



DATE: June 3, 2010

TO: Chair Sheffels and Members of the Planning Commission

FROM: Michael Paine, Environmental Planning Manager, 425-452-2739
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SUBJECT: Shoreline Master Program, Residential Setbacks—Planning Commission Study Session

The June 9th study session, will present a discussion on options for designating an appropriate shoreline setback on residential properties. This memorandum includes a summary of the requirements under the Shoreline Management Act (SMA), how other local jurisdictions have addressed residential setbacks, and key citizen concerns articulated to date. At this study session, staff is requesting direction from the Commission on a generalized approach to addressing setbacks on residential development. Specific policies and code language, based on the Commissions' direction, will be developed and introduced at later in the summer.

BACKGROUND

At the May 12 study session, staff introduced the first working draft of the update SMP. As you recall, staff stressed the preliminary nature of the working draft and noted that it *does not represent a staff recommendation*. The transmittal of the SMP working draft was intended to provide a starting point for the interactive policy and code development phase of the SMP update process that begins in earnest tonight and culminates in a Public Hearing before the Commission in the fall.

At the same study session, staff proposed that the Commission begin their more detailed review by focusing on those areas of most community interest first, thereby ensuring ample time for a thorough airing of views. To this end, staff recommended the following topic areas for detailed review: setbacks and vegetation conservation, piers and docks, shoreline stabilization, marinas, nonconformities, and restoration planning. The Commission agreed that this approach made sense and directed staff to begin this work as soon as possible.

Bellevue has had an SMP since 1974 and one of its stated goals is:

“To ensure that the City’s shorelines and wetlands are planned and coordinated to afford optimal use of these limited resources; and to ensure that the shorelines and wetlands provide natural amenities within an urban environment.”

From the SMP’s first adoption, structure setbacks and limits on the location of development were seen as integral to protecting and preserving the shorelines. Prior to 2006, the City’s SMP included provisions for a 25-foot structure setback on all properties and required all development to prepare a “plan indicating methods for preserving shoreline vegetation and for control of

erosion during and following construction”. Likewise residential development was discouraged from disrupting soils and creating erosion problems; instead, residential development was encouraged to contain disturbance using plant material as a first option. Furthermore, landfill was limited and the use of vegetation for stabilizing the water’s edge from erosion was encouraged over the use of bulkheads.

The City’s current critical area provisions include a shoreline buffer and setback because under the Growth Management Act lakes are considered habitat that support state species of importance. The current Bellevue buffer on a developed site is 25 feet, with an additional 25-foot structure setback; vacant lands require a 50-foot buffer. Numerous exceptions and administrative provisions are included (see LUC 20.25H) to allow these dimensions to be modified. The critical area provisions, as they apply to shoreline, are discussed in more detail in the section on regulatory options below.

SUMMARY OF THE SHORELINE MANAGEMENT ACT AND WAC GUIDELINES

The Shoreline Management Act (SMA), Chapter 90.58 RCW, was approved by voters in 1971. Although the SMA embodies a legislatively-determined and voter-approved balance between protection of state shorelines and development, its primary purpose is to protect shorelines as fully as possible.¹ On shorelines of statewide significance, such as Lake Sammamish and Washington, the legislature declared that “the interest of all people shall be paramount in the management of shorelines of statewide significance.” RCW 90.528.020. The legislature provided specific requirements to both Ecology and local jurisdictions when managing these shorelines:

[T]he department in adopting guidelines for shorelines of statewide significance, and local government, in developing master programs for shorelines of statewide significance, shall give preference to uses in the following order of preference which:

- (1) Recognize and protect the statewide interest over the local interest;
- (2) Preserve the natural character of the shoreline;
- (3) Result in long term over short term benefit;
- (4) Protect the resources and ecology of the shoreline;
- (5) Increase public access to publicly owned areas of the shoreline;
- (6) Increase recreational opportunities for the public in the shoreline; and
- (7) Provide for any other element defined in RCW 30.58.100 deemed appropriate or necessary.

RCW 90.58.020. The SMA establishes the state requirements for managing shorelines, and the Washington State Department of Ecology’s implementing regulations, or Guidelines, provide process and substantive direction to local jurisdictions when preparing their shoreline master programs. The state requirements provide the regulatory framework under which the City must

¹ *Samson v. City of Bainbridge Island*, 149 Wn. App. 33, 49 (2009).

develop its shoreline master program.² Specific guidance for shorelines of statewide significance is provided in the Guidelines. WA 173-26-251.

Consistent with the SMA, and specifically, RCW 90.58.020, Ecology's Guidelines, as stated in Title 173-26 WAC, requires each jurisdiction to include development standards for residential development along the shoreline. Ecology acknowledges that single-family residences are the most common form of shoreline development and are identified as a priority use when developed in a manner consistent with control of pollution and prevention of damage to the natural environment. WAC 173-26-241(3)(J)

Ecology also states that without proper management, single family residential use can cause significant damage to the shoreline area through cumulative impacts from shoreline armoring, storm water runoff, septic systems, introduction of pollutants, and vegetation modification and removal. *Id.* Shoreline Master Programs are required to include policies and regulations for residential development that assure no net loss of shoreline ecological functions. *Id.* Additionally, provisions that include specific shoreline setbacks requirement for residential structures, buffer areas, density requirements, standards for shoreline armoring and vegetation conservation are required. *Id.*; *see also* WAC 173-26-211(f) (describing management policies for shoreline residential environment). Finally residential development, including appurtenant structures and uses, are to be sufficiently set back from steep slopes and shorelines vulnerable to erosion so that structural improvements, including bluff walls and other stabilization structures, are not required to protect such structures and uses. *Id.*

POLICY GUIDANCE FROM WORKING DRAFT SMP

At the Planning Commission's May 12th meeting staff presented the SMP working draft with the purpose of giving the Commission a glimpse at the breadth of work required and a sense of the potential policy direction for consideration. In addition to the environment designation criteria that establishes the need for standards for residential development, the following is an excerpt of relevant working draft policies to consider when discussing the regulatory options for setbacks.

Use Policies – General

POLICY SH-42. Provide adequate setbacks from the City's lake shores to protect sensitive features and functions typical to the City's shorelines while recognizing accessory uses typical to the use that occupies the site.

POLICY SH-43. Guide development activity through dimensional and density standards appropriate to the shoreline jurisdiction. Standards should include setbacks, building heights, lot coverage, impervious surface, and other land use controls essential to provide guidance for future growth and development within the shoreline jurisdiction. Development regulations should, when possible, avoid, minimize, and mitigate impacts from development to ecological functions.

Residential Use Policies

² *Biggers v. City of Bainbridge Island*, 162 Wn.2d 683, 694-696 (2007)(holding that local jurisdiction's ability to manage shorelines, flows from the state because local governments do not possess any inherent constitutional police power over state shoreline use)..

POLICY SH-90. New primary residential structures should be prohibited in the setback from the shoreline; except where significant shoreline enhancement or restoration is proposed.

POLICY SH-92. New or expanded residential development in the shoreline jurisdiction should be located and designed to minimize adverse effects on shoreline process and functions.

POLICY SH-93. Design of new residential development should protect, enhance, and restore shoreline ecological functions. Encourage use of low impact development stormwater management techniques, shoreline restoration, and other conservation measures.

POLICY SH-95. New residential development and expansions to existing residential structures shall be designed and located to eliminate the need for shoreline armoring and stabilization.

POLICY SH-100. Allow existing, legally-established primary residential structures that encroach into the setback from the ordinary high water mark to be redeveloped within the existing footprint, provided, the redevelopment complies with the Shoreline Master Program.

POLICY SH-101. Create incentives and provide flexibility to encourage development and redevelopment to incorporate native vegetation, shoreline restoration, low impact development techniques, or softened shoreline stabilization, or other restoration measures determined by the Director.

Working draft policies generally reflect the concept of minimizing impacts on ecological function while allowing some flexibility for alternative development based on site conditions. The policies recognize the existing developed condition of Bellevue's shorelines but also acknowledge the ability of these shorelines to provide ecological benefits. Residential uses and their associated activities, make up the majority of the shoreline uses in Bellevue. Consequently, how these uses are developed is important to the character and health of Bellevue's shoreline. Although Bellevue's shorelines are considered relatively developed there are varying degrees of encroachment (i.e. setbacks) on the shoreline. Policies need to not only consider the character of the shorelines today, and accommodate where possible existing structures, but also the address future development. Because the existing development pattern varies, future development on sites with structures located far from the shoreline today may result in larger structures and development closer to the water in the future. In keeping with our established principles, the Commission must balance property rights with environmental protection and neighborhood character when making policy choices for setbacks and residential development.

Staff will review these policies with the Commission at the meeting as an introduction to the regulatory options presented below. The policies will be edited to reflect the regulatory concept the Commission supports as a result of their discussion. In Attachment 1 staff has included a complete excerpt from the relevant sections pertaining to residential development.

CITIZEN CONCERNS

The Commission and staff have heard numerous concerns regarding existing and pending regulations pertaining to residential properties. Although many of these concerns relate to the authority of critical areas ordinances to be applied in shorelines, there is a range of more specific issues that the Commission should consider in its deliberations. These include the following:

- The use of "no-touch" buffers instead of less restrictive setbacks;
- Sizing buffers or setbacks to minimize impact on private property;

- Regulatory standards should reflect existing developed conditions in Bellevue and not attempt recreate predevelopment conditions;
- Regulatory standards should reflect existing environmental conditions which are thought to be heavily affected by watershed-scale impacts;
- There is significant interest in retaining the ability to maintain and rebuild existing nonconforming structures;
- There is interest among some property owners that residential property rights trump environmental protection in the shoreline.

OTHER JURISDICTIONS' APPROACHES

Staff reviewed several local jurisdictions who have either received DOE approval for an updated SMP or who have an SMP which was approved by local ordinance. A detailed description of their standards is included in Attachment 2. On balance, all nearby jurisdictions chose not to place a “no-touch” buffer on their lake shorelines opting instead for a shoreline structure setback with a wide variety of sizes, restrictions, conservation requirements, and incentives.

Redmond has a 35-foot setback and allows, with revegetation, for a reduction to 20 feet. Kirkland has a slightly more complicated system, based on zoning district and lot depth. In low density residential, the requirement is 30 percent of lot depth but in no case less than 30 feet or more than 60 feet. For higher residential densities the rule is 25 feet or 15 percent of the parcel depth, whichever is greater. Sammamish requires a 45-foot setback. In most cases, all three jurisdictions have options to reduce setbacks based on restorative actions by the property owner.

The cities of Kirkland and Redmond also employ a range of approaches to preserving existing vegetation and to installing more. Kirkland sets retention standards for existing habitat trees and landscape standards for new shoreline development. Redmond has tree retention and vegetation requirements for commercial and multi-family zones. A vegetation standard is triggered on single family lots with the reconstruction and development of residences. Sammamish limits clearing and thinning and encourages vegetation retention.

In the draft SMP, staff presents a comparable approach that ties modest levels of replanting to new development or redevelopment to offset loss of shoreline function.

PROPOSED REGULATORY APPROACH

The SMP applies to that part of a property or properties 200 feet from the ordinary high water mark and the aquatic area waterward of that mark to the jurisdictional boundary. Associated floodways and wetlands area also included. While the entire shoreline area is subject to regulation under the SMP, and each increment of development should be mitigated under the Guidelines’ policy of no net loss, the impact on property owners can be greatly reduced, and the benefit to aquatic habitat potentially increased, if regulations and incentives are targeted to protecting a smaller area on either side of the ordinary high water mark. Regulations aimed at moderating development impacts to this interface between land and water may result in the most positive effects on a range of critical water quality and habitat functions, including those

components most important to juvenile Chinook survival in Lake Washington and Lake Sammamish.

This emphasis is justified because the coupling between terrestrial and aquatic systems is particularly strong along the lakeshore where human activities and their impacts can interfere with this relationship. Shorelines that are heavily modified with bulkheads, devoid of native vegetation or covered by structures, concrete, and pavers simply cannot contribute to this crucial interaction between land and water in the same manner less developed shorelines can. While not the only source of inputs, the absence of shoreline inputs can negatively affect the productivity of benthic habitats supporting both rooted and floating vegetation zone within littoral or photic zone (the depth to which light penetrates). This is important because the array of species found in the littoral zone is generally more diverse than in either open or deep water areas and is attributed to the variety of substrates and vegetation comprising the habitats present. The littoral zone provides habitat for a variety of attached microbes, worms, invertebrates (crayfish, shrimp and insects), and both juvenile and adult fish, amphibians, and reptiles. Lack of some measure of protection may prove especially damaging if future investment in shoreline property pushes even larger structures closer to the shoreline. Other areas on a shoreline property, being further removed from this sensitive zone, are simply more resilient, suggesting that policies and regulations aim at protecting an area around this interface between land and water should be the chief interest under Bellevue's proposed SMP, with a lesser focus on activities within the shoreline area outside this zone. Absent this emphasis, a more comprehensive, lot-scale approach might be justified to ensure no net loss of ecological function as properties redevelop.

WHY SETBACKS ARE NECESSARY

While there is little question that watershed-level effects have the greatest impact on aquatic areas, there is still benefit in protecting the interface between the land and water at the property scale to ensure no net loss of ecological function. Regulatory setbacks provide the best means to ensuring maintenance of the crucial connection between land and shore and the habitat and water quality benefits that come with it. Moreover, setbacks buffer aquatic areas from impacts associated with increased intensity of development. Shoreline setbacks serve a range of purposes, including, but not limited to:

- Protecting existing shoreline process and functions including shoreline habitat
- Avoiding damage from flooding and erosion
- Preventing excess nutrients from flowing into surface water
- Reducing inputs of pollutants found in oil, herbicides, pesticides and fertilizer
- Constraining inputs of trace metals and foreign chemicals of all kinds
- Ensuring that new development is adequately sited to avoid and minimize need for new shoreline stabilization features
- Preserving and enhancing views of the water
- Preventing permanent preclusion of restoration of shoreline functions and habitat, with the overall goal of achieving new State requirements for no net loss
- Maintaining existing character and the scenic quality of Bellevue's shorelines.

In general terms, a minimum of 25-to-50 feet is needed to provide an appropriate transition between the water and improvements in order to provide protection from erosion, account for flooding, and provide for the connection between shoreline vegetation and the littoral zone. When Bellevue adopted its SMP in 1974, it established a 25-foot setback. This was subsequently expanded to 50 feet in 2006 when an additional 25-foot buffer was added in response to new research suggesting that additional protection might be warranted. It was also recognized that the ability of setbacks to remove some pollutants carried by runoff can be improved by planting a portion of the shoreline in native shrubs and groundcovers and some smaller trees while also providing food sources for shoreline wildlife and nutrient inputs to littoral zone. Use of native vegetation will also help to reduce application of chemicals normally used in lawn and garden care close to the shoreline area.

Though a review of scientific literature based on function may suggest the need for larger shoreline buffers to protect more ecological functions (WDFW recommends aquatic buffers up to 250 feet wide in many cases), application of these recommendations is often heavily influenced by specific site characteristics and the intensity of existing development. Moreover, the efficiency with which buffers perform their work—for example removing pollutants or creating habitat—drops for some functions with lateral distance from the aquatic zone. As a consequence, staff has identified setback options that as much as possible recognize existing conditions and are focused on meeting a no net loss standard. For example, roughly 76 percent of structures (greater than 800 square feet) on Lake Sammamish and 67 percent of similar structures on Lake Washington are located at more than 35 feet from ordinary high water (OHW). Similarly about 89 percent of structures on Phantom Lake are located more than 50 feet away and 68 percent of structures at Newport Shores Canals are farther than 35 feet.

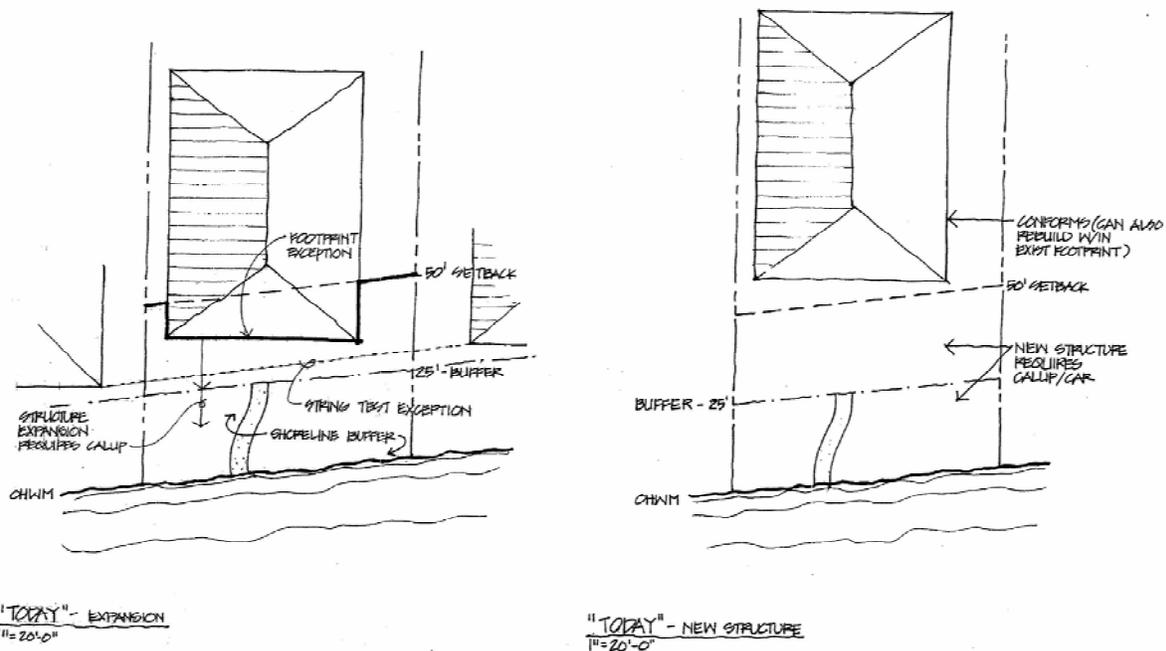
The potential regulatory options try to balance private property rights and environmental protection by incorporating setback options that are based on an evaluation of existing conditions while providing protection for shoreline functions.

SETBACK OPTIONS

In crafting setback options, staff relied on the SMA, the Guidelines, draft SMP policies outlined above, and the previously introduced principles for review that state regulations should: (1) be Bellevue appropriate; (2) should focus on neighborhood character, (3) balance regulatory interest with private property rights; (4) be predictable and user-friendly while preserving flexibility for those that want it; and, (4) take notice of citizen issues. With this in mind, staff developed two options (A and B) for the Planning Commission's consideration. We have also included our current code option for comparison purposes. As discussed at our May 12 study session, staff has not developed detailed code language at this time. Instead staff seeks direction from the Commission on the broad outline of a preferred approach; staff will return at a later date with detailed policy and code language.

Current Code

The current shoreline setback provisions were developed as part of the 2006 Critical Areas Code update. While a key component was the addition of a 25-foot shoreline buffer to the preexisting 25-foot setback, the new provisions also contained two additional elements that were unique when compared to previous critical areas regulation in Bellevue. The first was the concept that no legally existing structure would be rendered nonconforming—the so-called “footprint” rule. And the second was the nearly infinite flexibility allowed a property owner to depart from the existing prescriptive regulations and tailor regulations to their specific circumstance. Other notable provisions included an allowance for modest expansion without additional study and a string test rule that permitted new development to move to a line established by previous development so long as it was not less than 25 feet from ordinary high water.

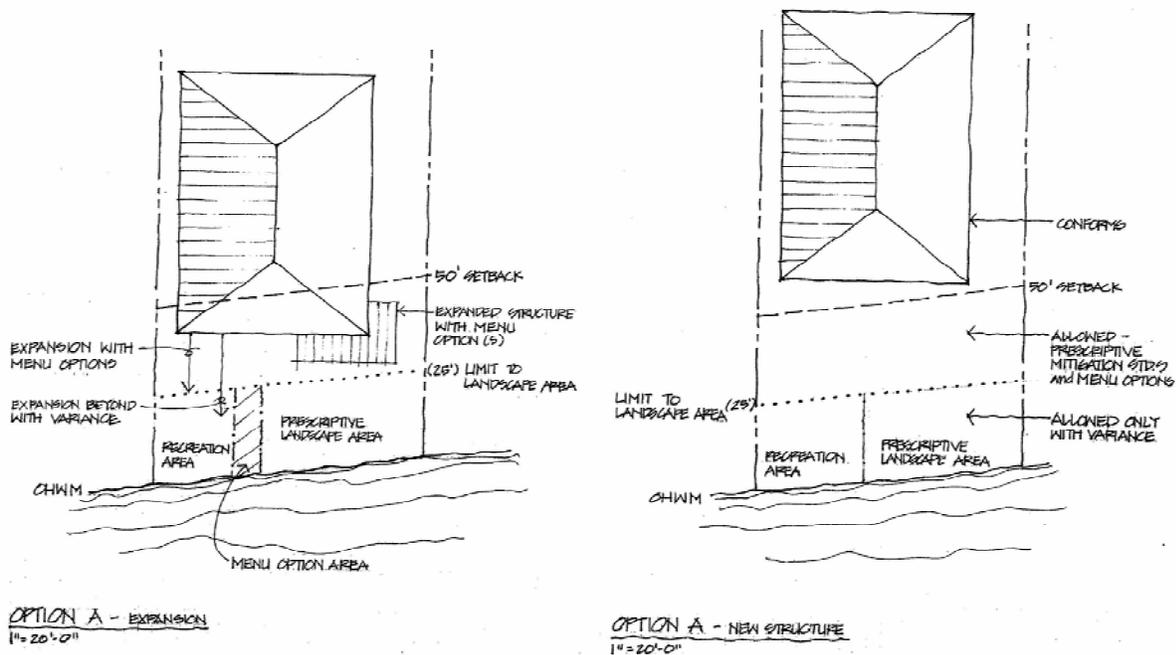


As outlined in the diagram above expansion of an existing residence toward the water is allowed provided an applicant can demonstrate, by means of a scientific study, that the impacts to ecological functions are mitigated. Typically, this analysis resulted mitigation involving aquatic and buffer planting, full or partial bulkhead removal, soft stabilization or other improvements that provided ecological lift. Similarly, a property owner building a new residence on an undeveloped lot and facing a 50-foot setback could choose to propose a different dimension and move forward provided a scientific study demonstrated net ecological improvement.

Option A – Maximum Flexibility with Incentive Options

Option A is attempts to capture most of the protection provided by the larger setback in our current code while substituting a set of preapproved mitigation menu options for the inherent flexibility of detailed site-specific scientific reports now required. No buffer is recommended;

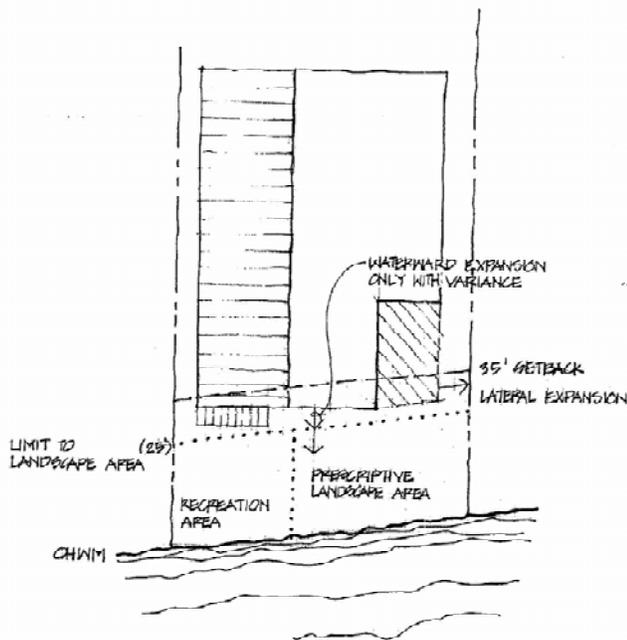
however, this option includes a setback of 50 feet for lakes Sammamish, Washington, and Phantom, mimicking current code, and a setback of 25 feet for Newport Shores Canals. Setback reductions for new and existing development up to 25 feet from OHW are possible based on selection from a range of incentive actions in the mitigation option menu. New construction or tear down and reconstruction must start at the 50-foot line and implement a required landscape standard. Movement beyond this line requires participation in the options menu. In contrast with current code, expansion beyond 25 feet would require a shoreline variance. (The landscape standard resembles similar approaches involving landscaping and tree preservation found elsewhere in the land use code that is triggered by certain redevelopment actions. In this case, new construction or complete redevelopment requires planting the landscape reserve space noted below.)



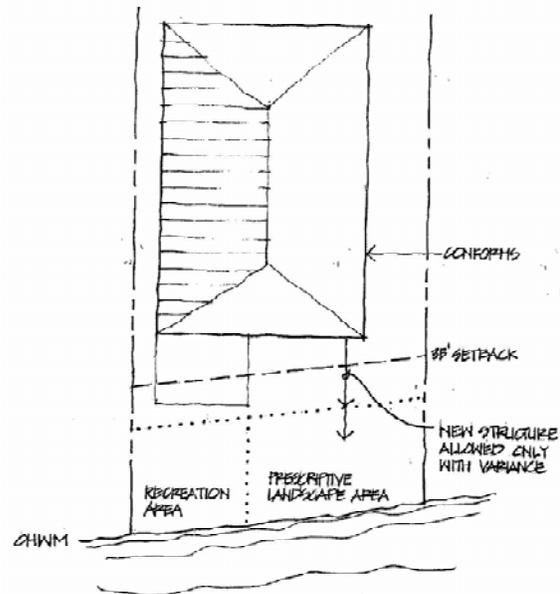
Option A divides the first 25 feet of setback from OHW into a management area divided between a recreation area and a landscape reserve area. This concept responds to a concern heard from many shoreline property owners regarding the inflexibility of buffers by dedicating an area of up to 40 percent of the first 25 feet of from OHW to shoreline recreational uses. (The remaining 60 percent is dedicated to vegetation conservation—for example, preservation of existing vegetation—or serves as a receiving area for required landscaping or future mitigation from the options menu.) The idea is to provide property owners freedom to use the shoreline area as they see fit within some minimal guidelines while maintaining the means to mitigate impacts of new development. Of course, absent development activity, existing legal uses and activities may persist and property owners may continue to use their property as they do currently.

Option B – Maximum Predictability

Option B depicts an alternative designed to provide maximum predictability by setting a bright line and prohibiting new development beyond this point except with a variance. No buffer is suggested but minimum setbacks are 50 feet for Phantom Lake, 35 feet for lakes Sammamish and Washington, and 25 feet for Newport Shores Canals.



OPTION B - EXPANSION
1" = 20'-0"



OPTION B - NEW STRUCTURES
1" = 20'-0"

In general, expansion within the required setback would be limited and structures already within the setback would be considered nonconforming. However, for those existing structures situated at less than the required setback but more than 25 feet from OHW, minor lateral expansion with partial prescriptive mitigation (landscaping) would be allowed without triggering full compliance with the required setback. In contrast, for structures already closer than 25 feet to OHW, no expansion waterward within the 25 feet would be permitted without a variance. New construction, including a tear down and rebuild, would have to meet the setback limit and provide prescriptive landscaping to standard.

As in Option A, a management area divided between a recreation area and a landscape reserve is identified. This option responds to the concern from many shoreline property owners regarding the inflexibility of buffers and the need to use their shoreline for recreational and water enjoyment activities. Again, absent development activity, existing legal uses and activities may persist and property owners may continue to use their property as they do currently.

Table 1:

COMPARISON OF RESIDENTIAL DEVELOPMENT STANDARDS			
	TODAY	OPTION A	OPTION B
SETBACK³	All water bodies	Lake WA, Sammamish, Phantom Lake, & Mercer Slough/Kelsey Creek	Phantom Lake & Mercer Slough/Kelsey Creek 50'
	Developed site- 25' buffer/25' setback	50'	
	Undeveloped site- 50' buffer/0 setback	Newport Shores Canals 25'	Lake WA and Sammamish 35'
			Newport Shores Canals 25'
PROPERTY STATUS	Conforming	Nonconforming/Existing Development	Nonconforming w/ exceptions
PROCESS TO MODIFY SETBACKS	<p><i>Exceptions-</i></p> <ul style="list-style-type: none"> Footprint exception String Test to no less than 25' <p><i>Prescriptive-</i></p> <ul style="list-style-type: none"> Allowed uses, 500 sq. ft under limited circumstances. <p><i>Administrative-</i></p> <ul style="list-style-type: none"> Critical Land Use Permit (CALUP) w/ Critical Areas Report-(CAR) 	<p><i>Prescriptive-</i></p> <ul style="list-style-type: none"> Menu options to 25' <p><i>Administrative-</i></p> <ul style="list-style-type: none"> Variance beyond 25' 	<p><i>Prescriptive –</i></p> <ul style="list-style-type: none"> None for new structures Minor lateral expansion for nonconforming <p><i>Administrative-</i></p> <ul style="list-style-type: none"> Variance beyond 35'
CERTAINTY	Low	Moderate	High
FLEXIBILITY	Moderate	High	Low
ECOLOGICAL FUNCTION	Moderate/High	Moderate	Moderate/Low
COST TO PROPERTY OWNER	High	Moderate	Low
COMPLEXITY OF ADMINISTERING	High	Moderate	Low

NEXT STEPS

Staff seeks Commission direction on proceeding with a setback option introduced in this memorandum. Selection of an option would allow staff to return with detailed policy and code

³ Floodplain, wetland and buffers overlay setbacks.

language for Commission review. Meetings that follow this summer will focus on the specific topics previously identified and will work towards refining those related sections of the draft SMP as the processes progresses. This process could result in a revised draft being released in late September with a formal review of the draft to occur at a public hearing in October or November.

Table 1: The Tentative Work Schedule for the SMP Update

June 9	Introduce working draft Continue review working draft and identify target areas for detailed review
June/July	Setbacks and shoreline stabilization
September/October	Piers, nonconformities and other issues Introduce revised draft Continue review of revised draft
October/November	Open house Public Hearing on revised draft
November	Make recommendation to City Council

ATTACHMENTS

1. Excerpt from working draft
2. Comparison of other jurisdictions

ATTACHMENT 1
Excerpt from Shoreline Master Program working draft 5-12-2010

2.B.4. Shoreline Residential (SR) Environment

2.B.4.a. Purpose of the SR Environment

The purpose of the Shoreline Residential environment is to accommodate single or multifamily residential development and associated accessory structures that are consistent with this shoreline master program.

2.B.4.b. SR Designation Criteria

A Shoreline Residential environment designation will be assigned to City of Bellevue's shorelands if they are predominantly residential development or are planned for residential development, and exhibit moderate to low levels of ecological functions because of historic shoreline modification.

2.B.4.c. SR Management Policies

Policy SH-21. Establish standards for density, minimum frontage width, setbacks, lot coverage limitations, shoreline stabilization, vegetation conservation, critical area protection, and water quality. Standards must be established to assure no net loss of shoreline ecological functions, taking into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations.

Policy SH-22. New multifamily and multi-lot residential and recreational developments should provide public access and joint use for community recreational facilities. This policy is not intended to apply to existing residential uses.

Policy SH-23. Water-oriented recreational uses should be allowed.

2.B.5. Shoreline Residential Canal (SRC) Environment

2.B.5.a. Purpose of the SRC Environment

The purpose of the Shoreline Residential Canal environment is to maintain single-family residential development adjacent to artificially-created canals in the Newport Shores Community. The SRC designation acknowledges the unique characteristics of that portion of the Newport Shores Community that is dependent on the artificial canals for access to waters of the state for the purpose of navigation. This environment also identifies specific physical and biological constraints related to the presence of engineered bulkheads to support the artificial canal system and the filled lands behind the bulkheads.

2.B.5.b. SRC Designation Criteria

A Shoreline Residential Canal environment designation is assigned to those properties within the Newport Shores community with frontage along an artificial canal system which is dependent upon engineered bulkheads for structural support. These areas are characterized by a relatively low-level ecological function. The SRC environment does not include those Newport Shores properties that are located along sections of Lake Washington shoreline and not on canals.

ATTACHMENT 1
Excerpt from Shoreline Master Program working draft 5-12-2010

2.B.5.c. SRC Management Policies

Policy SH-24. Allow for the maintenance, repair, and replacement of the canal structural bulkheads to retain the canals in their existing configuration as necessary to preserve the original design; provided the objective of no net loss of ecological function is satisfied.

Policy SH-25. Develop standards for density or minimum shoreline frontage width, setbacks, lot coverage limitations, buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality to assure no net loss of shoreline ecological functions, taking into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations.

Policy SH-26. Allow water-oriented recreational uses.

3.B.1.b. General Use Policies

POLICY SH-38. The City should ensure that all proposed shoreline development will protect the public's health, safety, and welfare, and should endeavor to protect property rights while implementing the policies of the Shoreline Management Act and the City's SMP.

POLICY SH-39. The City should give preference to those uses that are consistent with the City's SMP, or are unique to or dependent upon uses of the state's shoreline areas.

POLICY SH-40. Single family development is the most common land use along Bellevue's shorelines and is a priority use when developed in a manner consistent with control of pollution and prevention of damage to the natural environment (WAC 173-26-142(3)(j)).

POLICY SH-41. The City should reduce use conflicts by prohibiting or applying special conditions to those uses which are inconsistent with this SMP, or are not unique to or dependent upon use of the state's shoreline. In implementing this policy, preference should be given first to water-dependent uses, then to water-related uses, and water-enjoyment uses.

POLICY SH-42. Provide adequate setbacks from the City's lake shores to protect sensitive features and functions typical to the City's shorelines while recognizing accessory uses typical to the use that occupies the site.

POLICY SH-43. Guide development activity through dimensional and density standards appropriate to the shoreline jurisdiction. Standards should include setbacks, building heights, lot coverage, impervious surface, and other land use controls essential to provide guidance for future growth and development within the shoreline jurisdiction. Development regulations should, when possible, avoid, minimize, and mitigate impacts from development to ecological functions.

POLICY SH-44. Locate, design, and manage shoreline uses to prevent significant adverse impacts to ecological functions, such as water quality, and fish and wildlife habitat.

POLICY SH-45. Ensure that the objective of no net loss of ecological function is met through establishment of appropriate use regulations in response to findings of the City's shoreline inventory and assessment.

ATTACHMENT 1
Excerpt from Shoreline Master Program working draft 5-12-2010

3.B.1.c. General Use Regulations (PROPOSED REGULATIONS AND REGULATORY CONCEPTS)

Proposed Regulations:

1. Any development within the shoreline jurisdiction shall comply with this SMP and all applicable Bellevue codes and policies, including but not limited to the Comprehensive Plan, the Bellevue Land Use Code, Sign Code, and clearing and grading regulations. When conflicts exist, the more protective rule shall apply.
2. Where applicable, all federal and state water quality and effluent standards shall be met.
3. If an upland portion of a property extends into the shoreline jurisdiction, SMP policies regulations shall apply only to that portion of the property lying within shoreline jurisdiction.
4. All development within shoreline jurisdiction shall be accompanied by a plan indicating methods of preserving shoreline vegetation and for control of erosion during and following construction in accordance with this SMP, the City of Bellevue Clearing and Grading regulations, Chapter 23.76 BCC, Storm Code, Chapter 24.06 BCC, and the Comprehensive Plan.
5. Accept for human propelled small unlicensed watercraft (such as kayaks or skiffs), the dead storage of watercraft water ward of the ordinary high water mark of the shoreline is prohibited.
6. Where applicable, state and federal standards for the use of herbicides, pesticides and/or fertilizers shall be met, unless superseded by more restrictive City of Bellevue codes. Use of such practices in the shoreline shall comply with the City's "Environmental Best Management Practices."
7. Adequate storm drainage and sewer facilities must be operational before construction of new development within shoreline jurisdiction. Storm drainage facilities shall be separated from sewage disposal systems.

Proposed Regulatory Concepts:

- Create siting standards applicable to all uses.
- Simplify existing density and dimensional standards (LUC 20.20.10) to include requirements appropriate for application in the shoreline jurisdiction and appropriate to protect shoreline features and functions.
- Develop appropriate shoreline setback standards.

3.B.8. Residential Development

Residential development means one or more buildings, structures, lots, parcels or portions thereof which are designed for and used or intended to be used to provide a place of abode, including single-family residences, duplexes, other detached dwellings, floating homes, multi-family residences, mobile home parks, residential subdivisions, residential short subdivisions, and residential planned unit development, together with accessory uses and structures normally applicable to residential uses, including, but not limited to, garages, sheds, tennis courts,

ATTACHMENT 1
Excerpt from Shoreline Master Program working draft 5-12-2010

swimming pools, parking areas, fences, cabanas, saunas, and guest cottages. Residential development does not include hotels, motels, or any other type of overnight or transient housing or camping facilities.

Single family residences are a preferred use under the Shoreline Management Act when developed in a manner consistent with this Shoreline Master Program.

3.B.8.a. Applicability of Residential Development Policies and Regulations

These policies and regulations apply to residential uses and structures in the shoreline uses. For purposes of this section, accessory structures shall include garages, sheds, swimming pools, tennis courts, spas, greenhouses and similar facilities.

3.B.8.b. Residential Development Policies

POLICY SH-89. Single-family residential development is a preferred shoreline use, when developed in a manner consistent with control of pollution and prevention of damage to the natural environment.

POLICY SH-90. New primary residential structures should be prohibited in the setback from the shoreline; except where significant shoreline enhancement or restoration is proposed.

POLICY SH-91. Develop standards for both major and minor replacement, repair, and maintenance of existing structures and features.

POLICY SH-92. New or expanded residential development in the shoreline jurisdiction should be located and designed to minimize adverse effects on shoreline process and functions.

POLICY SH-93. Design of new residential development should protect, enhance, and restore shoreline ecological functions. Encourage use of low impact development stormwater management techniques, shoreline restoration, and other conservation measures.

POLICY SH-94. All residential development, including appurtenant structures and uses, should be sufficiently set back from steep slopes and shorelines vulnerable to erosion so that structural improvements or armoring are not required to protect such structures and uses.

POLICY SH-95. New residential development and expansions to existing residential structures shall be designed and located to eliminate the need for shoreline armoring and stabilization.

POLICY SH-96. Over-water residences, including floating homes, are not a preferred use and should be prohibited.

POLICY SH-97. New multiunit residential development, including the subdivision of land for more than four parcels, should provide community and/or public access.

POLICY SH-98. Allow maintenance of legally-established landscaping consistent with the Shoreline Master Program, and encourage conversion of landscaping to native vegetation.

POLICY SH-99. Acknowledge and address distinctive patterns of historic shoreline conditions and characteristics and respond to these conditions and characteristics by developing appropriate development standards.

POLICY SH-100. Allow existing, legally-established primary residential structures that encroach into the setback from the ordinary high water mark to be redeveloped within the existing footprint, provided, the redevelopment complies with the Shoreline Master Program.

ATTACHMENT 1
Excerpt from Shoreline Master Program working draft 5-12-2010

POLICY SH-101. Create incentives and provide flexibility to encourage development and redevelopment to incorporate native vegetation, shoreline restoration, low impact development techniques, or softened shoreline stabilization, or other restoration measures determined by the Director.

POLICY SH-102. When subdividing waterfront property into 5 or more lots, require the reallocation of density away from sensitive shoreline resources to more appropriate upland locations.

POLICY SH-103. Balance vegetation management, conservation, or restoration objectives, with residential shoreline uses, including recreation.

3.B.8.c. Residential Development Regulations (PROPOSED REGULATORY CONCEPTS)

- Develop standards for new single-family residential addressing siting, height, location, construction, repair, and maintenance (including legally-established landscaping).
- Develop standards that balance vegetation management, conservation, or restoration with the recreational use associated with residential shoreline.
- Develop standards to allow maintenance and repair of existing legally-established appurtenant structures.
- Develop standards prohibiting new appurtenant structures in the shoreline setback.
- Develop standards allowing limited intrusions into the setback, such as stairs, handrails, and trails providing access to the shoreline.
- Develop standards prohibiting the use of boats, houseboats, or watercraft as a permanent residence; except, for those proposed in the Marina Environment designation.
- Develop standards for new multifamily residential development addressing siting, height, location, construction, repair, maintenance, and public access (where applicable).
- Develop shoreline subdivision regulations that include requiring the clustering of density through subdivision of waterfront land into 5 or more lots. Provide incentives for property owners subdividing less than 5 lots with a flexible standard.
- Develop prescriptive criteria to allow modification of dimensional standards.

ATTACHMENT 2
Jurisdiction Comparisons

	Kirkland (DOE Hearing)	Sammamish (Submitted to DOE- no DOE Hearing yet)	Redmond (approved by DOE)
Buffer	None	None	None
SETBACK	<p>Residential-L 30% of the average parcel depth, except in no case is the shoreline setback permitted to be less than 30 feet or required to be greater than 60 feet</p> <p>Residential-M/H The greater of: a. 25' or b. 15% of the average parcel depth</p>	<p>Shoreline Setback 45'</p> <p>Building setback 5'</p>	<p>Lake Sammamish 35'</p>
MINIMUM SETBACK AFTER PRESCRIPTIVE MODIFICATIONS	No less than 25'	No less than a 15' structure setback plus 5' building setback (total of 20')	No less than 20'
PRESCRIPTIVE REQUIREMENTS TO EXPAND BEYOND SETBACK	<p>Menu of options to reduce setback:</p> <ul style="list-style-type: none"> • Non/soft structural stabilization • Opening of piped streams • Sloping hard structural stabilization • LID techniques as an alternative to direct lake discharge • Increased landscape strip along water • Pervious materials for all pollution generating surfaces • Limit lawn area w/in setback • Preserve or restore 20% of site w/ native vegetation 	<p>Menu of improvement options to reduce setback:</p> <ul style="list-style-type: none"> • Bulkhead removal • Restoration of shoreline to a natural or seminatural state • Preservation of existing natural features • Establishment of 15- vegetation enhancement area • Establishment of 5-feet of native vegetation waterward of bulkhead • Limit impervious surface • Limit lawn area • Additional vegetation enhancement area 	20' setback area revegetated with primarily native vegetation. Establishment of a tree canopy is encouraged.

