nor the following sentence with the three sub-items.

Commissioner McInteer said she was okay with the first sentence of 21E, including the notion of dispersing public access throughout the shoreline areas. The "highest priority" language could end up working against the notion of adding new public access points. She said she was in favor of the mechanisms to obtain public access.

Commissioner Shull agreed that the mechanisms to obtain access should be retained in the policy. She noted that there have been concerns raised by the public about the City's use of eminent domain to bring about new public access, and stressed that that approach is not one of the mechanisms listed in the proposed policy language.

Mr. Greenberg said the existing Comprehensive Plan policy reads "The City should seek opportunities to develop new waterfront access points or other shoreline access through tax-title properties, donations of land and waterfront areas, and acquisition using grants and bonds." He suggested that including the mechanisms to obtain would not be absolutely necessary.

Commissioner Shull noted her support for retaining the first sentence, including the notion of dispersing public access throughout the shoreline, and said she could support eliminating the mechanisms to obtain.

Commissioner Clingan said he could support eliminating the entire first sentence. Commissioner McInteer said that would be her recommendation as well.

Chair Fitzgibbon observed that the commission would not be able to complete its discussion of the proposed policy language without calling an additional work session ahead of the next regularly scheduled meeting.

It was agreed to schedule a special commission meeting for March 16. The commission also discussed scheduling a review of the final draft before it is forwarded to the City Council.

New Business -- None

Director's Report

Chair Fitzgibbon took a moment to express the gratitude of the commission for the service of Commissioner Grage. He said she will be missed.

Adjournment

Motion to adjourn was made by Commissioner Shull.

Chair Fitzgibbon adjourned the meeting at 9:24 p.m.

Approved: _____

Joe Fitzgibbon, chair
Planning Commission

Planning Commission Public Comment Summary

Items No. 33 and 92

Revised as of 3-23-10

33	Shoreline Vegetation Conservation 20.30.040 (page IV-9)	<p>Vegetation alterations require review pursuant to 20.30.040(2.b).</p> <p>There appears to be a mistake in the outline numbering used in the comment letter. b is a, c is b. The correct nomenclature is used below</p> <p>a. <u>Alterations to vegetation within shoreline jurisdiction (except for the maintenance of existing or approved conditions) are not allowed without shoreline review. When allowed, alterations to the vegetation shall result in no net loss of shoreline ecological value or function.</u></p> <p>The suggested language implies that all alterations will be associated with new development. This may not always be the case. If mitigation is required it should be accordance with other provisions in the SMP such as 20.30.010[2.c], impact mitigation and 20.30.095[2.a] Residential Development. Suggest the following changes.</p> <p>b. <u>Alterations within the shoreline vegetation conservation buffer shall provide mitigation for new impacts of the development, and shall only be allowed through approval of a vegetation management plan. If mitigation of impacts is necessary it should take the form of vegetation enhancement and result in improvements to ecological functions. The plan shall be prepared by qualified professional and shall be consistent with the provisions of this chapter and BMC Chapter 19.40. <u>Vegetation enhancement plans shall include:</u></u></p> <p>No suggested changes to the remainder of the section.</p> <p><u>i. Revegetation of degraded buffer areas within 20 feet of the ordinary highwater mark (or top of shore armoring if applicable) or wetland edge with dense native vegetation meeting the standards of paragraph (c)(iii-iv) below. The Administrator may require wider widths or other improvements to mitigate greater impacts.</u></p> <p><u>ii. The above revegetation area may be modified using area averaging when existing structures encroach into the 20 foot width, when access through the area to waterfront facilities is needed, or when water-dependent activities need to take place in the area.</u></p> <p>c. These are good clarifications however references too lawn not being an acceptable ground cover is not necessary as it is prohibited by section vii. Agree that section v. should be removed, this is overly restrictive in that any alteration cannot remove vegetation areas, this is may not be possible in some development scenarios. The section is suggested to read as follows:</p> <p><i>Within a shoreline riparian buffer as set forth in BMC 20.30.050 alterations shall comply with the following;</i></p> <p><i>i. The applicant shall provide a vegetation management plan prepared by a qualified professional; and</i></p> <p><i>ii. At least 75% of the buffer area shall be <u>revegetated, where it is degraded;</u></i> <i>and</i></p> <p><i>iii. Where vegetation is proposed within the buffer it shall be provided at a density to mimic natural conditions <u>rather than a landscaped yard;</u> and</i></p> <p><i>iv. Vegetation <u>planting areas</u> shall consist of <u>a mix of native trees, shrubs and ground cover – lawn is not an acceptable groundcover; and</u></i></p> <p><i>v. When alterations are proposed within a buffer, the end result shall be no loss of vegetated areas; and</i></p> <p><i>v. Vegetation management plans should place emphasis on providing plantings within a 20 foot wide area parallel and adjacent to the shoreline; and</i></p> <p><i>vi. Lawn is a prohibited vegetation in the shoreline buffer due to its limited functional benefits and need for chemical and fertilizer application; and</i></p> <p><i>vii. Include appropriate limitations on the use of fertilizer, herbicides and pesticides as needed to protect lake and marine water quality.</i></p>
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33

Shoreline
Vegetation
Conservation

20.30.040

(page IV-9)

Recommended Version

- a. *Alterations to vegetation within shoreline jurisdiction (except for the maintenance of existing or approved conditions) are not allowed without shoreline review. When allowed, alterations to the vegetation shall result in no net loss of shoreline ecological value or function.*
- b. *Alterations within the shoreline vegetation conservation buffer shall only be allowed through approval of a vegetation management plan. If mitigation of impacts is necessary it should take the form of vegetation enhancement and result in improvements to ecological functions. The plan shall be prepared by qualified professional and shall be consistent with the provisions of this chapter and BMC Chapter 19.40. Vegetation enhancement plans shall include:
 - i. *Revegetation of degraded buffer areas within 20 feet of the ordinary high water mark (or top of shore armoring if applicable) or wetland edge with dense native vegetation meeting the standards of paragraph (c)(iii-iv) below. The Administrator may require wider widths or other improvements to mitigate greater impacts.*
 - ii. *The above revegetation area may be modified using area averaging when existing structures encroach into the 20 foot width, when access through the area to waterfront facilities is needed, or when water-dependent activities need to take place in the area.**
- c. *Within a shoreline riparian buffer as set forth in BMC 20.30.050 alterations shall comply with the following;
 - i. *The applicant shall provide a vegetation management plan prepared by a qualified professional; and*
 - ii. *At least 75% of the buffer area shall be revegetated, where it is degraded; and*
 - iii. *Where vegetation is proposed within the buffer it shall be provided at a density to mimic natural conditions rather than a landscaped yard; and*
 - iv. *Vegetation planting areas shall consist of a mix of native trees, shrubs and ground cover; and*
 - v. *Vegetation management plans should place emphasis on providing plantings within a 20 foot wide area parallel and adjacent to the shoreline; and*
 - vi. *Lawn is a prohibited vegetation in the shoreline buffer due to its limited functional benefits and need for chemical and fertilizer application; and*
 - vii. *Include appropriate limitations on the use of fertilizer, herbicides and pesticides as needed to protect lake and marine water quality.**

92	20.30.095 Shoreline Uses (ADU's)	<p>Pursuant to comprehensive plan policy and the GMA, accessory dwelling units should be allowed, however it should be clarified that they should not be allowed in a shoreline buffer or setback.</p> <p>g. Accessory structures and Appurtenances. Accessory structures and appurtenances that are not normal appurtenances as defined at the end of this chapter must be proportional in size and purpose to the residence and compatible with onsite and adjacent structures, uses and natural features. Accessory structures and appurtenances that are not water-dependent are not permitted waterward of the principal residence unless clearly water-dependent (buoys, docks and floats) and used for recreational or personal use unless there is a compelling reason to the contrary. Except for fences less than 6 feet high, accessory and appurtenant structures should shall not be located within shoreline buffers to assure that buffer integrity is maintained.</p> <p>Recommended Version</p> <p>g. Accessory structures and Appurtenances. Accessory structures and appurtenances must be proportional in size and purpose to the residence and compatible with onsite and adjacent structures, uses and natural features. Accessory structures and appurtenances that are not water-dependent are not permitted waterward of the principal residence unless clearly water-dependent (buoys, docks and floats) and used for recreational or personal use. Except for fences less than 6 feet high, accessory and appurtenant structures shall not be located within shoreline buffers or riparian buffer setbacks to assure that buffer integrity is maintained.</p> <p>20.40.005 Appurtenance means development necessarily connected to the use and enjoyment of a single family residence and located landward of the perimeter of an associated wetland and landward of the ordinary high water mark. Normal appurtenances include a garage; deck; driveway; utilities solely servicing the subject single family residence; fences; and grading which does not exceed 250 cubic yards.</p> <p>19.10.010 Accessory – A use, activity, structure or part of a structure that is subordinate and incidental to the main activity or structure on the site.</p> <p>K. Detached Accessory Dwelling Units. <u>Detached accessory dwelling units shall not be located in riparian buffers or riparian buffer building setbacks.</u></p> <p>GMA goal. RCW 36.70A.020 (4) Housing. Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock. RCW 36.70A.400 & RCW 43.63A.215 state "accessory apartment provisions shall be part of the local government's development regulation, zoning regulation, or official control." [excerpt] Burien Comprehensive Plan Pol. HS 1.11 The development of accessory dwelling units in single-family residences should be allowed to continue. (pg 2-65, [excerpt])</p>
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Appendix 8-C

Guidance on Widths of Buffers and Ratios for Compensatory Mitigation for Use with the Western Washington Wetland Rating System

8C.1 Introduction

This appendix provides guidance on widths of buffers, ratios for compensatory mitigation, and other measures for protecting wetlands that are linked to the *Washington State Wetland Rating System for Western Washington-Revised* (Hruby 2004b). Refer to Appendix 8-D for guidance for eastern Washington. Appendices 8-C through 8-F have been formatted similar to the main text of this volume (i.e., with a numbering system) to help with organization.

The tables below list the recommended widths of buffers for various alternatives, examples of measures to minimize impacts, and ratios for compensatory mitigation.