ATTACHMENT 2
Jurisdiction Comparisons

	Kirkland (DOE Hearing)	Sammamish (Submitted to DOE- no DOE Hearing yet)	Redmond (approved by DOE)
		<ul style="list-style-type: none"> BMPs for vegetation management 	
NEW AND TEAR DOWN STRUCTURES	Required to meet minimum setbacks	Can be rebuild in existing footprint	Required to meet 35' but may take advantage of reduction to 20' with planting. New construction or reconstruction that involves greater than 50% of the value of existing improvements adhering to 35-foot setback- requires 50% of the minimum 20foot building setback with native vegetation.
VEGETATION STANDARDS	<p>Trees w/in setback must be preserved</p> <p>Plant native vegetation in 75% of the nearshore area- (10-15 feet in width)</p> <p>Nonconforming Shoreline Setback Vegetation: Must be brought into conformance when the cost of which exceeds 50 percent of the replacement cost of all structures on the subject property.</p>	<p>Vegetation enhancement area- Vegetation enhancement area means an area immediately landward of the OHWM in which existing trees and native vegetation are preserved or native vegetation is restored</p> <p>Lake Sammamish Vegetation Enhancement Area. The fifteen (15) foot-wide portion of the shoreline setback immediately landward of the OHWM is reserved as a vegetation enhancement area.</p> <p>Triggered:</p> <ul style="list-style-type: none"> Construct or expand the footprint by more than two hundred (200) sq ft Construct or expand an existing bulkhead or other stabilization structure by more than ten percent (10%). 	<p>Trees within building setback must be maintained.</p> <p>20' setback area with native vegetation. Establishment of a tree canopy is encouraged.</p>

ATTACHMENT 2
Jurisdiction Comparisons

	Kirkland (DOE Hearing)	Samamish (Submitted to DOE- no DOE Hearing yet)	Redmond (approved by DOE)
		<p>The vegetation enhancement area, (75%) by area of the vegetation consisting of native trees, shrubs, and groundcover. Up to (25%) by area of the vegetation in the vegetation enhancement area may be composed of non-native or ornamental plantings.</p>	
<p>PROPERTY STATUS</p>	<p>Legally established nonconforming structures may be maintained, altered, remodeled, repaired and continued; provide that nonconforming structures cannot be enlarged, intensified, increased, or altered in any way that increases the nonconformity.</p> <p>Expansion or enlargement in shoreline setback requires a variance.</p> <p>Specific circumstances where a nonconforming structure can be expanded without a variance:</p> <ul style="list-style-type: none"> ○ Constructed prior to City's Final Shoreline Report in 12-2006 ○ Implement setback reduction provisions for all structures. ○ Structure located landward of the OHWM. ○ Enlargement of footprint within 	<p>Expansion, reconstruction, replacement of legally established structure allowed if doesn't increase the degree of non-conformity.</p> <p>Replacement may be allowed if City determines that new location results in less impact to shoreline functions than replacement in existing footprint.</p> <p>Existing non-conforming with regard to setback, area, bulk, ht. or density may be maintained, reconstructed or repaired provided that:</p> <ul style="list-style-type: none"> ● Maint./recon./repair does not increase non-conformity by encroaching on or into building or shoreline setback <p>If non conforming is damaged, it may be reconstructed to match the footprint that existed immediately prior to the event provided:</p> <ul style="list-style-type: none"> ● Owner submit complete 	<p>Nonconforming structure may not be expanded or altered so as to increase nonconformity.</p> <p>Nonconforming structures may be maintained & repaired & may be enlarged or expanded provided that expansion does not extend the structure close to the shoreline.</p> <p>Structure shall be brought into full compliance with code when alteration or expansion of the structure takes place and the following takes place within any 3-yr period:</p> <ul style="list-style-type: none"> ● The GFA is increased by 100% or more, <u>OR</u> ● The costs stated on approved building permit equal or exceed the assessed value of the structure at the beginning of that 3-yr. period.

ATTACHMENT 2
Jurisdiction Comparisons

	Kirkland (DOE Hearing)	Sammamish (Submitted to DOE- no DOE Hearing yet)	Redmond (approved by DOE)
	<p>shore. setback not exceed 10% of GFA. Upper floor additions may be permitted</p> <ul style="list-style-type: none"> ○ Enlargement cannot extend waterward than existing structure. ○ Applicant must restore a portion of shoreline setback area with riparian veg. ○ Comply with BMP's ○ Must use fully shielded cut off light fixtures ○ Remodel not cause adverse impact to ecological functions and/or processes. ○ Provision can only be used once within any 5 year period 	<p>application within 24 months of date of damage</p> <ul style="list-style-type: none"> ● All permits issued within 2 yrs. Of initial submittal of complete application and restoration is completed within 2 yrs. Of permit issuance. May be extended 1 yr. ● If above criteria not me, City may require applicant to plant vegetation enhancement with native trees and shrubs <p>Non-conforming structure that is moved outside the existing footprint must be brought into compliance with SMP.</p>	

section, 20D.150.60-010 and other applicable portions of the Shoreline Master Program.

- (5) In any High Intensity/Multi-Use location within a buffer where the land is actively being used as part of a legitimate business operation, such land including either structures or active operational areas, established prior to January 1, 2003, may continue to operate. New structures, pavement, and other improvements are permitted within this area so long as incremental environmental benefit is provided and no net loss of shoreline ecological functions is demonstrated.

20D.150.60-020 Lake Sammamish Setback.

Lake Sammamish has no buffer (as noted in 20D.150.60-010 above) but rather has a building setback. The waterfront-building setback for new development and redevelopment (tear downs) along Lake Sammamish shall be a minimum of 35 feet. The building setback can be reduced to 20 feet if the setback area is revegetated with primarily native vegetation. Establishment of a tree canopy is encouraged. No constructed structures other than those required for waterfront access/docks are allowed within the 20-foot setback. New development adhering to the 35-foot setback and/or reconstruction that involves greater than 50% the value of existing improvements shall be required to plant 50% of the area in the minimum 20 foot building setback with native vegetation.

20D.150.60-030 Buffer and Setback Measurements

Shoreline buffers and waterfront-building setbacks are measured from the ordinary high water mark.

20D.150.70 In-Water Structures

20D.150.70-010 Purpose.

The purpose of this chapter is to provide standards and guidelines for the location and design of docks, marinas, boat launches, and similar in-water structures that have the potential to adversely impact natural shoreline resources.

20D.150.70-020 Applicability.

- (1) All in-water structures shall comply with the standards of this chapter.
- (2) Critical Areas Restrictions. In-water structures are also subject to the requirements of RCDG 20D.140.30-030, Alteration of Wetlands, and RCDG 20D.140.20-040, Alteration of Riparian Stream Corridors.

20D.150.70-030 Permitted In-Water Structures.

- (a) They shall not interfere with existing in-water recreational activities;
 - (b) They shall not significantly damage fish and wildlife habitats;
 - (c) They shall be designed to achieve no net loss of shoreline ecological functions.
 - (d) They shall be aesthetically and functionally compatible with the shoreline area and nearby uses. Aesthetic impacts shall be avoided, or if not possible, aesthetic impacts shall be mitigated.
 - (e) They shall be located only at sites with suitable environmental conditions, shoreline configuration, access, and neighborhood uses.
- (5) Boat launch ramps and vehicle access to the ramps shall be paved. Access to the ramp and parking for the ramp shall be located a sufficient distance from any frontage road to provide safe maneuvering of boats and trailers, and shall not be located through public beaches, or through critical habitat areas, including, but not limited to, Category I and II wetlands.
- (6) Boat launch ramps shall be designed to minimize areas of landfill or shoreline protective structures.
- (7) All facilities shall meet health, safety, and welfare requirements of appropriate state agencies.
- (8) Covered moorage is prohibited.
- (9) Commercial marinas are prohibited. Recreational marinas are permitted and shall provide public access.
- (10) If a recreational marina allows live-aboard vessels, a Shoreline Conditional Use Permit shall be required.
- (11) Marinas and boat launches shall not interfere with the rights of navigation.
- (12) Vessels shall be restricted from extended mooring on waters of the state except as allowed by applicable state regulations and unless a lease or permission is obtained from the state and impacts to navigation and public access are mitigated.

20D.150.70-070 Water-Oriented Accessory Structures.

Accessory structures that are water-oriented and accessory to a shoreline or water-dependent use shall meet the following standards.

- (1) Water-oriented accessory structures are not subject to the waterfront building setbacks or side yard setbacks of the underlying zone (see RCDG 20C.30.25), unless otherwise noted below.

- (2) Boathouses and similar water-oriented structures may extend no further waterward than the ordinary high water line. Such structures shall meet the minimum side yard setback required in the underlying zone, unless they are a joint use facility that serves more than one adjoining waterfront lot.
- (3) Water-oriented accessory structures shall not exceed ten feet in height and 250 square feet in area. However, multiuse structures that include storage and changing rooms may be a maximum of 500 square feet. The area of such covered structures shall be included in the maximum lot coverage and impervious surface limits of the zone in which they are located.
- (4) Uncovered boat lifts and similar equipment or structures used for watercraft may be located waterward of the ordinary high water mark to the waterward limit of the associated pier or dock. Such structures associated with docks shall have a height limit of four feet above ordinary high water. Such structures associated with piers shall have a height limit of four feet above the deck of the pier. Where a boatlift is used in lieu of a pier, it may extend waterward of the ordinary high water mark, provided it does not exceed four feet above the OHWM in height and meets the side yard setback of the underlying zoning district. Covered boat lifts shall not exceed 96 inches in height as measured from the ordinary high water mark.
- (5) Joint Use Accessory Structures. Water-oriented accessory structures that serve more than one adjoining waterfront lot may be constructed with a zero side setback from the common boundary, provided that the owners of such property enter into a reciprocal use agreement recorded with the King County Auditor.

20D.150.80 Shoreline Protective Structures

20D.150.80-010 Purpose.

The purpose of this chapter is to provide standards and guidelines for the location and design of bulkheads, levees and other shoreline protective structures that have the potential to adversely impact the shoreline natural environment. New development, however, should be located and designed to avoid the need for future shoreline stabilization to the extent feasible.

20D.150.80-020 Permitted Shoreline Protective Structures.

- (1) New and replacement shoreline protective structures shall be allowed under the following circumstances only:

RCDG 20D.140.30-040, Wetlands Performance/Design Standards and RCDG 20D.140.20-060, Riparian Stream Corridor Performance Standards.

- (c) Any removal of trees within the shoreline jurisdiction shall also meet the requirements of RCDG 20D.150.110, Tree Protection, Landscaping and Screening Within Shorelines.

20D.150.100 Fences

20D.150.100-010 Prohibited Locations

Fences are prohibited in stream buffers.

20D.150-110-020 General Regulations

Fences in residential and other zones are regulated in RCDG 20D.50, Fences.

20D.150.110 Tree Protection, Landscaping and Screening Within Shorelines.

20D.150.110-010 Tree Protection

In addition to RCDG 20D.80, Landscaping and Tree Protection, all development within the shoreline jurisdiction shall comply with the additional tree protection, landscaping and screening requirements of this section. Where there is a conflict between regulations, the more restrictive regulation shall apply.

- (1) Tree Protection Requirements. To maintain the ecological functions that trees provide to the shoreline environment, including air quality, wildlife habitat, temperature and glare attenuation, and aquifer recharge, significant trees shall be retained as follows:
 - (a) Consistent with 20D.180.20-070, Tree Protection Standards, a minimum of 35% of the existing significant trees shall be preserved on site.
 - (b) Within the waterfront building setback, significant trees shall be retained, except where the tree is dead, diseased, dying or hazardous.
 - (c) Within the shoreline buffer, trees shall be removed only where allowed under RCDG 20D.140.10-160, Buffer Areas, and 20D.140.20-020, Stream Buffers.
 - (d) Within the shoreline jurisdiction, significant trees shall not be removed or topped for the purpose of creating views. Non-destructive thinning of lateral branches to enhance views is allowed.

- (2) Tree Replacement. Significant trees that are removed, or significant trees designated for protection that are irreparably damaged or destroyed shall be replaced. Replacement trees shall be planted as follows:
- (a) Each existing significant tree shall be replaced with two new trees.
 - (b) For each additional three inches d.b.h. above six inches d.b.h., one additional replacement tree shall be planted, up to six trees.
 - (c) Where on-site tree replacement is not feasible, the Administrator may allow up to 60% of the required replacement trees to be planted off-site, pursuant to RCDG 20D.80.20.080, Tree Replacement. Replacement trees shall be planted within or adjacent to the shoreline jurisdiction. Trees planted in proposed landscaping of the site perimeter, vehicle use areas, shoreline buffers and other areas of the site may be counted as replacement trees.
 - (d) See RCDG 20D.80.20-080(5) for size, species and condition of replacement trees.
- (3) Trees planted within shoreline public open space areas and public trail corridors shall be maintained only under the supervision of Redmond Parks Department.

20D.150.110-020 Landscaping and Screening in Shorelines

- (1) Landscaping Within Stream Buffers.
Within stream buffers, landscaping shall meet the additional requirements of RCDG 20D.140.30-040, Wetlands Performance/Design Standards in RCDG 20D.140.20-060, Riparian Stream Corridor Performance Standards.
- (2) Landscape Area Requirements. In Business (CO, CB, NC & GC) zones, 25% of the site shall be landscaped. In the Business Park Zone, 22% of the site shall be landscaped if the site is less than one acre and 20% of the site shall be landscaped if the site is one acre or larger in size. In Industrial (MP & I) zones, 20% of the site shall be landscaped if the site is less than one acre and 18% of the site shall be landscaped if the site is one acre or larger in size. In multi-family residential zones (R12, R18, R20 & R30), 50% of the site shall be landscaped. Vegetated buffers may be used to meet the site area landscaping requirements.
- (3) Screening of Storage and Service Areas.
- (a) All outdoor storage areas shall be screened on all sides, pursuant to 20D.120.10-040, Screening.
 - (b) All vehicle use areas located adjacent to, or visible from public parks or open space, the water body, or shoreline trails or public access features shall be screened from the water body, shoreline trails and public access features. Screening is intended to create a

(3) Additional Shoreline View Requirements.

- (a) Public shoreline views along the Sammamish River corridor are provided by the Sammamish River Trail along the east side of the river and the informal trail along the west side of the river. Because of this public facility and the established Citywide Shoreline Public Views identified in (1) above, additional public shoreline view regulations and provisions within proposed developments for public views are not required along the Sammamish River.
- (b) Public shoreline views along the Bear/Evans Creek Valley are protected to some degree by Citywide Shoreline Public Views identified in (1) above. Potential public physical access will eventually be provided by the Bear/Evans Creek Trail Greenway System, which in turn will provide public visual access.
- (c) Public shoreline views along the north side of Bear Creek (between the Sammamish River and Union Hill Road) are provided by the Bear Creek Trail. Additional public shoreline view regulations are not required for this reach of Bear Creek.
- (d) One public shoreline view of Lake Sammamish is identified in (1) above via Idylwood Park. Public view corridor regulations of single family homes along Lake Sammamish shall not be required.

20D.150.190-020 Shoreline Cultural Access. – Reserved.

20D.150.200 Shoreline Administration and Procedures

20D.150.200-010 Administrative Interpretations

The Administrator may adopt such code interpretations as necessary to administer the shoreline master program policies and regulations. Any formal written interpretations of shoreline policies or regulations shall be submitted to the Department of Ecology for review.

20D.150.200-020 Nonconformances

- (1) Nonconformities, as defined in Chapter 20A.20 RCDG, Definitions, may continue to be used and maintained in accordance with the provisions of this chapter except as otherwise provided in RCDG 20D.150.150-020, Amortization of Off-premise Signs within the Shoreline and, RCDG 20D.160.10-110, Amortization of Nonconforming Sandwich Board Signs. The use and maintenance is permitted as a result of vested rights obtained through the legal establishment of the nonconforming use or structure.

- (2) **Nonconforming Shoreline Uses.** A nonconforming use located within the shoreline jurisdiction may not be enlarged or expanded. If a nonconforming use is discontinued for twelve consecutive months or for twelve months during any two-year period, the nonconforming rights shall expire and any subsequent use shall be conforming.
- (3) **Nonconforming Shoreline Structures.** A nonconforming structure may not be expanded or altered in any way so as to increase that nonconformity. Provided, however, that nonconforming shoreline structures may be maintained and repaired and may be enlarged or expanded provided that said enlargement or expansion does not extend the structure closer to the shoreline. A nonconforming structure shall be brought into full compliance with the Redmond Community Development Guide (meaning the development shall be modified to make it code compliant) when alteration or expansion of the structure takes place and the following takes place within any three-year period:
 - (a) The gross floor area of the structure is increased by 100 percent or more; or
 - (b) The costs stated on all approved building permit applications for the structure equal or exceed the assessed value of the structure at the beginning of that three-year period.

20D.150.200-030 Shoreline Permits

- (1) **Purpose.** It is the purpose of this section to describe the procedures and requirements for development within specified areas related to lakes, rivers, streams, wetlands, and floodplains as required to implement the Shoreline management Act, as amended, Chapter 90.58 RCW, and to aid in implementation of the Federal Flood Insurance Program and the State Flood Control Zone Program.
- (2) **Permit Required.** Within the shoreline jurisdiction, as described in 20D.150.20, development shall be allowed only as authorized in a Shoreline Substantial Development Permit, Shoreline Conditional Use Permit or Shoreline Variance Permit unless specifically exempted from obtaining such a permit under Section 20D.150.200-030(3), Exemptions. Enforcement action by the City or Department of Ecology may be taken whenever a person has violated any provision of the Shoreline Management Act or any Redmond Shoreline Master Program provision, or other regulation promulgated under the Act. Procedures for enforcement action and penalties shall be as specified in 1.14 Redmond Municipal Code. In addition, where here a single integrated development encompasses both shoreline and non-shoreline areas, a shoreline substantial

(5) **Mitigation.** Property owners proposing new shoreline use or development shall mitigate adverse environmental impacts in accordance with this Program and other applicable regulations whether or not the use/development requires or is exempt from a shoreline substantial development permit. Mitigation measures are listed in SMC 25.06.020(10) in the table showing shoreline setback reductions.

(6) **Building setback.** A five (5) foot-wide building setback shall be established from the landward edge of the shoreline setback required in SMC 25.06.020(7). The following may be allowed in the building setback subject to the square footage limits of SMC 25.07.08:

- (a) Landscaping;
- (b) Uncovered decks that are less than eighteen (18) inches above grade;
- (c) Building overhangs if such overhangs do not extend more than eighteen (18) inches into the building setback area;
- (d) Impervious ground surfaces, such as driveways and patios;
- (e) Trails.

(7) **Shoreline Setback.** A shoreline setback is established for Lake Sammamish, Pine Lake, and Beaver Lake. The shoreline setback area is the area extending forty-five (45) feet (or as reduced by SMC 25.06.020(10)) landward from the OHWM. The following regulations shall apply:

- (a) Accessory uses and structures, including uncovered decks less than eighteen (18) inches above ground and impervious ground surfaces, are allowed as specified in this Program;
- (b) Non-water dependent shoreline uses and developments, including residential developments, shall be located landward of the shoreline setback unless otherwise specified by this Program;
- (c) Docks and shoreline stabilization structures shall be allowed within the shoreline setback as specified in this Program;
- (d) Public access structures, picnic areas, boat launches, docks and shoreline stabilization structures shall be allowed within the shoreline setback as specified in this Program;
- (e) Transportation facilities shall be allowed within the shoreline setback as specified in this Program;
- (f) Utilities shall be allowed within the shoreline setback as specified in this Program.

(9) **Lake Sammamish Vegetation Enhancement Area.** The fifteen (15) foot-wide portion of the shoreline setback immediately landward of the OHWM is reserved as a vegetation enhancement area. The following regulations apply:

(a) Property owners shall be required to establish and maintain the vegetation enhancement area:

i. As required by SMC 25.06.020(10), if they propose to construct or expand the footprint of a residential structure that is located entirely or partially in the shoreline setback or reduced shoreline setback such that the expanded footprint within the shoreline setback will increase by more than two hundred (200) square feet of footprint including when using the partial exemption of SMC 25.06.020(8); or

ii. If they propose to construct or expand an existing bulkhead or other stabilization structure by more than ten percent (10%).

iii. Excluded from this requirement are changes to a structure that do not expand the footprint. Also excluded from this requirement is rebuilding in the same footprint plus up to two hundred (200) square feet of additional footprint area within the shoreline setback providing the additional footprint area is not closer to the lake.

(b) The vegetation enhancement area, excluding the active use area, shall be planted or maintained with at least seventy-five percent (75%) by area of the vegetation consisting of native trees, shrubs, and groundcover designed to improve ecological functions. Up to twenty-five percent (25%) by area of the vegetation in the vegetation enhancement area may be composed of non-native or ornamental plantings.

(c) An area of up to twenty-five percent (25%) of the vegetation enhancement area may be used as an active use area consistent with the requirements of this Program provided that the active use area is located to avoid areas of greater sensitivity and habitat value. If this 25% limitation would not allow a corridor extending back from the lake measuring at least 15 feet parallel to the lake, a 15-foot wide corridor may be used.

(d) Structures, decks and paved areas within the vegetation enhancement area may only be located within the active use area except as otherwise allowed by this Program.

(e) When the establishment of the vegetation enhancement area is required, the final installation shall be approved by the city.

(10) **Lake Sammamish Reduced Shoreline Setback.** The Lake Sammamish shoreline setback may be reduced in accordance with this Program and as shown in the Table 1 below.

Table 1: Shoreline Setback Reductions

Reduction	Number of feet the standard Lake Sammamish shoreline setback may be reduced	Reduction Criteria Reductions may be cumulative, but in no case shall the resulting shoreline setback be less than fifteen (15) feet*. Planting in accordance with VEA requirements.
1	15 feet	For removal of an existing bulkhead located at, below, or within five feet landward of the lake's OHWM and subsequent restoration of the shoreline to a natural or seminatural state, including the restoration of topography, soil composition, and vegetation; or, For restoration of the shoreline to a natural or seminatural state if no bulkhead is present, but other existing unnatural shoreline contours are present; or, For preservation of the existing natural shoreline conditions if no bulkhead or other unnatural shoreline features are present.
2	10 feet	For establishment of a 15-foot vegetation enhancement area along the shoreline.
3	10 feet	For establishment of at least a 5 foot width of native vegetation along the entire waterward side of a modified bulkhead, including the use of small gravel or rock fill, as part of an Army Corps of Engineer approved plan and in compliance with all WDFW and other appropriate agency regulations.
4	5-10 feet	Reduction of 5 feet for impervious surface coverage 10 percent less than the city standard and 10 feet for impervious surface coverage 20 percent less than the city standard as allowed by SMC 25.07.080(2)(b) or (c).
5	5 feet	For limiting lawn area to no greater than 20 percent of the shoreline jurisdiction area.
6	1-10 feet	For every 50 square feet of native planting area added landward of and adjacent to the VEA, 1 foot reduction (up to 10 feet maximum reduction).
7	5 feet	For preservation of existing native vegetation or restoration of native vegetation, as necessary, in a minimum 5 foot wide nearshore area below the lake's OHWM.
8	5 feet	For preparation of, and agreement to adhere to, a written shoreline vegetation management plan that includes appropriate limitations on the use of fertilizer, herbicides, and pesticides to protect lake water quality.

* Plus the five (5) foot building setback (SMC 25.06.020)

(a) The partial exemption(s) of SMC 25.06.020(8)(b) and (c) may be utilized for modifications, replacements and additions that do not expand the footprint by more than one thousand (1,000) square feet within the shoreline setback in lieu of the reductions authorized in Table 1, with establishment and maintenance of the 15 foot vegetation enhancement area. Establishment of the vegetation enhancement area is encouraged but not required for expansions of two hundred (200) square feet or less.

(b) Reduction measures shall be installed, monitored, maintained and city inspected. Mitigation provisions in SMC 21A.50.140 and SMC 21A.50.145 shall apply and financial guarantees pursuant to SMC 21A may be required.

(11) **Pine Lake and Beaver Lake Tree Retention.** Eighty percent (80%) of the significant trees within the shoreline jurisdiction must be retained. This requirement shall not apply to documented hazard trees.

(12) **Pine and Beaver Lakes Vegetation Enhancement Area.** A vegetation enhancement area immediately landward of the OHWM is encouraged.

(13) **Critical Areas within Shoreline Jurisdiction.** Where critical areas including wetlands, streams, frequently flooded areas, geologically hazardous areas, or fish and wildlife habitat conservation areas designated in SMC 21A.50 occur in the shoreline jurisdiction, the SMC 21A.50 buffer or shoreline setback that provides the greatest protection shall prevail.

(14) **Notice on Title.** The owner of any property required to maintain a vegetation enhancement area on which a development proposal is submitted or any property on which mitigation is established as a result of development, except a public right-of-way or the site of a permanent public facility, shall file a notice approved by the City with the King County records and elections division. The required contents and form of the notice shall be determined by the Director. The notice shall run with the land.

25.06.030 Shoreline Public Access Regulations

(1) Physical and/or visual access should be made available to the public through public parks, rights-of-way and other public lands.

(2) New public access is not required for new single-family residential subdivisions.

(3) Development of public access facilities in, on or over the water shall be constructed using materials that allow light penetration and do not contaminate water. Facilities in, on or over the water shall be of non-reflective materials that are compatible in terms of color and texture with the surrounding area. The underside of over-water facilities should incorporate reflective materials where necessary to reduce the effects of shadowing.

(4) Public access should be located adjacent to other public areas, accesses and connecting trails, and connected to the nearest public street end or other public access point.

	Lake Sammamish Shoreline Residential	Lake Sammamish Urban Conservancy	Pine and Beaver Lakes Shoreline Residential	Pine and Beaver Lakes Urban Conservancy
Single Family Residential (SMC 25.07.080) (SMC 25.06.020)				
Height	35 feet	35 feet	35 feet	35 feet
Setbacks	15% of lot width, minimum setback 5 feet	15% of lot width, minimum setback 5 feet	R-4	R-4
Impervious surface (max.)	R-4, no additional % for lots under 9,076 square feet	40%	R-4, no additional % for lots under 9,076 square feet	40%
Fences	6 feet	6 feet	6 feet	6 feet
Accessory structures (not ADU) (SMC 25.07.080)				
Height	10 feet	10 feet	10 feet	10 feet
Maximum footprint	200 square feet	200 square feet	200 square feet	200 square feet
Other structures outside shoreline setback				
Height	35 feet	35 feet	35 feet	35 feet
Footprint Maximum	None	None	None	None
Docks: Private Residential (SMC 25.07.050)				
Length	Dock length of 80 feet maximum or length necessary to reach a depth of 8 feet. No dock shall be more than ¼ the distance to the opposite shoreline.	Dock length of 80 feet maximum or length necessary to reach a depth of 8 feet. No dock shall be more than ¼ the distance to the opposite shoreline.	Dock length of 80 feet maximum or length necessary to reach a depth of 8 feet. No dock shall be more than ¼ the distance to the opposite shoreline.	Dock length of 80 feet maximum or length necessary to reach a depth of 8 feet. No dock shall be more than ¼ the distance to the opposite shoreline.
Area: 1 owner	600 square feet	600 square feet	600 square feet	600 square feet
Area: 2 to 9 owners	800 square feet	800 square feet	700 square feet	700 square feet
Area: 10 or more owners	1,000 square feet	1,000 square feet	700 square feet	700 square feet
Width	Up to 50% of lot width	Up to 50% of lot width	Up to 50% of lot width	Up to 50% of lot width
Placement	At least 15 feet from property line			
Subdivision (25.07.080)	Shared use docks are required (see above for shared use dock allowances).	Shared use docks are required (see above for shared use dock allowances).	Shared use docks are required (see above for shared use dock allowances).	Shared use docks are required (see above for shared use dock allowances).
Canopy (25.07.050)				

	Lake Sammamish Shoreline Residential	Lake Sammamish Urban Conservancy	Pine and Beaver Lakes Shoreline Residential	Pine and Beaver Lakes Urban Conservancy
Coverage	25 x 15 feet	25 x 15 feet	-----	-----
Height above OHW	10 feet	10 feet	-----	-----
Docks: Public Recreational (25.07.060)				
Length	No limit	No limit	No limit	No limit
Area	3, 000 square feet	3, 000 square feet	3,000 square feet	3,000 square feet
Setbacks (25.06.020)				
Shoreline setback	45 feet	45 feet	45 feet	45 feet
Building setback	5 feet	5 feet	5 feet	5 feet
Vegetation enhancement area (VEA)	15 feet	15 feet	Encouraged	Encouraged
Active use area	25% of VEA	25% of VEA	No limit	No limit
Subdivision (25.07.050)				
Minimum area	12,500 square feet	12,500 square feet	12,500 square feet	12,500 square feet
Minimum lot width	50 feet	50 feet	50 feet	50 feet

(9) Subdivisions shall be designed to assure that future development of the established lots will not require armoring. Use of a bulkhead, wall, or similar structure to protect a platted lot where no structure presently exists shall be prohibited.

(10) Breakwaters, jetties, rock weirs, groins and similar structural modifications shall be prohibited.

(11) New bulkheads on vacant lands are prohibited.

25.07.080 Residential Use Regulations

(1) **Preferred use.** Single-family residential use is a preferred shoreline use and shall be permitted when consistent with this Program and the Act, including the goal to ensure no net loss of shoreline ecological functions.

(2) **New Residential Development.** New residential development and normal appurtenances shall be located sufficiently landward of the OHWM to preclude the need for new structural shoreline stabilization and/or flood protection for the useful life of the structure in accordance with the following:

(a) New residential development and normal appurtenances shall be located landward of the shoreline setback, or if applicable the reduced shoreline setback, or as otherwise allowed, in accordance with this Program.

(b) For Shoreline Residential areas, impervious surface allowances shall be in accordance with R-4 zoning requirements, with the exception that no additional impervious surface percentage is allowed for lots less than 9,076 square feet. See SMC 21A.25.030 Note 4.c.

(c) For Urban Conservancy areas, the maximum amount of impervious surface shall not exceed 40% of the lot area above OHWM.

(d) New accessory structures, excluding accessory dwelling units, may be located waterward of the shoreline setback provided that all of the following criteria are met:

- i. The maximum total footprint is not more than two hundred (200) square feet; and,
- ii. The maximum height is not more than ten (10) feet above existing average grade level; and,
- iii. The structure is located outside of wetlands, streams, other ecologically sensitive areas and associated buffers.
- iv. Square footage of non-fixed landscaping features (single and clustered rocks used in landscaping, birdhouses, and items such as party tents, umbrellas and outdoor furniture, garden boxes, planters, and trellises) is not regulated.

(3) Expansion of Existing Legally Established Residential Use.

(a) **Lake Sammamish.** An existing legally established residential structure may be expanded or reconfigured. Expansion/modification shall be subject to the requirements of SMC 25.06.020. Expansion shall be allowed in accordance with SMC 25.06.020(8). The minimum distance between the OHWM and the waterward edge of the footprint of the expansion (not including a maximum of eighteen (18) inches of overhanging eaves) shall be at least twenty (20) feet in accordance with SMC 25.06.020.

(b) **Pine and Beaver Lakes.** An existing legally established residential structure may be expanded or reconfigured. Expansion into the shoreline setback shall occur only as allowed in SMC 25.06.020(8). Expansion/modification shall be subject to the requirements of SMC 25.06.020.

(4) Interior setbacks.

(a) **Lake Sammamish.** Interior setbacks within shoreline jurisdiction shall total fifteen percent (15%) of the width of the lot, with a minimum setback of five (5) feet on either side of the lot.

(5) **Fences.** No portion of any fences within shoreline jurisdiction shall exceed six (6) feet in height, as measured from the existing ground elevation along the proposed fence alignment, and shall not be located within wetlands, streams, or SMC 21A.50 buffers.

(6) **Subdivision.** Shoreline lots may be subdivided in accordance with SMC Title 19.

(a) The minimum lot width required for subdivision within shoreline jurisdiction shall be fifty (50) feet as measured by scaling a circle of the applicable diameter within the boundaries of the lot. For lots fronting directly on the OHWM, the lot width circle shall touch the OHWM. An access easement may be included in the lot width circle; and

(b) Landward portions of all lots created through subdivision shall have a minimum size of twelve thousand five hundred (12,500) square feet, provided that all other applicable regulations are met, including this Program, SMC 21A.25 and the King County Department of Health, (septic system siting standards); and

(c) All new subdivisions shall be allowed one additional shared use dock. An existing dock may remain for either shared use or use by one lot in the subdivision.

25.07.090 Public Recreational Use Regulations

(1) Public recreational development on public land is a preferred shoreline use and is permitted when consistent with underlying zoning pursuant to SMC 21A.10, this Program, and the Act, including the goal to ensure no net loss of shoreline ecological functions.

(2) New public recreational activities and facilities proposed within shoreline jurisdiction shall be water-oriented, and shall provide physical and/or visual access to the shoreline.

25.08.070 Administration – General Standards

- (1) Unless otherwise stated, this Program shall be administered according to the standards and criteria in RCW 90.58 and WAC 173-27.

25.08.080 Permit Process – Land Use Decisions

- (1) Shoreline substantial development permits, statements of exemption, shoreline variances and shoreline conditional use permits shall be subject to all of the applicable requirements of SMC 20.05.

25.08.090 Permit Process – Appeals

- (1) Appeals of the final decision of the City with regard to shoreline management shall be governed by the provisions of RCW 90.58.180.
- (2) Appeals to the Shoreline Hearings Board of a decision on a shoreline substantial development permit, shoreline variance or shoreline conditional use permit may be filed by the applicant/property owner or any aggrieved party pursuant to RCW 90.58.180.
- (3) The effective date of the City's decision shall be the date of filing with the Department of Ecology as defined in RCW 90.58.140.

25.08.100 Non-conforming Use and Development – Alteration or Reconstruction

(1) Non-conforming Structures

- (a) Reconstruction, replacement, or expansion of the exterior footprint of an existing, legally established non-conforming structure is allowed provided that the addition or reconstruction does not increase the degree of non-conformity except as allowed in SMC 25.06.020.
- (b) Replacement may be allowed in a different non-conforming location if a determination is made by the City that the new location results in less impact to shoreline functions than replacement in the existing footprint.
- (c) Existing structures that were legally established but which are non-conforming with regard to the setback, area, bulk, height or density standards established by this Program may be maintained, reconstructed, or repaired, provided that:
 - i. The maintenance/reconstruction/repair does not increase the extent of non-conformity by encroaching upon or extending into the building setback area or shoreline setback or other area where new construction or use would not be allowed except as specifically allowed in SMC 25.07.080.

(d) Existing legally established structures that are non-conforming as to SMC 21A.50 buffer requirements for wetlands, streams, ponds, or landslide hazard areas and their building setbacks may be modified, expanded, and/or replaced according to SMC 21A.50.060, sections (1)(a) and (1)(b). Structure non-conformity for any reason other than SMC 21A.50 buffer requirements for wetlands, streams, ponds or landslide hazard areas and their building setbacks must comply with the regulations of this section.

(e) If a non-conforming structure is damaged by fire, explosion, or other casualty and/or natural disaster, it may be reconstructed to match the footprint that existed immediately prior to the time the damage occurred or in accordance with (b) of this section, provided that all of the following criteria are met:

i. The owner(s) submit a complete application within twenty-four (24) months of the date the damage occurred; and

ii. All permits are issued within two years of initial submittal of the complete application, and the restoration is completed within two (2) years of permit issuance. This period may be extended for one additional year by the Director if the applicant has submitted the applications necessary to establish the use or activity and has provided written justification for the extension; and

iii. If a non-conforming structure is damaged by fire, explosion, or other casualty and/or natural disaster and these criteria are not met, the City may require the applicant to plant the vegetation enhancement area with native trees and shrubs in accordance with SMC 25.06.020.

(f) A non-conforming structure that is moved outside the existing footprint must be brought into conformance with this Program and RCW 90.58, except as allowed by (b) of this section.

(g) If the repair or maintenance of a non-conforming dock changes the location of the structure or alters any dimension of the structure by more than ten percent (10%), it shall be subject to the regulations for new docks.

(2) Non-conforming lots

(a) An undeveloped lot, tract, parcel, site, or division of land located landward of the OHWM that was legally established prior to the effective date of this Program, but which does not conform to the present lot size standards, may be developed if permitted by other land use regulations. Such development shall conform to all other requirements of this Program.

(3) Non-conforming uses

(a) Uses that were legally established prior to the adoption or amendment of this Program - and are non-conforming with regard to the use regulations of this Program may continue as legal non-conforming uses.

(b) An existing use designated as a conditional use that lawfully existed prior to the adoption or amendment of this Program and which has not obtained a conditional use permit shall be considered a legal non-conforming use and may be continued subject to the provisions of this section without obtaining a conditional use permit.

(c) If a non-conforming use is discontinued for twelve consecutive months or for twelve months during any two-year period, the nonconforming rights shall expire and any subsequent use shall be conforming unless in compliance with this Program.

25.08.110 Rules of Director

(1) The Director is authorized to adopt administrative rules as are necessary and appropriate to implement this Program. The Director may prepare and require the use of such forms as are necessary to its administration.

25.08.120 Enforcement, Violations and Penalties

(1) The Director is authorized to enforce the provisions of this Program, including any rules and regulations promulgated thereunder, pursuant to the enforcement and penalty provisions of WAC 173-27.

25.08.130 Initiation of Development

(1) Development pursuant to a shoreline substantial development permit, shoreline variance, or shoreline conditional use shall not begin and shall not be authorized until twenty one (21) days after the "date of filing" or until all appeal proceedings before the Shoreline Hearings Board have terminated.

25.08.140 Permit Revisions

(1) A permit revision is required whenever the applicant/property owner proposes substantive changes to the design, terms or conditions of a use or development from those as approved in the existing and approved permit. Changes are substantive if they materially alter the project in a manner that relates to its conformance to the terms and conditions of the existing and approved permit, this Program or the Act. Changes that are not substantive in effect do not require a permit revision.

(2) An application for a revision to a shoreline permit shall be submitted to the Director. The application shall include detailed plans and text describing the proposed changes. The City shall review and process the request in accordance with the requirements of WAC 173-27-100.

83.190 Lot Size or Density, Shoreline Setback, Lot Coverage and Height

1. Calculation of Minimum Lot Size or Maximum Density –

- a. Development shall not use lands waterward of the OHWM to determine minimum lot size or to calculate allowable maximum density.
- b. For properties that are only partially located within the shoreline jurisdiction, the allowed density within the shoreline jurisdiction shall be based upon the land area located within the shoreline jurisdiction only. If dwelling units will be partially located within the shoreline jurisdiction, the City may approve an increase in the actual number of units in the shoreline jurisdiction, provided that the total square footage of the units within the shoreline jurisdiction does not exceed the allowed density multiplied by the average unit size in the proposed development on the subject property.
- c. If a maximum density standard is used, the number of permitted dwelling units shall be rounded up to the next whole number (unit) if the fraction of the whole number is at least 0.50.
- d. For detached dwelling units, the provisions addressing lot size, lot size averaging, and historic preservation contained in Chapter 22.28 KMC shall apply within the shoreline jurisdiction.

2. Shoreline Setback –

- a. General – This section establishes what structures, improvements, and activities may be in or take place in the shoreline setback established for each use in each shoreline environment.
- b. Measurement of Shoreline Setback –
 - 1) The shoreline setback shall be measured landward from the OHWM on the horizontal plane and in the direction that results in the greatest dimension from the OHWM (see Plate XX).
 - 2) In those instances where the OHWM moved further upland pursuant to any action required by this Chapter, or in accordance with permits involving a shoreline habitat and natural systems enhancement project approved by the City, a state or federal agency, the shoreline setback shall be measured from the location of the OHWM that existed immediately prior to the action or enhancement project.
 - 3) For those properties located along Lake Ave West south of the Lake Ave W Street End Park in the Residential – L environment, in instances where the shoreline setback of adjacent dwelling units has been reduced through a shoreline reduction authorized under KZC Section 83.380, the shoreline setback of these adjacent dwelling units, for the purpose of calculating a setback average, shall be based upon the required setback that existed prior to the authorized reduction.
 - 4) In those instances where there is an intervening property that is 60 feet in depth between the OHWM and an upland property, a shoreline setback shall be provided on the upland property based on the average parcel depth of the upland property. The setback on the upland property shall be measured from the OHWM across the intervening property and the upland property.
- c. Exceptions and Limitations in Some Zones – KZC Sections 83.190 through 83.250 contain specific regulations regarding what may be in or take place in the shoreline setback. Where applicable, those specific regulations supersede the provisions of this section.
- d. Structures and Improvements – The following improvements or structures may be located in the shoreline setback, except within the Natural shoreline environment, provided that they are constructed and maintained in a manner that meets KZC 83.360 for avoiding or at least minimizing adverse impacts to shoreline ecological functions:

- 1) For public pedestrian access required under KZC 83.420, walkways, benches, and similar features, as approved by the Planning Official.
- 2) For private pedestrian access to the shoreline, walkways within the shoreline setback are permitted, subject to the following standards:
 - a) The maximum width of the walkway corridor area shall be no more than 25 percent of the property's shoreline frontage, except in no case shall the corridor area required be less than 15 feet in width (see Plate XX).
 - b) The walkway corridor area shall be located outside of areas of higher ecological and habitat value.
 - c) The walkway in the corridor area shall be no more than 8 feet wide, and be constructed of a pervious walking surface, such as unit pavers, grid systems, pervious concrete, or, equivalent material approved by the Planning Official.
 - d) The walkway corridor area may contain minor improvements, such as garden sculptures, light fixtures, trellises and similar decorative structures that are associated with the walkway, provided that these improvements comply with the dimensional limitations required for the walkway corridor area and any view corridor requirements under KZC Section 83.410. Light fixtures approved under this subsection shall comply with the provisions contained in KZC 83.470.
- 3) Those portions of a water-dependent development that require improvements adjacent to the water's edge, such as fueling stations for retail establishments providing gas sales, haul-out areas for retail establishments providing boat and motor repair and service, boat ramps for boat launches or other similar activities.
- 4) Public access facilities or other similar public water-enjoyment recreational uses, including swimming beaches.
- 5) Underground utilities accessory to a shoreline use approved by the Planning Official, provided there is no other feasible route or location.
- 6) Bioretention swales, rain gardens, or other similar bioretention systems that allow for filtration of water through planted grasses or other native vegetation.
- 7) Infiltration systems provided that installation occurs as far as feasible from the OHWM.
- 8) Bay windows, greenhouse windows, eaves, cornices, awnings, and canopies may extend up to 18 inches into the shoreline setback, subject to the following limitations:
 - a) Eaves on bay windows may extend an additional 18 inches beyond the bay window.
 - b) Chimneys that are designed to cantilever or otherwise overhang are permitted.
 - c) The total horizontal dimension of these elements that extend into the shoreline setback, excluding eaves and cornices, shall not exceed 25 percent of the length of the facade of the structure.
- 9) Decks, patios and similar improvements may extend up to 10 feet into the shoreline setback but shall not be closer than 25 feet to the OHWM, except no closer than 15 feet to the OHWM within the Residential – L environment south of the Lake Ave West Street End Park, subject to the following standards:
 - a) The improvement shall be constructed of a pervious surface, such as wood with gaps between boards and a pervious surface below, unit pavers, grid systems, pervious concrete, or, alternatively, equivalent material approved by the Planning Official.
 - b) The total horizontal dimension of the improvement that extends into the shoreline setback shall not exceed 50 percent of the length of the facade of the residence structure.

- c) The improvement shall be located on the ground floor of the building and shall not be elevated more than necessary to allow for grade transition from the structure to the deck or to follow the existing topography.
 - 10) In the Urban Mixed environment, balconies at least 15 feet above finished grade may extend up to 4 feet into the required shoreline setback, but no closer than 21 feet to the OHWM.
 - 11) Outdoor seating areas for restaurants, hotels and other water enjoyment commercial uses may extend up to 10 feet into the shoreline setback, but shall be no closer than 16 feet to the OHWM, subject to the following standards:
 - a) The improvement shall be constructed of a permeable surface, such as wood with gaps between boards and a pervious surface below, unit pavers, grid systems, porous concrete, or equivalent material approved by the Planning Official.
 - b) The total horizontal dimension of the improvement that extends into the shoreline setback shall not exceed 50 percent of the length of the facade of the primary structure.
 - c) The improvement shall be located on the ground floor of the building and shall not be elevated more than necessary to allow for grade transition from the structure to the seating area or to follow the existing topography.
 - d) All outdoor lighting is required to meet the lighting standards of KZC 83.470.
 - e) The seating area is required to be fenced off from the shoreline by rope stanchions, portable planters, or similar device approved by the City, with openings through the fencing for customer entry. The floor plan of the seating area shall be designed to preclude the seating area from being expanded.
 - f) The applicant is required to provide one (1) or more approved trash receptacles and one (1) or more ashtrays.
 - g) The area of the seating shall be considered new gross floor area for the purposes of determining whether vegetation is required under the provisions of KZC 83.400.
 - 12) Retaining walls and similar structures that are no more than four (4) feet in height above finished grade; provided the following standards are met:
 - a) The structure shall be designed so that it does not interfere with the shoreline vegetation required to be installed under the provisions of KZC 83.400;
 - b) The structure shall not be installed to provide the function of a hard shoreline stabilization measure unless approved under the provisions of KZC 83.300 and shall be located, on average, five (5) feet landward or greater of the OHWM, and
 - c) The structure shall meet the view corridor provisions of KZC 83.410.
 - 13) Public bridges and other essential public facilities that must cross the shoreline.
 - 14) Parking as authorized by the Planning Official under the provisions of KZC 83.440.
 - 15) Shoreline stabilization measures approved under the provisions of KZC 83.300.
 - 16) Fences, swimming pools, tool sheds, greenhouses and other accessory structures and improvements are not permitted within the shoreline setback, except those specifically listed above in subsection 83.190 2.d.2).d).
3. Maximum Lot Coverage –
- a. General –
 - 1) KZC 83.180.3, Development Standards Chart, establishes the maximum lot coverage by use and shoreline environment.