- **Table 8C-1.** Width of buffers needed to protect wetlands in western Washington if impacts from land use and wetland functions are NOT incorporated (Buffer Alternative 1). [Page 4]
- **Table 8C-2.** Width of buffers based on wetland category and modified by the intensity of the impacts from changes in proposed land use (Buffer Alternative 2). [Page 5]
- **Table 8C-3.** Types of land uses that can result in high, moderate, and low levels of impacts to adjacent wetlands (used in Buffer Alternatives 2 and 3). [Page 5]
- **Table 8C-4.** Width of buffers needed to protect Category IV wetlands in western Washington (Buffer Alternative 3). [Page 6]
- **Table 8C-5.** Width of buffers needed to protect Category III wetlands in western Washington (Buffer Alternative 3). [Page 6]
- **Table 8C-6.** Width of buffers needed to protect Category II wetlands in western Washington (Buffer Alternative 3). [Page 7]
- **Table 8C-7.** Width of buffers needed to protect Category I wetlands in western Washington (Buffer Alternative 3). [Page 8]
- **Table 8C-8.** Examples of measures to minimize impacts to wetlands from different types of activities. [Page 10]

- **Table 8C-9.** Comparison of recommended buffer widths for high intensity land uses between Alternative 3 (step-wise scale) and Alternative 3A (graduated scale) based on score for habitat functions [Page 14].
- **Table 8C-10.** Comparison of recommended widths for buffers between Alternative 3 and Alternative 3A for proposed land uses with high impacts with mitigation for impacts. [Page 15]
- **Table 8C-11.** Mitigation ratios for projects in western Washington. [Page 21]

The guidance in this appendix can be used in developing regulations such as critical areas ordinances for protecting and managing the functions and values of wetlands. The recommendations are based on the analysis of the current scientific literature found in Volume 1. The detailed rationale for the recommendations is provided in Appendices 8-E and 8-F.

The recommendations on buffer widths and mitigation ratios are general, and there may be some wetlands for which these recommendations are either too restrictive or not protective enough. The recommendations are based on the assumption that a wetland will be protected only at the scale of the site itself. They do not reflect buffers and ratios that might result from regulations that are developed based on a larger landscape-scale approach.

8C.2 Widths of Buffers

Requiring buffers of a specific width has been one of the primary methods by which local jurisdictions in Washington have protected the functions and values of wetlands. Generally, buffers are the uplands adjacent to an aquatic resource that can, through various physical, chemical, and biological processes, reduce impacts to wetlands from adjacent land uses. The physical characteristics of buffers (e.g., slope, soils, vegetation, and width) determine how well buffers reduce the adverse impacts of human development. These characteristics are discussed in detail in Chapter 5, Volume 1.

In addition to reducing the impacts of adjacent land uses, buffers also protect and maintain a wide variety of functions and values provided by wetlands. For example, buffers can provide the terrestrial habitats needed by many species of wildlife that use wetlands to meet some of their needs.

The review of the scientific literature has shown, however, that buffers alone cannot adequately protect all functions that a wetland performs. Additional guidance is, therefore, provided on other ways in which wetlands can be managed and regulated to provide some of the necessary protection that buffers alone do not provide. The following guidance for protecting the functions and values of wetlands is based on their category as determined through the rating system for western Washington.

Basic assumptions for using the guidance on widths for buffers

Recommendations for widths of buffers assume that:

- The wetland has been categorized using the *Washington State Wetland Rating System for Western Washington-Revised* (Hruby 2004b).
- The buffer is vegetated with native plant communities that are appropriate for the *ecoregion* or with a plant community that provides similar functions. Ecoregions denote areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources. The U.S. Environmental Protection Agency maintains updated maps of ecoregions that are available at <http://www.epa.gov/naaujydh/pages/models/ecoregions.htm>. Ecoregions currently mapped for Washington are: Coast Range, Puget Lowland, Cascades, Eastern Cascades Slopes and Foothills, North Cascades, Columbia Plateau, Blue Mountains, and Northern Rockies.
- If the vegetation in the buffer is disturbed (grazed, mowed, etc.), proponents planning changes to land use that will increase impacts to wetlands need to rehabilitate the buffer with native plant communities that are appropriate for the ecoregion, or with a plant community that provides similar functions.
- The width of the buffer is measured along the horizontal plane (see drawing below):

- The buffer will remain relatively undisturbed in the future within the width specified.

Three alternatives for protecting the functions of wetlands using buffers are described in the following sections:

- **Buffer Alternative 1.** Width based only on wetland category.
- **Buffer Alternative 2.** Width based on wetland category and the intensity of impacts from proposed changes in land use.
- **Buffer Alternative 3.** Width based on wetland category, intensity of impacts, and wetland functions or special characteristics. This alternative has two options for determining the widths of buffers when they are based on the score for habitat. Alternative 3 provides three buffer widths based on habitat scores, while Alternative 3A provides a graduated scale of widths for buffers based on habitat scores.

The buffer widths recommended for each alternative were based on the review of scientific information in Volume 1. The guidance in this appendix synthesizes the information about the types and sizes of buffers needed to protect the functions and special characteristics of wetlands.

Appendices 8-C and 8-D do not provide the metric equivalents for buffer widths even though most of the research on buffers uses the metric scale. This decision was made because most local governments use the English Customary measures. For example, a buffer width is set at 50 feet rather than 15 meters.

8C.2.1 Buffer Alternative 1: Width Based Only on Wetland Category

This alternative, in which the width of buffers is based only on the category of the wetland, is the simplest (Table 8C-1). The width recommended for each category of wetland in Alternative 1 is the widest recommended for that category in both Alternatives 2 and 3 (discussed below). Alternative 1 provides the least flexibility because many different types of wetlands and types of human impacts are combined. For example, not all wetlands that fall into Category I or II need a 300-foot buffer. If no distinctions are made between the wetlands that fall into Category I or II, all wetlands that fall into these categories have to be protected with a 300-foot buffer so adequate protection is provided for those wetlands that do need a buffer this wide. Also, the widths recommended for this alternative are those needed to protect the wetland from proposed land uses that have the greatest impacts since no distinctions between impacts are made.

Table 8C-1. Width of buffers needed to protect wetlands in western Washington if impacts from land use and wetland functions are NOT incorporated (Buffer Alternative 1).

Category of Wetland	Widths of Buffers
IV	50 ft
III	150 ft
II	300 ft
I	300 ft

8C.2.2 Buffer Alternative 2: Width Based on Wetland Category and Modified by the Intensity of the Impacts from Proposed Land Use

The second alternative increases the regulatory flexibility by including the concept that not all proposed changes in land uses have the same level of impact (Table 8C-2). For example, one new residence being built on 5 acres of land near a wetland is expected to have a smaller impact than 20 houses built on the same 5 acres. Three categories of impacts from proposed land uses are outlined: land uses that can create high impacts, moderate impacts, and low impacts to wetlands. Different land uses that can cause these levels of impacts are listed in Table 8C-3.

Table 8C-2. Width of buffers needed to protect wetlands in western Washington considering impacts of proposed land uses (Buffer Alternative 2).

Category of Wetland	Land Use with Low Impact *	Land Use with Moderate Impact *	Land Use with High Impact *
IV	25 ft	40 ft	50 ft
III	75 ft	110 ft	150 ft
II	150 ft	225 ft	300 ft
I	150 ft	225 ft	300 ft

* See Table 8C-3 below for types of land uses that can result in low, moderate, and high impacts to wetlands.

Table 8C-3. Types of proposed land use that can result in high, moderate, and low levels of impacts to adjacent wetlands.

Level of Impact from Proposed Change in Land Use	Types of Land Use Based on Common Zoning Designations *
High	<ul style="list-style-type: none"> • Commercial • Urban • Industrial • Institutional • Retail sales • Residential (more than 1 unit/acre) • Conversion to high-intensity agriculture (dairies, nurseries, greenhouses, growing and harvesting crops requiring annual tilling and raising and maintaining animals, etc.) • High-intensity recreation (golf courses, ball fields, etc.) • Hobby farms
Moderate	<ul style="list-style-type: none"> • Residential (1 unit/acre or less) • Moderate-intensity open space (parks with biking, jogging, etc.) • Conversion to moderate-intensity agriculture (orchards, hay fields, etc.) • Paved trails • Building of logging roads • Utility corridor or right-of-way shared by several utilities and including access/maintenance road
Low	<ul style="list-style-type: none"> • Forestry (cutting of trees only) • Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.) • Unpaved trails • Utility corridor without a maintenance road and little or no vegetation management.

* Local governments are encouraged to create land-use designations for zoning that are consistent with these examples.

8C.2.3 Buffer Alternative 3: Width Based on Wetland Category, Intensity of Impacts, Wetland Functions, or Special Characteristics

The third alternative provides the most flexibility by basing the widths of buffers on three factors: the wetland category, the intensity of the impacts (as used in Alternative 2), and the functions or special characteristics of the wetland that need to be protected as determined through the rating system. The recommended widths for buffers are shown in Tables 8C-4 to 8C-7. Using this alternative, a wetland may fall into more than one category in the table. For example, an interdunal wetland may be rated a Category III wetland because it is an isolated interdunal wetland, but it may be rated a Category II wetland based on its score for functions.

If a wetland meets more than one of the characteristics listed in Tables 8C-4 to 8C-7, the buffer recommended to protect the wetland is the widest one. For example, if a Category I wetland (Table 8C-7) scores 32 points for habitat and 27 points for water quality functions, a 300-foot buffer is needed for land uses with high impacts because the widths needed to protect habitat are wider than those needed for the other functions.

Table 8C-4. Width of buffers needed to protect Category IV wetlands in western Washington (Buffer Alternative 3 for wetlands scoring less than 30 points for all functions).

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use	Other Measures Recommended for Protection
Score for all 3 basic functions is less than 30 points	Low - 25 ft Moderate - 40 ft High - 50 ft	No recommendations at this time ¹

Table 8C-5. Width of buffers needed to protect Category III wetlands in western Washington (Buffer Alternative 3 for wetlands scoring 30 - 50 points for all functions).