83.370 Federal and State Approval

1. All work at or waterward of the OHWM requires permits or approvals from one or more of the following state and federal agencies: U.S. Army Corps of Engineers, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, or Washington Department of Ecology.
2. Documentation verifying necessary state and federal agency approvals must be submitted to the City prior to issuance of a building permit, including shoreline exemption. All activities within shorelines jurisdiction must comply with all other applicable laws and regulations.
3. If structures are proposed to extend waterward of the inner harbor line, the applicant must obtain an aquatic use authorization from the Washington State Department of Natural Resources and submit proof of authorization with submittal of a Building Permit.

83.380 Shoreline Setback Reduction

1. Improvements permitted within the Shoreline Setback - See standards contained in KZC 83.190.2.
2. Shoreline Setback Reductions –
 - a. In the Residential – L shoreline environment, the shoreline setback may be reduced by two (2) feet if subject to the Historic Preservation provisions of KMC 22.28.048, but in no case closer than 25 feet with the exception in the Residential L - shoreline environment south of the Lake Ave West Street End Park where the minimum shoreline setback is 15 feet.
 - b. The required shoreline setback may be reduced to a minimum of 25 feet when setback reduction impacts are mitigated using a combination of the mitigation options provided in the chart below to achieve an equal or greater protection of lake ecological functions. In the portion of the Residential-L environment located south of the Lake Ave W Street End Park, the required shoreline setback may be reduced to a minimum of 15 feet. The following standards shall apply to any reduced setback:
 - 1) The minimum setback that may be approved through this reduction provision is 25 feet in width, except that properties in the Residential L – shoreline environment south of the Lake Ave West Street End Park may reduce to a minimum setback of 15 feet. Any further setback reduction below 25 feet or 15 feet, respectively, in width shall require approval of a shoreline variance application.
 - 2) The City shall accept previous actions that meet the provisions established in the setback reduction option chart in KZC 83.380.d. below as satisfying the requirements of this section, provided that all other provisions are completed, including but not limited to, the agreement noted in Section 83.380.2.b.4 below. The reduction allowance for previously completed reduction actions may only be applied once on the subject property.
 - 3) Prior to issuance of a certificate of occupancy or final inspection, the applicant shall provide a final as-built plan of any completed improvements authorized or required under this subsection.
 - 4) Applicants who obtain approval for a reduction in the setback must record the final approved setback and corresponding conditions, including maintenance of the conditions throughout the life of the development, unless otherwise approved by the City, in a form acceptable to the City Attorney, and recorded with the King County Bureau of Elections and Records. The applicant shall provide land survey information for this purpose in a format approved by the Planning Official.
 - 5) The shoreline setback reduction mechanisms shall not apply within the Natural shoreline environment.
 - c. The reduction allowance shall be applied to the required shoreline setback. For instance, if a reduction is proposed in the Residential – L environment, where the shoreline setback requirement is 30% of the average parcel depth, the shoreline setback could be reduced to

20% of the average parcel depth, but in no case less than 25 feet, if Reduction Option 1 in the chart below is used.

d. The chart below describes the setback reduction options:

Shoreline Setback Reduction Options		Reduction Allowance	
		Standard Reduction (min. 25 ft. setback)	Residential-L, south of Lake Ave W Street End Park (min. 15 ft. setback)
Water Related Conditions or Actions			
1	Presence of non-structural or soft structural shoreline stabilization measures located at, below, or within 5 feet landward of the lake's OHWM along at least 75 percent of the linear lake frontage of the subject property. This can include the removal of an existing hard structural shoreline stabilization measure and subsequent restoration of the shoreline to a natural or semi-natural state, including restoration of topography, and beach/substrate composition. This option cannot be used in conjunction with Option 2 below	Reduce required setback by 15 percentage points, or in cases where the required setback is 60' reduce setback by 30 ft.	Reduce required setback by 15 ft.
2	Presence of non-structural or soft structural shoreline stabilization measures located at, below, or within 5 feet landward of the lake's OHWM along at least 15 linear feet of the lake frontage of the subject property. This may include the removal of an existing hard structural shoreline stabilization measure and subsequent restoration of the shoreline to a natural or semi-natural state, including creation or enhancement of nearshore shallow-water habitat, beach/substrate composition. This option cannot be used in conjunction with Option 1 above;	Reduce required setback by 5 percentage points, or in cases where the required setback is 60' reduce setback by 10 ft.	Reduce required setback by 5 ft.
3	Opening of previously piped on-site watercourse to allow potential rearing opportunities for anadromous fish for a minimum of 25 feet in length. Opened watercourses must be provided with a native planted buffer at least 5 feet wide on both side of the stream, and must not encumber adjacent properties with a 5 foot wide buffer without express written permission of the adjacent property owner. A qualified professional must design opened watercourses. The opened watercourse shall be exempt from the buffer provisions of KZC 83.490. The opened watercourse is exempt from the buffer requirements and standards of KZC 83.510.	Reduce required setback by 5 percentage points, or in cases where the required setback is 60' reduce setback by 4 ft.	Reduce required setback by 5 ft.
4	Hard structural shoreline stabilization measure is setback from the OHWM between 2 ft. to 4 ft based on feasibility and existing conditions and/are sloped at a maximum 3 vertical (v):	Reduce required setback by 5	Reduce required

Shoreline Setback Reduction Options		Reduction Allowance	
		Standard Reduction (min. 25 ft. setback)	Residential-L, south of Lake Ave W Street End Park (min. 15 ft. setback)
	1 horizontal (h) angle to provide dissipation of wave energy and increase the quality or quantity of nearshore shallow-water habitat.	percentage points, or in cases where the required setback is 60 ft. reduce setback by 4 ft.	setback by 5 ft.
5	Soft structural shoreline stabilization measures are installed waterward of the OHWM. They may include the use of gravels, cobbles, boulders, and logs, as well as vegetation. The material shall be of a size and placed to remain stable and accommodate alteration from wind- and boat-driven waves and shall be graded to a maximum slope of 1 vertical (v): 4 horizontal (h).	Reduce required setback by 2 percentage points, or in cases where the required setback is 60 ft. reduce setback by 4 ft.	Reduce required setback by 2 ft.
Upland Related Conditions or Actions			
6	Installation of biofiltration/infiltration mechanisms in lieu of piped discharge to the lake, such as mechanisms that infiltrate or disperse surface water on the surface of the subject property. These mechanisms shall be sized to store a minimum of 70% of the annual volume of runoff water from the subject property, for sites with poor soils, or 99% of the annual volume of runoff water from the subject property, for sites with well-draining soils. This mechanism shall apply to sites where the total new or replaced impervious surface is less than or equal to 5,000 square feet. The mechanisms shall be designed to meet the requirements in the City's current surface water design manual.	Reduce required setback by 2 percentage points, or in cases where the required setback is 60 ft. reduce setback by 4 ft.	Reduce required setback by 2 ft.
7	Increasing the width of the required landscape strip within the reduced shoreline setback a minimum of five (5) additional feet in width.	Reduce required setback by 2 percentage points, or in cases where the required setback is 60 ft. reduce setback by 4 ft.	Reduce required setback by 2 ft.

Shoreline Setback Reduction Options		Reduction Allowance	
		Standard Reduction (min. 25 ft. setback)	Residential-L, south of Lake Ave W Street End Park (min. 15 ft. setback)
		ft.	
8	Installation of pervious material for all pollution generating surfaces such as driveways, parking or private roads that allows water to pass through at rates similar to pre-developed conditions. Excluded from this provision are the vehicular easement roads, such as 5 th Ave West or Lake Ave West in the Residential – L shoreline environment.	Reduce required setback by 2 percentage points, or in cases where the required setback is 60 ft. reduce setback by 4 ft.	Reduce required setback by 2 ft.
9	Limiting the lawn area within the shoreline setback to no more than 50 percent of the reduced setback area.	Reduce required setback by 2 percentage points, or in cases where the required setback is 60 ft. reduce setback by 4 ft.	Reduce required setback by 2 ft.
10	Preserving or restoring at least 20 percent of the total lot area outside of the reduced setback and any critical areas and their associated buffers as native vegetation.	Reduce required setback by 2 percentage points, or in cases where the required setback is 60' reduce setback by 4 ft.	Reduce required setback by 2 ft.

83.390 Site and Building Design Standards

1. Water-enjoyment and non-water oriented commercial and recreational uses shall contain the following design features to provide for the ability to enjoy the physical and aesthetic qualities of the shoreline:
 - a. Buildings are designed with windows that orient toward the shoreline.

- b. Buildings are designed to incorporate outdoor areas such as decks, patios, or viewing platforms that orient toward the shoreline.
 - c. Buildings are designed with entrances along the waterfront façade and with connections between the building and required public pedestrian walkways.
 - d. Service areas are located away from the shoreline.
 - e. Site planning includes public use areas along waterfront public pedestrian walkways, if required under the provisions established in KZC 83.420, that will encourage pedestrian activity, including but not limited to:
 - 1) Permanent seating areas;
 - 2) Vegetation, including trees to provide shade cover; and
 - 3) Trash receptacles.
2. Exemptions – The following are exempt from the requirements of KZC 83.390.1 above:
- a. Non-water oriented commercial and recreational uses that are located on the east side of Lake Washington Blvd. NE/Lake Street or on the east side of 98th Avenue NE.
 - b. Non-water oriented commercial and recreational uses where there is an intervening development between the shoreline and the subject property.
3. Buildings shall not incorporate materials that are reflective or mirrored.

83.400 Tree Management and Vegetation in Shoreline Setback

1. Tree Retention - The following provisions shall apply to significant trees located within the shorelines jurisdiction, in addition to the provisions contained in Chapter 95 KZC. Provisions contained in Chapter 95 KZC that are not addressed in this section continue to apply.

To maintain the ecological functions that trees provide to the shoreline environment, significant trees shall be retained or, if removed, the loss of shoreline ecological functions shall be mitigated for, subject to the following standards:

- a. No Development Activity –

For tree removal in the shoreline setback when no development activity is proposed or in progress, the following tree replacement standards and requirements shall apply:

- 1) Healthy, diseased or nuisance trees that are removed or fallen trees in the shoreline setback shall be replaced as follows:

Removed Tree Type	Replacement Requirement
1 conifer tree less than 24 inches in diameter as measured at breast height	For removal of conifer tree up to 12 inches in diameter, replace with 1 native conifer tree at least 6 ft. in height measured from existing grade. For removal of conifer tree greater than 12 inches in diameter but less than 24 inches in diameter, same replacement requirements as for conifer tree 12 inches in diameter or less, but also a riparian vegetation area at least 80 square feet at the time of planting. Riparian area shall contain at least 60% shrubs and be a minimum of 3 ft. wide in all dimensions at the time of planting.
1 deciduous tree less than 24 inches in	For removal of deciduous tree up to 12

<p>diameter as measured at breast height</p>	<p>inches in diameter replace with 1 deciduous tree at least 2 inches in caliper measured 6 inches above existing grade or 1 native conifer tree at least 6 feet in height measured from existing grade..</p> <p>For removal of deciduous tree greater than 12 inches in diameter but less than 24 inches in diameter, same replacement requirements as for deciduous tree 12 inches in diameter or less, but also a riparian vegetation area of at least 80 square feet at the time of planting. Riparian area shall contain at least 60% shrubs and be a minimum of 3 feet wide in all dimensions at the time of planting.</p>
<p>1 conifer or deciduous tree 24 inches in diameter or greater as measured at breast height</p>	<p>Only tree meeting the criteria found in KZC Chapter 95 for a nuisance or hazard tree may be removed. A report, prepared by a qualified professional certified arborist, must be submitted showing how tree meets the criteria. The City arborist shall make the final determination if tree meets the criteria and may be removed.</p> <p>If the City arborist approved removal of the tree, tree replacement shall be:</p> <p>For removal of 1 conifer tree, replace with 2 native conifer trees at least 6 ft. in height at the time of planting.</p> <p>For removal of 1 deciduous tree, replace with 2 trees of either type. Native conifer tree shall be at least 6 ft. in height and deciduous tree shall be at least 2 inches in caliper measured 6 inches above existing grade at the time of planting.</p>
<p>A significant tree that has fallen as a result of natural causes, such as a fire, flood, earthquake or storm</p>	<p>If the subject property complies with the minimum tree density requirement established in KZC Chapter 95, no replacement is required. Otherwise, replace with 1 tree. Native conifer tree shall be at least 6 ft. in height and deciduous tree shall be at least 2 inches in caliper measured 6 inches above existing grade at the time of planting.</p>

- 2) A tree removal request shall be submitted in writing to the City prior to any tree removal within the shoreline setback. The request shall include the location, number, type and size of tree(s) being removed and the proposed replacement tree(s) and riparian vegetation planting plan meeting the standards required in KZC 83.400.1.a) above. The City shall inspect the tree replacement once installation is complete.
- 3) An alternative replacement option shall be approved if an applicant can demonstrate that:

- a) It is not feasible to plant all of the required mitigation trees in the shoreline setback of the subject property, given the existing tree canopy coverage and location of trees on the property, the location of structures on the property, and minimum spacing requirements for the trees to be planted, or
- b) The required tree replacement will obstruct existing views to the lake, at the time of planting or upon future growth that cannot otherwise be mitigated through tree placement or maintenance activities. The applicant shall be responsible for providing sufficient information to the City to determine whether the tree replacement will obstruct existing views to the lake.

The alternate replacement option must be equal or superior to the provisions of this section in accomplishing the purpose and intent of maintaining shoreline ecological functions and processes. This may include, but shall not be limited to, a riparian restoration plan consisting of at least 60% shrubs and some groundcovers selected from the Kirkland Native Plant List that shall equal at a minimum 80 square feet for each tree to be replanted. The applicant shall submit a planting plan to be reviewed by the Planning Official or Urban Forester, who may approve, approve with conditions, or deny the request.

If the alternative plan is consistent with the standards provided in this subsection, the Planning Official or Urban Forester shall approve the plan or may impose conditions to the extent necessary to make the plan consistent with the provisions. If the alternative mitigation is denied, the applicant shall be informed of the deficiencies that caused its disapproval so as to provide guidance for its revision and re-submittal.

- 4) In circumstances where the proposed tree removal includes a tree that was required to be planted as a replacement tree under the provisions of this subsection or as part of the required vegetation in the shoreline setback established in KZC 83.400.3 below, the required tree replacement shall be addressed under the provision below that requires only a 1:1 replacement.
- 5) For required replacement trees, a planting plan showing the location, size and species of the new trees is required to be submitted and approved to by the Planning Official. All replacement trees in the shoreline setback must be selected from the Kirkland Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester.

b. Development Activity –

For tree removal in the shoreline setback when development activity is proposed or in progress.

1) Submittal Requirements in the Shoreline Setback –

- a) A site plan showing the approximate location of significant trees, their size (DBH) and their species, along with the location of existing structures, driveways, access ways and easements and the proposed improvements.
- b) An arborist report stating the size (DBH), species, and assessment of health of all significant trees located within the shoreline setback. This requirement may be waived by the Planning Official if it is determined that proposed development activity will not potentially impact significant trees within the shoreline setback.

- 2) Tree Retention Standards in the Shoreline Setback - Within the shoreline setback, existing significant trees shall be retained, provided that the trees are determined to be healthy and windfirm by a qualified professional, and provided the trees can be safely retained consistent with the proposed development activity. The Planning Official is authorized to require site plan alterations to retain significant trees in the shoreline setback. Such alterations include minor adjustments to the location of building footprints, adjustments to the location of driveways and access ways, or adjustment to the location of walkways,

easements or utilities. The applicant shall be encouraged to retain viable trees in other areas on-site.

3) Replanting Requirements in the Shoreline Setback –

- a) If the Planning Official approves removal of a significant tree in the shoreline setback area, then the tree replacement requirements of KZC 83.400.1.a above shall be met. See alternative mitigation option in KZC 83.400.1.b.3) c) below that may be proposed.
- b) For required replacement trees, a planting plan showing location, size and species of the new trees is required. All replacement trees in the shoreline setback must be selected from the Kirkland Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester.
- c) An alternative mitigation option may be approved if an applicant can demonstrate that:
 - i. It is not feasible to plant all of the required mitigation trees on the subject property, given the existing tree canopy coverage and location of trees on the property, the location of structures on the property, and minimum spacing requirements for the trees to be planted, or
 - ii. The required tree replacement will obstruct existing views to the lake, at the time of planting or upon future growth that cannot otherwise be mitigated through tree placement or maintenance activities. The applicant shall be responsible for providing sufficient information to the City to determine whether the tree replacement will obstruct existing views to the lake.

The alternate mitigation must be equal or superior to the provisions of this subsection in accomplishing the purpose and intent of maintaining shoreline ecological functions and processes. This may include, but shall not be limited to, a riparian restoration plan consisting of at least 60% shrubs, perennials and groundcovers selected from the Kirkland Native Plant List that shall equal at minimum 80 square feet for each tree to be replanted. The applicants shall submit a planting plan to be reviewed by the Planning Official or Urban Forester, who may approve, approve with conditions, or deny the request.

If the alternative plan is consistent with the standards provided in this subsection, the Planning Official or Urban Forester shall approve the plan or may impose conditions to the extent necessary to make the plan consistent with the provisions. If the alternative mitigation is denied, the applicant shall be informed of the deficiencies that caused its disapproval so as to provide guidance for its revision and re-submittal.

2. Tree Pruning - Non-destructive thinning of lateral branches to enhance views or trimming, shaping, thinning or pruning of a tree necessary to its health and growth is allowed, consistent with the following standards:
 - a. In no circumstance shall removal of more than one-fourth (1/4) of the original crown be permitted;
 - b. Pruning shall not include topping, stripping of branches or creation of an imbalanced canopy;
 - c. Pruning shall retain branches that overhang the water to the maximum extent feasible.
3. Required Vegetation in Shoreline Setback – Riparian vegetation contributes to shoreline ecological functions in a number of different ways, including maintaining temperature, removing excessive nutrients and toxic compounds, attenuating wave energy, removing and stabilizing sediment and providing woody debris and other organic matter. In order to minimize potential impacts to shoreline ecological functions from development activities, the following shoreline vegetation standards are required:

- a. For properties that do not comply with the shoreline vegetation standards contained in this subsection, refer to KZC 83.550 to determine when compliance is required.
- b. Minimum Vegetation Standard Compliance –
 - 1) Location –
 - a) Water-dependent Uses or Activities - The applicant shall plant native vegetation, as necessary, in at least 75 percent of the nearshore riparian area located along or near the water's edge, except for the following areas, where the vegetation standards shall not apply: those portions of water-dependent development that require improvements adjacent to the water's edge, such as fuel stations for retail establishments providing gas sales, haul-out areas for retail establishments providing boat and motor repair and service, boat ramps for boat launches, swimming beaches or other similar activities shall plant native vegetation on portions of the nearshore riparian area located along the water's edge that are not otherwise being used for the water-dependent activity.
 - b) All Other Uses - The applicant shall plant native vegetation, as necessary, in at least 75 percent of the nearshore riparian area located along or near the water's edge.
 - c) In the instance where there is an intervening property between the shoreline and an upland property and the portion of the intervening property abutting the upland property has an average parcel depth of less than 25 feet, shoreline vegetation along the west property line area of the upland property shall be provided within the shoreline setback pursuant to KZC 83.400, unless:
 - i. The required shoreline vegetation already exists on the intervening lot;
 - ii. The intervening property owner agrees to installing the shoreline vegetation on their property; or
 - iii. A proposal for alternative compliance is approved under the provisions established in KZC 83.400.3.f.
 - 2) Planting Requirements –
 - a) For uses other than those list below in KZC 83.400.2) b) for Detached, Attached and Stacking Dwelling units, the vegetated portion of the nearshore riparian area shall average ten (10) feet in depth from the OHWM, but may be a minimum of five (5) feet wide to allow for variation in landscape bed shape and plant placement. Total square feet of landscaped area shall be equal to a continuous 10-foot wide area.
 - b) For Detached, Attached or Stacked Dwelling Units within the Residential – M/H shoreline environment, the vegetated portion of the nearshore riparian area shall average 15 feet in depth from the OHWM. Total square feet of landscaped area shall be equal to a continuous 15-foot wide area.
 - c) The public access walkway required under KZC 83.420 may extend into the required landscape strip as necessary to meet the public pedestrian access requirements, provided that the overall width of the landscape strip is maintained.
 - d) Installation of native vegetation shall consist of a mixture of trees, shrubs and groundcover and be designed to improve habitat functions. At least 3 trees per 100 linear feet of shoreline must be included in the plan, with portions of a tree rounded up to the next required tree. At least 60 % of the landscape bed shall consist of shrubs.
 - e) Plant materials must be native and selected from the Kirkland Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester.

- c. Use of Existing Vegetation - The City shall accept existing native trees, shrubs and groundcover as meeting the requirements of this subsection, including vegetation previously installed as part of a prior development activity, provided that the existing vegetation provides a landscape strip at least as effective in protecting shoreline ecological functions as the required vegetation. The City may require the applicant to plant trees, shrubs, and groundcover according to the requirements of this subsection to supplement the existing vegetation in order to provide a buffer at least as effective as the required buffer.
- d. Landscape Plan Required - The applicant shall submit a landscape plan that depicts the quantity, location, species, and size of plant materials proposed to comply with the requirements of this subsection, and shall address the plant installation and maintenance requirements set forth in KZC 95. Plant materials shall be identified with both their scientific and common names. Any required irrigation system must also be shown.
- e. Vegetation Placement – When required either by this subsection or as a mitigation measure, such as for a new pier or dock or structural shoreline stabilization measure, vegetation selection and placement shall comply with the following standards:
 - 1) Vegetation shall be selected and positioned on the property so as not to obscure the public view within designated view corridors from the public right-of-way to the lake and to the shoreline on the opposite side of the lake at the time of planting or upon future growth.
 - 2) Vegetation may be selected and positioned to maintain private views to the water by clustering vegetation in a selected area, provided that the minimum landscape standard is met, unless alternative compliance is approved.
- f. Alternative Compliance - Vegetation required by this subsection shall be installed unless the applicant demonstrates one of the following:
 - 1) The vegetation will not provide shoreline ecological function due to existing conditions, such as the presence of extensive shoreline stabilization measures that extend landward from the OHWM; or
 - 2) It is not feasible to plant all of the required vegetation on the subject property, given the existing tree canopy coverage and location of trees on the property, the location of structures on the property, or minimum spacing requirements for the vegetation to be planted; or
 - 3) The vegetation will substantially interfere with the use and enjoyment of the portion of the property located between the primary structure and OHWM, such as the existing structure is located in very close proximity to the OHWM; the area in between the primary structure and the OHWM is encumbered by a sanitary sewer, public pedestrian access easement, public access walkway or other constraining factors; or
 - 4) The required vegetation placement will obstruct existing views to the lake, at the time of planting or upon future growth, which cannot otherwise be mitigated through placement or maintenance activities. The applicant shall be responsible for providing sufficient information to the City to determine whether the vegetation placement will obstruct existing views to the lake.

The alternate measures must be equal or superior to the provisions of this subsection in accomplishing the purpose and intent of maintaining and improving shoreline ecological functions and processes.

Requests to use alternative measures shall be reviewed by the Planning Official who may approve, approve with conditions, or deny the request. Cost of producing and implementing the alternative plan, and the fee to review the plan by City staff or the City's consultant shall be borne by the applicant.

If the alternative plan is consistent with the standards provided in this subsection, the Planning Official shall approve the plan or may impose conditions to the extent necessary to make the plan consistent with the provisions. If the alternative mitigation is denied, the

applicant shall be informed of the deficiencies that caused its disapproval so as to provide guidance for its revision and re-submittal.

4. Other Standards -

- a. For other general requirements, see Chapter 95 KZC, Tree Management and Landscaping Requirements.
- b. The applicant is encouraged to make significant trees removed under these provisions available for City restoration projects, as needed.

5. Responsibility for Regular Maintenance -

- a. The applicant, landowner, or successors in interest shall be responsible for the regular maintenance of vegetation required under this section. Plants that die must be replaced in kind or with similar plants contained on the Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester.
- b. All required vegetation must be maintained throughout the life of the development. Prior to issuance of a certificate of occupancy or final inspection, the proponent shall provide a final as-built landscape plan and a recorded agreement, in a form approved by the City Attorney, to maintain and replace all vegetation that is required by the City. The agreement shall be recorded with the King County Bureau of Elections and Records.

83.410 View Corridors

1. General - Development within the shoreline areas located west of Lake Washington Boulevard and Lake Street South shall include public view corridors that provide the public with an unobstructed view of the water. The intent of the corridor is to provide an unobstructed view from the adjacent public right-of-way to the lake and to the shoreline on the opposite side of the lake.
2. Standards -
 - a. For properties lying waterward of Lake Washington Boulevard and Lake Street South, a minimum view corridor of thirty (30) percent of the average parcel width must be maintained. A view of the shoreline edge of the subject property shall be provided if existing topography, vegetation, and other factors allow for this view to be retained.
 - b. The view corridors approved for properties located in the Urban Mixed shoreline environment established under a zoning master plan or zoning permit approved under the provisions of Chapter 152 KZC shall continue to comply with those requirements. Modifications to the proposed view corridor shall be considered under the standards established in this Chapter and the zoning master plan.
3. Exceptions - The requirement for a view corridor does not apply to the following:
 - a. The following water-dependent uses:
 - 1) Piers and docks associated with a marina or moorage facility for a commercial use;
 - 2) Piers, docks, moorage buoys, boatlifts and canopies associated with Detached, Attached and Stacked Unit uses; and
 - 3) Tour boat facility, ferry terminal or water taxi, including permanent structures up to 200 square feet in size housing commercial uses ancillary to the facility.
 - 4) Public Access Pier or Boardwalk
 - 5) Boat launch
 - b. Public Parks
 - c. Properties located in the Urban Mixed shoreline environment within the Central Business District zone.

- 2) Reducing the number or size of pilings to the extent allowed by site-specific engineering or design considerations;
 - 3) Softening existing hard shoreline stabilization measures to the extent allowed by site-specific characteristics;
 - 4) Raising the height of the structure off the water, provided that the height of the existing building is not increased; and
 - 5) Incorporating grating into the re-built structure where feasible.
- e. For piers and docks, appropriate measures are taken to mitigate adverse impacts to the maximum extent feasible while still retaining the existing area and dimensions, if desired, including, but not limited to:
- 1) Meeting the standards for height of piers and diving boards, minimum water depth, location of ells, fingers and deck platforms and pilings and moorage piles in KZC 83.270 through 83.290; and
 - 2) installing decking materials that allow a minimum of 40% light transmittance through the material.
- f. For hard shoreline stabilization measures, the applicant shall consult the provisions for emergency actions contained in KZC 83.560. If the work needed does not qualify as an emergency action under these provisions, then the applicant shall comply with the provisions for shoreline stabilization contained within KZC 83.300.

5. Certain Nonconformances Specifically Regulated

a. General -

- 1) The provisions of this section specify when and under what circumstances certain nonconformances must be corrected. If a nonconformance must be corrected under KZC 83.550, the applicant must submit all information necessary for the City to review the correction as part of the application for any development permit. In addition, the City will not permit occupancy until the correction is made.
- 2) If KZC 83.550.4 above of KZC 83.550 applies to a specific nonconformance, then the provisions of this section do not apply to that same nonconformance.

b. Non-conforming structure -

- 1) A nonconforming structure that is moved any distance must be brought into conformance.
- 2) Any structural alteration of a roof or exterior wall that does not comply with height, shoreline setback, or view corridor standards shall be required to be brought into conformance for the nonconforming height, setback or view corridor, except as provided otherwise in this Chapter. Excepted from this subsection is the repair or maintenance of structural members, the alteration to existing windows and/or doors and the addition of new windows and/or doors or other similar features, provided that there is no increase in floor area or that the location of the exterior wall is not modified in a manner that increases the degree of non-conformance.
- 3) Increases in structure footprint outside of the shoreline setback or wetland or stream buffer shall be allowed, even if all or a portion of the previously approved footprint is within the shoreline setback, wetland or stream buffer.
- 4) If accessory structures are located within the shoreline setback, these existing nonconforming structures must be brought into conformance if the applicant is making an alteration to the primary structure, the cost of which exceeds 50 percent of the replacement cost of the structure.

- C If identified historical or archaeological resources are present, site planning and access to such areas shall be designed and managed to give maximum protection to the resource and surrounding environment.
- d. Interpretative signs, historical markers and other similar exhibits providing information about historical and archaeological features and natural areas shall be provided when appropriate.
- e. In the event that unforeseen factors constituting an emergency as defined in RCW 90.58.030 that necessitate rapid action to retrieve or preserve artifacts or data identified above, the project may be exempted from the permit requirement of these regulations. The City shall notify the State Department of Ecology, the State Attorney General's Office and the State Historic Preservation Office of such a waiver in a timely manner.
- f. Archaeological sites are subject to RCW 27.44 (Indian Graves and Records) and RCW 27.53 (Archaeological Sites and Records) and shall comply with WAC 25-48 or its successor as well as the provisions of this Chapter.
- g. Proposed changes to historical properties that are registered on the State or National Historic Register are subject to review under the National and State Registers' review process.

83.550 Nonconformances

1. General - This section establishes when and under what circumstances nonconforming aspects of a use or development must be brought into conformance with this Chapter. The applicant needs to consult the provisions of this section if there is some aspect of the use or development on the subject property that is not permitted under this Chapter.
2. When Conformance is Required - If an aspect, element or activity of or on the subject property conformed to the applicable shoreline regulations in effect at the time the aspect, element or activity was constructed or initiated, that aspect, element or activity may continue and need not be brought into conformance with this Chapter unless a provision of KZC 83.550 requires conformance. Further, nonconforming structures may be maintained, altered, remodeled, repaired and continued; provided that nonconforming structures shall not be enlarged, intensified, increased or altered in any way that increases the extent of the nonconformity, except as specifically permitted under KZC 83.550.
3. Abatement of Nonconformance That Was Illegal When Initiated - Any nonconformance that was illegal when initiated must immediately be brought into conformance with this Chapter. The City may, using the provisions of WAC 173-27, abate any nonconformance that was illegal when initiated.
4. Special Provision for Damaged Improvements - Non-conforming structures that are damaged or destroyed by fire, explosion, flood, earthquake, storm or other casualty may be restored or replaced in kind, provided that, the following are met:
 - a. The permit process is commenced within twenty-four (24) months of the date of such damage; and
 - b. The reconstruction does not expand, enlarge, or otherwise increase the non-conformity, except as provided for KZC 83.550; and
 - c. The reconstruction locates the structure in the same place where it was, or alternatively if moved, then the least environmentally damaging location relative to the shoreline and any critical areas; and
 - d. For existing residential structures built over the water, appropriate measures are taken to mitigate adverse impacts to the maximum extent feasible while still retaining the existing residential density, including but not limited to:
 - 1) Reducing the overwater footprint;

- 5) Non-conforming structures that are expanded or enlarged within the shoreline setback must obtain a shoreline variance; provided that, a non-conforming detached dwelling unit use may be enlarged without a shoreline variance where the following provisions apply:
 - 1) The non-conforming structure must have been constructed prior to December 1, 2006, the date of the City's *Final Shoreline Analysis Report*.
 - 2) Before implementing this provision, the applicant shall determine whether the provisions of KZC 83.380 would allow for a reduced setback, based upon existing conditions on the subject property.
 - 3) The structure must be located landward of the OHWM.
 - 4) Any enlargement of the building footprint within the shoreline setback shall not exceed 10 percent of the gross floor area of the existing dwelling unit prior to the expansion. Other enlargements, such as upper floor additions, may be permitted if the addition is consistent with other provisions contained in this subsection.
 - 5) The enlargement shall not extend further waterward than the existing primary residential structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.180, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate XX).
 - 6) The applicant must restore a portion of the shoreline setback area with riparian vegetation to offset the impact, such that the shoreline setback area will function at an equivalent or higher level than the existing conditions. The restoration plan shall be prepared by a qualified professional and shall be reviewed by the Planning Official and/or a consultant who may approve, approve with conditions, or deny the request.

If the proposal is consistent with the standards provided in this subsection, the Planning Official shall approve the plan or may impose conditions to the extent necessary to make the plan consistent with the provisions. If the proposal is denied, the applicant shall be informed of the deficiencies that caused its disapproval so as to provide guidance for its revision and resubmittal. The cost of producing and implementing the restoration plan and the review by City staff and/or a consultant shall be borne by the applicant. Examples include, but are not limited to:

- i. Installation of additional native vegetation within the shoreline setback that would otherwise not be required under this Chapter. At a minimum, the area of shoreline setback restoration and/or enhancement shall be equivalent to the area impacted by the improvement.
 - ii. Removal of an existing hard shoreline stabilization structure covering at least 15 linear feet of the lake frontage that is located at, below, or within 5 feet landward of the OHWM and subsequent restoration of the shoreline to a natural or semi-natural state, including creation or enhancement of nearshore shallow-water habitat.
 - iii. Setting back hard shoreline stabilization structures or portions of hard shoreline stabilization structures from the OHWM and subsequent restoration of the shoreline to a natural or semi-natural state, including restoration of topography and beach/substrate composition.
 - iv. Other shoreline restoration projects that are demonstrated to result in an improvement to existing shoreline ecological functions and processes.
- 7) The applicant must comply with the best management practices contained in KZC 83.480 addressing the use of fertilizer, herbicides and pesticides as needed to protect lake water quality.

- 8) The applicant shall use "fully shielded cut off" light fixtures as defined by the Illuminating Engineering Society of North America (IESNA), or other appropriate measure to conceal the light source from adjoining uses and the lake, and direct the light toward the ground for any exterior light sources located on the west façade of the residence or other façades with exterior light sources that is directed towards the lake.
 - 9) The remodel or expansion will not cause adverse impacts to shoreline ecological functions and/or processes as described on KZC 83.360.
 - 10) The provision contained in KZC 83.550.5.b.5 shall only be used once within any 5-year period.
- 6) A nonconforming detached dwelling unit that is located on a lot that has less than 3,000 square feet of building area lying landward of the required shoreline setback and upland of required wetland or stream buffers, may be rebuilt or otherwise replaced within the shoreline setback and required wetland or stream buffer without a shoreline variance, provided the following standards are met:
- 1) The structure must be located landward of the OHWM.
 - 2) The size of the building footprint shall not be increased and the reconstructed structure shall not extend further waterward than the existing primary residential structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.180, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate XX)..
 - 3) The reconstruction does not expand, enlarge, or otherwise increase the non-conformity.
 - 4) The reconstruction locates the structure in the least environmentally damaging location relative to the shoreline and the critical areas.
 - 5) The structure must comply with any requirements of this Chapter, zoning, building, or fire codes in effect when the structure is built, other than allowed in the subsection.
- 7) A primary structure that does not conform to the required shoreline setback and is located on a lot that has less than 3,000 square feet of building area lying landward of the shoreline setback, not including the area located within the required side yard setbacks and up to 10 feet of a required front yard, may be rebuilt or otherwise replaced in its current location within the shoreline setback, provided the following standards are met:
- 1) The structure must be located landward of the OHWM.
 - 2) The size of the building footprint shall not be increased and the reconstructed structure shall not extend further waterward than the existing primary structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.180, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate XX)..
 - 3) The reconstruction does not expand, enlarge, or otherwise increase the non-conformity.
 - 4) The structure must comply with any requirements of this Chapter, zoning, building, or fire codes in effect when the structure is built, other than allowed in this subsection.
- c. Nonconforming Use –
- 1) A nonconforming use may be continued by successive owners or tenants.
 - 2) Any nonconforming use, except for a detached dwelling, unit must be brought into conformance or discontinued if:

- 1) The applicant is making an alteration that increases the extent of the non-conformity, such as increasing the gross floor area of any structure that houses or supports the nonconforming use; or
 - 2) The nonconforming use has ceased for 90 or more consecutive days. It shall not be necessary to show that the owner of the property intends to abandon such nonconforming use in order for the nonconforming rights to expire; or
 - 3) The nonconforming use is replaced by another use. The City may allow a change from one nonconforming use to another such use if, through a shoreline conditional use process, the City determines that the proposed new use will comply with the following standards:
 - i. The proposed use will be consistent with the policies and provisions of the Act and this Chapter and is compatible with the uses in the area as the preexisting use;
 - ii. The use or activity is not enlarged, intensified, increased or altered in a manner that increases the extent of the non-conformity;
 - iii. The structure(s) associated with the non-conforming use shall not be expanded in a manner that increases the extent of the non-conformity, including encroachment into areas, such as setbacks, and any wetlands, streams and/or associated buffers established by this Chapter, where new structures, development or use would not be allowed;
 - iv. The change in use will not create adverse impacts to shoreline ecological functions and/or processes as described in KZC 83.360; and
 - v. Uses that are specifically prohibited or that would thwart the intent of the Act or this Chapter shall not be authorized.
- d. Non-conforming wetland or stream buffer –
- 1) If existing structures or other improvements are located within the wetland, stream or associated buffers, these structures and improvements must be brought into conformance if the applicant is making an alteration, change or any other work on the subject property in a consecutive 12-month period and the cost of the alteration, change or work exceeds 50 percent of the replacement cost of all existing structure and improvements on the subject property.
 - 2) If the cost threshold of subsection d above is not exceeded, the alterations or changes may occur provided that the alterations or changes comply with this code and no exterior alterations or changes are made to the nonconforming portion of the structure or improvement, unless otherwise authorized by this Chapter.
- e. Non-conforming lot size - An undeveloped lot, tract, parcel, site or division which was created or segregated pursuant to all applicable laws, ordinances and regulations in effect at the time, but that is nonconforming as to the present lot size or density standards may be developed so long as such development conforms to other requirements of this Chapter and the Act.
- f. Nonconforming public pedestrian walkway -
- 1) If a previously installed public shoreline access walkway is subsequently found not installed to the property line, the walkway shall be extended to the property line consistent with conditions established in the original permit. The City can require the walkway to be extended with or without a building permit proposal.
 - 2) If a previously installed shoreline access trail was subsequently found to have vegetation, fencing, other improvements or accessory structures installed that block connection to an adjacent shoreline access walkway, the blockage shall be removed. The City can require the block connection removed with or without a building permit proposal.

- 3) Nonconforming shoreline pedestrian access walkways that were legally created shall not be required to comply with the dimensional standards or setback standards of this Chapter.
- 4) The shoreline public access walkway requirements established in this Chapter must be brought into conformance as much as is feasible, based on available land area if the applicant completes an alteration to all primary habitable structure(s) in shorelines jurisdiction , the cost of which exceeds 50 percent of the replacement cost of all structures and improvements on the subject property.
- g. Nonconforming Shoreline Setback Vegetation- The vegetation requirements of this Chapter must conform as much as is feasible, based on available land area, in either of the following situations:
 - 1) An increase of at least 10 percent in gross floor area of any structure located in shorelines jurisdiction, excluding detached dwelling unit and public park uses; or
 - 2) An alteration to any structure(s) in shorelines jurisdiction, the cost of which exceeds 50 percent of the replacement cost of all structures on the subject property.
- h. Nonconforming Lighting - Exterior lighting must be brought into compliance with the requirements of this Chapter under the following circumstances:
 - 1) The shielding requirements of KZC 83.470 shall be met when any nonconforming light fixture is replaced or moved.
 - 2) All other requirements of KZC 83.470 shall be met when there is an increase in gross floor area of more than 50 percent of the primary structures on the subject property.
- i. Prior approval of Shoreline Variance - A structure for which a shoreline variance has been issued shall be considered a legal nonconforming structure and the requirements of this section shall apply as they apply to preexisting nonconformities.
- j. Prior approval of Shoreline Conditional Use - A use that is listed in this Chapter as a conditional use, but existed prior to adoption of this Chapter or any relevant amendment and for which a conditional use permit has not been obtained shall be considered a nonconforming use.
- k. Any Other Nonconformance -
 - 1)The applicant is making any alteration or change or doing any other work in a consecutive 12-month period to an improvement that is nonconforming or houses, supports or is supported by the nonconformance, and the cost of the alteration, change or other work exceeds 50 percent of the replacement cost of that improvement; or
 - 2) The use on the subject property is changed and this Chapter establishes more stringent or different standards or requirements for the nonconforming aspect of the new use than this code establishes for the former use.

Replacement costs shall not include costs relating to non-structural interior elements, such as but not limited to appliances, heating and cooling systems, electrical systems, and interior finishes.

83.560 Emergency Actions

1. When Allowed –

Emergency actions are those that pose an unanticipated and imminent threat to public health, safety, or the environment and that require immediate action or within a time too short to allow full compliance with the provisions of this Chapter.

Plate XX

Addition to Nonconforming Detached Dwelling Unit

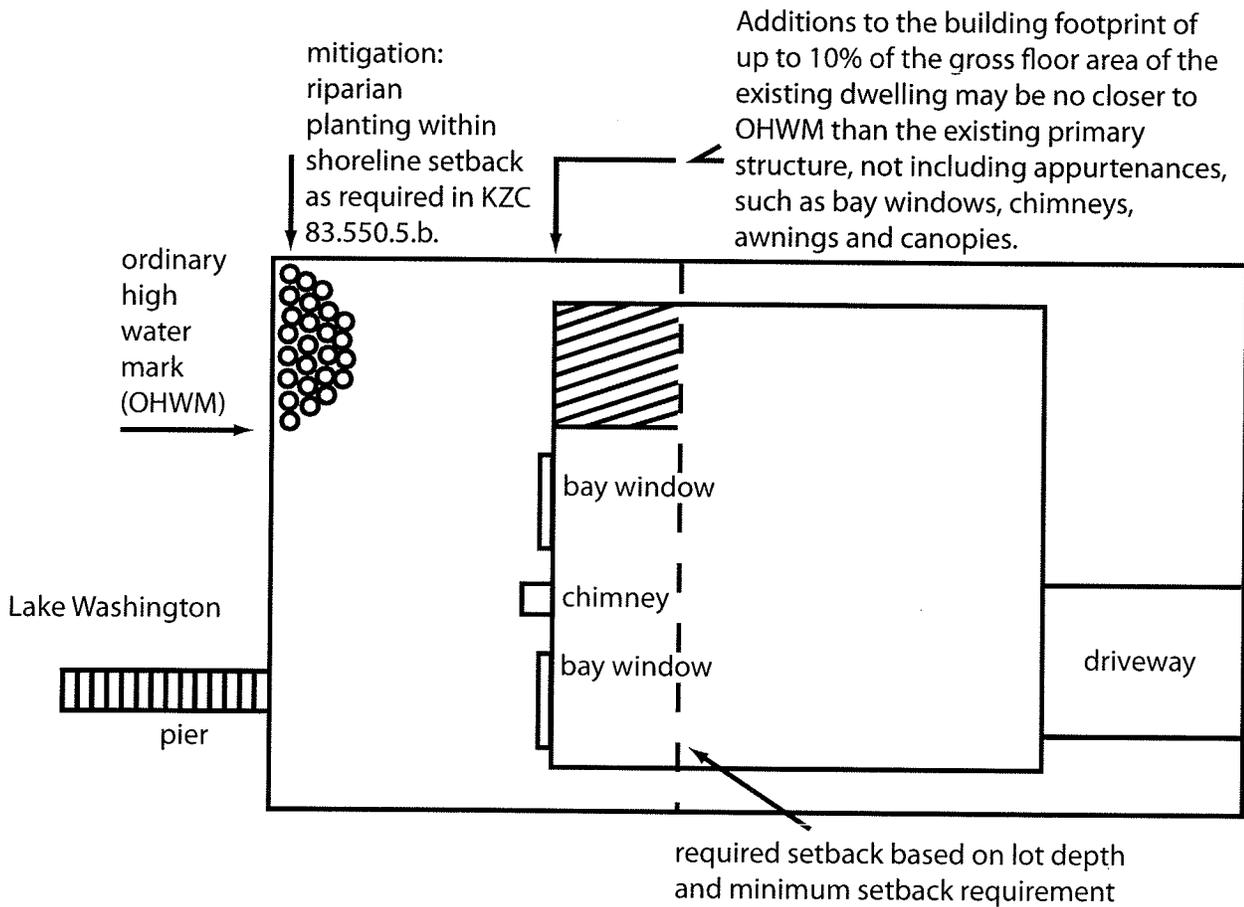
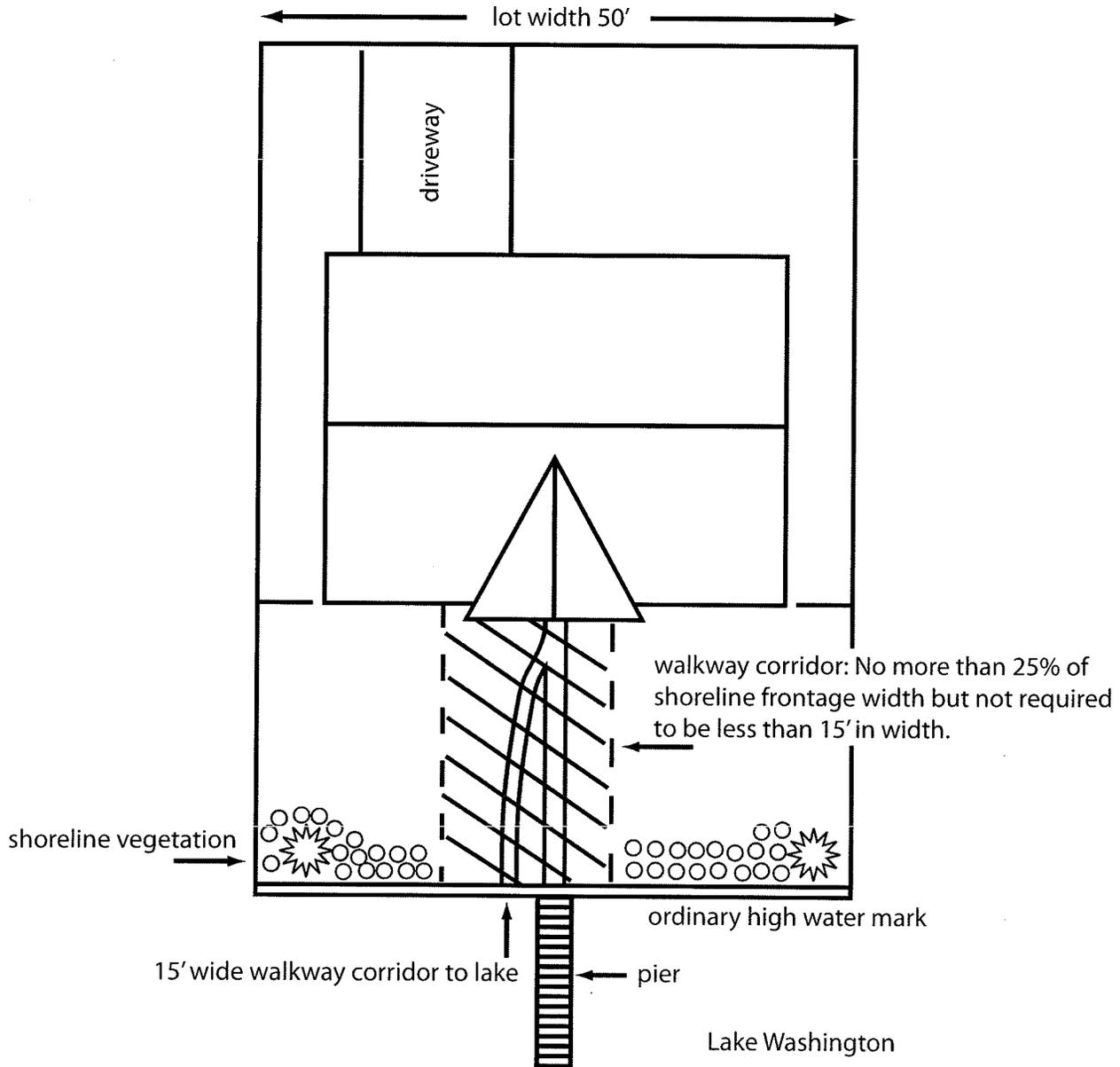


Plate XX

Maximum Shoreline Walkway Corridor



Shoreline Master Program

U P D A T E

Planning Commission Meeting
June 9, 2010



What we will cover tonight

- Background
- Options
- Next steps
- Discussion
- PC direction



SMA

- Statewide over local interest
- Preserve natural character of shorelines
- Long term over short term benefit
- Protect resources and ecology
- Increase public access to public lands
- Increase recreational opportunities



WAC Guidelines

- Develop standards for residential development
- Single family is priority use when developed to control pollution and prevent environmental damage
- Assure no net loss of shoreline ecological functions

Summary of Working Draft Policies

New regulations should:

- Establish higher standards for new development
- Minimize impacts while providing flexibility
- Account for existing developed condition and consider existing uses
- Create development standards (ie setbacks)
- Encourage sensitive shoreline development with a balanced program of regulations and incentives

General Policies

- **POLICY SH-42. Provide adequate setbacks** from the City's lake shores to **protect sensitive features and functions** typical to the City's shorelines while **recognizing accessory uses** typical to the use that occupies the site.
- **POLICY SH-43.** Guide development activity through **dimensional and density standards appropriate** to the shoreline jurisdiction. Standards should include setbacks, building heights, lot coverage, impervious surface, and other land use controls essential to provide guidance for future growth and development within the shoreline jurisdiction. **Development regulations should, when possible, avoid, minimize, and mitigate impacts** from development to ecological functions.

Regulatory Specific Policies

- **POLICY SH-89. Single-family residential** development is a **preferred shoreline use**, when developed in a manner consistent with control of pollution and prevention of damage to the natural environment.
- **POLICY SH-92. New or expanded residential development** in the shoreline jurisdiction should be located and designed to **minimize adverse effects** on shoreline process and functions.
- **POLICY SH-101. Create incentives and provide flexibility** to encourage development and redevelopment to incorporate native vegetation, shoreline restoration, low impact development techniques, or softened shoreline stabilization, or other restoration measures determined by the Director.

Regulatory Approach

- Recognizes importance of the interface between land and water in creating and maintaining ecological functions
- Targets limited area on either side of ordinary high water
- Reduces impacts on property owners and increases positive ecological effect

No Net Loss of Ecological Function

- Basic concept: loss must be offset by gain
- Loss is the removal or disruption of an ecological process that produces certain physical conditions
- No net loss standard designed to halt the introduction of new impacts resulting from new development
- Achieved via the SMP planning process and by regulating individual developments
- Minimization of impacts through mitigation sequencing
- Cumulative impacts still remain

Why Setbacks?

- Benefit in protecting shoreline interface to ensure no net loss of ecological functions
- Avoid damage from flooding and erosion
- Minimize need for shorelines stabilization
- Reduce discharge of pollutants
- Preserving or enhancing views of water
- Prevent preclusion of future restoration
- Maintain character and scenic quality
- Longstanding commitment to environmental stewardship (1974)

Setback Options

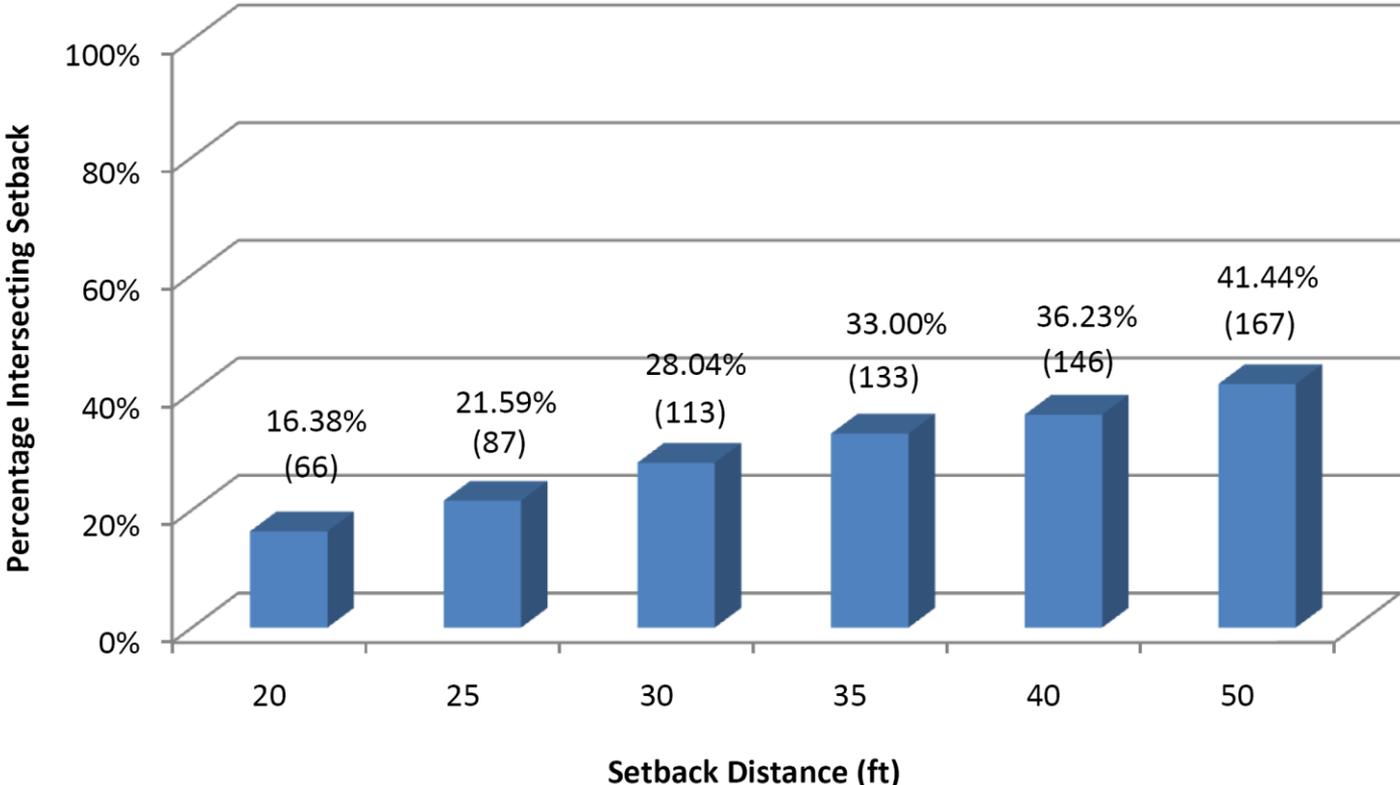
- **Current Code** - Prescriptive with flexibility through science study
- **Option A** - Maximum flexibility with incentive options
- **Option B** - Maximum predictability

*Requirements only triggered by development *

Data Analysis

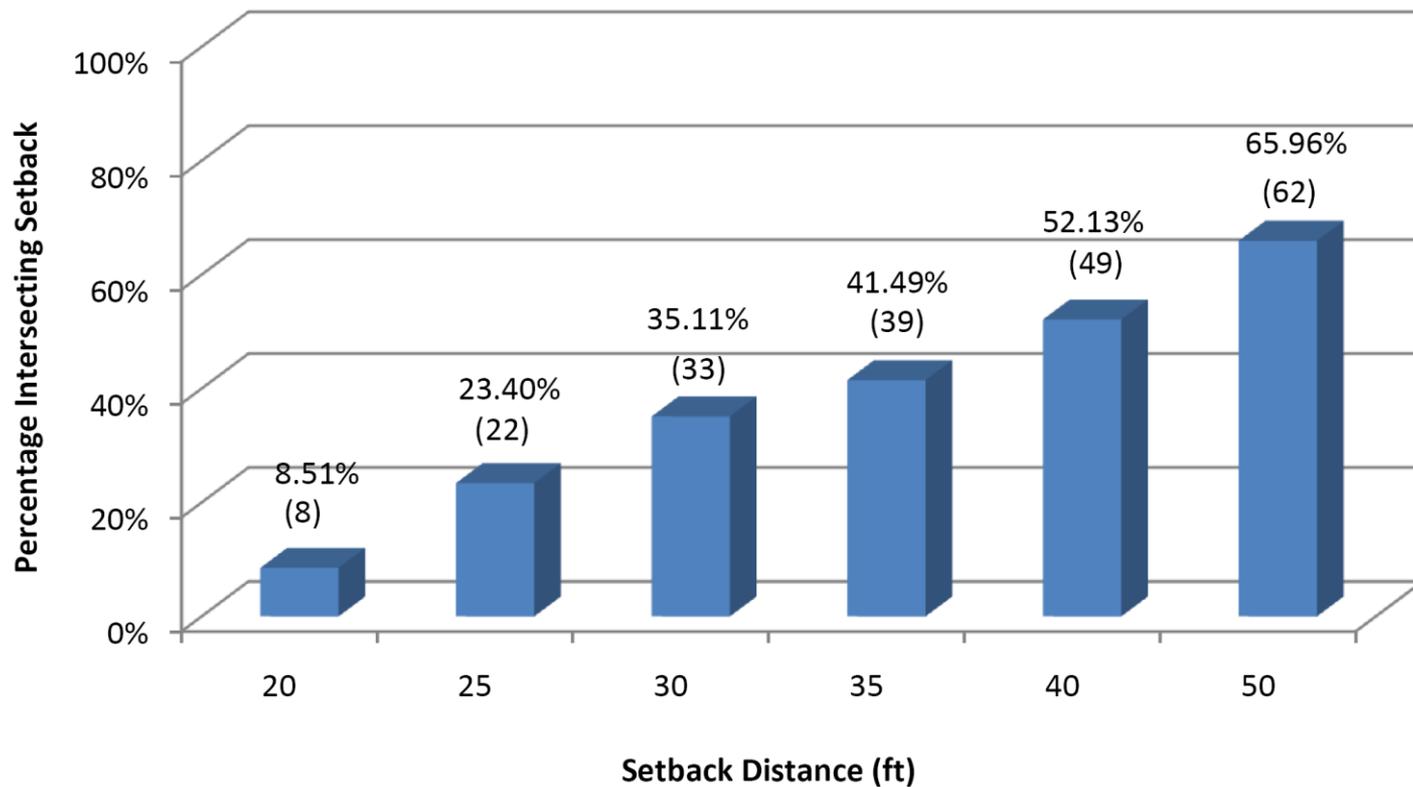
- Four geographic areas:
Lake Sammamish, Lake Washington excluding Newport Shores, Newport Shores neighborhood on Lake Washington, and Phantom Lake
- Structures >800 square feet and <800 square feet
- Based on approximate OHWM elevations
- Data is to be used to discuss relative effects of policies and regulations not to be used to make site-specific, project-level decisions

Percent Structures > 800 sq. ft. (Lake Washington Setbacks)



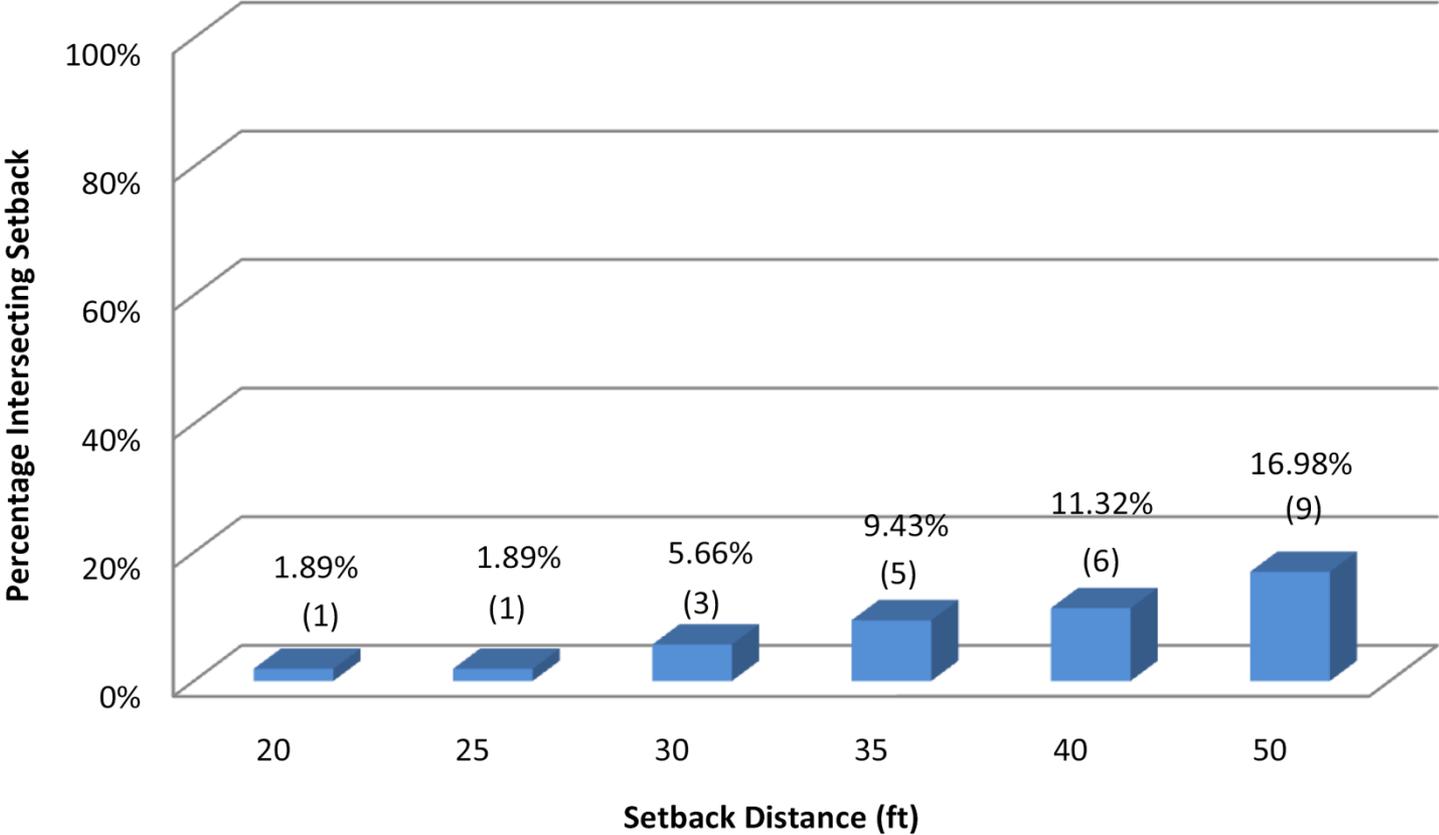
(Total number of Structures in Jurisdiction: 403)

Percent Structures > 800 sq. ft. (Newport Shores Setbacks)



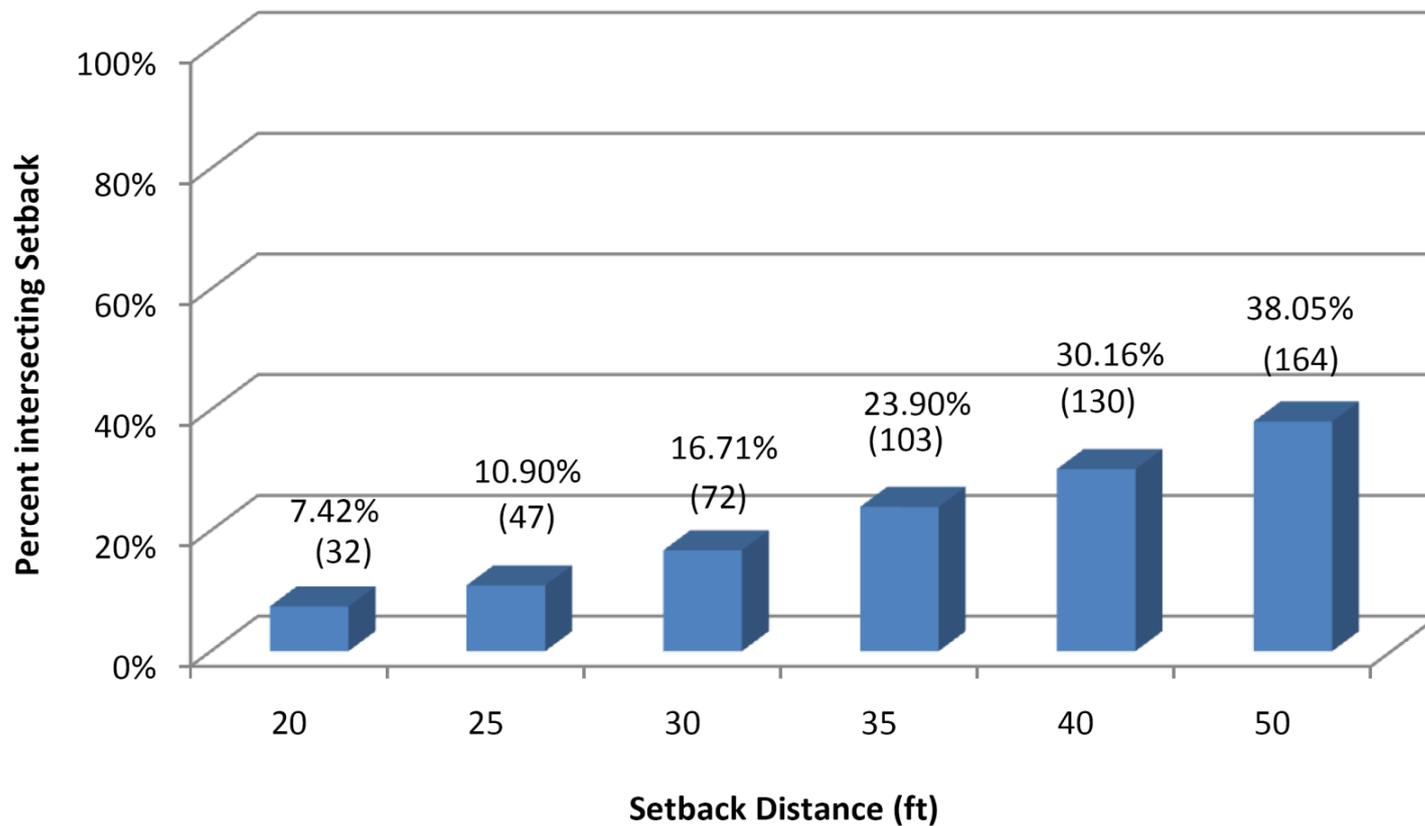
(Total number of structures in Jurisdiction: 127)

Percent Structures > 800 sq. ft. (Phantom Lake Setbacks)



Total Number of Structures in Jurisdiction: 53

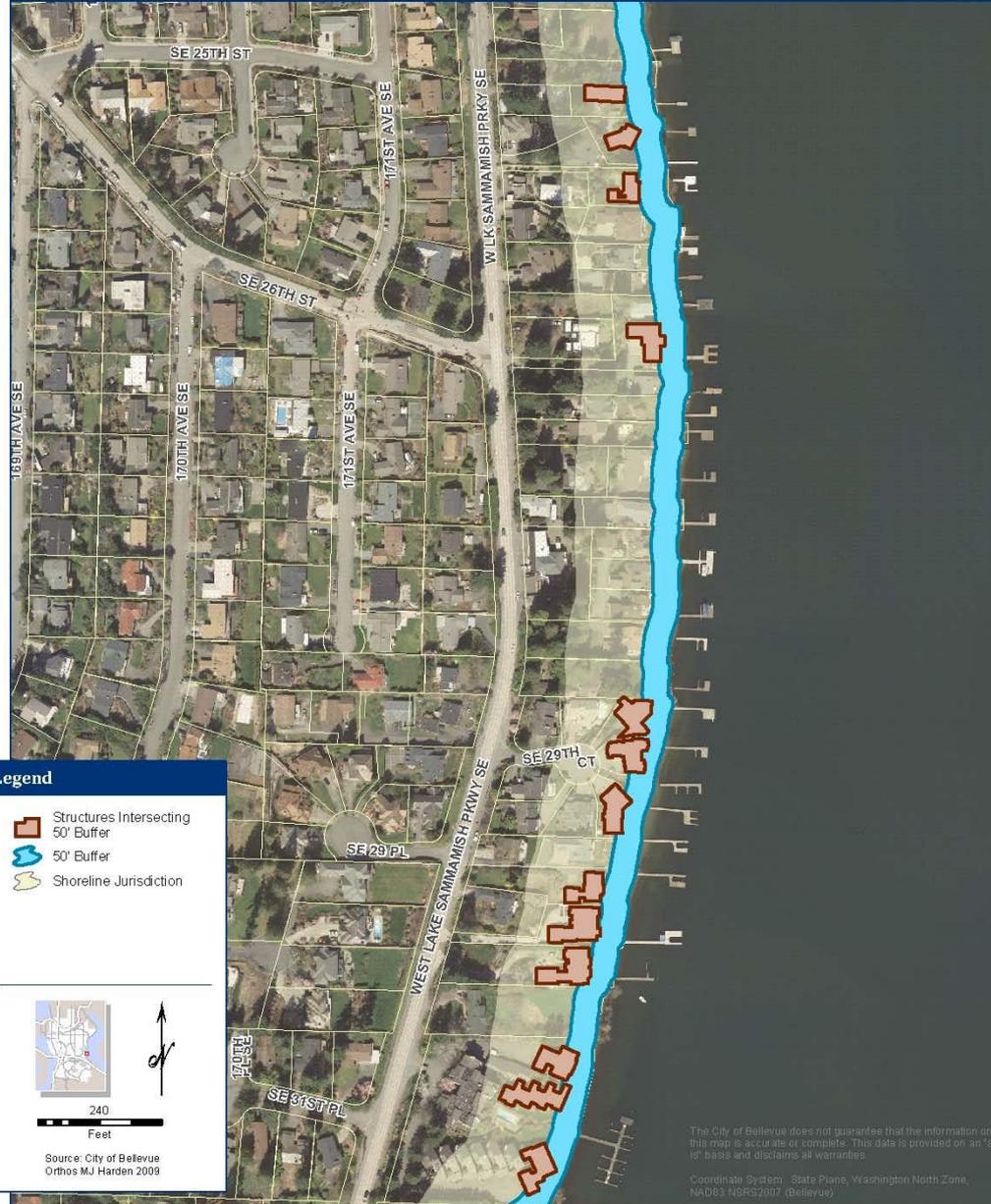
Percent Structures > 800 sq. ft. (Lake Sammamish Setbacks)



(Total number of Structures in Jurisdiction: 431)

Structures (> 800 sq. ft) intersecting 50 ft. Buffer

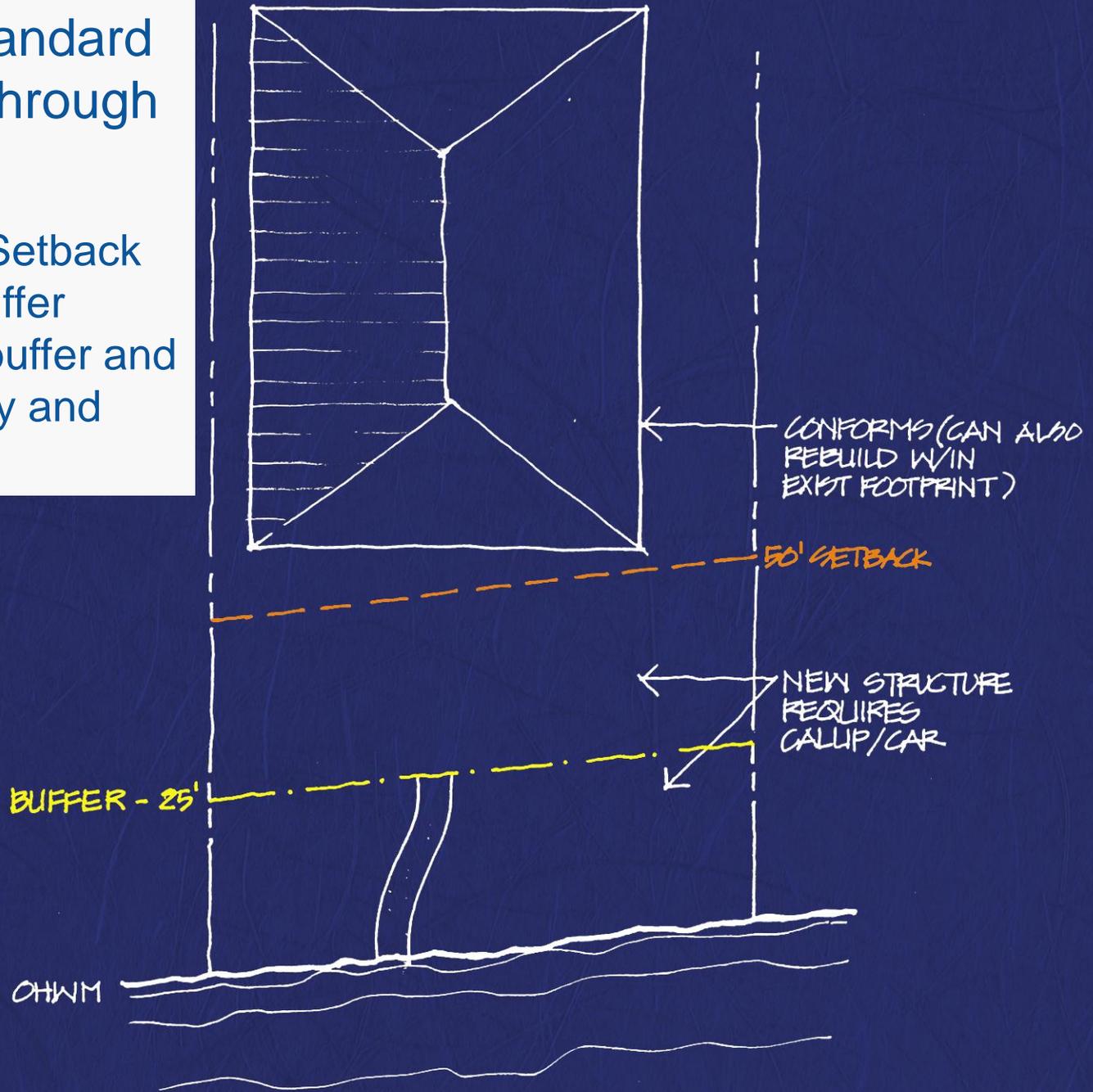
South Lake Sammamish Area



Prescriptive standard with flexibility through site study

- 25' Buffer & 25' Setback
- Limitations in buffer
- Modification of buffer and setback with study and mitigation

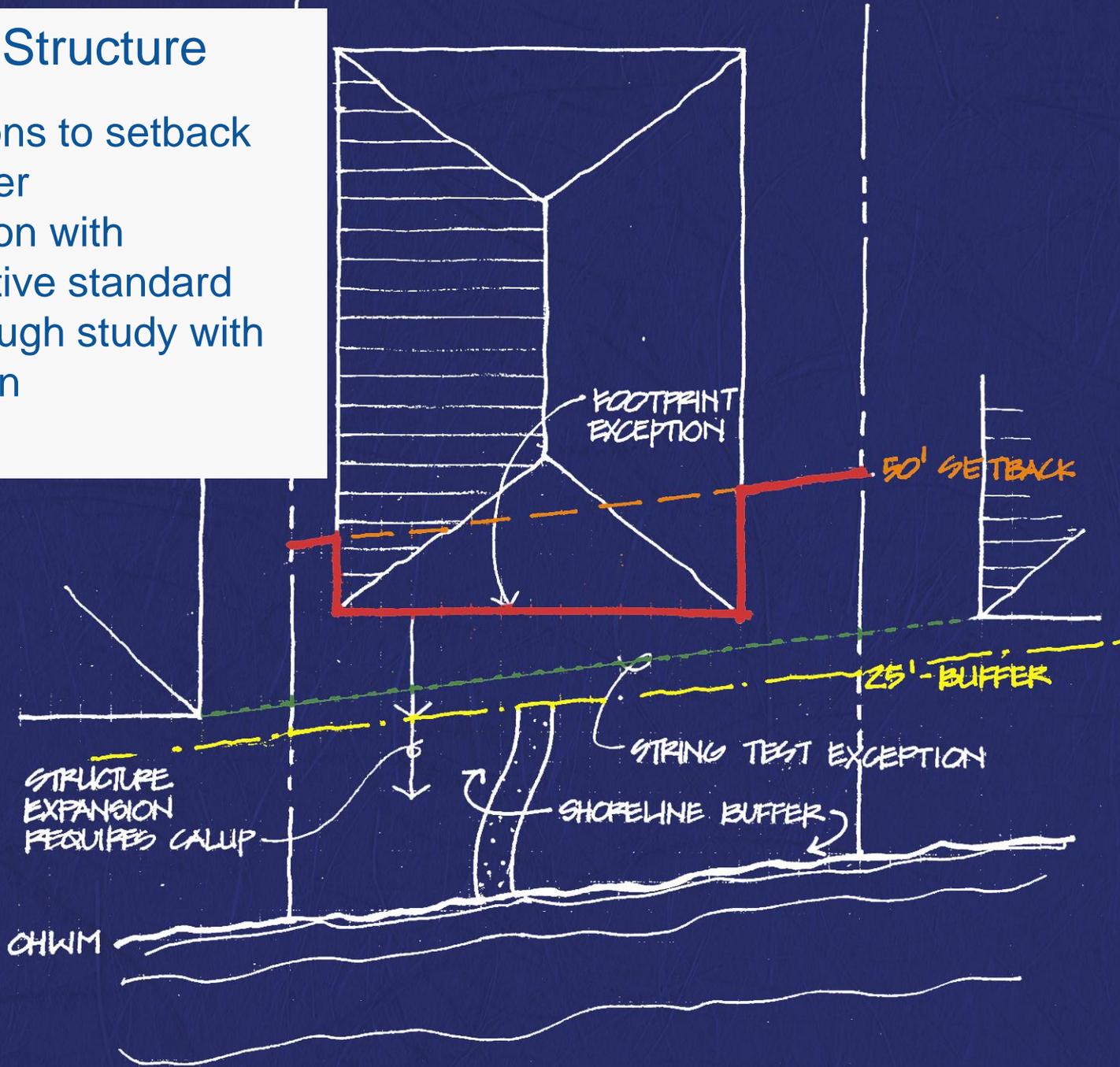
Current Code



Existing Structure

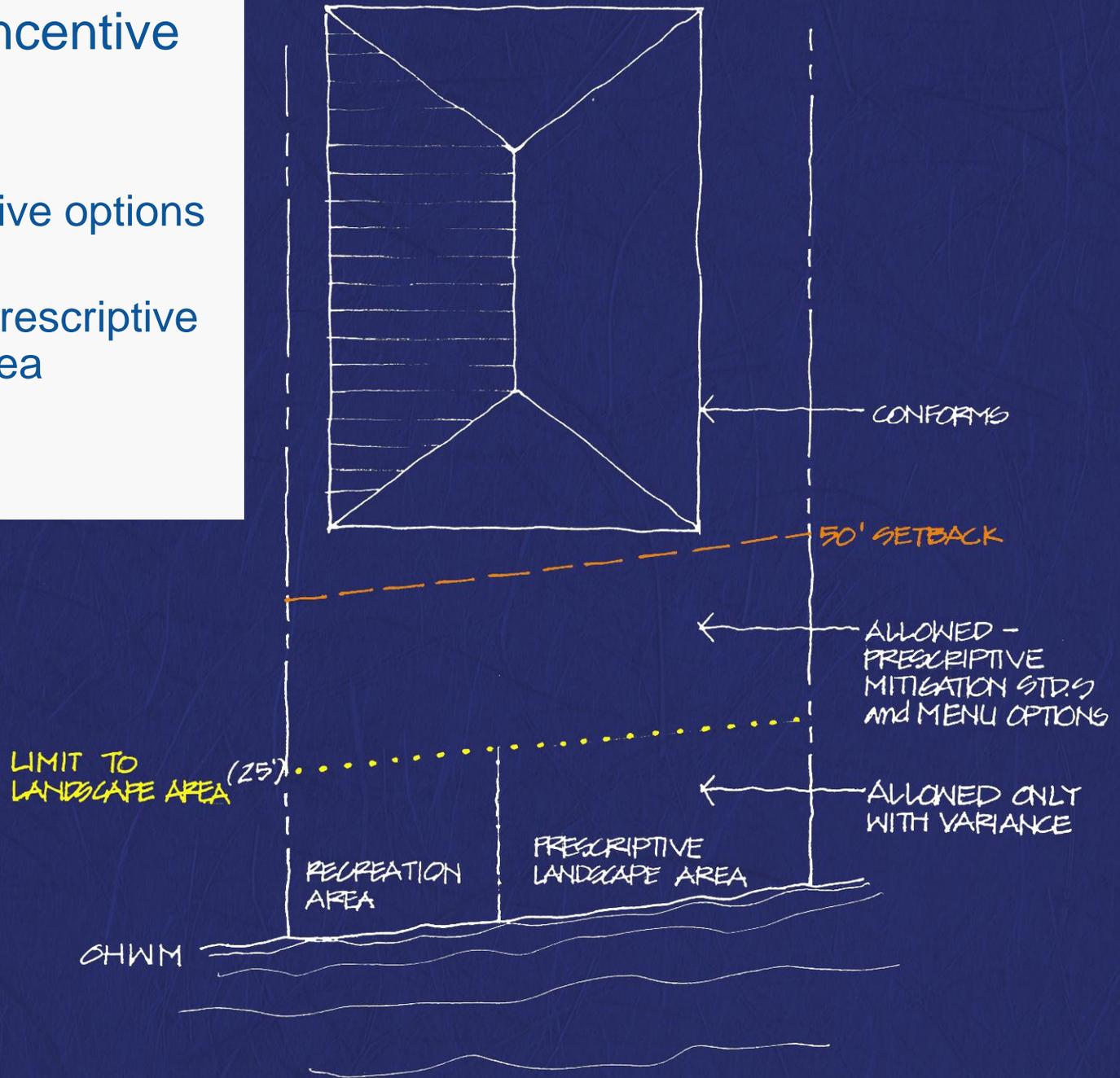
- Exceptions to setback and buffer
- Expansion with prescriptive standard and through study with mitigation

Current Code



Flexible with incentive options

- 50' setback
- Menu of incentive options to expand
- Recreation & prescriptive landscaping area



Option A

Existing structure

- Allowed to expand with incentive menu options
- Threshold for partial landscaping std

Option A

EXPANSION WITH MENU OPTIONS

EXPANSION BEYOND WITH VARIANCE

RECREATION AREA

PRESCRIPTIVE LANDSCAPE AREA

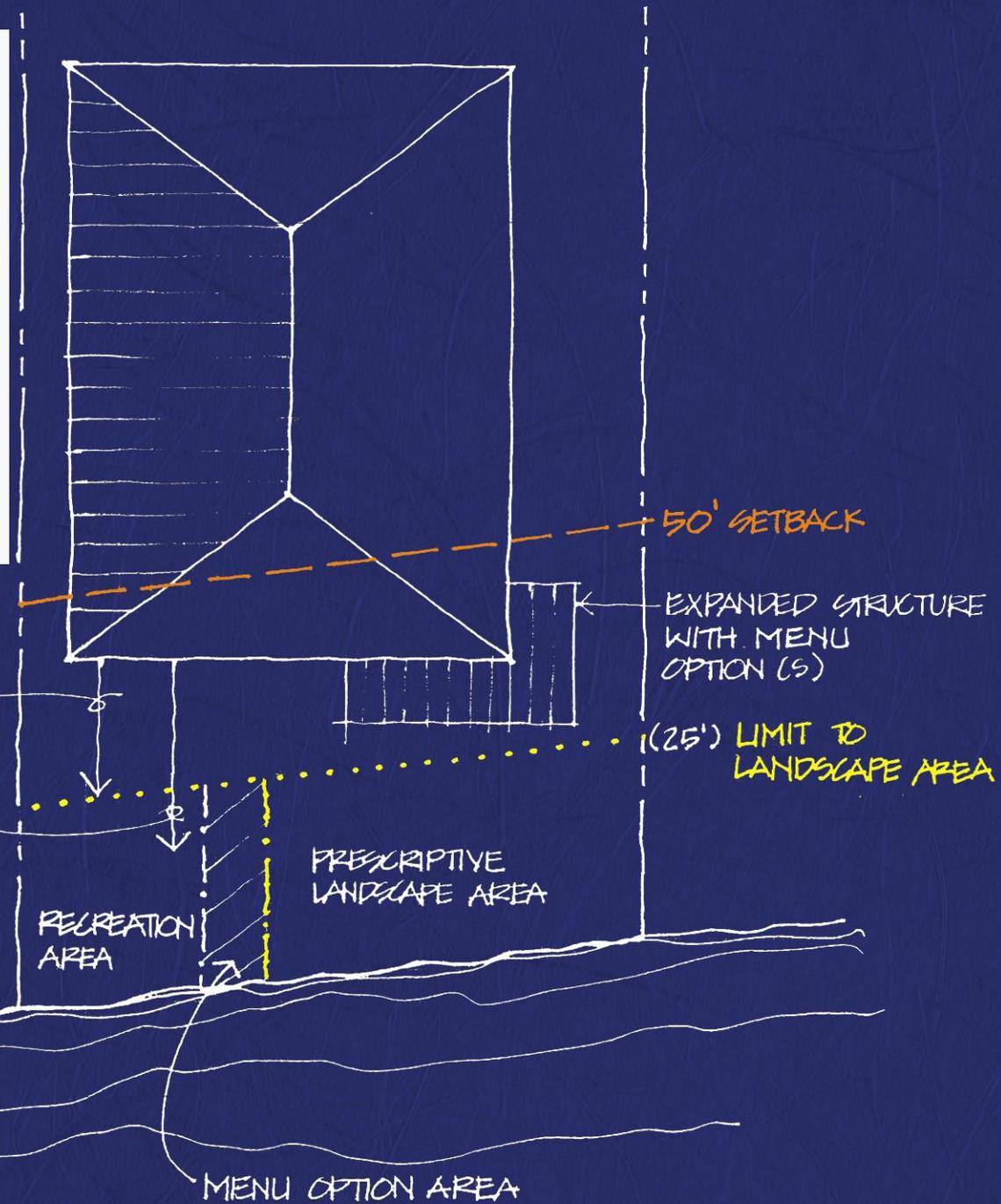
50' SETBACK

EXPANDED STRUCTURE WITH MENU OPTION (S)