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use	Other Measures Recommended for Protection
Moderate level of function for habitat (score for habitat 20 - 28 points)	Low - 75 ft Moderate - 110 ft High - 150 ft	No recommendations at this time ¹
Not meeting above characteristic	Low - 40 ft Moderate - 60 ft High - 80 ft	No recommendations at this time ¹

¹ No information on other measures for protection was available at the time this document was written. The Washington State Department of Ecology will continue to collect new information for future updates to this document.

Table 8C-6. Width of buffers needed to protect Category II wetlands in western Washington (Buffer Alternative 3 for wetlands scoring 51-69 points for all functions or having the "Special Characteristics" identified in the rating system).

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use (Apply most protective if more than one criterion is met.)	Other Measures Recommended for Protection
High level of function for habitat (score for habitat 29 - 36 points)	Low - 150 ft Moderate - 225 ft High - 300 ft*	Maintain connections to other habitat areas
Moderate level of function for habitat (score for habitat 20 - 28 points)	Low - 75 ft Moderate - 110 ft High - 150 ft	No recommendations at this time ²
High level of function for water quality improvement and low for habitat (score for water quality 24 - 32 points; habitat less than 20 points)	Low - 50 ft Moderate - 75 ft High - 100 ft	No additional surface discharges of untreated runoff
Estuarine	Low - 75 ft Moderate - 110 ft High - 150 ft	No recommendations at this time ²
Interdunal	Low - 75 ft Moderate - 110 ft High - 150 ft	No recommendations at this time ²
Not meeting above characteristics	Low - 50 ft Moderate - 75 ft High - 100 ft	No recommendations at this time ²

* Fifty of the 122 wetlands used to calibrate the rating system for western Washington were Category II. Of these 50, only five (10%) would require 300-foot buffers to protect them from high-impact land uses. The maximum buffer width for the remaining 45 wetlands would be 150 feet.

² See footnote on the previous page.

Table 8C-7. Width of buffers needed to protect Category I wetlands in western Washington (Buffer Alternative 3 for wetlands scoring 70 points or more for all functions or having the "Special Characteristics" identified in the rating system).

Wetland Characteristics	Buffer Widths by Impact of Proposed Land Use (Apply most protective if more than one criterion is met)	Other Measures Recommended for Protection
Natural Heritage Wetlands	Low - 125 ft Moderate - 190 ft High - 250 ft	No additional surface discharges to wetland or its tributaries No septic systems within 300 ft of wetland Restore degraded parts of buffer
Bogs	Low - 125 ft Moderate - 190 ft High - 250 ft	No additional surface discharges to wetland or its tributaries Restore degraded parts of buffer
Forested	Buffer width to be based on score for habitat functions or water quality functions	If forested wetland scores high for habitat, need to maintain connections to other habitat areas Restore degraded parts of buffer
Estuarine	Low - 100 ft Moderate - 150 ft High - 200 ft	No recommendations at this time ³
Wetlands in Coastal Lagoons	Low - 100 ft Moderate - 150 ft High - 200 ft	No recommendations at this time ³
High level of function for habitat (score for habitat 29 - 36 points)	Low - 150 ft Moderate - 225 ft High - 300 ft	Maintain connections to other habitat areas Restore degraded parts of buffer
Moderate level of function for habitat (score for habitat 20 - 28 points)	Low - 75 ft Moderate - 110 ft High - 150 ft	No recommendations at this time ³
High level of function for water quality improvement (24 - 32 points) and low for habitat (less than 20 points)	Low - 50 ft Moderate - 75 ft High - 100 ft	No additional surface discharges of untreated runoff
Not meeting any of the above characteristics	Low - 50 ft Moderate - 75 ft High - 100 ft	No recommendations at this time ³

³ See footnote on page 6.

2-252

8C.2.4 Special Conditions for a Possible Reduction in Buffer Widths

8C.2.4.1 Condition 1: Reduction in Buffer Width Based on Reducing the Intensity of Impacts from Proposed Land Uses

The buffer widths recommended for proposed land uses with high-intensity impacts to wetlands can be reduced to those recommended for moderate-intensity impacts under the following conditions:

- For wetlands that score moderate or high for habitat (20 points or more for the habitat functions), the width of the buffer can be reduced if both of the following criteria are met:
 - 1) A relatively undisturbed, vegetated corridor at least 100-feet wide is protected between the wetland and any other Priority Habitats as defined by the Washington State Department of Fish and Wildlife (“relatively undisturbed” and “vegetated corridor” are defined in questions H 2.1 and H 2.2.1 of the *Washington State Wetland Rating System for Western Washington – Revised*, (Hruby 2004b)). Priority Habitats in western Washington include:
 - Wetlands
 - Riparian zones
 - Aspen stands
 - Cliffs
 - Prairies
 - Caves
 - Stands of Oregon White Oak
 - Old-growth forests
 - Estuary/estuary-like
 - Marine/estuarine shorelines
 - Eelgrass meadows
 - Talus slopes
 - Urban natural open space (for current definitions of Priority Habitats, see <http://wdfw.wa.gov/hab/phshabs.htm>)

The corridor must be protected for the entire distance between the wetland and the Priority Habitat by some type of legal protection such as a conservation easement.

- 2) Measures to minimize the impacts of different land uses on wetlands, such as the examples summarized in Table 8C-8, are applied.
- For wetlands that score less than 20 points for habitat, the buffer width can be reduced to that required for moderate land-use impacts by applying measures to minimize the impacts of the proposed land uses (see examples in Table 8C-8).