(25') LIMIT TO LANDSCAPE AREA

CHWM

MENU OPTION AREA



Example Landscaping

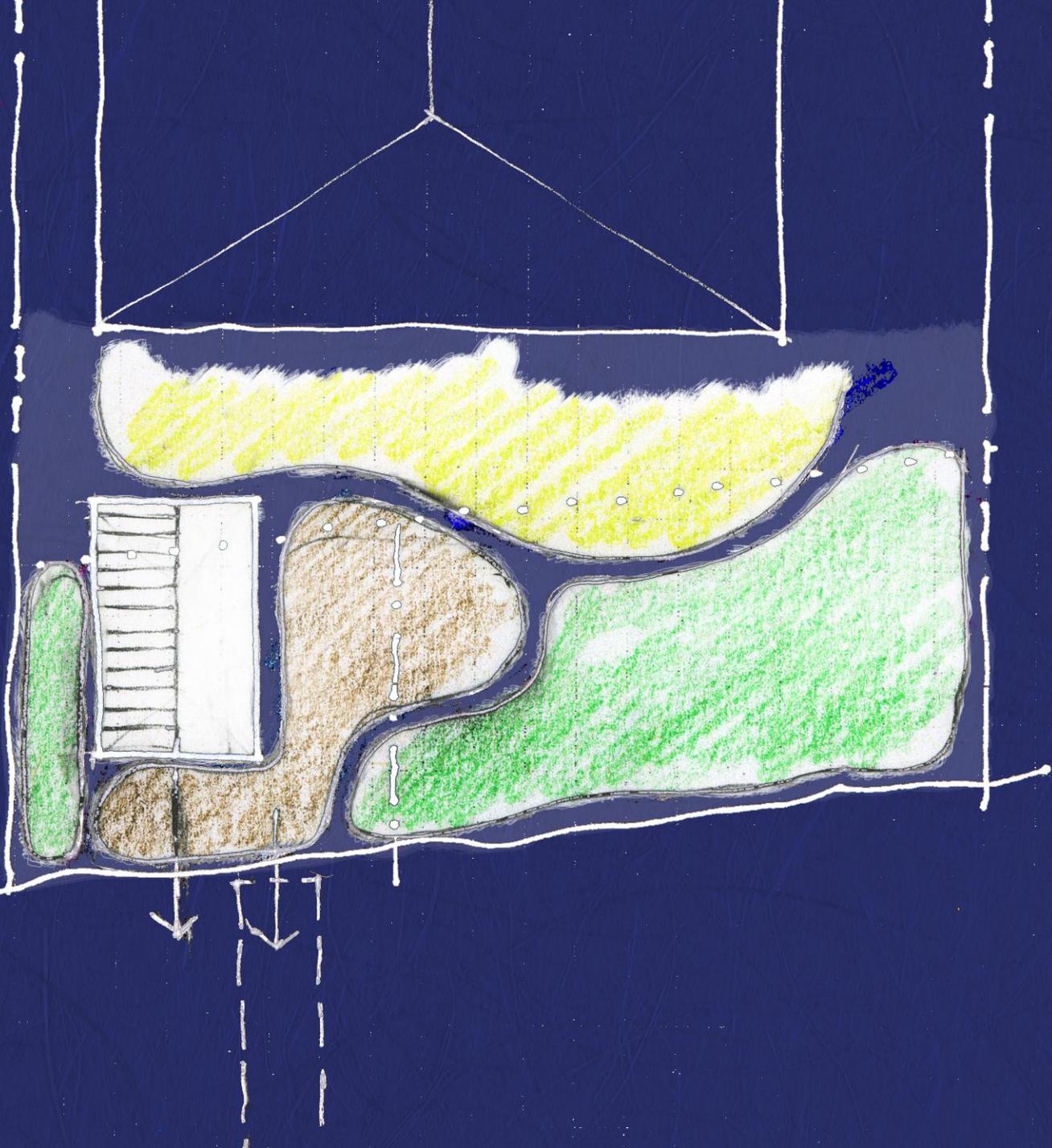
- Landscaping divided into separate areas.
- Allows pervious hard surfaces, lawn/ornamental gardens and existing structures
- Preserves existing vegetation



Landscape Area

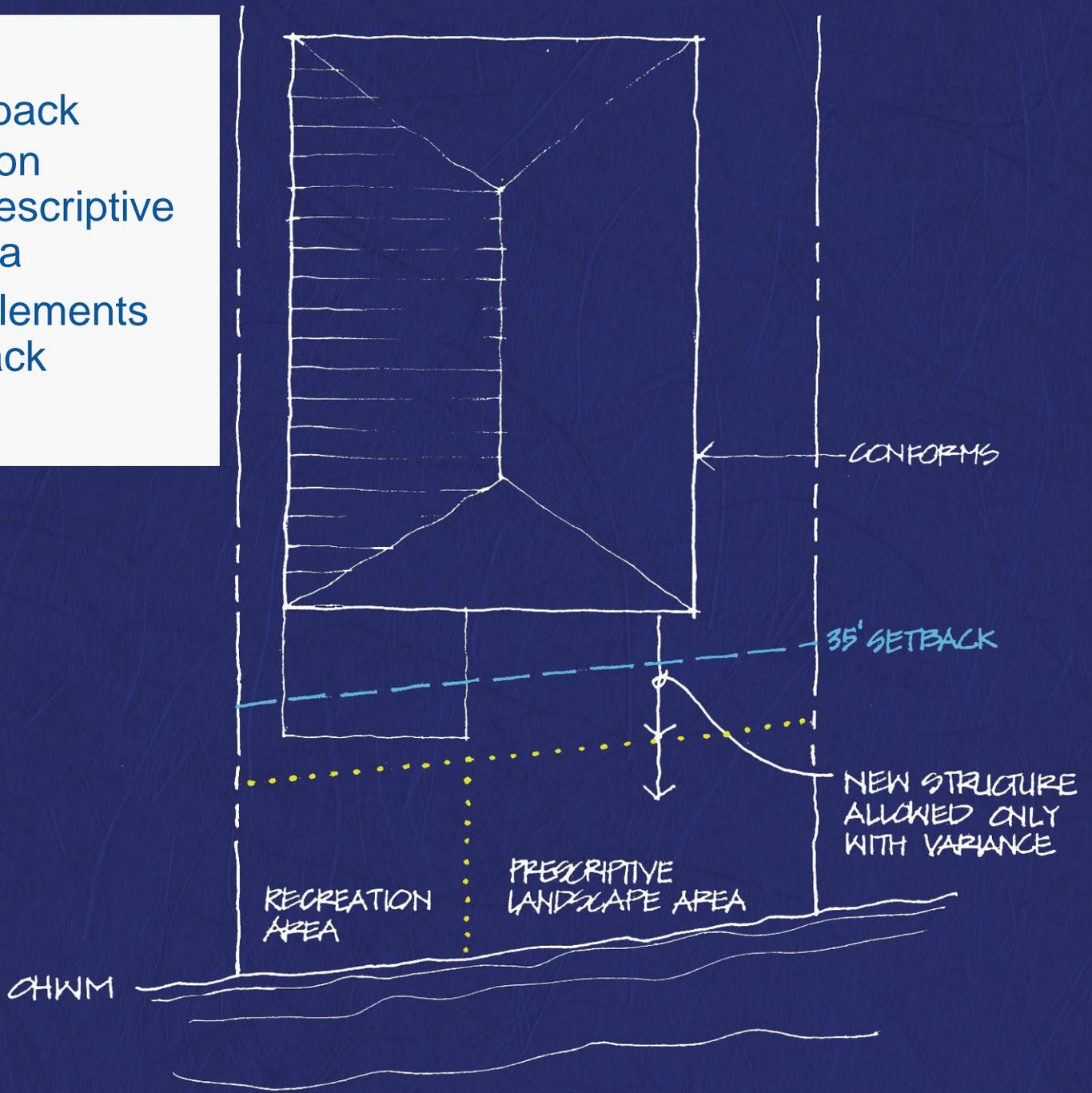


Landscape Area



Predictable

- Prescriptive setback
- Limited expansion
- Recreation & prescriptive landscaping area
- Minor building elements allowed in setback



Option B

Existing Structure

- Lateral expansion allowed
- Threshold for partial landscaping std

LIMIT TO
LANDSCAPE AREA
(25')

RECREATION
AREA

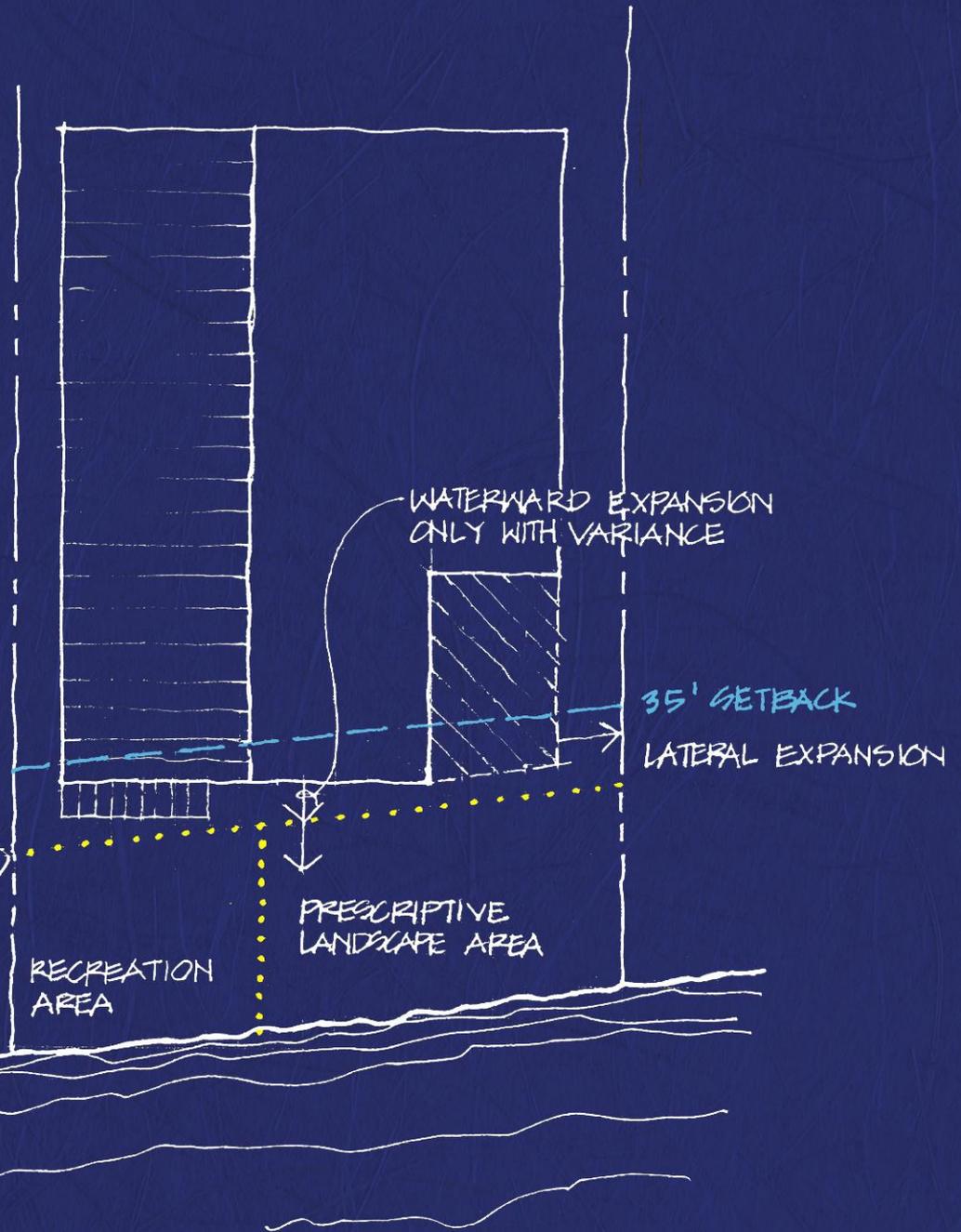
PRESCRIPTIVE
LANDSCAPE AREA

WATERWARD EXPANSION
ONLY WITH VARIANCE

35' GETBACK
LATERAL EXPANSION

CHWM

Option B



	Kirkland (DOE Hearing)	Sammamish (Submitted to DOE)	Redmond (approved by DOE)
BUFFER	None	None	None
SETBACK	<p>Residential-L 30% of the average parcel depth, (Not less than 30 'or greater than 60 ')</p> <p>Residential-M/H The greater of:</p> <ul style="list-style-type: none"> • 25' or • 15% of the average parcel depth 	<p>Shoreline Setback 45'</p> <p>Building setback 5'</p>	<p>Lake Sammamish 35'</p>
MINIMUM SETBACK	No less than 25'	No less than a 15' structure setback plus 5' building setback	No less than 20'
STDS-EXPAND BEYOND SETBACK	Menu of options	Menu of options	One option
VEG. STD.	Plant native vegetation in 75% of nearshore area (10-15 feet wide)	75% of area landward of OHWM plant native vegetation 15' wide	20' setback area revegetated with primarily native vegetation. Establishment of a tree canopy is encouraged.

COMPARISON OF RESIDENTIAL DEVELOPMENT STANDARDS

	TODAY	OPTION A	OPTION B
SETBACK	All water bodies	Lake WA, Sammamish, Phantom Lake, & Mercer Slough/Kelsey Creek	Phantom Lake & Mercer Slough/Kelsey Creek
	Developed site- 25' buffer/25' setback	50'	50'
	Undeveloped site- 50' buffer/0 setback	Newport Shores Canals	Lake WA and Sammamish
		25'	35'
			Newport Shores Canals
			25'
CERTAINTY	Low	Moderate	High
FLEXIBILITY	High	Moderate	Low
ECOLOGICAL FUNCTION	Moderate/High	Moderate	Moderate/Low
COST TO PROPERTY OWNER	High	Moderate	Low
COMPLEXITY OF ADMINISTERING	High	Moderate	Low

Planning Commission Work Session

- Discussion
- PC selection of option
- Next steps

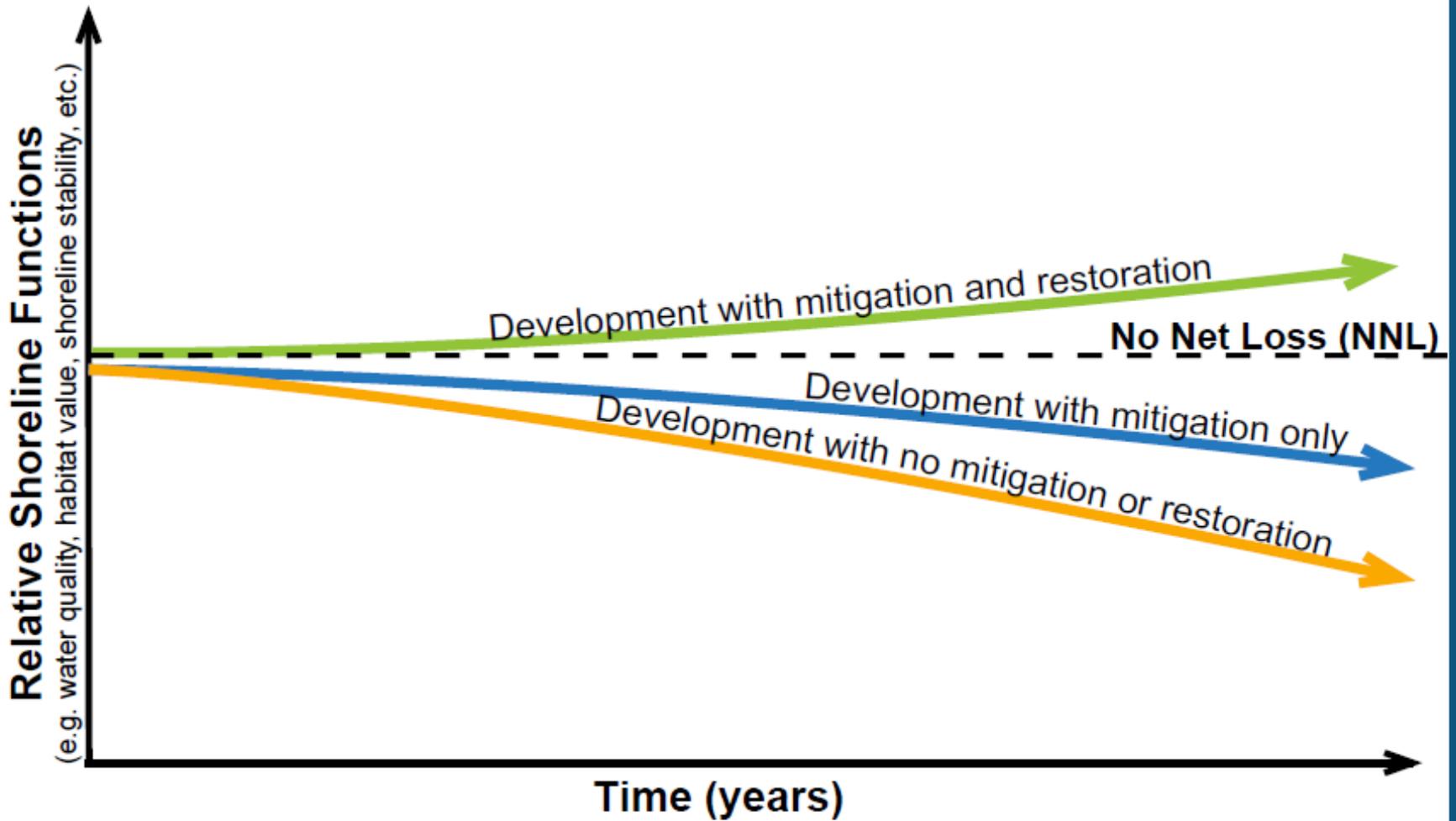


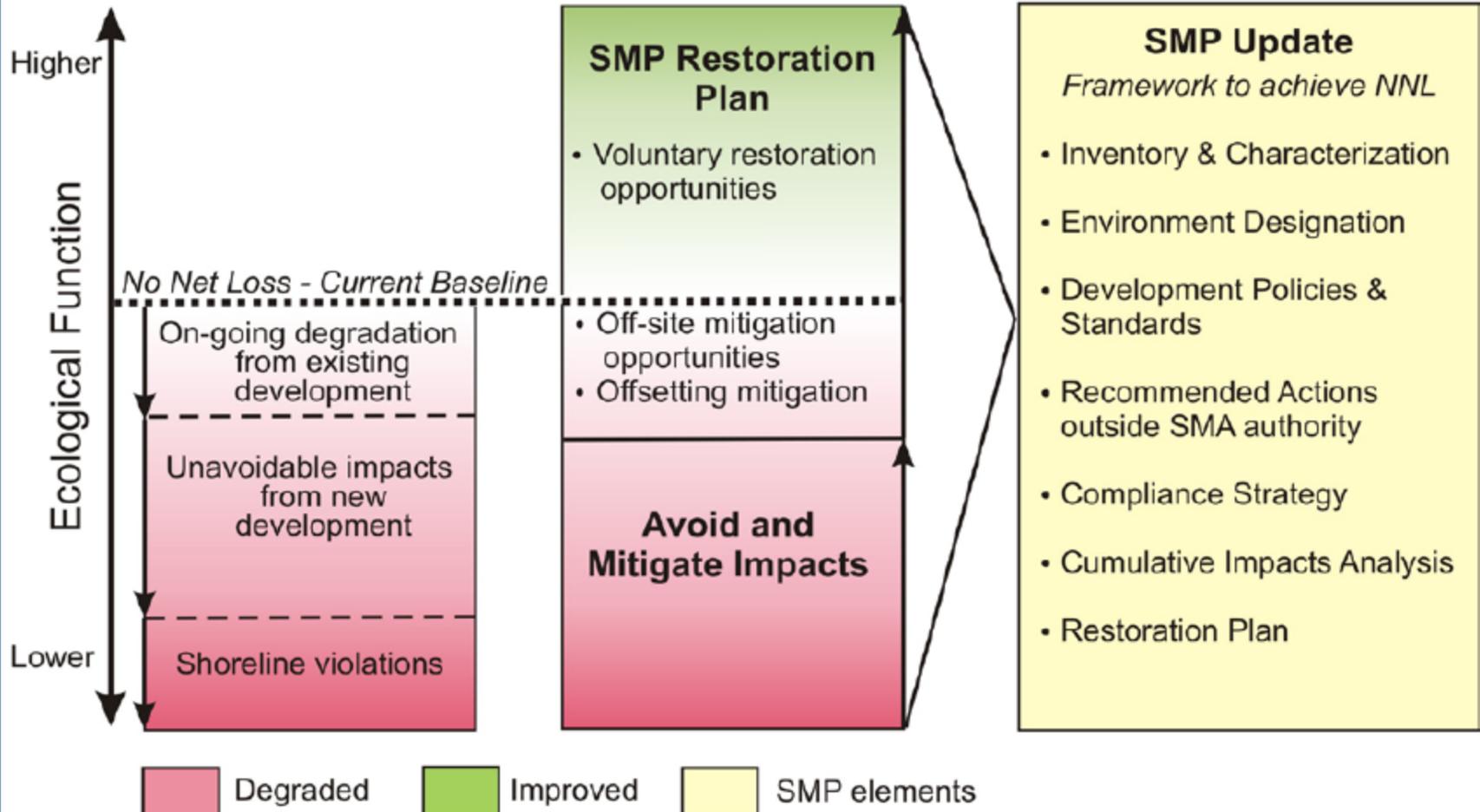
Next Steps

June	Continue review working draft and identify target areas for detailed review
July	Review specific areas
September/ October	Continue review of specific areas Remaining unresolved issues Introduce revised draft Continue review of revised draft
October/ November	Open house Public Hearing on revised draft
December	Make recommendation to City Council

What is Ecological Function?

- Plants and animals rely on certain physical conditions and ecological processes for survival
- Physical conditions include: water depth and temperature, soil type, and climate.
- Ecological processes include: water flows and movement, nutrient recycling, sediment movement and food chain relationships
- Physical conditions and ecological processes taken together make up ecological functions
- Ecological functions are building blocks of habitat types on which species depend





CITY OF BELLEVUE
BELLEVUE PLANNING COMMISSION
STUDY SESSION MINUTES

June 9, 2010
6:30 p.m.

Bellevue City Hall
City Council Conference Room 1E-113

COMMISSIONERS PRESENT: Chair Sheffels, Commissioners Ferris, Hamlin, Himebaugh, Mathews, Turner

COMMISSIONERS ABSENT: Commissioner Lai

STAFF PRESENT: Paul Inghram, Department of Planning and Community Development, Michael Paine, Heidi Bedwell, Development Services Department

GUEST SPEAKERS: None

RECORDING SECRETARY: Gerry Lindsay

1. CALL TO ORDER

The meeting was called to order at 6:33 p.m. by Chair Sheffels who presided.

2. ROLL CALL

Upon the call of the roll, all Commissioners were present with the exception of Commissioner Mathews, who arrived at 6:37 p.m., Commissioner Hamlin, who arrived at 6:45 p.m., and Commissioner Lai, who was excused.

3. PUBLIC COMMENT – None

4. APPROVAL OF AGENDA

The agenda was revised to include an additional public comment period to during the study session; the revised agenda was approved by consensus.

5. COMMUNICATIONS FROM CITY COUNCIL, COMMUNITY COUNCILS, BOARDS AND COMMISSIONS – None

6. STAFF REPORTS

7. STUDY SESSION

A. Shoreline Master Program Update

Environmental Planning Manager Michael Paine provided the Commissioners with copies of a document titled “Shoreline Master Program Update Planning Commission Map Book.” He noted that it contained a fairly comprehensive set of maps and GIS analysis data used by staff in making recommendations about setbacks, as well as information about how the ordinary high water mark is determined.

Associate Planner Heidi Bedwell stressed that the working draft is a preliminary document intended to provide the Commission and the public an indication of the breadth of the work that will be undertaken, and a sense of some potential policy language. The principles of review set forth at the May 12 Commission meeting are consistent with the city's past approach to environmental regulation. The principles call for regulations to recognize that Bellevue is heavily urbanized and as such the regulations should ensure no net loss of existing environmental functions rather than seek a return to pre-development conditions. The regulations should recognize that Bellevue's neighborhoods reflect natural areas juxtaposed with the built environment, and thus focus on preserving or creating places in neighborhoods that people can enjoy. It should be recognized that policy goals may not be achievable through regulation alone, and that regulatory changes should be consistent with all relevant constitutional and other legal limitations. Regulations should be predictable and flexible and designed to be user-friendly. Regulations should also be inclusive by involving a wide range of stakeholders in the process.

Ms. Bedwell stressed the need to keep in mind the goals established in the Shoreline Management Act which pertain to the management of the shorelines. The state directs local jurisdictions to give preference to uses in the following order: recognize and protect statewide interests over local interests; preserve the natural character of the shoreline; favor long-term over short-term benefits; protect the resources and ecology; increase public access to public lands; and increase recreational opportunities. Additionally, the state rules in the WAC give guidance about the development of standards for residential development. The guidelines give direction relative to environmental designations and specific uses for residential development. They acknowledge the need to develop standards for residential development, and acknowledge that the single family use is a priority use when developed to control pollution and prevent environmental damage. According to the guidelines, standards should ensure no net loss of ecological function.

Continuing, Ms. Bedwell said the policies in the working draft generally reflect an approach that new regulations should establish higher standards for new development; minimize impacts while providing flexibility; account for existing developed conditions and consider uses; create development standards generally; and encourage sensitive shoreline development with a balanced program of regulations and incentives.

Mr. Paine said the approach being taken by staff relative to the Shoreline Master Program update involves being sensitive to everything that has been brought to light by the public and the Commission while maintaining specific ecological functions along the shorelines. He stressed that the target area is the interface between the water and the shorelines, which is the area in which the greatest benefit can be achieved by protecting the littoral zone and the adjoining uplands. The Shoreline Master Program regulates the entire 200-foot area landward of the ordinary high water mark, and theoretically each increment of development that occurs in the area is potentially mitigatable, which is a guiding principle. While the entire shoreline area is subject to regulation under the SMP, and each increment of development should be mitigated under the Guidelines' policy of no net loss, the impact on property owners can be greatly reduced, and the benefit to aquatic habitat potentially increased, if regulations and incentives are targeted to protecting a smaller area on either side of the ordinary high water mark. Regulations aimed at moderating development impacts to this interface between land and water may result in the most positive effects on a range of critical water quality and habitat functions, including those components most important to juvenile Chinook survival in Lake Washington and Lake Sammamish.

Another approach would be to focus on entire lots. In that instance even minor losses in the

upland areas could be made up by providing mitigation near the shoreline or elsewhere on the site. Staff believes that approach would not be very profitable. The better approach would be to focus on the area 30 feet water ward and 30 to 50 feet landward of the ordinary high water mark.

Mr. Paine said any discussion of why anything should be done under the Shoreline Master Program requires some understanding of what is meant by the notion of no net loss of ecological function. He allowed that the concept is difficult to understand, and would be difficult on a day-to-day basis to regulate given that it is hard to measure. At its core, however, is the basic idea that any loss of ecological function must be offset by a gain. The loss of ecological function is defined as the removal or disruption of ecological processes that produce certain physical conditions. The no net loss standard is intended to halt the introduction of new impacts resulting from new development. Existing development has ongoing impacts that are cumulative in nature and very difficult to assess. The impacts resulting from new development are far easier to assess.

The Shoreline Master Program achieves no net loss in two specific ways. The first is cumulatively across the entire city through planning efforts, and the second is cumulative on a site-by-site basis. Ostensibly, for each individual development action there is some mitigation that can offset the loss. Cumulatively, however, many of the impacts are too small to measure or otherwise cannot be mitigated for, and thus they should be dealt with by restoration planning efforts across the entire jurisdiction. The planning process itself is intended to be part of the no net loss equation by instituting mitigation for individual developments as they come online.

The minimization of impacts is typically achieved through mitigation sequencing, which first seeks to avoid impacts, then seeks to minimize impacts, then if necessary directs mitigation to occur. That process does not, however, adequately address the cumulative impacts for a variety of reasons. For example, if a wetland is disturbed by filling it, to go back and restore the area will encounter a number of temporal effects. Cutting down a big tree will result in the loss of certain ecological benefits that cannot be replaced by the planting of a six-foot tree; it will take a very long time for the ecology of the area to return to its former state. The approach often taken is a requirement to double, triple or quadruple the area to be mitigated to offset those temporal impacts; instead of replacing the large tree with a single six-foot tree, up to four six-foot trees are replanted instead.

With regard to the issue of why setbacks are needed, Mr. Paine explained that land use setbacks have been in common use for a very long time. Land use setbacks are used to separate uses, to separate one single family home from another, to provide protections against the spread of fires, and for a number of other reasons. Setbacks in the shoreline have many of the same functions. Primarily they are intended to insulate critical shoreline interactions from damage by development. They also serve as protections against damage from flooding and erosion. Setbacks also help to reduce the discharge of pollutants, preserve and enhance views of the water, and maintain the character of a community. Bellevue has imposed setbacks for some time in line with its longstanding commitment to environmental stewardship. The 25-foot structure setback on shorelines was put in place in 1974, and the critical areas ordinance, including buffers up to 50 feet in width for streams, went into effect in 1987.

Mr. Paine stressed that shoreline setbacks only go into effect in association with development. None of the regulations are relevant to existing properties with lawns running to the water's edge or to a bulkhead, so long as the intensity of development on the site is not altered in any way.

The current code is very prescriptive but includes an enormous amount of flexibility. It was developed under the Growth Management Act which permits departing from the standards provided a high-quality scientific study is commissioned and appropriate mitigation is

undertaken.

Mr. Paine brought to the table two options. Option A, Maximum Flexibility with Incentive Options, is based on components of the existing code and adds a menu option which takes away the need for a detailed scientific study. Option B, Maximum Predictability, establishes a bright line which cannot be crossed without a shoreline variance.

Ms. Bedwell referred to the map and GIS information document. She explained that the maps cover four geographic areas: Lake Sammamish, Lake Washington excluding the Newport Shores area that abuts the canals, the Newport Shores area that does abut the canal area, and Phantom Lake. The mapping includes a focus on structures that are both greater and less than 800 square feet. She stressed that the mapping is based on approximate ordinary high water mark elevation lines given that the lines must be determined on a site-by-site basis. The city has generated an approximate elevation line for the shoreline of Lake Sammamish, which is 31.8 NAVD 88, from which structure setbacks can be measured; the line was determined by a scientific study in response to concerns from citizens about uncertainties regarding the starting point from which to measure setbacks, though property owners still have the option of conducting a study to determine the specific ordinary high water mark for their sites. The city reports all of its vertical elevations datum in NAVD 88 format; the Army Corps of Engineers uses a different vertical datum. Lake Washington has a managed pool elevation, and the approximate high pool elevation is 18.8, but for purposes of the analysis 20 feet was used. A specific study has not been undertaken for Phantom Lake, but based on some general telemetry information, the analysis uses an elevation of 262.

Ms. Bedwell stressed that the data used is intended to discuss the relative effects of policies and regulations. It is not intended to be site-specific or used as project-level decision-making information.

With regard to Lake Washington, Ms. Bedwell said 66 structures, or 16.38 percent of the total number of structures, are located within 20 feet of the ordinary high water mark; 21.59 percent of the structures are located within 25 feet of the ordinary high water mark, and 33 percent are within 35 feet of the ordinary high water mark.

The Newport Shores subset of Lake Washington has somewhat different development conditions given the dredged canal areas. The development pattern there reflects structures that lie generally between 25 and 35 feet from the bulkheads or the ordinary high water mark.

There are fewer parcels generally along the shores of Phantom Lake, and the structures are for the most part located farther away from the assumed elevation of 262 feet. Only 9.4 percent of the structures are within 35 feet of the ordinary high water mark; only 17 percent of the structures are within 50 feet of the ordinary high water mark.

Ms. Bedwell noted that flood plains are a factor along Phantom Lake as well. She said the analysis included a comparison of the parcels that might have a flood plain beyond a setback of 35 feet. The determination was that 52 properties have a flood plain that exceed a setback of 35 feet; with a setback of 50 feet there would still be some properties impacted. In some cases, the governing provision will be the 100-year flood plain elevation, which will limit development in the area.

Mr. Paine pointed out that the Phantom Lake area is complicated even further because of its extensive associated wetland systems. There are setbacks associated with the flood plain and the wetlands in addition to the shoreline setbacks; the latter is probably the least impactful on future

development, however.

Ms. Bedwell said on Lake Sammamish only about 10.9 percent of the structures greater than 800 square feet are within 25 feet of the ordinary high water mark. At 35 feet the percentage increases to 24. About 38 percent of the structures are within 50 feet.

The current code has a prescriptive standard with flexible options. The flexibility was built in by choice to better allow for addressing site-specific issues. For developed sites there is a 25-foot buffer and a 25-foot structure setback. For vacant properties, the buffer is 50 feet. There are limitations on the activities that can happen within the buffer, specifically limits on vegetation removal and the construction of hardscape elements. Access to the shoreline is permitted through the buffer area. The code is written to recognize existing development by allowing for exceptions to the setback and the buffer, the most notable of which is the footprint exception which essentially draws the buffer or setback line to be drawn around existing structures and keeps them from being labeled nonconforming. The string test exception allows for connecting the two closest points on the two adjacent properties and allows the center property setback to be an average of those two. The prescriptive option allows for some expansion of an existing structure, up to 500 square feet, without requiring additional study and without triggering the full standards.

Mr. Paine said the high level of flexibility built into the existing code is unusual, but it comes at a cost of hiring specialists to do the work of developing and presenting an argument to the city. The public has been very clear about not wanting to pay those costs, and that is a key issue that is being addressed in the update.

Ms. Bedwell said Option A establishes the existing 50-foot setback and acknowledges some of the existing development patterns. It includes a menu of options that allow for encroaching beyond the 50-foot limit, though the appropriate calibrations for each of the menu options have yet to be worked out. An example might be that planting native landscaping near the water's edge would allow for a five-foot reduction in the setback, or removal of a bulkhead could yield a reduction in the setback. The option thus allows for flexibility but does not allow for going beyond the menu. The approach recognizes the tension the current code has created by establishing a no-touch buffer, which does not really acknowledge how people use their shorelines. The idea is to allow a percentage of the nearshore area to be used for recreational purposes while at the same time establishing a landscaping standard. For existing structures that might lie outside the 50-foot buffer area, Option A allows for expansion with the menu options.

Answering a question asked by Commissioner Himebaugh, Ms. Bedwell explained that the prescriptive landscaping area and the list of menu options are two different things. The landscaped area is tied to the prescriptive standard that would be triggered generally by new development. The menu options can reduce the setback but may also reduce the total amount of recreation area. Mr. Paine added that properties with no plans to develop or redevelop will be allowed the full use of their properties without triggering anything. Ultimately the expectation is that staff will recommend a hierarchy of menu options.

Commissioner Hamlin asked if the critical areas permit option will also be included in the mix as a potential option. Ms. Bedwell said there is room for discussion on that item. It is possible that under some parameters a scientific study would be warranted. Mr. Paine said the city would need to make sure the Department of Ecology would be comfortable with that approach. In any case, there would need to be a demonstration of no net loss.

Commissioner Ferris asked what the incremental difference in ecological function is between a

25-foot setback and a 50-foot setback. Mr. Paine said for most ecological functions, there is a diminishing return the further away from what is to be protected. Around the country, the buffers set for lakes and marine estuaries are fairly expansive; most are set based on individual functions. For example, many low-density residential developments around Chesapeake Bay have septic systems, so they need a large buffer area to address that concern alone. The advantage of going to a 50-foot buffer is the opportunity to better insulate against additional intensive development along the shoreline. A 50-foot buffer certainly offers more room for flexibility. A wider buffer means less impervious surface areas and more area to filtrate pollutants, keeping them out of lake waters. However, it cannot be definitively determined that a 35-foot buffer or 50-foot buffer is any specific percentage better than a 25-foot buffer because much depends on the specific functions that need to be preserved.

Commissioner Ferris said the proposed regulations appear to be somewhat arbitrary, with numbers picked based on what other jurisdictions are doing. It does not appear that the chosen numbers will in fact improve or preserve ecological functions. He said he was supportive of the policies identified but did not get the causal connection between the regulations and the ecological improvement. Mr. Paine said the documentation from other jurisdictions shows that the buffers being set for similar water bodies are far larger than 50 feet. In fact the 50-foot buffer width came about as a compromise made by the Commission based on the developed nature of the shoreline. There is ample argument for a buffer of more than 50 feet based on a host of functional assessments, but the developed nature of the shoreline would make actually achieving a buffer that large problematic at best. There simply are no order of magnitude percentages that can be placed on buffers of different widths; everything is relative to the desired functions. Primarily, shoreline buffers are needed to promote hydrology, filter pollutants, allow for vegetative areas, and to promote habitat and habitat contributions to the littoral zones. Within limits, the more insulation that can be provided, the better.

Ms. Bedwell said Option B establishes a prescriptive standard. For Lake Sammamish and Lake Washington the proposal is for a buffer width of 35 feet, with a reduced 25-foot buffer for the canal areas. For Phantom Lake, the proposed buffer width is 50 feet because of the ecology there and the flood plains. Option B allows minor building elements such as decks or patios to encroach on the 35-foot buffer. Existing structures would be allowed some leeway for lateral expansion, though not within 25 feet of the ordinary high water mark; water ward expansions would only be allowed through a variance process.

Mr. Paine allowed that under Option B reinvestments in development would be more difficult because the prescriptive approach would serve to hem in developments. The option would be far easier to understand and administer, but would greatly reduce flexibility.

Ms. Bedwell pointed out that Kirkland has had a Department of Ecology hearing on its proposed Shoreline Master Program master plan. The city of Sammamish has submitted its plan to the Department of Ecology but has not yet had a hearing on it, and the city of Redmond has had its plan approved by the Department of Ecology. Other jurisdictions around Lake Washington and Lake Sammamish are in the process of updating their Shoreline Master Programs. In Kirkland, the setbacks for residential range from 25 to 60 feet. The shoreline setback in Sammamish is 45 feet with an additional building setback of five feet, and Redmond has a setback of 35 feet. None of those jurisdictions have a buffer proposed as part of their plans. The minimum setbacks can be modified through certain provisions, though in Kirkland the minimum is 25 feet, while in Sammamish and Redmond it is 20 feet. Both Kirkland and Sammamish employ a menu of options, whereas Redmond allows for reducing the setback in exchange for planting native vegetation within the first 20 feet. There are general vegetation standards outlined in the regulations for all three jurisdictions; for both Kirkland and Sammamish, the standard is 75

percent of the area landward of the ordinary high water mark to a width of either 10 or 15 feet, whereas in Redmond it is a width of 20 feet.

Answering a question asked by Commissioner Himebaugh, Ms. Bedwell explained that under Option A, an existing structure could be expanded beyond the 50-foot setback without having it considered to be nonconforming. Structures located beyond the 25-foot setback would be labeled nonconforming. Under Option B, any structure beyond 35 feet would be considered nonconforming. Because of the footprint exception, there are no nonconforming structures under the current code.

Chair Sheffels opened the floor for comments from the public.

Mr. Marty Nizlek, 312 West Lake Sammamish Parkway, spoke on behalf of the Washington Sensible Shorelines Association. He noted that he testified with regard to shoreline ecological function at the May 12 Commission meeting but has not yet had a response to his comments. He urged the Commission not to require vegetated areas except as elected property owners or as required under existing drainage codes, and to not require the inclusion of any requirements for trees along the shoreline. He referenced the published works of Dr. Don Flores dealing with Puget Sound area vegetative function. The Commission was encouraged to include low-cost, tested and easily established vegetation options should be offered for those who choose them. The Commission was urged to recommend that requirements to enhance ecological function should be voluntary only, and that incentives be utilized over prescriptive regulations. The Commission was asked to direct staff to provide a list of incentives. The city is a shoreline property owner, yet it is planning for intense development right down to the water's edge in conjunction with the Meydenbauer Bay park plan. At the same time, regular shoreline property owners are being asked to back off from using the shoreline areas. The issues raised during the March forum have yet to be addressed, nor has any process been proposed for a sound, scientifically based, outcomes-measurable program; that is unacceptable.

Ms. Elfi Rahr, 16509 SE 18th Street, said Phantom Lake does not have an elevation of 262 feet as purported by the staff. In 1985 the state granted \$2 million to the city to conduct an extensive and comprehensive lake study. The process took some five years and resulted, among other things, in the determination that Phantom Lake has an elevation of 256.52. The lake level increases some two feet throughout the season, which is 258. The master plan written in 1980 stated that with the development of the I-90 Business Park, the lake level would rise only two inches. The mistakes made by not correctly calculating storm runoff have been significant, and the Phantom Lake property owners are the victims. Flooding of 156th Avenue SE triggered the need for a quick and cheap fix, but that was yet another mistake that the property owners are having to pay for. If the lake level were at 262 feet as stated by staff, most of the wetlands would be four feet under water and part of Lake Hills would be flooded. It would be better if high water in the lake could escape into the wetland again. There is very little native vegetation that can survive under water resulting from the lake level rising annually.

Ms. Anita Skoog Neil, 9302 SE Shoreland Drive, suggested the draft is sporadically organized; there are items in chapters three through six that should be in with each specific environmental designation. It is easy to misinterpret, which results in confusion. The matter will not be ready for a public hearing by October or November. The public is not being provided with information in a timely manner. She suggested that the intent of vegetation conservation is to protect the ecological functions along the shoreline. Vegetation conservation may also protect property and may increase the stability of shoreline areas susceptible to erosion. In addition, vegetation may provide habitat for terrestrial animals such as squirrels and birds. She said she would remove from the staff draft version words and phrases such as "restore," "eco-wide system," "human

safety,” “reduce the need for structural shoreline stabilization,” “improve the visual and aesthetic qualities of the shoreline,” “to protect plant and animal species,” “to enhance shoreline uses,” “in critical areas and critical area buffers with shoreline jurisdiction to support shoreline functions and processes such as food webs, sediment transport, terrestrial and aquatic habitat, water quality and hydrology,” “when balanced with the objective of vegetation conservation,” “require mitigation for hazardous trees that are removed within the shoreline setback in critical areas and critical area buffers,” “reduce the need for hard structure,” “provide incentives to private property owners to achieve specific habitat improvement goals, including retention and enhancement of native vegetation,” and “consider and encourage a set of values when reviewing the development of shoreline and encourage vegetation conservation policies that improve the visual and aesthetic qualities of the shoreline.” She said she grew up on a west-facing Lake Washington shore and in the 42 years she lived on the property at least six feet of the property was lost. Vegetation alone cannot prevent erosion.

Mr. Tim Trohimovich, co-director of planning and law for FutureWise, suggested that most people would agree with the need to protect the threatened salmon, steelhead and orcas. The National Marine Fisheries Service has taken a comprehensive look at the existing endangered stocks, the impacts of development, and what is needed by way of solutions. Their recommendations for lakes include a setback of 150 feet with native vegetation. He recognized that Bellevue’s shorelines are mostly built out and that there are very few places that have 150 feet of native vegetation, but voiced concern about the options that will reduce the protections. The Shoreline Management Act in RCW 90.58.0904 requires that Shoreline Master Programs must be at least as protective as adopted critical areas regulations. The city should do all it can to put in place more protections; it should not compromise and put in place fewer protections.

Mr. Dwight Martin, 5101 East Lake Sammamish Parkway NE, said FEMA has made some sweeping proposals that are extremely restrictive on shoreline development. So much so that even the state Department of Ecology has protested and has suggested the department is overlaying the good work that has already been done by the state. FEMA is currently reviewing comments and has created a work group that includes staff from various cities. There has been quite a pushback on FEMA’s first proposal. When people buy waterfront properties, they have a reasonable expectation of use, which is not to say what is commonly called a reasonable use exemption, which is more of a minimum use allowed by a jurisdiction to avoid being sued for taking property. Reasonable expectation of use should include being allowed to landscape the property and to improve an existing structure. It should not include the right to drill wells offshore, nor does it include the right to pollute. The Shoreline Management Act specifically lists residential as a preferred use of the shoreline environment. It does not say residential is a preferred use only if property owners do not wantonly pollute during construction or afterward. Too often concepts get linked together resulting in a negative bias against those who own shoreline properties and simply want to use them. Those who write or enforce regulations often say people should not worry about the regulations because they only come into effect if one wishes to develop, as if that is something unusual. Development is not in fact unusual, and people always expect to improve their position in life, including developing and using their properties. The whole point of the regulations being developed is to regulate how people can use their properties.

Mr. Tom Schafer, 1822 West Lake Sammamish Parkway SE, voiced support for Option A as a concept. The various options are intensive and hard to understand, especially when diving into the details around things like prescriptive landscape area and vegetation management. It helps to understand what native vegetation is, which includes very large trees and shrubs. As the policies and regulations are written, they must be very clear and understandable.

Mr. Charley Klinge, an attorney with Groen Stephens and Klinge, said he represents the Washington Sensible Shorelines Association. He suggested that progress is being made. Staff understands now that there are concerns with the existing code; that is why they are coming forward with some options. There is no one right way to do it. No one will be able to say for sure what the Department of Ecology's position will be until a plan is submitted for review, until then, all options on the table are just proposals and not final answers. The shoreline guidelines are in fact guidelines, not prescriptions. They are written to give local governments plenty of discretion in addressing their particular circumstances. While it is true that the regulations will only kick in where there is new development proposed, it should be kept in mind that new development is a broad term. One property owner who tore out an existing patio and planted grass was cited for a violation of the critical area code; he had to hire a consultant and argue with staff about appropriate mitigation for doing what appeared on the surface to be a good thing. The fact is what he had done was classified as new development. Under the current code, any kind of a change or modification is automatically disallowed without critical area reports and mitigation. That should not be glossed over. It should be stressed, however, that the no net loss of ecological functions concept applies to existing ecological functions. Once they are identified, they must absolutely be mitigated for. Science applicable to streams cannot be directly applied to lakes. The Commission should focus on and address the most likely things to happen relative to new development on shoreline properties, which is additions to single family homes, patio and landscape improvements, repairing and replacing bulkheads, and repairing and remodeling docks.

Mr. Brian Parks, 16011 SE 16th Street, spoke as both the Phantom Lake homeowners Shoreline Master Program representative and a board member of the Washington Sensible Shorelines Association. He said the staff Shoreline Master Program outline regarding setbacks and vegetative buffers is especially not applicable to Phantom Lake for a number of reasons. The results of the buffer zones will be a proliferation of unintended volunteer trees, including the four varieties of willow that are common around the lake. Some of them are quite tall, others lean over, and still others are brittle and break off branches that then themselves take root and spread, dropping leaves, branches and limbs into the lake, all of which become hazards. If allowed to grow, the trees will ruin residential and trail views, thus decreasing public enjoyment, which is contrary to the goals of the Shoreline Master Program, and reducing property values. There is a solid wall of willow trees growing on the west end of Phantom Lake where the property all belongs to the city. The staff recommendation is for a mandated 25-foot buffer plus a 25-foot setback on Phantom Lake, yet in reality the lake's circumstances necessitate a tailored approach to reduce plant matter. Phantom Lake has elevated nitrogen and phosphorous levels that are due in large part to decaying plant matter, which leads to associated anaerobic conditions of the water below a depth of eight feet which in turn leads to toxic blooms of cyanobacteria. Reducing the lily pad population on Phantom Lake would probably do more good than the minimal nutrients they contribute. Proposals such as adding woody debris, shoreline trees and increased native plantings would further aggravate the problematic conditions, do not offer any scientifically proven benefits, are unnecessary, and are both costly and undesirable to the majority of homeowners. The United States Geological Service study 024130 was intended to show the potential reduction of unwanted nitrogen and phosphorous by using more environmentally friendly fertilizers on lawns, but in fact the study surprisingly revealed that wooded lots contribute even more of the unwanted nutrients than lawns do. Swales, which are intended to use natural vegetation to treat runoff, often become overgrown and contribute more the nutrients into the system. Contrary to the USGS study, the Bellevue shorelines analysis report states that cleared landscapes and modified shorelines likely lead to lower functions than other reaches around the lake. The Shoreline Management Act mandates all Shoreline Master Programs to be based on the best available science rather than ideology. The USGS study represents the best available science. Phantom Lake has the highest Shoreline Analysis Report scores and is a

model of shoreline care, yet the staff outline carries over the 25-foot buffer plus the 25-foot setback only on Phantom Lake, in effect punishing Phantom Lake residents for their good stewardship. Phantom Lake residents already have increased vegetation buffers resulting from the gradual increase in average lake elevation and the associated increase of wetland plants. The damming of the traditional western outlet of the lake with an earthen berm and plywood skirt by the city should have included regular maintenance to keep the sediment from building up in Phantom Creek, the eastern outlet. The Commission should visit the lake and observe the conditions firsthand.

Ms. Susie Vancovski, 3560 West Lake Sammamish Parkway SE, spoke on behalf of Vasa Park Resort. She said the resort has been in existence since 1926. The Vasa homeowners association and the Vasa Park board is opposed to being rezoned to urban conservancy. The board has no desire to further develop the property, but neither does it want its development rights taken away. It is not the shoreline property owners that are causing harm to the waters of the lakes. The water in the pipe that drains the I-90 Business Park is horrible and it flows directly into Lake Sammamish; that has nothing to do with homeowners. For two years in a row the city failed to clean the catch basins and the overflow ran through the park like a river, taking away 17 tons of sand, depositing three inches of oily sludge in the summer kitchen, and wiped out the laundry room. That same sludge flows into the lake every day from the upland area.

Mr. Richard Johnson, 2824 West Lake Sammamish Parkway SE, said the drainage basin for Lake Sammamish covers 63,000 acres. The sum total of the Bellevue waterfront properties on Lake Sammamish is less than 120 acres. Less than one-fifth of one percent of what flows into Lake Sammamish can in any way, shape or form be attributed to the waterfront properties. If all the waterfront properties were used for mitigation purposes alone, the total contribution would amount to nothing. The request for proposals for the Shoreline Master Program update issued in June 2007 included in the scope of services the statement that the inventory and characterization relies heavily on the use of GIS data and analytical techniques. All of that data was preexisting, and the document clearly indicates no new data would be collected. The data included the claim that 71 percent of the Lake Sammamish shoreline was armored. A privately funded photographic survey, however, that utilized publicly available information determined that in fact the armored shoreline was no higher than 36 percent based on the ordinary high water mark. The lake elevation is at its highest during the months of November through March. Additionally, during the salmon season when the water level is lower, the armored shoreline makes up only about seven and a half percent. The numbers relied on by the city are so far wrong as to completely astound anyone who cares to take even a casual tour of the lake.

Mr. Dallas Evans, 2254 West Lake Sammamish Parkway SE, said the ordinary high water mark study conducted by The Watershed Company uses the 95th percentile in terms of high water marks around the shoreline. It is apparent in reading the study that the company measured a number of shorelines based on the highest water mark they saw hit the shore. He shared with the Commission a short video showing a storm on Lake Sammamish that showed how far the water reaches during storm events. He said because the city has bought into the findings of the report, the ordinary high water mark for Lake Sammamish has been set at 31.8 feet; other cities around the lake have determined the elevation to be lower, though some have accepted Bellevue's findings. The Army Corps of Engineers has determined the ordinary high water mark to be at least a foot lower than what Bellevue is claiming. The winds that flow over Lake Sammamish come from the south. The shorelines that run parallel to the direction of the wind suffer no impacts at all, while the northern shores take the full brunt of the wind. Half to two-thirds of the Bellevue shoreline is impacted by large waves resulting from the winds. That fact needs to be taken into consideration in developing options for the shoreline. Storms that damage docks can trigger a need to conduct a very expensive critical areas study before the docks can be repaired.

Mr. John Strong, 1604 West Lake Sammamish Parkway, said for the most part, structures along the shoreline are located where they are not because the owner wants to hover over the water but because something physical is in the way, including roads and hillsides. Most of the lakefront properties have been developed, and most of the homes are not new. Older homes need maintenance and occasionally need to be remodeled and updated. When deciding what the setbacks and other regulations should be, the city should do it in a way that will allow waterfront property owners to do what needs to be done and get on with their lives. When it is overly burdensome to do every little thing, regular maintenance will be avoided and properties will not be upgraded. Attention must be paid to environmental concerns, but also to the needs of property owners.

Ms. Donna Lempke, 2016 West Lake Sammamish Parkway SE, suggested that Phantom Lake would not have as large a flood plain as it has if the outlet were properly maintained. She said her biggest concern with Lake Sammamish is phosphorous getting into the water. To date, the maximum phosphorus level in the lake has not been exceeded and the lake water is about equal to that of Lake Washington, which is considered to be an ideal lake as far as the comeback it has made from its polluted state in the 1960s. Along the shoreline of Lake Sammamish are properties that have recently been redeveloped; the mitigation required has included the placement of logs in the water which will eventually harbor bass which will in turn eat young salmon. Between the logs is dirt and plants, most of which will be washed away during storm events, adding additional phosphorus to the lake.

Mr. Scott Sheffield, 2220 West Lake Sammamish Parkway SE, asked the Commissioners to continue asking tough questions of staff. He said it is very frustrating to sit in the audience and not be allowed to ask additional questions. The Commission should carefully consider the answers given by staff and determine whether or not they are scientifically sound. Staff has said the hydrology needs to be improved, but they have not explained if that means water quality, stormwater runoff, or something else. There need to be scientific measurements made so the problems said to exist can be understood. If there is a problem and it is being made worse by the property owners, the property owners will step up to help, but they are not wanting to be told to do something just because.

****BREAK****

Chair Sheffels observed that the conditions along Lake Sammamish and Lake Washington are similar, but Phantom Lake is in a class of its own. There have studies, reviews, suggestions and personal observations from a variety of persons regarding Phantom Lake, and if another layer of regulations were to be established for that area without addressing the basic questions, the Commission would be remiss in doing its job. She said she would like to see a means devised under which the city and the Phantom Lake community could work together to figure out what the true picture is and what the ordinary high water mark ought to be. All of that should be settled before the Commission lumps the Phantom Lake area in with the Shoreline Master Program update.

Mr. Paine suggested that at the Commission's next meeting there should be a presentation on the full history of Phantom Lake. The Commission has been hearing a lot about the lake and its environment, but only one side of the story is being told. All of the lakes, but particularly Phantom Lake, face significant watershed problems, and those impacts are preeminent in terms of the overall degradation of the lakes. The issue of parsing out what happens along the shoreline from what happens in the overall watershed is not completely clear, but there are still things property owners can do to make the interface better and consequently improve the habitat

for juvenile salmonids and other fish and insects. Phantom Lake presents a unique situation, and the method for moving ahead suggested by the city is a lake management district. That approach, however, is beyond the scope of the Shoreline Master Program update. Phantom Lake is largely constrained by wetlands and flood plains, so much so that deciding there should be no setback at all would have no effect on how people can build and use their properties given that the rules for wetlands and flood plains are far more demanding. The Commission should defer thinking about how to handle the Phantom Lake situation until more information about the area can be shared.

Mr. Paine said the city is willing to partner with a lake management district in ways that would be beneficial to everyone. However, the city cannot act alone. The properties involved are privately owned and the city has absolutely no obligation to manage the channel.

Commissioner Hamlin said he was confused as to why there should be a proposal for a 50-foot setback for Phantom Lake properties, or indeed why the Phantom Lake area should be called out separately, if the rules for wetlands and flood plains will carry the day anyway. Mr. Paine said the issue is that virtually every lawn is a wetland. There are fringe wetlands along the edge of the lake; that is clearly evidenced by the fact that willows, which are wetlands plants, are cropping up everywhere. The Phantom Lake shoreline if left untended would mirror the shoreline of the property owned by the city.

Commissioner Turner said it appeared to him that many of the issues Phantom Lake is experiencing are based on the development that has gone on in the areas that drain to Phantom Lake, not on the development that has occurred on the actual Phantom Lake properties. He suggested the city may in fact have an interest in addressing the problem resulting from commercial development over which the Phantom Lake property owners have absolutely no say. Making their regulations more severe will not actually solve the problems. Mr. Paine said if there were no wetlands or flood plain associated with Phantom Lake, there would still be an existing 25-foot buffer and 25-foot structure setback. Adopting a structure setback only would immediately lessen the impact on property owners by getting rid of the buffer. Buffers are far more restrictive by their very nature.

Chair Sheffels said a full presentation on the history of Phantom Lake would be very helpful.

Commissioner Hamlin allowed that under Option B Phantom Lake is in a way being treated equal to Lake Sammamish and Lake Washington given the percentage of structures in the setback area.

Ms. Bedwell allowed that the ordinary high water mark calculation for Phantom Lake could be on the conservative side and thus reflect a somewhat higher elevation. She said it is possible that fewer structures are actually in the setback area. Staff will be working with the local residents in clarifying what the elevation should be.

Mr. Paine said staff would welcome anyone's interest in trying to unravel the ordinary high water mark study. He said it was done at the highest caliber of scientific research and subjected the peer review by PhD statisticians, so the validity of the study really cannot be effectively argued. The confusion lies in the interpretations. For example, in 1999-2000 the salmon were listed as an endangered species. A study of the bulkheads on Lake Washington and Lake Sammamish was conducted that involved the use of GPS devices in measuring bulkheads. At the time, bulkheads were defined as structures located at or above the ordinary high water mark because bulkheads interrupt the habitat forming processes that support juvenile salmonids living in the lake. Everything within a reasonable distance from the shoreline was counted as a

bulkhead. In terms of the environment, it really does not matter whether a bulkhead is at the ordinary high water mark or the edge of the flood plain because the effects are largely the same. The bulkhead study findings are correct, but they do not mesh with the study done by local citizens because the baselines and definitions are different. The ordinary high water mark is defined as the usual and accustomed mark made by the water in the lake, which is not specific to high water or low water.

Commissioner Turner said during his tenure on the Commission he had heard numerous questions and issues about the studies that have been used, but no real solid rebuttal for what the public has been saying. The recommendations of staff are based on the studies which the public claims are flawed. As a result, there should be some attempt made to address the issues raised by the public. If the city claims development along the shoreline is causing trouble, there should be some evidence presented with regard to exactly what the damage is and how extensive it is.

Mr. Paine commented that in the city of Bellevue there are far more residents living under the requirements associated with streams under the critical areas code than the requirements associated with lakes. There is an enormous amount of science that looks at the connection between the riparian area and the impact it has on the stream. One of the most important things in a natural setting is wood falling into streams that form pools and drops that provide habitat for salmon. The addition of leaf litter and insects all contribute to a biota that supports other life. The same thing occurs in the aquatic environment, which is a living and breathing system. The life forms in the lakes rely heavily on the nearshore area and waters of less than nine meters depth where light filters down and where vegetation grows. There is a movement across the land/water boundary, the evidence of which was presented by the highly qualified scientist Tessa Francis who talked at length about the importance of the interchange. Her report was summarily dismissed by the public. With respect to the pollutants that get into the lakes, distinguished scientists, including Dr. Pauley, have made the case that urban development in the watershed has some very significant adverse impacts and is directly tied to the diminishment of salmon habitat and salmon populations. That is why there have been so many listings in the Puget Sound area that suggest the fish are threatened or endangered. The connections, however, are difficult to unravel at the site scale. No one can say with any certainty whether a buffer of 25 feet, or 35 feet, or 50 feet will make a difference. It can be said, however, that some number will make a difference, and that having native vegetation close to the water and no bulkhead is better than having no vegetation close to the water and a vertical bulkhead.

Commissioner Ferris stated that he had read the report on how the shorelines were inventoried and classified. He noted that the report includes only a few categories, all of which were evaluated on a somewhat judgmental basis in terms of the contribution of each to the overall ecology. He suggested that a formula could be developed based on the five or six things that contribute to the ecological function of lakes. The formula could, for example, include a weight for each item. An inventory for a specific property could then generate a point total based on the weighted criteria and be used in determining how a proposed development will impact the ecological functions. Such an approach could allow property owners to develop while at the same time allowing the city to achieve improvements to the overall ecological functions over time.

Mr. Paine said that is exactly the approach staff will be proposing; he said he already has a draft table drawn up with the various functions listed. The options menu will be based on that table. He said the most important thing in determining the quality of functions on shorelines in built-up areas is whether or not there is a bulkhead in place. The study done by Mr. Evans makes clear to everyone that bulkheads not located directly on the shoreline have large associated areas that could be planted, thus creating a beneficial habitat and a place for the interchange to occur. Staff

did not consider that in looking at site-by-site and reach-by-reach functions.

Asking a question asked by Commissioner Himebaugh, Mr. Paine clarified that the focus is on the concept of no net loss of ecologic functions. Commissioner Himebaugh allowed that inventory indicates the shorelines in Bellevue are largely built up and suggested that staff should highlight non-regulatory options for shoreline restoration in addition to the regulatory options. He said non-regulatory options should avoid putting property owners in the position of having to meet an ecological bar that may in fact be impossible to measure on a site-specific basis. Mr. Paine said one function of the city's restoration planning effort is to address the cumulative impacts that do not get mitigated on site, either because they are not measured precisely enough or because of the temporal issues. The city is supposed to have a plan that identifies potential mitigation sites to offset the loss that is inevitable with development over time. However, while the city is obligated to have a plan in hand, it is not obligated to fund the plan. The city could institute a fee in-lieu approach under which property owners could buy into a potential mitigation project at some other location. Alternatively, the city could purchase properties from willing sellers on which to allow mitigation or restoration, thereby offsetting the impacts of hundreds of shoreline lots, but that option would be very costly.

Commissioner Turner suggested that before the city takes steps to direct property owners how to mitigate something on their properties, there should be a better understanding of what the ecological functions are for the properties in question and the system overall. Mr. Paine's response was that that would be very tall task and could potentially stop the city from regulating anything. Commissioner Turner said the fact remains that the regulations will impact property owners along the lake while the owners of properties throughout the ecosystem will not be impacted. A balance needs to be sought. Mr. Paine pointed out that the same could be said for property owners living on steep slopes or near streams, all of whom are already being called on to work for the public benefit in protecting those areas. Commissioner Turner said he would prefer to see incentives and non-regulatory approaches identified as the best way to go.

Commissioner Mathews asked if the current approach of drawing setback lines around existing structures to avoid the issue of nonconformance could be incorporated into either Option A or Option B. Mr. Paine said Option B would establish a bright line under which structures are either conforming or they are not. Under Option A, all structures would be conforming until the 25-foot limit is reached. Expansions would be allowed, but only in line with the options menu.

Commissioner Ferris agreed that conducting a full study of the ecology of the entire system would not be practical, and would be outside the bounds of what the city is trying to achieve with the Shoreline Management Program update. However, within the limits of the scope of the task at hand, drawing a line between specific ecological improvements and incentives would be a good idea. He said he generally favored Option A but needed far more details before developing a recommendation for what the setback width should be. Additionally, the prime focus for improving ecological functions should be on where the streams flow into the lakes and areas where the greatest impact could be realized, and the fee in-lieu approach would fit perfectly into that scenario. The concept is already in use in the form of transfer of development rights.

Commissioner Hamlin concurred with the choice of Option A and with the notion of focusing improvements in areas where they will have the greatest impact. With regard to the width of the setback, he said he had no argument against what was proposed by staff.

Commissioner Mathews added his support for Option A as well. He commented that while the degree to which any mitigation on any particular property may be small, the incremental impact of improvements along the entire shoreline can be huge over time.

Commissioner Turner said Option A would be the better choice. He concurred with Commissioner Ferris in wanting to see a matrix developed. He stressed the need to have a strong rationale on which to base both regulations and incentives. Some effort should be put into addressing the specific concerns that have been raised by the public.

Commissioner Himebaugh said he was not prepared to recommend either Option A or Option B because he had not previously seen the map book. He said the limited information in the staff memo allowed him to gain a basic idea of where the nonconformities would exist. He suggested that Option A would be preferable to Option B. He said he had some concerns with the issue of transferable rights and agreed that a matrix is needed to connect the dots between the impacts on ecological functions and the use of property. The footprint rule should be kept on the table as a part of Option A.

Ms. Bedwell asked Commissioner Himebaugh to clarify if he would support the line around a footprint for structures closer than 25 feet from the ordinary high water mark. He answered that he would.

Chair Sheffels noted the general consensus of the Commission in favor of going with Option A, the notion of a transfer of rights as an incentive, and retaining the footprint approach.

Attention was given next to the policies in Attachment 1. Commissioner Mathews referred to SH-22 and the notion of multifamily or multi-lot residential/recreational developments providing public access. He asked how that would work. Chair Sheffels added a question about the zoning and the potential of having three or more houses on a single lot as multifamily and how to require public access. Ms. Bedwell said the majority of the zoning along the lake shorelines is single family residential, with the exception of the multifamily development in the area of Meydenbauer Bay, and the existing multifamily development at the south end of Lake Sammamish that has an underlying single family zoning. She said she did not have specific data on the number of lots with the potential for subdivision. The environmental designation will not change the underlying zoning from a density standpoint. There is no anticipation of new multifamily development, other than for redevelopment actions.

Commissioner Hamlin sought confirmation that the proposed policies are based on the Shoreline Management Act, which Ms. Bedwell provided. Commissioner Hamlin called attention to the policy language calling for increased public access to the publicly owned areas of the shoreline, and increased recreational opportunities for the public in the shoreline, and asked if those policies will be relied on to provide more public access. Ms. Bedwell said the language was taken directly from the WAC guidelines. Commissioner Hamlin said he could see nothing in the language calling for the use of private property to increase public access. Mr. Ingram pointed out that the guidelines have a section that specifically addresses what cities should do regarding public access. That topic will be before the Commission for discussion at a future meeting.

Chair Sheffels called attention to policy SH-41 and the references to water-dependent uses and water-related uses. She asked if the policy language would prohibit things like a restaurant or other public use that might be considered not exactly water-related. Mr. Paine said the language refers to the priorities expressed in the Shoreline Management Act and the WAC. Water-dependent is first, water-related is second, and water enjoyment, which is where restaurants typically come is, is third.

Commissioner Hamlin referred to 3.B.1.c paragraph 5 and suggested “accept” should read “except.” He suggested the balance of the policy appears to prohibit boats from being on the

water year round. Mr. Paine explained that the policy is based on an existing city policy that does not permit the dead storage of watercraft. However, “water ward” should be changed to “landward.” He added that the policy is intended to prevent the storage of boats on the beach.

Commissioner Ferris suggested the policy language as written could be interpreted to mean boats cannot be parked water ward of the shoreline to serve as a breakwater.

Commissioner Himebaugh called attention to policy SH-93 and policy SH-101, both of which address the issue of restoration, and suggested the city should be very careful in distinguishing where the policies encourage restoration and where they require restoration. Mr. Ingram allowed that the guidelines make a clear distinction between mitigation and restoration and the policy language should do the same. The policies should also allow and encourage where appropriate those who want to do restoration.

Motion to extend the meeting beyond 10:00 p.m. was made by Commissioner Ferris. Second was by Commissioner Mathews and the motion carried unanimously.

Mr. Paine commented that the draft contains too many policies. He said staff intends to pare the down to just the appropriate ones.

8. OTHER BUSINESS

Mr. Ingram said one of the potential dates for the annual Commission retreat is June 23. If that date is selected, the agenda items for that date will be shifted.

9. PUBLIC COMMENT

Ms. Anita Skoog Neil, 9302 SE Shoreland Drive, commented that the organization of Attachment 1 improves on the disorganized nature of the initial draft. The designations are in Chapter 2, but it is necessary to go to other chapters to gain the overall pictures. She said she is solidly opposed to the transfer of rights issue. There is no reason for people on the water to pay for benefits that can be accrued in a place like Bellfield. If something benefits everyone, everyone should participate in the cost. It is too premature to be narrowing down the options, but when they are determined the customer should be permitted the leeway of selecting the right option. She said she has an accessory dwelling unit that is 35 feet from the ordinary high water mark, and if it burns down she will not be allowed to rebuild it unless there is an option included on the list. More time should be spent in reviewing the policies even if it means resetting the deadline.

Mr. Dallas Evans, 2254 West Lake Sammamish Parkway, suggested that Mr. Paine is an idealist. Too often his answers are wishy washy, and that is frustrating. There are structures located 50 to 75 feet back from the water’s edge that should not be called bulkheads. The Department of Ecology and the WAC both define a bulkhead as a structure at the water’s edge, and that definition was in place well before the study conducted by The Watershed Company. There just is no data backing the notion that that study is valid.

Mr. Brian Parks, 16011 SE 16th Street, agreed that some of the replies from staff have included only half truths. With regard to the ordinary high water mark, there is confusion only in the fact that the city’s FEMA map shows the more recent numbering system and the elevation of 265 feet, while the federal FEMA map shows an elevation of 261 feet. Two different systems are used for the same FEMA map. Staff claims there will be no affect on Phantom Lake property owners because the houses are set back so far, but the proposed setback will in fact regulate what

can be done with the properties. Adding more regulations will take away value.

Mr. Dwight Martin, 5101 East Lake Sammamish Parkway, said the issues of setbacks and nonconformity are very important to him as a builder and to his clients. He said he was surprised to hear the Commission provide staff with specific direction with regard to setback numbers at such an early stage in the process. Option B with the flexibilities of Option A would be a better approach. The Commission should remain open to additional ideas as they come up. The flexibility contained in the existing code is exemplary and should not go away. Nonconformity can be a real problem for property owners and should therefore be avoided. Vertical additions should not be deemed to be an increase to a nonconforming structure. The Department of Ecology does not require buffers on Lake Sammamish, the proof of which is in Redmond's approved code.

Mr. Richard Johnson, 2824 West Lake Sammamish Parkway SE, said where the ordinary high water mark is set is important. Raising it by only one foot can change the depth of some properties by as much as ten or fifteen feet and could be the difference between being in compliance or out of compliance. Those impacts should be carefully considered.

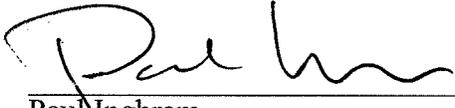
Commissioner Ferris asked the staff to take some time at an upcoming meeting to make some sense of the ordinary high water mark issue.

10. NEXT PLANNING COMMISSION MEETING

A. June 23, 2010

11. ADJOURN

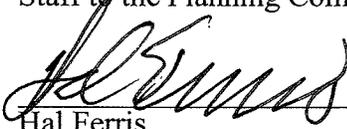
Chair Sheffels adjourned the meeting at 10:17 p.m.



Paul Inghram
Staff to the Planning Commission

10/20/2010

Date



Hal Ferris
Chair of the Planning Commission

10/20/2010

Date



MEMORANDUM

DATE: July 7, 2010

TO: Chair Sheffels and Members of the Planning Commission

FROM: Michael Paine, Environmental Planning Manager, 452-2739
Heidi Bedwell, Associate Planner, 452-4862
David Pyle, Senior Planner, 452-2973

SUBJECT: Shoreline Master Program, Presentation on Phantom Lake

At the July 14 study session, staff from the Utilities Department will provide a presentation on Phantom Lake including the City's past and current management actions and involvement with community members to address water quality and lake elevation issues. This briefing is being provided for informational purposes to the commission and public in response to questions raised during ongoing review of the Shoreline Master Program Update. No direction is requested at this time. Utilities intends to subsequently meet with the Phantom Lake homeowners to review the issues and determine if there is interest in restarting a broader conversation about forming a Lake Management District to implement additional lake management actions. It is hoped that this step will give the Commission confidence that many of the issues raised by community members regarding lake elevation, water quality, and lake management will be appropriately addressed in another forum given that most of these issues are outside the scope of the SMP update.

BACKGROUND

At the June 9 study session, staff presented a discussion on options for designating an appropriate shoreline setback on residential property. The objective was to obtain direction from the Commission on the broad outline of a desired approach. In addition to current code, two options were outlined.

The first, dubbed Option A, combined a 50-foot setback—duplicating the dimensions and some of the protection of current code—with a required landscape standard for new construction and major redevelopment. An options menu was included under which a property owner could move closer to the water's edge by carrying out certain rehabilitative projects such as additional planting, structure removal, use of low impact development techniques, preservation of other habitat on site, and bulkhead removal or modification. Other incentives could also be added to this list. A management area, located within 25 feet of ordinary high water and divided between

a recreation zone and a landscape reserve, was identified as providing a balance between demand for recreational use and ecological protection.

Option B combined a 35-foot “bright-line” setback with little or no flexibility to go beyond this line. The focus was on predictability for property owners and ease of use. A variance would be required to build past the required setback. As in Option A, a management area, divided between a recreation zone and landscape reserve, was introduced.

In the discussion that followed, Commission members asked a number of questions having to do with Phantom Lake. Chair Sheffels expressed concern about creating another layer of regulations without addressing many of the basic questions asked by homeowners regarding lake elevation and water quality. She suggested that a full presentation on Phantom Lake would be very helpful. Commissioners Turner and Hamlin expressed similar views, with Commissioner Turner concerned that new shoreline rules would be more restrictive than those currently existing. Tonight’s presentation and the commitment by the Utilities Department to engage in a Phantom Lake community discussion regarding these issues should help to remedy these concerns.

Commissioner Turner and Ferris also raised concerns regarding the absence of a clear link between the negative impact of urban development at the watershed scale to ecological function and the actual contribution of any particular shoreline property owner to that degradation. To address this issue, Commission Ferris asked that staff develop a matrix of key ecological functions important to overall lake health and affected by site development. He proposed that staff then assign a relative weight to each function with the objective of using this table to determine how a proposed development might impact ecological function. Staff committed to looking at this approach as a potential tool to support application of the options menu. This effort would accompany further discussion on setbacks when this issue comes back to the Commission in the fall.

Further discussion focused on providing staff direction on which setback option represented a preferred approach. On balance, the Commission favored Option A with some additions. Commissioner Mathews expressed interest in seeing the “footprint rule,” as used in current code, added to the mix. Others wanted to add the maximum flexibility provided by a scientific site-specific study to justify deviation from the prescriptive standard—also a key component of existing code. Chair Sheffels and Commissioner Ferris also noted their desire to see a fee-in-lieu approach used to ensure mitigation occurs in sites where it will do the most good.

Staff committed to coming back at a later date in the fall with a more refined version of Option A reflecting the Commission’s desire to optimize elements of current code that favor site-specific flexibility with an option built around predefined options.

NEXT STEPS

With this special topic discussion on Phantom Lake, staff will provide information to the Commission about the range and complexity of issues regarding management of this lake. No specific direction is required, but it is hoped that the information provided will make the Planning Commission more comfortable with staff proceeding to refine regulations and policies specific to Phantom Lake given the commitment of Utilities and DSD to meet with community members outside the context of the SMP update.

Commission meetings that follow this summer will focus on the specific topics previously identified and staff will work towards refining those related sections of the draft SMP as the processes progress. This process could result in a revised draft being released in October with a formal review of the draft to occur at a public hearing in November. On July 28, staff will introduce two topics: residential piers and shoreline stabilization. The proposal for piers has been substantially reworked to reflect staff interest in simplification, comments from contractors, and concerns raised by the community. We are likewise reviewing our current stabilization rules.

Table 1: The Tentative Work Schedule for the SMP Update

June	Introduce working draft Continue review working draft and identify target areas for detailed review Setbacks
July	Phantom Lake, Piers and shoreline stabilization
September	Introduce nonconformities Marinas Introduce vegetation conservation
October	Finalize Setbacks and residential policies Introduce revised draft Continue review of revised draft
November	Public Hearing on revised draft Make recommendation to City Council

CITY OF BELLEVUE
BELLEVUE PLANNING COMMISSION
STUDY SESSION MINUTES

July 14, 2010
6:30 p.m.

Bellevue City Hall
City Council Conference Room 1E-113

COMMISSIONERS PRESENT: Chair Sheffels, Commissioners Ferris, Hamlin, Himebaugh, Lai, Mathews, Turner

COMMISSIONERS ABSENT: None

STAFF PRESENT: Nicholas Matz, Department of Planning and Community Development; Michael Paine, Heidi Bedwell, David Pyle, Development Services Department; Phyllis Varner, Brian Ward, Utilities Department

GUEST SPEAKERS: None

RECORDING SECRETARY: Gerry Lindsay

1. CALL TO ORDER

The meeting was called to order at 6:34 p.m. by Chair Sheffels who presided.

2. ROLL CALL

Upon the call of the roll, all Commissioners were present.

3. PUBLIC COMMENT

Mr. Jerry Baruffy, 9236 SE Shoreland Drive, stated that in addition to attending the Planning Commission meetings in Bellevue on the Shoreline Master Program topic, he has been attending the Planning Commission meetings in Tukwila where the same topic has been addressed. In Tukwila, those who addressed the Planning Commission and voiced concerns were emailed notice of when those concerns would be specifically addressed. He said he has attended 16 meetings in Bellevue and to date nothing has changed. Shoreline property owners are vehemently opposed to the draft plan, yet the issues are not being addressed and no one is saying why. Staff seem to have their own vision and seem unwilling to listen to the shoreline property owners. Some of the information presented by the experts brought in by staff has been irrelevant, specious and embarrassing. The experts brought in by the property owners, on the other hand, had very specific and relevant information.

4. APPROVAL OF AGENDA

The agenda as submitted was approved by consensus.

5. COMMUNICATIONS FROM CITY COUNCIL, COMMUNITY COUNCILS, BOARDS AND COMMISSIONS – None

6. STAFF REPORTS

Senior Planner Nicholas Matz commented that an incorrect subject heading had inadvertently been included in the packet material. On page 1, the heading “Introduction to the Eastgate/I-90 Land Use and Transportation Project” should in fact read “Shoreline Master Program Presentation on Phantom Lake.”

8. STUDY SESSION

A. Shoreline Master Program Update

Environmental Planning Manager Michael Paine noted that in previous meetings there have been a lot of issues raised around Phantom Lake, particularly with the lake level and water quality issues that are functions of the much larger watershed and which cannot be addressed through the Shoreline Master Program. He said he hoped the presentation by Utilities staff on Phantom Lake would allay concerns with respect to the Shoreline Master Program.

Phyllis Varner, NPDES Permit Coordinator, said Utilities staff have agreed to meet with the Phantom Lake homeowners to review their issues and to determine if there is interest in restarting a broader conversation about forming a lake management district to implement additional lake management activities.

Phantom Lake is located in East Bellevue to the north of I-90 and west of Lake Sammamish. Larson Lake is located to the northwest of Phantom Lake. Originally, Phantom Lake and Larson Lake were a single lake formed by a melting glacier. Over time vegetation washed into the lake and decayed, and the lake filled in to a depth ranging from five feet to twenty-one feet. Eventually, a shallow area filled in forming two separate lakes. The area between the two lakes is called the Lake Hills Greenbelt.

Ms. Varner said the geologic formation of the two lakes accounts for why they are naturally nutrient rich. There is a lot of phosphorus input from the peat soils that underlie the lakes; they are naturally low in water clarity and experience low oxygen levels.

In 1890 a farmer changed the outlet of Phantom Lake from Lake Washington to Lake Sammamish by hand digging and blasting a channel. The result was a lowered lake level and the formation of wetlands around the lake and between the lakes. The majority of residential area in the watershed was developed prior to any storm detention and water quality requirements. The I-90 Business Park development began in the 1980s in an area that was formally the site of an airfield and a King County landfill. In 1985, in response to concerns about the quality of the lake, the city secured grants to fund lake studies and capital projects aimed at improving water quality.

Phantom Lake covers 63 acres and has a maximum depth of 54 feet and a median depth of 21 feet. It has 7392 feet of shoreline. The beneficial uses include aesthetics, wildlife, fish and recreation. The lines for the properties that surround the lake include the lake bottom, making all of it privately owned. The water is designated water of the state. Public access to the lake is a relatively recent thing; in 1985 when the city secured grants to conduct lake management studies and projects, one of the conditions was for public access.

Ms. Varner said the list of questions raised during the Shoreline Master Program process with regard to Phantom Lake include: has the lake level measuring system changed?; are the water quality goals being met?; and what is the city’s role with regard to lake management?

Brian Ward, Senior Engineer, Watershed Planning Division, Department of Utilities, explained

the concept of vertical datum. He said anytime someone talks about the elevation of a structure or mountain the reference is to above mean sea level. A vertical datum attempts to set the zero mark for mean sea level. In 1988 a new vertical datum was established and is referred to as NAVD88, or the North American Vertical Datum; the previous vertical datum was established in 1929 and is referred to as NGVD29, or National Geodetic Vertical Datum. Between 1929 and 1988 there were a great deal more sea level zero marks gathered all around the country. The adoption of NAVD88 shifted the vertical zero mark by plus 3.58 feet.

Continuing, Mr. Ward said if one goes to the library and looks up the FEMA flood insurance rate map, the numbers shown will be based on NGVD29. All of the elevations shown in the 1987 Phantom Lake management report are based on the 1929 vertical datum. Whenever lake elevations are discussed, the first thing that must be done is to establish which vertical datum is being used. All references to NGVD29 can be converted to NAVD88 by adding 3.58 feet.

With regard to the question of whether or not lake level ranges have changed, Mr. Ward said the utilities department has not been monitoring Phantom Lake with an eye on answering a trend analysis question. The department has collected some data, but it does not represent a continuous record prior to 2000.

References have been made to the data collection work done by Don Miles, a Phantom Lake resident who collected water levels off his dock over a period of time. The highest mark he noted was 262.5 when converted to NAVD88.

The city has a probe located in Phantom Lake that hourly records the lake level and electronically sends it to the Bellevue Service Center where it is logged. Beginning in 2007, the calibration of the instrument and the software used to collect the data were upgraded; the data collected since has a much higher degree of confidence.

The hundred year flood plain elevation was established by FEMA in 1978 and has not changed, other than being normalized to the NAVD88 standard. The cutoff berm effectively separates Larson Lake from the Kelsey Creek drainage basin. However, during a hundred year storm event, or any significantly large storm event, the lake drainage returns to its historic function by crossing over the berm and draining into the Kelsey Creek basin. Accordingly, the flood plain is depicted as extending north toward Larson Lake.

A graph of the December 3, 2007, storm event was shared with the Commissioners. Mr. Ward noted that the level of Phantom Lake rose quickly as it received runoff from the lake's watershed. During the periods of time when the rain slacked off, the level of the lake gradually decreased. The average lake level during the event was 261.2 NAVD88 as reported by the probe.

Ms. Varner said the water quality goals developed by a consultant were established as part of the Phantom Lake studies and water quality improvements. The goals focus on phosphorus, which is the single most important factor in feeding algal blooms on the lake. The city monitors the quality of the lake monthly and has done so since 1990; additional monitoring is conducted as warranted. For the period 2005-2009, the water clarity goal has been exceeded 100 percent of the time. During the same period total phosphorus in the lake, both from internal and external sources, was better than the goal 80 percent of the time, and measurements of Chlorophyll A, the green pigment in plants produced through photosynthesis, were better than the goal 60 percent of the time.

The goal for depth of lake clarity is two meters (6.5 feet) or greater. The average for 2005-2009

was 3.3 meters (10.8 feet). The earliest lake data is from a study done between June and September in 1971. Samples taken during that study indicate lake clarity was worse than they are currently, and the phosphorus levels were higher than they are currently. The phosphorus goal is 2.5 micrograms/liter or less, and the average of the 2005-2009 data was 18.9; the average from the 1971 study was 46.5 micrograms/liter. The highest reading in the 2005-2009 period was 35 micrograms/liter, and the high value from the 1971 study was 80 micrograms/liter.

Commissioner Lai asked what factors influence phosphorus levels in the lake. Ms. Varner said the levels change seasonally and include seepage through the peat soils beneath the lake as well as inflow from runoff. The largest source of phosphorus in Phantom Lake is the lake sediment. The second highest source is the highly disturbed wetlands soils. Normally wetlands are sinks for pollutants, but once they are disturbed they become a source. The hydraulic gradient towards the lake means the wetlands feed into the lake. Runoff from the watershed in general certainly adds to the phosphorus levels, as does runoff from the immediate residential and commercial areas that flows into the lake. A variety of measures were implemented as part of the lake management improvement program; some of them have worked, and some have not.

Commissioner Ferris commented that the Clean Water Act was implemented in 1974. Prior to that time there could have been mostly septic tanks in use around the lake and in the basin. Connecting homes to the sanitary sewer system could have contributed to cleaning up the lake. Many local residents have highlighted the degradation that has occurred since the office park was developed. He suggested it would be helpful to compare the current water quality data with the data collected prior to the development of the commercial area south of Phantom Lake. Ms. Varner said the first data collected after the 1971 data was collected in 1985. The commercial area began development in the early 1980s, prior to the 1985 data. Commissioner Ferris said he would like to see the comparison made using the best available data.

Commissioner Lai said he would appreciate knowing a little more about how the goals were set. Ms. Varner shared that the lake study was done to bring about improvements. There were no specific measurable goals established, however, relative to how good is good enough. Citizens raised concerns about algal blooms, and a second watershed committee was set up by the City Council to focus on developing a lake management district. Setting measurable goals was a part of that process. The consultant hired to work with the city evaluated all of the data collected to that point, looked at the natural conditions, reviewed what had been done by the previous consultant, and worked with the committee to identify goals reflecting the meso-eutrophic lake conditions. The goals were adopted and are used to monitor conditions.

Commissioner Lai suggested that some revisions to the goals might be needed given that the algal level goal is being met only 60 percent of the time and the water clarity goal is being met 100 percent of the time.

Chair Sheffels asked if the algal conditions in the lake contribute to health problems. Ms. Varner said blue-green algae is very common in lakes, especially those with high nutrient levels. Blue-green algae is present in Phantom Lake and in fact in most lakes in the Northwest. Blue-green algae can produce toxins, though scientists do not yet know why. The determination of whether or not the algae is producing toxins requires toxicity testing. Both the Department of Ecology and the Department of Public Health take the lead, and their general recommendation is that where blue-green algae blooms are noted people and pets should stay out of the water. Water samples from Phantom Lake have been taken periodically since the 1990s in response to citizen requests; to date, none of the samples have tested positive for toxins.

Ms. Varner noted that the Storm and Surface Water Utility provides stormwater management

services in all 26 basins within the city limits. The services are paid for through storm and surface water rates. If property owners want more services, they must pay for them. One way that is done is through special benefit districts. Another option is through the formation of lake management districts.

Commissioner Ferris asked what percentage of stakeholders must agree to be part of a lake management district, and asked if those who do not agree are exempt from assessments. Ms. Varner said votes are allocated on the basis of one for each dollar of assessment, and the city does not vote. A simple majority is all that is required for passage, based on the total number of votes.

In 1985 the city received \$1.6 million in grants and added to that \$500,000 to fund the Phantom Lake and Larson Lake studies and projects. The improvements were put in in 1990 and that was followed by two years of post monitoring. Residents came forward after an algal bloom in 1995 and indicated they wanted to see additional management activities carried out on Phantom Lake. All grant dollars had dried out by then, so the City Council passed a resolution that said future city funding of Phantom Lake watershed studies and projects must be contingent on the implementation of a lake management district in which all property owners within the district would participate, including the city as one of the property owners. The Council funded a consultant to work with the Phantom Lake watershed committee to assess the improvements that had been made with the grant dollars and to determine what changes, if any, should be made. The consultant and the committee identified \$1.4 million in improvements over a seven-year period, including alum treatment.

The formation of a lake management district was discussed with the watershed as the boundary line, plus another area that was close enough for its residents to walk to the lake and enjoy it. The issue was reviewed by the Environmental Services Commission, the Council identified the rates, and the rates were published in the newspaper. That triggered an outcry from residents who argued against being levied fees for a lake that had been private and inaccessible to them for 30 years. The assessment was subsequently reevaluated, and the Council directed the committee to send around a petition showing sufficient support for the lake management district. At the time the lake quality was looking better. An aerator was in operation, though there were conflicting reports from experts about its efficiency. The committee ultimately concluded operation of the aerator should be discontinued, and voted not to go forward with the formation of a lake management district. The funds that had been set aside by the Council for the petition drive were used to conduct a one-time maintenance on the outlet channel. The decision was made to manage the lake for aesthetics only, which is why the lake water quality goals are based on phosphorous.

Since the decision not to go forward with a lake management district, the city has continued to monitor, operate and maintain the improvements put in using the grant dollars. The city's official position continues to be that any additional activities relative to lake management will need to be done through the formation of a lake management district.