Table 8C-8. Examples of measures to minimize impacts to wetlands from proposed change in land use that have high impacts. (This is not a complete list of measures.)

Examples of Disturbance	Activities and Uses that Cause Disturbances	Examples of Measures to Minimize Impacts
Lights	<ul style="list-style-type: none"> • Parking lots • Warehouses • Manufacturing • Residential 	<ul style="list-style-type: none"> • Direct lights away from wetland
Noise	<ul style="list-style-type: none"> • Manufacturing • Residential 	<ul style="list-style-type: none"> • Locate activity that generates noise away from wetland
Toxic runoff*	<ul style="list-style-type: none"> • Parking lots • Roads • Manufacturing • Residential areas • Application of agricultural pesticides • Landscaping 	<ul style="list-style-type: none"> • Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered • Establish covenants limiting use of pesticides within 150 ft of wetland • Apply integrated pest management
Stormwater runoff	<ul style="list-style-type: none"> • Parking lots • Roads • Manufacturing • Residential areas • Commercial • Landscaping 	<ul style="list-style-type: none"> • Retrofit stormwater detention and treatment for roads and existing adjacent development • Prevent channelized flow from lawns that directly enters the buffer
Change in water regime	<ul style="list-style-type: none"> • Impermeable surfaces • Lawns • Tilling 	<ul style="list-style-type: none"> • Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	<ul style="list-style-type: none"> • Residential areas 	<ul style="list-style-type: none"> • Use privacy fencing; plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion; place wetland and its buffer in a separate tract
Dust	<ul style="list-style-type: none"> • Tilled fields 	<ul style="list-style-type: none"> • Use best management practices to control dust

* These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site.

8C.2.4.2 Condition 2: Reductions in Buffer Widths Where Existing Roads or Structures Lie Within the Buffer

Where a legally established, non-conforming use of the buffer exists (e.g., a road or structure that lies within the width of buffer recommended for that wetland), proposed actions in the buffer may be permitted as long as they do not increase the degree of non-conformity. This means no increase in the impacts to the wetland from activities in the buffer.

For example, if a land use with high impacts (e.g., building an urban road) is being proposed next to a Category II wetland with a moderate level of function for habitat, a 150-foot buffer would be needed to protect functions (see Table 8C-6). If, however, an existing urban road is already present and only 50 feet from the edge of the Category II wetland, the additional 100 feet of buffer may not be needed if the road is being widened. A vegetated buffer on the other side of the road would not help buffer the existing impacts to the wetland from the road. If the existing road is resurfaced or widened (e.g., to add a sidewalk) along the upland edge, without any further roadside development that would increase the degree of non-conformity, the additional buffer is not necessary. The associated increase in impervious surface from widening a road, however, may necessitate mitigation for impacts from stormwater.

If, however, the proposal is to build a new development (e.g., shopping center) along the upland side of the road, the impacts to the wetland and its functions may increase. This would increase the degree of non-conformity. The project proponent would need to provide the additional 100 feet of buffer extending beyond the road or apply buffer averaging (see Section 8C.2.6).

8C.2.4.3 Condition 3: Reduction in Buffer Widths Through an Individual Rural Stewardship Plan

A Rural Stewardship Plan (RSP) is the product of a collaborative effort between rural property owners and a local government to tailor a management plan specific for a rural parcel of land. The goal of the RSP is better management of wetlands than what would be achieved through strict adherence to regulations. In exchange, the landowner gains flexibility in the widths of buffers required, in clearing limits, and in other requirements found in the regulations. For example, dense development in rural residential areas can be treated as having a low level of impact when the development of the site is managed through a locally approved RSP. The voluntary agreement includes provisions for restoration, maintenance, and long-term monitoring and specifies the widths of buffers needed to protect each wetland within the RSP.

8C.2.5 Conditions for Increasing the Width of, or Enhancing, the Buffer

8C.2.5.1 Condition 1: Buffer is Not Vegetated with Plants Appropriate for the Region

The recommended widths for buffers are based on the assumption that the buffer is vegetated with a native plant community appropriate for the ecoregion or with one that performs similar functions. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided. Generally, improving the vegetation will be more effective than widening the buffer.

8C.2.5.2 Condition 2: Buffer Has a Steep Slope

The review of the literature (Volume 1) indicates that the effectiveness of buffers at removing pollutants before they enter a wetland decreases as the slope increases. If a buffer is to be based on the score for its ability to improve water quality (see Tables 8C-4 through 8C-7) rather than habitat or other criteria, then the buffer should be increased by 50% if the slope is greater than 30% (a 3-foot rise for every 10 feet of horizontal distance).

8C.2.5.3 Condition 3: Buffer Is Used by Species Sensitive to Disturbance

If the wetland provides habitat for a species that is particularly sensitive to disturbance (such as a threatened or endangered species), the width of the buffer should be increased to provide adequate protection for the species based on its particular life-history needs. Some buffer requirements for priority species are available on the Washington State Department of Fish and Wildlife web page (<http://wdfw.wa.gov/hab/phsrecs.htm>). The list of priority species for vertebrates is at <http://wdfw.wa.gov/hab/phsvert.htm>; for invertebrates it is at <http://wdfw.wa.gov/hab/phsinvrt.htm>. Information on the buffer widths needed by some threatened, endangered, and sensitive species of wildlife is provided in Appendix 8-H.

8C.2.6 Buffer Averaging

The widths of buffers may be averaged if this will improve the protection of wetland functions, or if it is the only way to allow for reasonable use of a parcel. There is no scientific information available to determine if averaging the widths of buffers actually protects functions of wetlands. The authors have concluded that averaging could be allowed in the following situations:

Averaging may not be used in conjunction with any of the other provisions for reductions in buffers (listed above).

- Averaging to **improve wetland protection** may be permitted when all of the following conditions are met:
 - The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a “dual-rated” wetland with a Category I area adjacent to a lower rated area
 - The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower-functioning or less sensitive portion
 - The total area of the buffer after averaging is equal to the area required without averaging
 - The buffer at its narrowest point is never less than 3/4 of the required width
- Averaging to **allow reasonable use** of a parcel may be permitted when all of the following are met:
 - There are no feasible alternatives to the site design that could be accomplished without buffer averaging
 - The averaged buffer will not result in degradation of the wetland’s functions and values as demonstrated by a report from a qualified wetland professional (see Appendix 8-G for a definition of a qualified wetland professional)
 - The total buffer area after averaging is equal to the area required without averaging
 - The buffer at its narrowest point is never less than 3/4 of the required width

8C.2.7 Modifying Buffer Widths in Alternative 3 Using a Graduated Scale for the Habitat Functions (Alternative 3A)

Alternative 3 contains recommendations for protecting the habitat functions of wetlands using only three groupings of scores (0-19, 20-28, 29-36). As a result, a one-point difference between 28 and 29 can result in a 150-foot increase in the width of a buffer around a wetland. The habitat scores were divided into three groups to simplify the regulations based on this guidance. This division is not based on a characterization of risks since the scientific information indicates that the decrease in risk with increasing widths of buffers is relatively continuous for habitat functions.

Such a large increase in width with a one-point increase in the habitat score may be contentious. A jurisdiction may wish to reduce the increments in the widths for buffers by developing a more graduated (but inherently more complicated) scale based on the scores for habitat. Table 8C-9 provides one example of a graduated scale for widths of buffers where the width increases by 20 feet for every one point increase in the habitat score (Figure 8C-1 shows the buffer widths graphically).

Table 8C-9. Comparison of widths for buffers in Alternatives 3 (step-wise scale) and 3A (graduated scale) for proposed land uses with high impacts based on the score for habitat functions in western Washington

Points for Habitat from Wetland Rating Form	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Alternative 3	100	150	150	150	150	150	150	150	150	150	300	300	300	300	300	300	300	300
Alternative 3A	100	100	100	120	140	160	180	200	220	240	260	280	300	300	300	300	300	300