Ms. Varner said as a result of issues raised during the Shoreline Master Program update process, Utilities staff have agreed to meet with the Phantom Lake homeowners to determine if there is interest in restarting the conversation about forming a lake management district.

With regard to the outlet channel, Ms. Varner said the one-time cleaning done by the city removed sediment from it, and the action made a difference in terms of lowering the lake level to some degree.

Commissioner Ferris suggested that Phantom Lake, while small, is symbolic of the bigger issues being dealt with as part of the Shoreline Master Program update. The charge given to the Commission is to deal with the area 200 feet landward from the shoreline. The quality of the water is impacted to a large degree by the entire basin that feeds the lake, which is a much bigger problem. The Commission could look at applying regulations affecting the property owners along the edge of the lake as a way of improving the ecological functions, but that solution may not in fact yield the desired results given the bigger picture. In the case of Phantom Lake, the only way to get to the heart of the issue will be through the creation of a lake management district. The Commission could include in its transmittal to the Council a statement to the effect that some issues remain unresolved given that they fall outside the jurisdiction of the Commission relative to the Shoreline Master Program update, and that the Council should address them.

Chair Sheffels asked Ms. Varner to keep the Commission updated with regard to the talks between Utilities staff and the Phantom Lake property owners.

Chair Sheffels opened the floor to comments from the public regarding Phantom Lake.

Mr. Merwin Hanniburg, 16114 SE 24th Street, said his property lies on the south shore of Phantom Lake. He said the first 100 feet of his property from the lakeshore landward is almost completely level and only a small amount higher in elevation than the lake itself. Nearly 20 years ago in talks with the city it was noted that the property would flood should the lake level rise. At the time the city indicated the lake was going to be maintained at a level below the level of the property. The property does flood occasionally as a result of large storm events, which is to be expected. However, initially flood waters receded rather quickly, whereas now the property is under water for most of the winter months, as is the dock. It was necessary to raise the area in front of the dock to make it accessible. Many years ago the city installed a weir on the lake which worked well to keep the lake at a higher level during the summer months. That also helped to keep the water quality higher. The weir apparently has caused the lake outflow to slow, resulting in a buildup of sediment in the outlet. That problem should be addressed in that it affects every property around the lake. If the FEMA flood level is increased, properties around the lake will be impacted by having to obtain expensive flood insurance. If the city requires a natural area along the lakeshore, it will be necessary to define what plants are natural and what plants are not, and that could be problematic.

Commissioner Lai asked Mr. Hanniburg about the degree to which his property is under water during the winter months. The response given was that the water level often increases by as much as eight inches.

Mr. Bill Rahr, 16509 SE 18th Street, said he has lived on his Phantom Lake lakefront property since the mid 50s. He noted that after 1961 the city took over the Fish and Game property and had to comply with the judge's order to control invitees onto the lake. The city met with the lake property owners and in about 1985 developed a plan to manage the invitees onto the lake. Of greater concern is the identified FEMA flood plain and its questionable showing on the maps. King County uses the old standard; the newer maps show the lake level raised by some three and a half feet. What is not known is whether or not FEMA has doctored its plan and restructured it to the shoreline of Phantom Lake with geophysical elevations from very early surveys. The only way to accurately show the flood plain is through the use of GPS technology matched to either the NGVD29 or the NAVD88. Doing that work would result in a lessening of the legal ramifications associated with the FEMA flood plain. Beyond that, however, in the plan to restore the lake, the lake level was set so that it would not flood 156th Avenue SE. That plan has been successful in that the street has not flooded since, but the lake level was allowed to rise

rather than to drain out to Larson Lake, which is four feet eight inches lower than Phantom Lake. The effort to keep the street from flooding has resulted in the raising of the level of Phantom Lake and a change to the associated flood plain. The work being done on the Shoreline Master Program is worrisome. There is some confusion with regard to exactly what the ordinary high water mark is; where that line is drawn is of prime concern to all property owners along the Phantom Lake shoreline because it defines where the 200-foot setback starts.

Ms. Cheryl Every, 1845 164th Avenue SE, said her property is on the east side of the lake and her home is some 80 feet from the lake. She said she has lived on the property since 1966 when the lake level was much lower. The lake has deteriorated over the years; the crappie and the catfish are gone, as are the tadpoles. In past years, when the lake level rose too high, property owners were permitted to go clean out the outflow to lower the lake level, but actions have been taken since by the city to keep the water in the lake. She said at one point the water got so high at least two feet of her property was under water. During a large storm event, the water came within ten feet of the house. A very large tree growing close to the old shoreline fell over because its roots were waterlogged.

Ms. Alfie Rahr, 16509 SE 18th Street, said in the 60s when she and her husband moved to the lake it had a very viable fishery. She said her property has the inlet to Phantom Lake that drains the 150-acre paved-over business district. The original grass swale was sufficient to handle the small amount of water it carried into the lake. It has all been rechanneled and the flow into the lake reaches as high as 42 cubic feet per minute, all coming from a source that is not clean. Construction of the business park in the 1980s had an immediate impact on Phantom Lake in the form of algae blooms and the like. The study done in 1971 was done by a student who sampled the water over a period of three months. His report failed to mention high phosphorous pollution readings on the south end of the lake, and e-coli resulting from a sewer lift station that every so often failed, allowing sewage to spill into the lake. She said her 200-feet of waterfront has been developed as a habitat for wildlife, and it has been open to the public many times for people to come and learn from. The increased water level, however, is ruining everything. Old and well-established trees of every sort are dying. A solution must be found because things cannot go on as they are. The lake now serves as little more than the detention pond for the I-90 business park.

Mr. Allen Aluff, 1426 163rd Place SE, said his property is on the south end of Phantom Lake. He recommended slowing down the process so all of the details can be fully explained and understood. A lake management district is probably not what is needed. What is really needed is better maintenance and removal of the weir so the water level can drop. All of the setbacks are determined by the level of the water in the lake. The I-90 business park clearly has harmed the lake and increased the water level, but the city says it cannot go back and ask them to fix the problem given that they met all applicable standards in place at the time of development. The lake property owners must therefore shoulder the problem. More development is being considered for the commercial area, yet the city does nothing to maintain the outlet so that the water level will not continue to rise. To put an assessment on the property owners to make up for a lack of attention to detail by the city would be inappropriate. The high water level is killing trees all along the shoreline. The water level readings for December 2009 were high because of a beaver dam; the documents do not show anomalies of that sort.

Mr. Brian Parks, 16011 SE 16th Street, said the Shoreline Master Program-relevant aspects of the Utilities presentation was all included in his previous reports to the Commission. He said both Lake Sammamish and Phantom Lake have outlet weirs, and Lake Washington has locks. None of them are naturally occurring; they are lake management efforts. It does not require an engineering degree to know that impeding outlet flow with a restriction will increase

sedimentation buildup and require routine maintenance. Absent that maintenance, a new equilibrium will gradually be established. By cross referencing the different datum methods, it can be seen that the previous high water levels are now the average lake levels. Olympia has established the Shoreline Management Act rules that everyone must play by. Their rules include basing decisions on the best available science, and on enhancement measures and baselines established in 1971. The staff argues that the city cannot help with the Phantom Lake outlet maintenance or beaver dams because the property and lake is privately owned. Utilities staff suggests that a lake management district is needed; that will result in more tax dollars from the property owners and will give more management power to the city, all in the face of many unfulfilled promises over the years. The homes and yards of the lakefront property owners are private, yet anyone can apparently come to Phantom Lake and put in a boat or swim in the water, or fish from the shoreline of any property owner without the government seeing any problem. The Bellevue utility bills received by the property owners say that storm and surface water services include flood control and management of stream and lakes. The city regulates what the property owners can do. The fact is the Phantom Lake property owners face stricter proposed regulations than the property owners on either Lake Washington or Lake Sammamish. Phantom Lake property owners collectively pay the taxes on 64 acres of submerged lands for years; the city gets a portion of that amount and supposedly uses some of it for flood control, but not for Phantom Lake residents. The city owns more than 25 percent of the shoreline lot acreage and more than 20 percent of the linear shoreline; that does not make it sound like Phantom Lake is a private lake. The Shoreline Master Program is supposed to be based on the 1971 conditions, yet in 1984 the city doubled the inlet culvert capacity, and in 1985 a weir was installed at the lake's original western outlet. In about 1990 another cement weir was placed in the main eastern drainage ditch, which is unofficially referred to as Phantom Creek. About half of the outlet ditch to Weowna Park is not even owned by Phantom Lake residents. A little sediment removal every other year and the occasional removal of a beaver dam would be reasonable for the city to carry out. The ordinary high water mark should be based on the lake level with the outlet cleaned and fully operational. Income from the utility billings should pay for the maintenance work. Most of the money spent on improving conditions in the lake went toward keeping 156th Avenue SE from flooding; that work and the installation of the weirs has brought about the increased lake level problems. Those actions should be mitigated by the city. Part of the problem appears to be that the upper half of the eastern main outlet ravine is called a private ditch and classified as drainage and is not mapped as part of the shoreline overlay district, while the lower half called Phantom Creek is classified as a Class F stream and a salmonid creek. The city cannot have it both ways. The Commission should include in the Shoreline Master Program a call for the removal of the weirs, regular outlet maintenance, and establishment of the ordinary high water mark at 257 NGVD29, which is 260.6 NAVD88.

Chair Sheffels asked if the weirs are adjustable. Mr. Parks said the gate has been removed from the cement weir, leaving a blockage with a notch out of it. The other weir is only an earthen berm.

Ms. Jill Moore, 16604 SE 17th Place, said her home is on Phantom Creek, which is the outflow for Phantom Lake. She said the city made a mistake in putting a berm on the other side of the lake and not letting the water out. The lake has steadily been increasing in depth, resulting in the loss of property. She said she would gladly give her permission for the city to come and take out the cement weir. That will help keep the lake at the right level. The increasing water level is killing trees along the shoreline. There is a large cedar tree that is showing signs of ill health; if it falls, it will block the creek and thus the outflow to Phantom Lake. The city must listen and do something to help the Phantom Lake property owners. The culvert on SE 17th Place is too small to accommodate the outflow of the lake; it needs to be increased in size.

Chair Sheffels allowed 40 minutes for a presentation by representatives of Washington Sensible Shorelines Association regarding the Shoreline Master Program update process.

Dr. Marty Nizlek, 312 West Lake Sammamish Parkway NE, said the fact that the Commission would be taking off the month of August would leave only a short timeline in the fall of the year to wrap things up. The draft code is very vague, and the Washington Sensible Shorelines Association members recently spent more than 100 hours focused on it and conducting analysis of high water situations. He said the group would provide a formal response to the draft document at the next Commission meeting.

Ms. Jill Wagner, 2236 West Lake Sammamish Parkway SE, said the Shoreline Master Program should result in a program that is clear, concise, effective, consistent and equitable. In addition, it should be compliant with the Shoreline Management Act and the Washington Administrative Code guidelines. It should recognize that shorelines are not critical areas simply because they are shorelines. The Shoreline Master Program should protect existing development and private property rights, be founded on lake-specific peer-reviewed science, and recognize that Bellevue's lake shorelines are essentially fully developed. The Shoreline Master Program should recognize that Bellevue's shoreline acreage is only a small proportion of the watershed and thus contributes but a small proportion of the impacts to the lakes. The document should address non-shoreline upland impacts to the lakes and insist that the impacts not be treated in an isolated or token fashion. The document should not disproportionately penalize a minority of residents; it should offer incentives and education to broaden the reach of the program. The Shoreline Master Program should assure that the city will be held to the same standards and requirements as all residents.

Mr. Mike Lunenschloss, 2242 West Lake Sammamish Parkway SE, addressed the issue of protecting existing properties. He observed that a tremendous investment has been made by the lakeshore property owners. The investments must be protected by allowing homeowners to maintain their properties. The Shoreline Master Program should allow for the normal maintenance and repair exemptions set forth in state regulations. The current city code limits the maintenance and repair exemption for nonconforming development, shoreline stabilization and moorage. The limitations are not justified. State regulations recognize that replacement may be a common method of maintenance and repair; the city needs to strengthen protections to allow property owners to maintain and repair their structures under broad circumstances without imposing obstacles. The principle of protecting existing property should extend to piers, docks, bulkheads and appurtenant structures. The fact that a disabled shoreline resident of Bellevue has had to spend three years and thousands of dollars to get a permit to allow disabled access on his own dock is an absolute disgrace. Protections should also apply on a larger scale to elements unique to the city's character. Nonresidential properties such as Vasa Park, Bellefield Office Park and Meydenbauer Bay are all part of the character and should be maintained and protected. Vasa Park has provided recreational opportunities for 85 years, and they have paid taxes all along. Single family residences are exempt under the Shoreline Management Act, and expansions of such residences are also exempt. No additional permitting requirements should be imposed beyond normal building permits. The city's code currently contains severe limitations on even minor expansions of existing residences within 50 feet of the ordinary high water mark, even though a substantial number of homes have been legally constructed within that area and the homeowners have a reasonable expectation of expansion options. Private property rights are threatened if the Shoreline Master Program contains any language that labels existing structures as nonconforming. Any code provisions creating nonconforming developments must be avoided. The goal must be to make it clear that all existing buildings, properties, features and developments will not be declared nonconforming.

Dr. Nizlek suggested that the shoreline designations represent a positive step in the direction of consistent regulations. However, each designation should have its own applicable code to make it readable and understandable. With regard to no net loss of ecological functions, he said mitigation should be for actual harm, not for some conjectural hypothesis; the code should not impose restoration and enhancement. Where the line is drawn for the ordinary high water mark is of prime concern to waterfront property owners. Any arbitrary shifting of the line is not appropriate. The datum for Lake Sammamish was established in the 1970s by the Corps of Engineers. Since then, the level of the lake has been allowed to move arbitrarily, not naturally, to a higher state, and that is not appropriate.

Mr. Dallas Evans, 2254 West Lake Sammamish Parkway SE, said changes are needed to the current provisions that will exempt the maintenance and repair of existing docks. It is far too cumbersome to go through the required process to make small changes to a dock. The Army Corps of Engineers already has the last word. Embedding language into the Bellevue code that only duplicates other jurisdictions makes no sense and will only create more problems. The city should not seek to take steps that go beyond what the National Marine Fisheries Service requires. Establishing the size and the configuration of piers and docks should be done by the Corps of Engineers based on localized conditions. With regard to bulkheads, he said by definition they are located at or below the ordinary high water mark. The structures serve multiple purposes but primarily serve to protect existing shoreline development. The current code is written to allow the department director to make decisions on a case-by-case basis as to whether or not a bulkhead should be removed. There are no prescriptive guidelines in the code. Upland abutments, including rockeries, that lie above the ordinary high water mark are not bulkheads or armoring; they are often constructed for aesthetic purposes only. If lake levels are allowed to rise over time, however, such structures could become confused with bulkheads; regulations that will keep that from happening will be very important. Vegetation buffers and conservation areas should be eliminated altogether. The state does not mandate them, and none of the scientific information brought before the Commission to date even applies to the local lakes. The setback should be established at 25 feet, which is where it has been for many years without negatively affecting the salmon runs. The salmon run when the lakes are at their lowest level, so any buffer put in will have no impact in any case. During the winter months when the water level is at its highest, the Bellevue shoreline of Lake Sammamish takes the brunt of the storms; anything planted close to the shoreline will only be wiped out before it can grow to maturity. Bellevue's lake shorelines are mostly fully developed, so imposing buffer zones will have little effect. Native growth requirements within 200 feet of the shoreline will also serve no useful purpose.

Mr. Scott Sheffield, 2220 West Lake Sammamish Parkway, said most citizens and taxpayers strive to assure that all adopted programs have a net benefit and are equitable. The science upon which the current regulations were adopted lacked peer review, was often misquoted, or had conclusions completely reversed. No methodologies have been established to measure the specific objectives of the Shoreline Master Program. Given the relatively small portion of the watershed that Bellevue shorelines represent, it is imperative that equity exist within the program. A systematic equitable approach must consider all impacts, not just shoreline impacts. There is a need for a task force to deal with lake and basin issues. Local residents know the shorelines intimately; the city staff do not. Early and regular involvement of Bellevue residents will avoid protracted and costly outcomes. The city should play a partnership role along with residents to achieve program goals and administer the program. The city cannot exempt itself from the requirements it imposes on its residents. The city should not consider a program comparable to the transfer of development rights, allowing for the barter or exchange of ecological function. Such programs are administratively complex, litigation prone, and fraught with abuse and misuse. Where ecological functions exist, the Shoreline Management Act calls for their protection, not for trading them away to an alternate location.

Ms. Anita Skoog-Neil, 9302 SE Shoreland Drive, noted that the staff memo included a background statement indicating that prior to 2006 the city's Shoreline Master Program included provisions for a 25-foot structure setback on all properties, and required all development to prepare a plan indicating methods for preserving shoreline vegetation and controlling erosion during and following construction. The memo also goes into why setbacks are necessary, stating that while there is little question that systemwide watershed impacts have the greatest impact on aquatic areas, there is still benefit to protecting the interface between the land and the water at the property scale to ensure no net loss of ecological function. Regulatory setbacks provide the best means to provide maintenance of the crucial connection between land and shore, and the habitat and water quality benefits that result. Moreover, setbacks buffer aquatic areas from the impacts associated with increased intensity of development. The Washington Sensible Shorelines Association believes that the health and condition of watersheds from the Cascades to Puget Sound has the greatest impact on function of lower aquatic areas. The city has not presented peer-reviewed science that identifies the need for an increase in private property setbacks separating land and water at the property scale. WSSA's proposed setbacks are sufficient to provide maintenance of the important connection between land and shore. Moreover, increasing intensity of development is not due to residential uses, but rather to the city's desire to expand commercial uses to the shoreline as the residential shorelines of Bellevue are fully developed.

In the staff memo, it is stated that setbacks are intended to protect the existing shoreline processes and functions, including shoreline habitat. WSSA holds that scientific evidence has not supported the validity of that presumption. Setbacks also serve to avoid damage from runoff and erosion, but most erosion damage comes from the water side of the high water mark, and most flooding is due to lack of property management of waterways and water levels. Staff says setbacks prevent excess nutrients from flowing into surface water, but studies of the nutrient runoff have not shown that a larger vegetative zone decreases the amount of nutrients flowing into the water; they likely add to the amount of nutrient runoff via plant decay. Staff holds that setbacks reduce inputs of pollutants found in oils, pesticides, herbicides and fertilizers, but the fact is the majority of pollution runoff is from city streets and upland locations. According to staff, setbacks constrain inputs of trace metals and foreign chemicals, but pollution flows into the lakes from city streets and upland locations. Setbacks supposedly ensure that new development will be adequately sited to avoid or minimize the need for shoreline stabilization, but property owners should be able to protect their properties from wind, water and wave-induced erosion, factors that have nothing to do with structure placement. Staff has stated that setbacks will preserve and enhance views of the water, but no property owner has a right to views crossing adjacent property lines. Preventing the permanent preclusion of restoration of shoreline functions and habitat with the overall goal of achieving new state requirements for no net loss is another reason cited by staff in favor of setbacks, but the city definition of restoration is not a reality, and the proposed policies and regulations exceed the goal of no net loss. Finally, staff has said that setbacks are needed to maintain the existing character and scenic quality of Bellevue's shoreline, but that goal can be attained by utilizing a 25-foot setback.

Ms. Laurie Lyford, address not given, provided the Commissioners with copies of the matrix with a column added titled the citizens' option.

Ms. Skoog-Neil said WSSA was recommending a 25-foot setback, and a prudent vegetation management approach.

Mr. Charlie Klinge, 11100 NE 8th Street, pointed out that staff as repeatedly said the bigger watershed issues cannot be addressed under the scope of the Shoreline Master Program update.

That is not, however, correct. Managing the weirs on Phantom Lake and addressing stormwater runoff into the lakes is totally within the purview of the city. He pointed out that the paper he wrote and provided to the Commission at an earlier meeting contained a number of quotes from the shoreline guidelines. WAC 173.26.186.4 states that the planning policies of master programs, as distinguished from the development regulations of master programs, may be achieved by a number of means, only one of which is the regulation of development. Other means, as authorized by RCW 98.58.240 include, but are not limited to, the acquisition of lands and easements within shorelines of the state by purchase, lease or gift, either alone or in concert with other local governments, and accepting grants, contributions and appropriations from any public agency or private individual. Additionally, other means may include, but are not limited to, public facility and park planning, watershed planning, voluntary salmon recovery projects, and incentive programs. Clearly, watershed planning is part of the Shoreline Master Program. The policy goals of the Act, implemented by the planning policies and master programs, may not be achievable by development regulation alone. Planning policies should be pursued through the regulation of development of private property only to an extent that is consistent with all relevant constitutional and other legal limitations. Master program elements regarding restoration should make real and meaningful use of established or funded non-regulatory policies and programs that contribute to restoration of ecological functions.

The overall purpose of the Shoreline Master Program is to create a program that protects shoreline resources, the salmon, and makes sure the lakes stay clean for the fish and for recreational purposes. If that is the goal, then a holistic viewpoint needs to be adopted. The narrow effort to regulate private property owners is not the right purpose, especially if the regulations have no measurable effect on salmon protection. With regard to the Meydenbauer Bay Park planning effort, the intention appears to be to remove the bulkhead and create a more natural shoreline while improving the stream and access to the public. The same focus should be an important aspect of the master program. The Commission should put everything necessary into the program; if the Council later decides not to do this or that, that will be their prerogative.

Mr. Klinge said the WAC guidelines are clear in stating that vegetation conservation standards do not apply retroactively to existing uses and standards. That remains a major concern for the WSSA. It is not enough to say if nothing is changed on a property then the rules will not come into play. The fact is people are always making changes. Landscaping wears out and needs to be renovated, and people want to improve or expand their docks, their decks and their houses. It is not right to declare a problem that does not exist and then demand favors from people in exchange for permission to do something. The real biological resources being impacted must be identified; once that is done, then work can progress toward mitigating the problem. Major renovations to large shoreline areas as part of a park project may be far more effective than incremental actions required of property owners in order to expand a dock.

Dr. Nizlek thanked the Commission for the time in which to make the presentation.

Commissioner Lai said he generally agreed with the notion espoused by the WSSA to take a holistic approach rather than a property-by-property basis. He sought and gained clarification from Dr. Nizlek that the Option C position brought forward by WSSA is the organization's position for how to move forward if the focus is to be on the shoreline areas only.

Commissioner Himebaugh voiced concern about the published timeline that includes a public hearing in November. The Commission is still dealing with some large and important questions about overall direction and it may be necessary to reconsider the schedule.

Chair Sheffels answered that the timeline is not set in stone and can be revised as necessary. The

state legislature has extended the deadline. The timeline is necessary, however, for keeping the process on track, though things should not be rushed. The Commission should take all the time it needs to carefully consider every point.

Environmental Planning Manager Michael Paine said the sticking point is that a Commission-recommended program must be submitted to the Department of Ecology in December. If that deadline is missed, the remaining portion of the grant money will be lost.

Commissioner Turner stressed the importance of taking the broader view relative to how to produce the Shoreline Master Program, and that may require taking more time. He asked if it would be possible to submit to the state a draft of the program in December, leaving time to look at the entire watershed in an effort to do things right and actually accomplish the goals. There should be no rush to adopt a plan that looks like some other jurisdiction's plan. Before any planning decision is made, all of the questions and concerns brought forward by the public should be fully addressed.

Commissioner Hamlin said he was comfortable with the published timeline. He agreed that there are goals to be met and suggested that there is adequate time in which to have the discussions. The Commission should avoid getting distracted from what is supposed to be achieved; it will not be possible to solve issues by widening the scope beyond the original Shoreline Master Program boundaries.

Commissioner Lai concurred. He suggested it was too early to be able to say whether or not the timeline is realistic. The Commission is committed to working through the steps to address the stated goals, and more will be known as the study progresses. He allowed that if at some point the Commission concludes the timeline will not work, it should be revised to avoid making hasty decisions without having in hand all of the necessary data.

Mr. Paine said staff is concerned about the timeline, and pointed out that it may be necessary for the Commission to hold meetings weekly once the draft is revised. That may be the only way to bring the draft into a cohesive document that the Commission can in good conscience send forward to the state. There are still some major issues yet to work through first.

Mr. Paine stressed the importance of having community members participate with Utilities staff regarding Phantom Lake. They are going to review their policies to date, and they will explore the notion that the channel is the offending element. Those who elect not to work together with staff and then later choose to go to the Council with ideas for what should be done will likely find the Council less receptive.

Commissioner Ferris commented that from the presentation made by the public it does appear that Phantom Lake is directed impacted by the overall drainage of the basin it is in. Every lake is impacted in the same way, but the problem in Phantom Lake appears to be exacerbated by the fact that it has a much smaller basin feeding it, it is a small lake, it has a relatively shallow depth, and it has a slower flushing rate. The business park was constructed under much less restrictive water runoff requirements, but until that issue is addressed the lake is going to continue to suffer. Mr. Paine said there is no question about the right of the Commission to make recommendations to the Council about policies to address the situation, but the Commission must also continue to focus on the goals of the Shoreline Master Program specific to the lake, not the wider watershed.

Commissioner Hamlin concurred with the comments made by Commissioner Ferris. He said the entire Phantom Lake basin is disturbing. Clearly the development that has gone on within it has impacted the lake. The city does not have a good handle on that system. The recommendation

of the Commission to the Council should include suggestions for how to address the overall problem. Mr. Paine pointed out that it is not just the business park that is contributing runoff to the lake; none of the residential structures in the basin have detention systems. A great deal of retrofitting will be required before the overall basin sees a reduced level of input into the lake.

Commissioner Himebaugh suggested that if the Commission agrees to consider options that are outside the universe of what has been looked at so far, and if the impact of development in the Phantom Lake basin is to be addressed, the idea of improving the lake's outflow should be on the table for inclusion in the Shoreline Master Program. Chair Sheffels allowed that there will likely be some recommendations come out of the meeting with staff and the property owners. The Commission will certainly want to be kept abreast of them.

Chair Sheffels made it clear that staff is more than willing to meet with the public for any amount of time to discuss the issues. She said if a member of the public has a disagreement with a particular staff member, they should seek out another. Often details can be worked out more easily on a one-on-one basis.

There was consensus to move Public Comment ahead of Other Business on the agenda.

10. PUBLIC COMMENT

Ms. Anita Skoog-Neil, 9203 SE Shoreland Drive, provided the Commission with materials regarding the Meydenbauer Bay park plan. She said she wanted the Commissioners to have the information well ahead of when the topic is to be discussed. The information came from the Meydenbauer Bay Neighborhood Association in an attempt to highlight issues and positions in order to reach a favorable solution to proposed Shoreline Master Program environmental concerns for Meydenbauer Bay park. The information was specific to areas that need to be addressed in the draft Shoreline Master Program. There are policy and regulations in the draft document that are not acceptable. It is evident that the issues cannot be resolved in the tentative timeframe that has been allotted; the proposed schedule is unrealistic and needs revision. There appears to be an assumption by staff that there is a general consensus on the draft policies and regulations, but that assumption is not valid. The public and the Commission are far apart on some issues and need clarification on others. A draft rewrite of the shoreline residential designation is close to completion and will be delivered to the Commission and staff soon. The designations need to be clarified and in some cases renamed. Water dependent uses should be the focus of the park. There are still concerns related to property rights, critical areas, shoreline setbacks, vegetative conservation and restoration, shoreline stabilization, shoreline modification, marina uses, transportation issues, public access, utilities and dredging, public land financing, and special programs such as the transfer of development rights. The Shoreline Master Program speaks of the city acquiring areas sensitive to urbanization, which is exactly what has been done with the acquisition of the Meydenbauer Bay park land over the years. The city is currently in a unique position of being a leader on the issue of environmental stewardship relative to its anticipated development of Meydenbauer Bay park. The bay itself is exceptional in that it has wildlife reminiscent of rural locations but is blocks away from a vibrant city. There is a lot of work to be done.

Mr. Brian Parks, 16011 SE 16th Street, stated that the last Phantom Lake-specific meeting notes have never been made available. He said his comments and papers have all been Shoreline Master Program-relative. Phantom Lake residents have never asked for a lake management district, nor is there a real need to form one. All of the real needs appear to be Shoreline Master Program-related. The shoreline overlay district includes the land between Phantom Lake and Larson Lake, even though Phantom Lake does not drain out that way, so it seems odd that the

shoreline overlay district will not include the main outlet to Phantom Lake. Including it could help solve some of the issues related to sedimentation buildup. There have been no changes in home development around Phantom Lake since the early 1970s. Forty-five percent of the residents are retirement age or older. The main changes that have affected the lake are the outlet weir, development of the I-90 business park, and development of the berm. Accordingly, there is nothing the homeowners need to mitigate.

Mr. Scott Sheffield, 2220 West Lake Sammamish Parkway SE, made available to the Commissioners copies of the March 24 meeting. He added that any additional supporting information that might be needed will gladly be provided.

Dr. Marty Nizlek, 312 West Lake Sammamish Parkway NE, said Phantom Lake has major issues that must be addressed. He shared some photos of damage on the shores of Lake Sammamish caused by high winds and waves. In the areas where the slope into the lake is small, a one-foot rise in the lake can result in a five- to ten-foot encroachment landward; the encroachment is even more dramatic on Phantom Lake. On one property where the city required the removal of a bulkhead, the upland property was lost as a consequence. The weir in the Sammamish River Slough is overgrown with vegetation and sediment has made it shallower; work is under way to get that problem corrected. Over the past decade, the outflow capacity has diminished by some 40 percent.

8. OTHER BUSINESS

A. Election of Officers

Motion to nominate Commissioner Ferris to serve as Chair was made by Commissioner Lai and was seconded by Commissioner Mathews.

There were no other nominations.

The motion carried unanimously.

Motion to nominate Commissioner Lai to serve as Vice-Chair was made by Commissioner Hamlin and was seconded by Commissioner Turner.

There were no other nominations.

The motion carried unanimously.

9. APPROVAL OF MINUTES

A. May 12, 2010

Commissioner Himebaugh referred to the first paragraph on page 8 and noted that "...public hearing has only one outlet... should read "...Phantom Lake has only one outlet...."

Commissioner Himebaugh called attention to the third paragraph on page 11 and noted that the phrase "...the March 26 by the public brought forward..." should read "...the March 24 presentation by the public brought forward...."

Motion to approve the minutes as amended was made by Commissioner Ferris. Second was by Commissioner Hamlin and the motion carried without dissent; Commissioner Mathews abstained

from voting.

B. May 26, 2010

Motion to approve the minutes as submitted was made by Commissioner Ferris. Second was by Commissioner Turner and the motion carried unanimously.

11. NEXT PLANNING COMMISSION MEETING

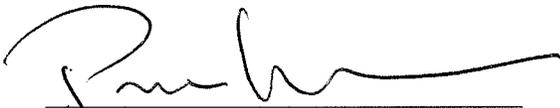
A. July 20, 2010 – Annual Retreat

Chair Sheffels reminded the Commissioners that the retreat would be held on a Tuesday rather than a Wednesday. She said it would begin with a display of electric cars at 5:00 p.m. The retreat will be held at the Microsoft building across the street from City Hall.

B. July 28, 2010

12. ADJOURNMENT

Chair Sheffels adjourned the meeting at 9:51 p.m.



Paul Inghram
Staff to the Planning Commission

10/13/2010
Date



Hal Ferris
Chair of the Planning Commission

10/13/2010
Date

VIC CHAIR



DATE: October 12, 2010

TO: Chair Ferris and Members of the Planning Commission

FROM: Shoreline Master Program Update Team
Carol Helland, Land Use Director 425-452-2724
Michael Paine, Environmental Planning Manager, 425-452-2739
Heidi Bedwell, Land Use Planner, 425-452-4862
David Pyle, Land Use Planner, 425-452-2973
Development Services Department

SUBJECT: Shoreline Master Program October 20, 2010 Planning Commission Study Session -revisit setbacks and landscape options associated with residential development

The study session on October 20th is a continued discussion on the topics of residential setbacks and landscape options. The Planning Commission previously did not have the information it needed to finalize their direction on a regulatory approach to these integrated topics because key components of the approach were not yet developed. In response to Planning Commission feedback, staff will be presenting the setback and vegetation components of the regulatory approach in an integrated manner. In addition, preliminary draft code language has been provided to facilitate Planning Commission discussion.

ACTION REQUESTED

Staff seeks Commission direction on a regulatory approach for residential shoreline setbacks, vegetation conservation, and landscaping in order to continue work on the revised draft.

SUMMARY OF PRIOR MEETINGS REGARDING SETBACKS AND VEGETATION

At the Commission's June 9th study session, staff introduced the background on the WAC Rules, working draft policies, and regulatory concepts related to residential setbacks. Also presented was the previously introduced principles for review of the Shoreline Master Program that describe how regulations should: (1) be Bellevue appropriate; (2) focus on neighborhood character, (3) balance regulatory interest with private property rights; (4) be predictable and user-friendly while preserving flexibility for those that want it; and, (5) take notice of citizen issues.

The Commission was presented with several regulatory options to meet the Rules established by the Department of Ecology for governing shoreline development. Described in detail were the City's current regulations, an Option A which included a menu option and an Option B with a prescriptive setback. The Commission discussed the options and expressed preference for an approach resembling Option A. Although a preference was identified, the Commission

acknowledged that the menu options which would allow the setback to be modified needed to be developed before final direction could be provided. In addition to the Option A preference, the Commission also requested staff to consider inclusion of the footprint exception provided under the current critical areas code and language regarding fee-in-lieu mitigation or transfer of development rights.

On September 22nd, vegetation conservation and landscaping was discussed. Because of the interrelationship between this topic and residential setbacks, preference for a regulatory framework was not reached by the Planning Commission. The purpose of the October 20 study session is to provide an integrated discussion of the residential setback, vegetation conservation, and landscaping topics to facilitate Planning Commission completion of this discussion. In response to Planning Commission feedback provided by some members, additional information is also provided on a prescriptive setback option for comparative purposes. Planning Commission preference for a regulatory framework on these topics is necessary at this time to meet timeline commitments for completion of the revised draft by year end. Minutes from the Planning Commission deliberations on June 9 and September 22 have been provided in Attachment 1 for ease of reference.

DETERMING SETBACK WIDTH

Setbacks are a mechanism to provide ecological protections, to allow for the use and enjoyment of property, and to meet the requirements of the Shoreline Management Act. This section describes a method by which the Commission could approach the policy question of establishing a minimum setback width that is sufficiently protective without over regulating. Four science-based criteria are introduced to aid in this discussion followed by a brief explanation of how the criteria could be used.

Key Policy Challenge: Establishing a Minimum Width

Regulatory setbacks associated with native vegetation provide the best means to ensure maintenance of the connection between land and shore and the habitat and water quality benefits that come with it. Shoreline setbacks serve a range of purposes, including, but not limited to:

- Protecting existing shoreline process and functions including shoreline habitat;
- Avoiding damage from flooding and erosion
- Preventing excess nutrients from flowing into surface water;
- Reducing inputs of organic compounds found in oil, herbicides, pesticides and fertilizer;
- Constraining inputs of trace metals and foreign chemicals of all kinds;
- Ensuring that new development is adequately sited to avoid and minimize need for new shoreline stabilization features.
- Preserving and enhancing views of the water.
- Preventing permanent preclusion of restoration of shoreline functions and habitat, with the overall goal of achieving new State requirements for no net loss.
- Maintaining existing character and the scenic quality of Bellevue's shorelines

There is significant scientific research pointing to the value of using setbacks, combined with vegetation, to protect aquatic resources from the potential impacts of adjacent human use. Setbacks and buffers are the primary regulatory tool in use across the country to protect streams, wetlands, ponds, and lake shorelines. The size and the effective width of a setback are integral to its effectiveness at protecting a resource.

Setbacks that are too small may still place water quality or aquatic habitat at risk. They may also fail to fully guard against cumulative impacts of existing uses over the long-term. While wider is almost always better, setbacks that are wider than need be unnecessarily constrain property owners from fully utilizing a portion of their property and are economically inefficient. So the key policy challenge in employing setbacks as a regulatory tool is to choose an appropriate width that is neither so small as to endanger the resource nor so large as to unnecessarily constrain property owners.

Selecting Science-based Criteria

One approach to making a policy decision about setbacks is to test options against a number of science-based criteria. Such criteria generally involve the following elements¹:

- Specific ecological functions targeted;
- Existing or potential resource value;
- Characteristics of site, reach, watershed, including existing vegetation;
- Intensity of abutting land use.

Using the science-based criteria, different setback widths can be tested for general effectiveness. For example, a smaller setback may be adequate if the aquatic area is in good condition, resource values are low (no threatened or endangered species for instance), site conditions ideal, a limited number of functions are targeted for protection, and the abutting land uses are low intensity. A larger setback would be better suited if the site abuts high-valued water resources, land uses are more intense, and where multiple functions are selected for protection.

What Ecological Functions Does a Setback Target?

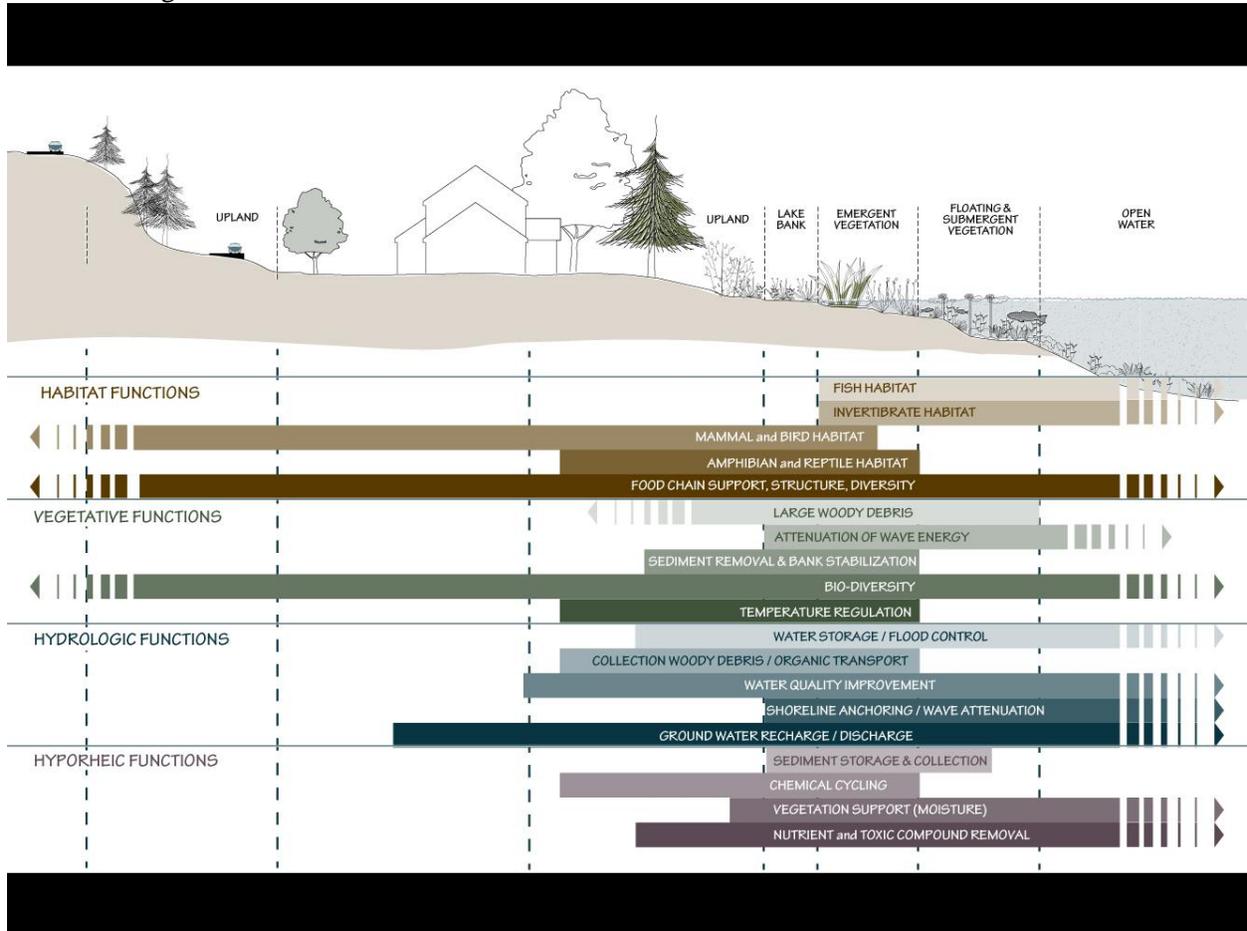
The Shoreline rules identify a large number of ecological functions for protection, and note that there should be no net loss of these functions from shoreline development. This large list of functions is visually depicted in Table 1 below, and is grouped into four broad functional categories: habitat, vegetative, hydrologic, and hyporheic.

To evaluate if the standard of no net loss of ecological function has been met through the policies, regulations, and programs included in the SMP, the City is required to complete a cumulative impacts assessment that demonstrates the effectiveness of the shoreline master program when tested with development scenarios. The cumulative impact analysis is intended to prevent adoption of an SMP that includes incremental development on individual properties that when looked at in relationship to the shoreline as a whole would create significant impacts on the

¹ During the CAO update process, staff relied on the methodology outlined in the Chesapeake Bay Riparian Handbook for Establishing and Maintaining Riparian Forest Buffers. 1998. for clarifying our thinking about setbacks and buffers

resource. A more detailed discussion of “no net loss” and the use of the cumulative impacts analysis is included in Appendix 2.

Table 1: Range of functions on freshwater shoreline



Although other functions listed above may be represented, the functions identified below are present to a greater or lesser degree on most residential shoreline properties in Bellevue depending on the intensity of development:

- bank stability,
- sediment removal/erosion control,
- pollutant removal
- aquatic habitat, and
- terrestrial habitat.

There are a limited number of studies regarding the width and effectiveness of lakeshore vegetated setbacks that the Planning Commission can use to quantify minimum buffer widths necessary to protect water quality and habitat functions. However, many studies done for wetlands and streams are relevant because lakes provide many of the same functions and the underlying biophysical processes that occur in shoreline areas are the same or similar to those that occur in wetlands and streams.

Table 2: Key functions protected by vegetated setbacks

Function	Key Factors	Range of Effective Buffer Widths (per May 2003 ²)	Recommended Buffer Widths for Lakes (Vermont, WQD, 2008 ³)	Comments
Bank stability	Root structure		15 feet	Vegetation Required
Sediment Removal/ Erosion Control	Soils, width, slope, flow path, vegetation type	16-860 ft	NA	Grass filter strips very effective especially with adequate infiltration and low slope angle sheet flow
Pollutant Removal	Soils, slope, flow path, vegetative structure, width	13-860 ft	100 ft	Mature forest vegetation
Aquatic Habitat	Vegetative structure, width	98-295 ft	25 ft	Mature native vegetation preferred: mimic natural ecosystems.
Terrestrial Habitat	Vegetative structure, width	328-820 ft	Up to 600 ft	Mature native vegetation preferred:

This information can help the Planning Commission select a setback width that protects the range desired functions given the Bellevue context.

Resource Value

Lakes Washington and Sammamish possess high resource value because they harbor a wide range of wildlife, including threatened and endangered species, as well as providing recreational and residential benefits. As a consequence, they are identified under state law as Shorelines of State Wide Significance (see WAC 173-26-251 for details.) In recognition of these greater resource values, the Shoreline Management Act calls for a higher level of effort in implementing its objectives on shorelines of statewide significance. The beneficial aspects of the resource, combined with the requirement to provide special consideration to the presence of threatened and endangered salmonids, support the use of larger setbacks to ensure the resource is adequately protected against the impacts of development over the long-term. If smaller setbacks are a community preference, then less flexibility elsewhere in the Master Program would likely be available in order to avoid unacceptable levels of cumulative impact.