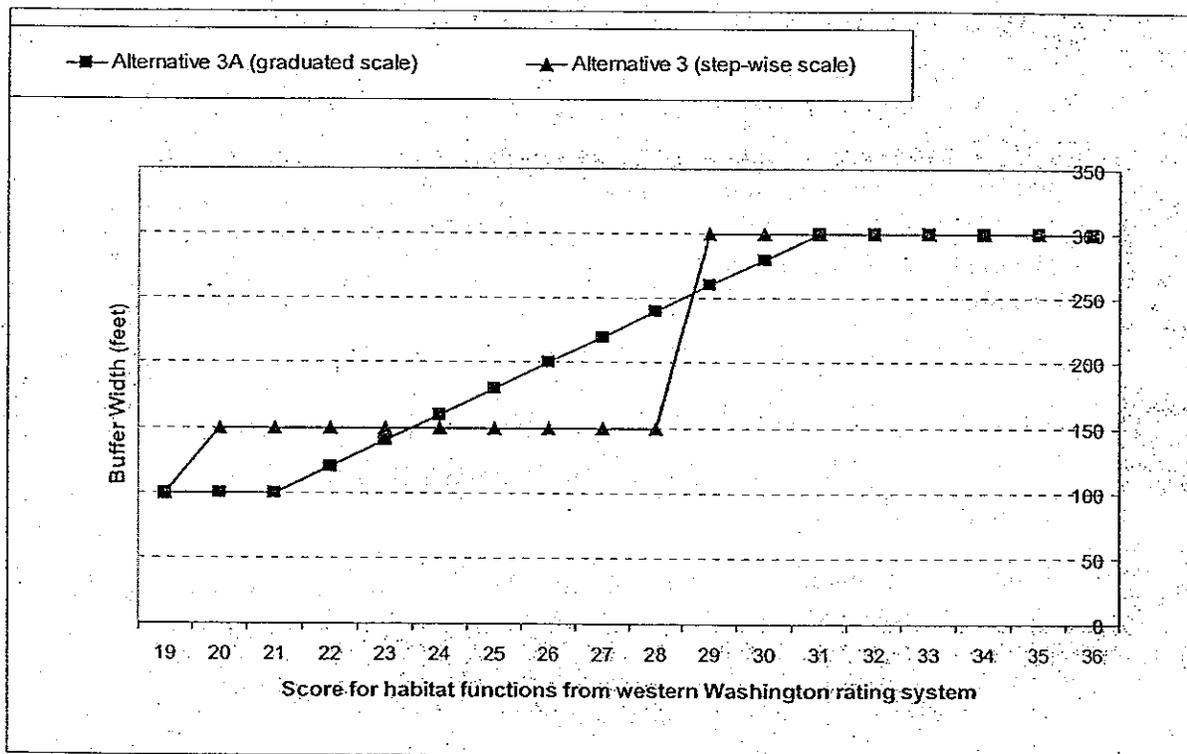


Figure 8C-1. Graphical comparison of widths for buffers in Alternative 3 and 3A for proposed land uses with high impacts based on the score for habitat functions in western Washington.

2-258

Other scales are possible as long as they keep within the limits established from the scientific information currently available: wetlands with scores for habitat that are higher than 31 points need buffers that are at least 300-foot wide; wetlands with a score of 26 points need buffers of at least 150 feet; and wetlands with a score of 22 points need buffers that are at least 100-foot wide.

These buffer widths can be further reduced by 25 percent if a proposed project with high impacts implements the mitigation measures such as those described in Table 8C-8. The measures are part of "Condition 1" in Section 8C.2.4 (Special Conditions for a Possible Reduction in Buffer Widths). The buffer widths under Buffer Alternatives 3 and 3A, and the corresponding 25 percent reduction (per buffer reduction condition 1) are shown in Table 8C-10 and represented graphically below in Figure 8C-2.

Table 8C-10. Comparison of widths for buffers in Alternatives 3 (step-wise scale) and 3A (graduated scale) for proposed land uses with high impacts based on the score for habitat functions in western Washington if the impacts are mitigated.

Points for Habitat from Wetland Rating Form	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Alternative 3 (with mitigation of impacts)	75	110	110	110	110	110	110	110	110	110	225	225	225	225	225	225	225	225
Alternative 3A (with mitigation of impacts)	75	75	75	90	105	120	135	150	165	180	195	210	225	225	225	225	225	225

2-259

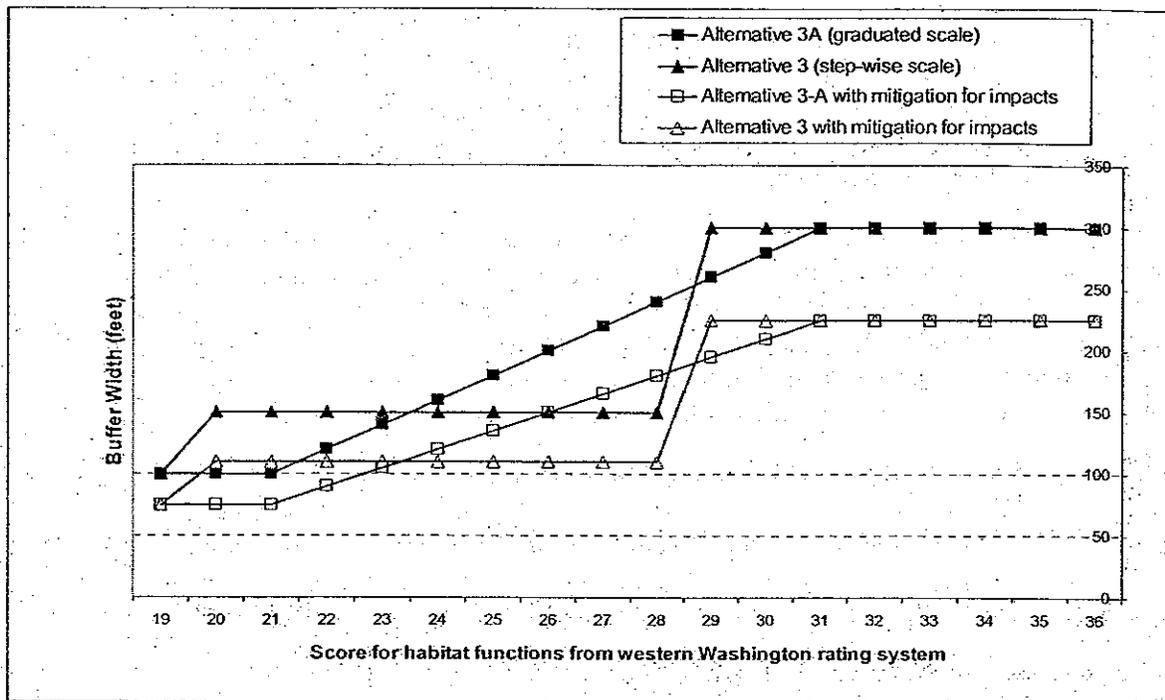


Figure 8C-2. Graphical comparison of widths for buffers in Alternatives 3 and 3A based on the score for habitat functions in western Washington with and without mitigating impacts of proposed development outside the buffer.

Alternatives 3 and 3A represent two separate approaches for determining widths of buffers for wetlands scoring between 20 and 31 points for the habitat functions. Local governments should select one of the two approaches and should not hybridize the approaches or adopt both at the same time.

2-260