Site Characteristics

Site factors are most important when evaluating setback performance in removing pollutants. Unfortunately these factors are complex and not immediately identifiable based on observation. For example, in many areas nitrogen loads are carried by subsurface flow, so focus on surface flows when assigning an appropriate buffer width may not be an effective means of addressing nitrogen transport. Site slope has a more observable impact on the effectiveness of a vegetated buffer to remove sediment, because the velocity of water flow across a steeply sloped site may

² May, C.W. 2003. Stream-Riparian Ecosystems in the Puget Sound Lowland Eco-Region

³ Vermont Department of Environmental Conservation, Water Quality Division (WQD). February 2008. How Wide a Buffer.

offset the benefit provided by vegetation. Typically vegetated setbacks or filter strips must be increased in length for each small increase in slope.

In the same way, setback dimensions can be adjusted based on the design and maintenance of the vegetation placed there. Dense native vegetation grown in undisturbed soils is likely to provide a range of functions more effectively than poor quality non-native vegetation. Generally benefits are amplified by requiring native forest over other vegetation types.

Intensity of Adjacent Use

Where the intensity of the land use or potential impact of the site activity increases, the general rule is the width of the setback must increase proportionately. In the same vein, the size or importance of a vegetated setback increases as the potential yield of nutrients, chemicals, metals and other pollutants goes up.

Application

There are two commonly adopted approaches to making a policy determination about setback width using the science-based selection criteria. The first approach is to adopt the greatest width necessary to accommodate all desired functions. Such an approach likely provides the greatest level of protection and lowest risk. The second approach is to utilize average widths necessary to accommodate all desired functions. This approach is to determine a width that will generally encompass the majority of desired functions. The second approach is similar to that used to establish the buffers and setbacks for the 2006 Critical Areas update. Allowance for modification and flexibility using additional criteria was then provided based on unique site conditions so that opportunities to create tailored buffers were available.

REGULATORY SETBACK CONCEPTS COMPARISON

This section provides a comparative discussion of the Option A flexible menu and a prescriptive setback option. Option A preliminary draft language was prepared for Planning Commission consideration following the June 9 study session, and is included in Attachment 3. Although there was not time to prepare preliminary draft language for a prescriptive option following the September 22 meeting, the City of Redmond adopted language is provided in Attachment 4 as an example prescriptive approach for comparison purposes.

In an effort to give context to the options, a table is included identifying a range of regulatory approaches taken historically at the City of Bellevue and currently proposed or adopted by neighboring jurisdictions. The table can be found in Attachment 5. The range of approaches for recently updated SMP varies from jurisdiction to jurisdiction due to differences in quantity and quality of shoreline resource, community values, and opportunities for mitigation and restoration. This is one of the reasons behind the SMP adoption principle that focuses on the program being Bellevue appropriate. As described in the no net loss and cumulative impacts assessment discussion in Attachment 2, setback alternatives must be evaluated as a component part of the entire Shoreline Master Program.

Table 3: Two Regulatory Approaches Compared

	Option A	Redmond
SETBACK	Lake WA, Sammamish, Phantom Lake, & Mercer Slough/Kelsey Creek 50' Newport Shores Canals 25'	Lake Sammamish 35'
MINIMUM SETBACK	25'	20'
MENU OPTIONS	YES	NO
MITIGATION FOR REDUCING SETBACK	Prescriptive per menu option	20' setback area with native vegetation. Establishment of a tree canopy is encouraged.
SITE SPECIFIC STUDY	YES	NO
VEGETATION STANDARDS	Within 25' from OHWM- All significant trees and native vegetation within first 25 feet from OHWM. Removal permitted with mitigation. Outside 25' 30% of significant trees.	Trees within building setback must be maintained. Limited removal permitted but must replace at 2-6 trees per tree removed. Preserve 35% of existing significant trees on site.
OTHER	Existing primary structures can be rebuilt in footprint if located no closer than 25' from OHWM without triggering planting requirements.	New development or reconstruction involving greater than 50% of value of improvements is required to plant 50% of minimum 20' setback.

Planning Commission Refined Option A

The Option A preliminarily preferred by the Commission included the concept of a fixed setback (described as 50 feet) and the opportunity for development to move closer to the water through the incorporation of different mitigation menu options. Provided in Attachment 3 is preliminary draft code language for Commission consideration. This language incorporates an approach to setbacks, landscaping requirements and vegetation conservation for residential properties. Of significance is the treatment of legally established existing structures which do not comply with minimum 50 foot setback. The Commission endorsed an option which allows the reconstruction of these existing structures in an existing building footprint. This concept was incorporated into the preliminary draft code language. A fee in lieu or transfer of development rights approach has not been included in this preliminary draft code language because public comment has not been supportive of including these approaches. These options can still be included in the revised draft scheduled for year-end release if direction is provided for staff to do so.

Vegetation Conservation, Tree Preservation and Landscaping Standards

The 50' setback described above contains a vegetation conservation area. The vegetation conservation area is the first 25' landward of the ordinary high water mark. All significant trees and native vegetation is to be preserved in this area. However, allowed within the vegetation conservation area are new private non-structural recreation developments, including pervious hardscape surfaces, paths, and walkways, that do not occupy more than 40% of the shoreline vegetation conservation setback area. Existing vegetation and private non-structural recreation developments may be maintained and replaced in their current locations. Also allowed are existing legally established structures.

The regulatory concept also includes a landscaping standard which would be applicable to the following development scenarios:

- New development on a vacant lot complying with the 50' setback;
- Construction of a totally new home on a site where a home is currently located where the home exceeds the footprint of the original home;
- Expansion of an existing home laterally more than 500 square feet;
- Any expansion of an existing home when the expansion is proposed waterward of the homes existing façade; and
- Construction of an accessory structure greater than 200 square feet.

In all of these cases the amount of landscaping required to be planted would be a maximum of 60% of the required vegetation conservation area planted with native vegetation. The planting templates found in the City's critical areas handbook would meet this intent without requiring a property owner to hire a designer to provide them with an appropriate planting plan. Other improvements such as expanding an existing structure laterally no more than 500 square feet or building an accessory structure less than 200 square feet would be exempt from the landscaping requirement.

Tree preservation standards for the remainder of the site outside the vegetation conservation area (outside the area 25' above the OHWM) are consistent with City-wide requirements for tree preservation. In addition to preserving the significant trees within the vegetation conservation area, the standards would require a minimum of 30% of the tree diameter inches on the remainder of the site to be retained. Because trees and native vegetation contribute to a healthy ecosystem, the standards for their preservation are critical in demonstrating protection of ecological functions in the City's SMP.

Primary Structure Setback

The regulatory Option A includes a shoreline setback of 50' the second 25' of which is referred to as the primary structure setback. This setback is measured from the edge of the vegetation conservation area landward 25'.

In general, new structures would need to adhere to the 50' setback. However, new accessory structures 200 square feet or smaller, ornamental landscaping, and private recreational developments would be allowed outright in the primary structure setback area. New primary

structures, expansion of existing structures and accessory structures greater than 200 square feet in size would have two options to reduce the setback and move structures closer. Reduction of the primary structure setback is permitted through either a series of mitigation menu options or by using a site specific study option (aka Critical Areas Report).

The purpose of the menu option is to provide for a predictable list of improvements or modifications that correspond to benefits in ecological function and in turn allow increased site development flexibility. The 50 foot setback provides a level of protection for a range of existing functions. Prescriptive reductions would be available to property owners based on the list of menu options. If more site development flexibility is necessary, opportunities can be evaluated through a site specific study akin to the current critical areas report process.

The Commission asked staff to detail the menu options and identify the desired outcomes associated with these actions. A table depicting the outcomes arrayed with a series of menu options is found in Attachment 6.

Prescriptive Option Comparison (Redmond SMP)

In contrast to Option A described above, the City of Redmond adopted a prescriptive approach to setbacks and vegetation conservation along their Lake Sammamish shoreline. The hallmarks of the Redmond SMP relating to setbacks and vegetation conservation are described in Table 3 above, and the Redmond regulations relating to setbacks and vegetation conservation are included as Attachment 4. What is important to note are the differences between the Shoreline jurisdiction area of Bellevue as it is compared with the City of Redmond.

Redmond Shoreline Residential Development Conditions

The City of Redmond is characterized by a total of 11.4 miles (60,192 linear feet) of shoreline. Of this, the majority is stream or wetland frontage, not lake frontage. Redmond has a limited number of single family residential lots along a proportionally short 7,097 foot segment of Lake Sammamish shoreline. South of Idylwood Park to the Bellevue city limit, there are 91 single family waterfront residential lots, two of which are undeveloped. Of these 91 lots, Redmond reports the closest structure to the lake at 0 feet; the furthest structure is approximately 300 feet from the lake. The average, estimated distance of houses to the lake is 75 feet. Twelve of the 89 structures are 20 feet or closer to the lake's ordinary high water mark, meaning that 13% of the homes along this section of Lake Sammamish are within 20 feet of the OHWM. The length of shoreline represented by these lots is eight percent of the total length of shoreline zoned single family residential on the west side of the lake. Single family development occupies a small portion of the Redmond shoreline.

Bellevue Shoreline Residential Development Conditions

Different from the Redmond shoreline, Bellevue is characterized by a total of 19.7 miles (104,027 linear feet) of shoreline area. Of this total area 15.96 miles (84,286 linear feet) are lakefront shoreline (not including Mercer Slough and Kelsey Creek) and includes 1,225 single family residential waterfront properties, of which 36 are considered undeveloped. Of the 1,189 developed lots, 107 or 9% of the primary structures are within 20 feet of the OHWM. The

portion of the west shore of Lake Sammamish shoreline that is not under Redmond’s jurisdiction is within the Bellevue city limits. Single family development is the primary use along the Bellevue shoreline.

ACTION REQUESTED AND NEXT STEPS

Staff seeks Commission direction on a regulatory approach for residential shoreline setbacks, vegetation conservation, and landscaping in order to continue work on the revised draft scheduled for release at year end.

Table 4. Proposed Planning Commission Schedule

November 3	Non-Conforming Development
November 17	Bundle remaining issues
December 8	Bundle remaining issues (continued)
December (mid-to-late)	Release revised draft
January 2011	Open House Introduce revised draft
February 2011	Public Hearing (date to be set by Planning Commission)

ONGOING PUBLIC OUTREACH

Since the Commission’s study session meeting on September 28th, staff attended a meeting of the Newport Shores Community Association. Information on the overall project schedule, points of public engagement, regulatory approaches for the residential canal area, and an introduction of some marina standards was provided to the community. The communities’ board will be meeting and providing the staff or Commission with feedback related to marina uses and operation. Additionally, staff offered to be available for follow up questions or meetings. To date, no other community groups have requested meetings with staff.

ATTACHMENTS

1. Planning Commission Meeting Notes – Setback Discussion
2. No Net Loss and Cumulative Impacts Assessment - Summary
3. Preliminary Draft Code Language
4. Redmond Shoreline Setback Code
5. Range of Regulatory Approaches
6. Table of Menu Options

ATTACHMENT 1

The following is a summary of the feedback provided to Development Services Department staff from the Planning Commission shoreline setback discussion¹:

1) June 9, 2010 Planning Commission Meeting Summary - Setback Discussion

Commissioner Ferris stated that he had read the report on how the shorelines were inventoried and classified. He noted that the report includes only a few categories, all of which were evaluated on a somewhat judgmental basis in terms of the contribution of each to the overall ecology. He suggested that a formula could be developed based on the five or six things that contribute to the ecological function of lakes. The formula could, for example, include a weight for each item. An inventory for a specific property could then generate a point total based on the weighted criteria and be used in determining how a proposed development will impact the ecological functions. Such an approach could allow property owners to develop while at the same time allowing the city to achieve improvements to the overall ecological functions over time.

Mr. Paine said that is exactly the approach staff will be proposing; he said he already has a draft table drawn up with the various functions listed. The options menu will be based on that table. He said the most important thing in determining the quality of functions on shorelines in built-up areas is whether or not there is a bulkhead in place. The study done by Mr. Evans makes clear to everyone that bulkheads not located directly on the shoreline have large associated areas that could be planted, thus creating a beneficial habitat and a place for the interchange to occur. Staff did not consider that in looking at site-by-site and reach-by-reach functions.

Asking a question asked by Commissioner Himebaugh, Mr. Paine clarified that the focus is on the concept of no net loss of ecologic functions. Commissioner Himebaugh allowed that inventory indicates the shorelines in Bellevue are largely built up and suggested that staff should highlight non-regulatory options for shoreline restoration in addition to the regulatory options. He said non-regulatory options should avoid putting property owners in the position of having to meet an ecological bar that may in fact be impossible to measure on a site-specific basis. Mr. Paine said one function of the city's restoration planning effort is to address the cumulative impacts that do not get mitigated on site, either because they are not measured precisely enough or because of the temporal issues. The city is supposed to have a plan that identifies potential mitigation sites to offset the loss that is inevitable with development over time. However, while the city is obligated to have a plan in hand, it is not obligated to fund the plan. The city could institute a fee in-lieu approach under which property owners could buy into a potential mitigation project at some other location. Alternatively, the city could purchase properties from willing sellers on which to allow mitigation or restoration, thereby offsetting the impacts of hundreds of shoreline lots, but that option would be very costly.

¹ Taken from draft meeting minutes.

Commissioner Turner suggested that before the city takes steps to direct property owners how to mitigate something on their properties, there should be a better understanding of what the ecological functions are for the properties in question and the system overall. Mr. Paine's response was that that would be very tall task and could potentially stop the city from regulating anything. Commissioner Turner said the fact remains that the regulations will impact property owners along the lake while the owners of properties throughout the ecosystem will not be impacted. A balance needs to be sought. Mr. Paine pointed out that the same could be said for property owners living on steep slopes or near streams, all of whom are already being called on to work for the public benefit in protecting those areas. Commissioner Turner said he would prefer to see incentives and non-regulatory approaches identified as the best way to go.

Commissioner Mathews asked if the current approach of drawing setback lines around existing structures to avoid the issue of nonconformance could be incorporated into either Option A or Option B. Mr. Paine said Option B would establish a bright line under which structures are either conforming or they are not. Under Option A, all structures would be conforming until the 25-foot limit is reached. Expansions would be allowed, but only in line with the options menu.

Commissioner Ferris agreed that conducting a full study of the ecology of the entire system would not be practical, and would be outside the bounds of what the city is trying to achieve with the Shoreline Management Program update. However, within the limits of the scope of the task at hand, drawing a line between specific ecological improvements and incentives would be a good idea. He said he generally favored Option A but needed far more details before developing a recommendation for what the setback width should be. Additionally, the prime focus for improving ecological functions should be on where the streams flow into the lakes and areas where the greatest impact could be realized, and the fee in-lieu approach would fit perfectly into that scenario. The concept is already in use in the form of transfer of development rights.

Commissioner Hamlin concurred with the choice of Option A and with the notion of focusing improvements in areas where they will have the greatest impact. With regard to the width of the setback, he said he had no argument against what was proposed by staff.

Commissioner Mathews added his support for Option A as well. He commented that while the degree to which any mitigation on any particular property may be small, the incremental impact of improvements along the entire shoreline can be huge over time.

Commissioner Turner said Option A would be the better choice. He concurred with Commissioner Ferris in wanting to see a matrix developed. He stressed the need to have a strong rationale on which to base both regulations and incentives. Some effort should be put into addressing the specific concerns that have been raised by the public.

Commissioner Himebaugh said he was not prepared to recommend either Option A or Option B because he had not previously seen the map book. He said the limited information in the staff memo allowed him to gain a basic idea of where the nonconformities would exist. He suggested that Option A would be preferable to Option B. He said he had some concerns with the issue of transferable rights and agreed that a matrix is needed to connect the dots between the impacts on ecological functions and the use of property. The footprint rule should be kept on the table as a part of Option A.

Ms. Bedwell asked Commissioner Himebaugh to clarify if he would support the line around a footprint for structures closer than 25 feet from the ordinary high water mark. He answered that he would.

Chair Sheffels noted the general consensus of the Commission in favor of going with Option A, the notion of a transfer of rights as an incentive, and retaining the footprint approach.

2) September 22, 2010 Planning Commission Meeting Summary - Setback Discussion

Turning to the issue of vegetation conservation, Commissioner Hamlin said he was not yet convinced that 50 feet is the right setback. He added that the vegetation conservation requirements seem a bit restrictive. Mr. Paine noted that the previous discussion with the Commission about vegetation conservation included the notion of a 25-foot vegetation conservation area in the context of a 50-foot setback. The concept is to provide for vegetation on or near the shoreline, and staff will draft language in accord with the direction provided by the Commission.

Commissioner Turner noted that the 50-foot setback was presented to the Commission as part of a package. The Commission never explicitly came out in favor of a setback of that depth. Staff was given general direction to work up language for the draft, but the Commission did not come to any conclusion about what the setback should be. He said the concept of preserving vegetation on or near the shoreline is sound, but when it comes to determining no net loss there needs to be more clarity with regard to measuring no net loss and what is supposed to be accomplished. Mr. Paine stressed that the draft language was in response to a set of regulations handed down by the Department of Ecology. He said if he had his way he would stay with the existing program with the buffer that is in place; it is much easier to administer. The Commission has not been inclined to pick a buffer but has directed staff to proceed with a setback. Vegetation conservation will have to be part of the package, but it will be up to the Commission to determine how it should be structured.

Chair Ferris said he would like to have the opportunity to review the options previously presented to the Commission. He said at the time the Commission leaned toward the 50-foot setback because it was thought that would allow for the greatest amount of flexibility, but the Commission may not have understood all of the ramifications.

Attachment 1
October 20, 2010 Planning Commission Meeting Agenda Memo
Planning Commission Meeting Notes – Setback Discussion

Commissioner Mathews agreed it would be helpful to have the options presented again before reaching a conclusion.

ATTACHMENT 2

CUMULATIVE IMPACTS – A MEASUREMENT OF NO NET LOSS

1) No Net Loss – What is it?

State law dictates that in updating their Shoreline Master Programs local jurisdictions “shall evaluate and consider cumulative impacts of reasonably foreseeable future development on shoreline ecological functions.... and shall contain policies, programs, and regulations that address adverse cumulative impacts and fairly allocate the burden of addressing cumulative impacts among development opportunities.” WAC 173-26-186 (8)(d). The no net loss standard is essentially designed to halt the introduction of new impacts to shoreline ecological functions resulting from new development. Both protection and restoration are needed to achieve no net loss.

To comply with this requirement, the City is responsible for developing a Shoreline Master Program that includes policies, regulations, and programs that work comprehensively to address impacts from existing and future development and to improve the condition of degraded resources and functions as compared to a baseline condition¹. To set a baseline of condition, a shoreline inventory analysis that characterizes shoreline functions and ecosystem-wide processes is completed and the relative condition of each reach of the City’s shoreline is determined. The City of Bellevue completed this work in the document entitled *City of Bellevue Shoreline Analysis Report*. This document has been previously provided to the Commission and is also available at the following link:

http://www.bellevuewa.gov/pdf/Development%20Services/Final_Draft_Shoreline_Analysis_Report_January_16_2009.pdf.

Following this inventory, the City is required to use the information presented in the characterization to develop a series of shoreline environments that set use priorities for each reach of shoreline that correspond with the relative level of ecological function identified in the inventory document. This work was completed and introduced to the Planning Commission on February 25, 2009. The February 25, 2009 agenda memo is available at the following link: <http://www.bellevuewa.gov/pdf/Planning%20Commission/PacketPlanningCommissionAgenda2-25-09b.pdf>.

Following the establishment of environments (like a zoning overlay) and a forecast of uses (use charts) that correspond to the shoreline environments, the City identifies and develops shoreline regulations that are intended to limit adverse cumulative impacts to shoreline resources and maintain a baseline condition as identified in the shoreline inventory – an effective no net loss of ecological function that is achieved through avoiding, limiting, and mitigating current and future impacts. This is the regulatory structure that was introduced to the Planning Commission in the Working Draft dated May 12, 2010, and is also available at the following link: http://www.bellevuewa.gov/pdf/Development%20Services/Draft_SMP.pdf.

To evaluate if the standard of no net loss of ecological function has been met through the policies, regulations, and programs included in the SMP, the City is required to complete a

¹ Washington State Department of Ecology SMP Handbook Chapter 4

cumulative impacts assessment that demonstrates the effectiveness of the shoreline master program when tested with development scenarios. The Cumulative Impacts Assessment is included as part of the Shoreline Master Program that is forwarded to the State Department of Ecology for review.

Upon completion by the City, the State Department of Ecology reviews the Shoreline Master Program; evaluates the policies, regulations, and programs; and determines if the program, when considered comprehensively, effectively limits impacts associated with development on the City's shorelines to a level that is consistent with the standard of no net loss of ecological function. This is demonstrated through the completion of a cumulative impacts assessment.

2) No Net Loss – How is it measured?

The Shoreline Management Act does not intend to stop or retroactively remove development. Rather, the act targets promotion of appropriate development in appropriate locations in an effort to preserve the natural functions of the shoreline. If residually degrading development inappropriate to the shoreline has been established, impacts must be recognized. The Shoreline Master Program is the mechanism by which impacts from development, past, present, and future, are addressed. The Cumulative Impacts Assessment is an analysis of the entire Shoreline Master Program that is intended to contemplate how:

- 1) Existing development affects the shoreline and relevant natural processes.
- 2) Future development and use of the shoreline will impact the shoreline and relevant natural processes.
- 3) Any proposed regulatory or programmatic programs may cause beneficial effects by avoiding, minimizing, and mitigating for impacts to the shoreline and relevant natural processes.

The Washington Administrative Code and the State Department of Ecology provide guidance in the completion of a cumulative impacts assessment. A series of indicators are identified in the Washington State Department of Ecology SMP Handbook. These indicators are used to gauge how specific development actions might impair processes and degrade ecological functions. The cumulative impacts assessment also considers the scale of the impact in relationship to the whole shoreline and what mitigation or restoration efforts may be included in the SMP. The objective of the SMP is to allow uses and direct development to locations and designs that cumulatively do not result in a net loss of ecological functions from the baseline conditions identified in the inventory document.

A cumulative impacts assessment can be compared to a budget spreadsheet with a fixed bottom line. In this comparison the bottom line is similar to the inventory that was completed on the onset of the Shoreline Master Program update in that the inventory sets the baseline condition that is targeted in the SMP. Also similar to a budget, the cumulative impacts assessment looks at various indicators that are similar to budget line items and may impact the shoreline to differing degrees depending on the ultimate package of rules proposed. For example, an SMP may be relatively flexible with dock standards to respond to community interest where recreational

Attachment 2
October 20, 2010 Planning Commission Meeting Agenda Memo
No Net Loss and Cumulative Impacts Assessment - Summary

boating is a significant community interest. In this case the docks standards would be designed to offer flexibility to accommodate the community interest, although other indicators would need to be further restricted to compensate for the impact associated with the flexibility. In this sense if the level of impact associated with one line item is increased, a different line item may need to be decreased in an effort to maintain the bottom line. Put simply, the most important factor in judging no net loss of ecological function is the cumulative impacts assessment that is the result of application of an SMP in total. Under this concept no component of the SMP is independent, and the cumulative effect of all policies, regulations, and programs should be considered when considering different options for each element of the SMP.

ATTACHMENT 3

- I. Shoreline Setback.
 - a. Purpose. This section establishes what structures and improvements may be located in the shoreline setback established for each shoreline environment.
 - b. Measurement of Shoreline Setback. The shoreline setback shall be measured landward from the ordinary high water mark on the horizontal plane and to a point that results in the greatest dimension from the ordinary high water mark.
 - c. Existing Development. Where a primary structure legally established on a site on or before **[insert date of ordinance adoption]**, encroaches into the structure setback established in subsection e below, the structure setback shall be modified to exclude the footprint of the existing primary structure. Expansion of any existing structure into the shoreline structure setback shall be allowed only pursuant to the setback reduction provisions in LUC 20.XX.XXX.
 - d. Shoreline Setback Dimensions. The following setbacks are the required shoreline setbacks for each shoreline environment. Disturbance of the shoreline setback is prohibited; except as necessary to maintain existing, legally-established appurtenances, and as allowed in other parts of this section.
 - i. Shoreline Residential. The overall shoreline setback for the Shoreline Residential environment shall be 50 feet and is divided into two setbacks, the Vegetation Conservation setback and the Primary Structure Setback. Each setback is 25 feet and is measured consecutively from the ordinary high water mark, beginning with the Vegetation Conservation setback, followed by the Primary Structure.
 - ii. Purpose of the Vegetation Conservation setback. The purpose of the Vegetation Conservation setback is protect and restore ecological functions and eco-system wide processes performed by shoreline vegetation. Removing vegetation impacts the ability of vegetated areas to protect or perform ecological functions. Conserving vegetation provides additional benefits, such as protecting human safety and property, reducing the need for shoreline stabilization, improve visual and aesthetic qualities of the shoreline, protect plant and animal species and their habitat, and to enhance shoreline uses. The Vegetation Conservation setback allows limited uses while assuring no net loss of shoreline ecological functions.
 - iii. Purpose of the Primary Structure Setback. To allow the ongoing use and maintenance, and expansion, consistent with LUC 20.28.XXX.4.b, of legally-established primary structures.
 - iv. Shoreline Setback Performance Standards:
 1. Vegetation Conservation Setback. The first 25 feet of the shoreline setback landward of the ordinary high water mark shall

be designated as a vegetation conservation area setback. Modification of the vegetation conservation setback is allowed as specified in section 4.a below. Uses legally established on or before [insert date of ordinance adoption] may continue, until other provisions of this chapter are required; then the property must conform to the standards set forth below. Landscape maintenance may continue pursuant to LUC 20.XX.XXX. II.e. **[Below].**

2. Primary Structure Setback. The area between 25 feet and 50 feet landward of the ordinary high water mark shall be designated as primary structure setback area. Modification of the primary structure setback is allowed as specified in section 4.b below.
3. Expansion of Existing Primary Structure into the primary structure setback.
 - a. To expand an existing primary structure into the primary structure setback, the applicant shall first demonstrate that expansion is not feasible outside of the shoreline setback, based on site constraints, such as topography or location of critical areas. Site constraints cannot result from the actions of the applicant or prior property owners.
 - b. Expansions within the primary structure setback in a parallel direction from at or behind the existing building line, up to 500 square feet in size over the lifetime of the structure, are permitted without compliance with the setback reduction or landscaping standards of this section.
4. Setback Reductions.
 - a. The overall 50 foot shoreline setback in the Shoreline Residential environment may be reduced to a minimum of 25 feet when setback reduction impacts are mitigated using a combination of the mitigation options provided in the table below to achieve an equal or greater protection of lake ecological functions. The following standards shall apply to any reduced setback:
 - i. The maximum allowed setback reduction that may be approved through this provision is to the 25-foot vegetation conservation setback. Any further reduction below the minimum 25-foot vegetation conservation setback shall require approval of a shoreline variance application.
 - ii. Setback reductions shall be granted only if the applicant demonstrates that expansion rearward or lateral outside of the required general shoreline

setback is not feasible due to the intended function of the expansion.

- iii. Before issuance of a certificate of occupancy or final inspection, the applicant shall provide a final as-built plan of any completed improvements authorized or required under this subsection.
- iv. Applicants who obtain approval to reduce the setback, must record the final approved setback and corresponding conditions, including maintenance of the conditions throughout the life of the development, unless otherwise approved by the City, in a form acceptable to the City Attorney, and recorded with the with the King County Division of Records and Elections or its successor agency.

- b. Setbacks may be reduced by the amounts identified in Table 20.XX.XXX:

Table 20.XX.XXX - Setback Reduction Menu Options

	MENU OPTION	RELATIVE SETBACK REDUCTION
1.	Presence of non-structural or soft structural shoreline stabilization measures located at, below, or within 5 feet landward of the lake's ordinary high water mark along at least 75 percent of the linear lake frontage of the subject property. This can include the removal of an existing hard structural shoreline stabilization measure and conversion to a non-structural or soft structure stabilization measure. This option cannot be used in conjunction with Option 2 below.	HIGH
2.	Presence of non-structural or soft structural shoreline stabilization measures located at, below, or within 5 feet landward of the lake's ordinary high water mark along at least 15 linear feet of the lake frontage of the subject property. This may include the removal of an existing hard structural shoreline stabilization measure and conversion to a non-structural or soft structure stabilization measure. This option cannot be used in conjunction with Option 1 above;	MEDIUM
3.	Opening of previously piped on-site watercourse to allow improvement to habitat function for fish for a minimum of 25 feet in length. Opened watercourses must be provided with a native planted buffer at least 5 feet wide on both side of the stream. A qualified professional must design opened watercourses.	MEDIUM
4.	Soft structural shoreline stabilization measures are installed waterward of the ordinary high water mark. They may include the use of gravels, cobbles, boulders, and logs, as well as vegetation.	MEDIUM

	The material shall be of a size and placed to remain stable and accommodate alteration from wind- and boat-driven waves and shall be graded to a maximum slope of 1 vertical (v): 4 horizontal (h).	
5.	Installation of pervious material for all pollution generating surfaces such as driveways, parking or private roads that allows water to pass through at rates similar to pre-developed conditions.	MEDIUM
6.	Preserving or restoring at least 20 percent of the total lot area outside of the reduced setback and any critical areas and their associated buffers as native vegetation.	MEDIUM
7.	Hard structural shoreline stabilization measures are setback from the ordinary high water mark between 2 ft. to 4 ft based on feasibility and existing conditions and/are sloped at a maximum 3 vertical (v): 1 horizontal (h) angle to provide dissipation of wave energy and increase the quality or quantity of nearshore shallowwater habitat.	LOW
8.	Increasing the width the vegetation conservation setback to by 5 feet.	LOW
9.	Limiting total site impervious coverage to at least 10% less than maximum allowed	LOW

5. Improvements Allowed. The following improvements are allowed within the required 50-foot shoreline setback without a setback reduction:
 - a. Improvements allowed within the 25-foot Vegetation Conservation Setback:
 - i. In the Vegetation Conservation setback, up to 40% of the setback is available for existing or new non-structural recreation developments, such as pervious hardscape, paths, and walkways. The remaining 60% of the setback is reserved for native landscape, the purpose of which is to protect the functions and provide the benefits described in LUC 20.XX.XXX.1.d.2.
 - ii. Private non-structural recreation developments, including pervious hardscape surfaces, paths, and walkways that do not occupy more than 40% of the shoreline vegetation conservation setback may be located in the shoreline vegetation conservation area setback; provided they are constructed and maintained in a manner that minimizes adverse impacts to shoreline ecological functions, and subject to compliance with a landscaping standard

that requires an equivalent area no smaller than 100 square feet of the vegetation conservation area be planted with native vegetation to offset the impact of the recreational development. The improvement shall be constructed using pervious materials or methods.

- iii. Landscaping that is primarily characterized by native species.
- b. Improvements allowed within the required 25-foot Primary Structure Setback:
 - i. Accessory structures smaller than 200 square feet, ornamental landscaping, and private recreational developments are allowed in this area without requiring compliance with a landscape standard and in compliance with general residential use dimensional standards including setbacks, lot coverage, and impervious surface limitations.
 - ii. Accessory structures larger than 200 square feet may be accommodated through a reduction in setback as allowed under section I.3.i.e above.
 - iii. Minor Building Elements. Bay windows, greenhouse windows, eaves, cornices, awnings, and canopies may extend up to 18 inches into the shoreline primary structure setback, subject to the following limitations:
 - 1. Eaves on bay windows may extend an additional 18 inches beyond the bay window.
 - 2. Chimneys that are designed to cantilever or otherwise overhang are permitted.
 - 3. The total horizontal dimension of these elements that extend into the shoreline setback, excluding eaves and cornices, shall not exceed 25 percent of the length of the facade of the structure.
- v. Shoreline Residential Canal. The overall shoreline setback for the Shoreline Residential Canal Environment shall be 25 feet and shall be administered as follows:
 - 1. Vegetation Conservation Area. Twenty percent of the shoreline setback landward of the canal shall be designated as a vegetation conservation area.

2. All significant trees within the shoreline setback shall be retained.
3. Accessory structures are not allowed within the 25-foot shoreline setback in the Shoreline Residential Canal Environment.
4. Improvements allowed within the required 25-foot shoreline setback:
 - a. Private non-structural recreation developments, including pervious hardscape surfaces, paths, and walkways.
 - b. Structural elements considered essential and associated with canal bulkheads.
 - c. Landscaping that is primarily characterized by native species.
 - d. Minor Building Elements. Bay windows, greenhouse windows, eaves, cornices, awnings, and canopies may extend up to 18 inches into the shoreline primary structure setback, subject to the following limitations:
 1. Eaves on bay windows may extend an additional 18 inches beyond the bay window.
 2. Chimneys that are designed to cantilever or otherwise overhang are permitted.
 3. The total horizontal dimension of these elements that extend into the shoreline setback, excluding eaves and cornices, shall not exceed 25 percent of the length of the facade of the structure
 - e. Critical Areas. If critical areas are located on the site, the requirements for the associated critical area buffer and buffer setback may impose a larger setback requirement. In the event of conflict, the provision providing the greatest protection to critical areas, their buffers, and setbacks shall apply.

II. Vegetation Conservation

- a. Purpose. Retention of significant trees and native vegetation as required by this section is necessary to maintain and protect property values, to enhance the visual appearance of the City, to preserve the natural wooded character of the Pacific Northwest, to promote utilization of natural systems, to reduce the impacts of development on the storm drainage system and water resources, and to provide a better transition between the various land uses permitted in the City.
- b. Tree Retention and Native Vegetation Standards in the Shoreline Vegetation Conservation Setback. Within the shoreline vegetation conservation setback, all native vegetation as defined in the City's Critical Areas Handbook and existing

significant trees shall be retained, provided that the trees are determined to be healthy and provided the trees can be safely retained consistent with the proposed development activity.

- c. Replanting Requirements in the Shoreline Vegetation Conservation Setback. All significant trees removed within the shoreline jurisdiction shall be replaced at a ratio of 3:1 with a minimum 5 gallon or 2 inch caliper for replacement.
- d. Tree Retention within the Shoreline Jurisdiction. In areas other than the vegetation conservation setback, but within the shoreline jurisdiction, the applicant must retain at least 30 percent of the existing diameter inches of the significant trees.
- e. Existing Landscape Maintenance- Routine maintenance of existing legally established landscaping and landscape features developed prior to August 1, 2006, in the shoreline setback may be continued in accordance with this section. For purposes of this section, "routine maintenance" includes mowing, pruning, weeding, planting annuals, perennials, fruits and vegetables, and other activities associated with maintaining a legally established ornamental or garden landscape and landscape features. Also, for purposes of this subsection, "landscape features" refers to fences, trellises, rockeries and retaining walls, pathways, arbors, patios, play areas and other similar improvements. To be considered routine maintenance, activities shall have been consistently carried out so that the ornamental species predominate over native or invasive species. Use of fertilizers, insecticides and pesticides is prohibited.
- f. Hazard Trees. The removal of trees that are hazardous, posing a threat to public safety, or posing an imminent risk of damage to an existing structure, public or private road or sidewalk, or other permanent improvement, is allowed; provided, that:
 - i. The applicant submits a report on a form provided by the Director from a certified arborist, registered landscape architect, or professional forester that documents the hazard and provides a replanting schedule for the replacement trees;
 - ii. Tree cutting shall be limited to pruning and crown thinning, unless otherwise justified by a qualified professional. Where pruning or crown thinning is not sufficient to address the hazard, trees should be converted to wildlife snags and completely removed only where no other option removes the identified hazard;
 - iii. All vegetation cut (tree stems, branches, etc.) shall be left within the shoreline vegetation conservation area or, if present, critical area or buffer, unless removal is warranted due to the potential for creating a fire hazard or for disease or pest transmittal to other healthy vegetation;
 - iv. The landowner shall replace any trees that are removed pursuant to a restoration plan meeting the requirements of LUC 20.25H.210 **[update reference to appropriate shoreline critical area provision]**;

- v. If a tree to be removed provides critical habitat, such as an eagle perch, a qualified wildlife biologist shall be consulted to determine timing and methods for removal that will minimize impacts; and
- vi. Hazard trees determined to pose an imminent threat or danger to public health or safety, to public or private property, or of serious environmental degradation may be removed or pruned by the landowner on whose property the tree is located prior to receiving the permits required under this part; provided, that the landowner makes reasonable efforts to notify the City, and within 14 days following such action, the landowner shall submit a restoration plan that demonstrates compliance with the provisions of this part.
- g. Select Vegetation Pruning. Pruning of existing trees and vegetation within the shoreline vegetation conservation area with hand labor and hand-operated equipment in accordance with this subsection. The pruning allowed by this subsection shall be performed in accordance with guidelines established by the Director for each of the following pruning techniques: canopy reduction; canopy cleaning; canopy thinning; canopy raising or lifting; structural pruning; and canopy restoration.

In no event may a tree or vegetation which is an active nest site for a species of local importance be pruned pursuant to this subsection.

- III. Landscape development within the Vegetation Conservation shoreline setback–
 - a. Purpose. This section establishes the requirements for landscape development within the shoreline Vegetation Conservation setback.
 - b. Landscaping. The following development activities shall require compliance with the landscape standards established in this section within the shoreline vegetation conservation setback:
 - i. New primary structure on an undeveloped site within shoreline jurisdiction; or
 - ii. Reconstructed primary structure whose lot coverage is greater than the existing structure; or
 - iii. Expansion of an existing home laterally more than 500 square feet; or
 - iv. Any expansion of an existing home when the expansion is proposed waterward of the homes existing façade; or
 - v. Construction of an accessory structure greater than 200 square feet within the primary structure? setback.
 - c. Landscaping Requirement
 - i. When required, an applicant shall plant landscaping in the amount of 60% of the area of the required shoreline vegetation conservation setback.

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Preliminary Draft Code Language

- ii. Use of Existing Vegetation. The City shall accept existing native trees, shrubs, and groundcover as meeting the requirements of this subsection, including vegetation previously installed as part of a prior development activity,; provided that the existing vegetation provides a landscape strip at least as effective in protecting shoreline ecological functions as the required vegetation. The City may require the applicant to plant trees, shrubs, and groundcover according to the requirements of this subsection to supplement the existing vegetation in order to provide a buffer at least as effective as the required buffer.
- iii. Plant materials must be native and selected from the City of Bellevue Critical Areas Handbook, or other native or shoreline appropriate species approved by the Director.

ATTACHMENT 4

The following are sections of the Redmond Shoreline Master Program that govern setbacks and vegetation conservation:

20D.150.60-020 Lake Sammamish Setback.

Lake Sammamish has no buffer (as noted in 20D.150.60-010 above) but rather has a building setback. The waterfront-building setback for new development and redevelopment (tear downs) along Lake Sammamish shall be a minimum of 35 feet. The building setback can be reduced to 20 feet if the setback area is revegetated with primarily native vegetation. Establishment of a tree canopy is encouraged. No constructed structures other than those required for waterfront access/docks are allowed within the 20-foot setback. New development adhering to the 35-foot setback and/or reconstruction that involves greater than 50% the value of existing improvements shall be required to plant 50% of the area in the minimum 20 foot building setback with native vegetation.

20D.150.60-030 Buffer and Setback Measurements

Shoreline buffers and waterfront-building setbacks are measured from the ordinary high water mark.

20D.150.70-070 Water-Oriented Accessory Structures.

Accessory structures that are water-oriented and accessory to a shoreline or water-dependent use shall meet the following standards.

- (1) Water-oriented accessory structures are not subject to the waterfront building setbacks or side yard setbacks of the underlying zone (see RCDG 20C.30.25), unless otherwise noted below.
- (2) Boathouses and similar water-oriented structures may extend no further waterward than the ordinary high water line. Such structures shall meet the minimum side yard setback required in the underlying zone, unless they are a joint use facility that serves more than one adjoining waterfront lot.
- (3) Water-oriented accessory structures shall not exceed ten feet in height and 250 square feet in area. However, multiuse structures that include storage and changing rooms may be a maximum of 500 square feet. The area of such covered structures shall be included in the maximum lot coverage and impervious surface limits of the zone in which they are located.
- (4) Uncovered boat lifts and similar equipment or structures used for watercraft may be located waterward of the ordinary high water mark to the waterward limit of the associated pier or dock. Such structures associated with docks shall have a height limit of four feet above ordinary high water. Such structures associated with piers shall have a height limit of four feet above the deck of the pier. Where a boatlift is used in lieu of a pier, it may extend waterward of the ordinary high water mark, provided it does not exceed four feet above the OHWM in height and meets the side yard setback of the underlying zoning district. Covered boat lifts shall not exceed 96 inches in height as measured from the ordinary high water mark.
- (5) Joint Use Accessory Structures. Water-oriented accessory structures that serve more than one adjoining waterfront lot may be constructed with a zero side setback

from the common boundary, provided that the owners of such property enter into a reciprocal use agreement recorded with the King County Auditor.

20D.150.90-010 Prohibited Clearing and Grading.

The following clearing and grading activities are prohibited within the shoreline jurisdiction:

- (1) Clearing or grading within shoreline buffers, except as part of a buffer restoration or mitigation plan and except as otherwise permitted under 20D.150.60-010(2) through (5).
- (2) Clearing or grading within Lake Sammamish waterfront building setbacks, except for the purpose of habitat restoration and enhancement or natural beach enhancement or protection, or the installation of residential docks, shoreline protective structures, or public access, where allowed.

20D.150.90-060 Design and Construction Standards in Shorelines.

Any clearing, grading, landfill or excavation within the shoreline jurisdiction shall meet the additional construction standards specified in this section. Shoreline buffers are defined in 20D.150.60, Shoreline Buffers and Setbacks. Waterfront building setbacks are defined in 20D.150.60-020, Lake Sammamish Setback. The shoreline jurisdiction is defined in 20D.150.20, Shoreline Jurisdiction.

- (1) Landfills and excavations shall not cause significant direct or indirect damage to shoreline vegetation, water quality, stream flow, fish habitat, aquatic life or wildlife. Landfills and excavations shall achieve no net loss of shoreline ecological functions.
- (2) Landfills and excavations shall not significantly reduce the aesthetic and visual qualities of the shoreline, nor significantly reduce public access to the shoreline or significantly interfere with shoreline recreational uses.
- (3) The extent of the landfill shall be the minimum amount and extent necessary to accomplish the purpose for the fill under subsection 20D.150.90-030 of this section.
- (4) Landfilling shall not create unstable land conditions, cause subsidence, cause land to rise, or otherwise jeopardize public safety and property.
- (5) Fill material shall consist of clean materials, free of toxins or other wastes that may degrade water quality or shoreline habitat.
- (6) All proposals for landfills within the floodplain shall provide confirmation that an equal water storage capacity is maintained and that no significant direct or indirect damage to the watercourse, water quality, stream flow or aquatic life will occur, and compliance with the development standards for flood hazard areas as outlined in RCDG 20D.140.40-030.
- (7) Any clearing or grading within a shoreline buffer shall also meet the requirements for stream buffers and wetland buffers in the City's critical areas regulations, RCDG 20D.140.30-020, Wetland Buffers and 20D.140.20-020, Stream Buffers, including 20D.150.60-010, Shoreline Buffers.
- (8) All landfilling in the floodplain is also subject to the requirements of RCDG 20D.140.40-030, Flood Hazard Areas – Development Standards.
- (9) Natural Beach Enhancement and Protection.
 - (a) Materials used in landfills for natural beach enhancement and protection shall be equivalent in form, size and function to beach material that naturally occurs at the site or other comparable natural beach site.

(b) Beach enhancement and protection shall incorporate planting of native emergent and upland vegetation, where such vegetation would naturally occur and where planting would promote beach stabilization.

(c) Natural beach enhancement and protection shall not:

(i) Detrimentally interrupt littoral drift, or redirect waves, current or sediment to other sites.

(ii) Extend waterward more than the minimum amount necessary to achieve a reasonable level of beach stabilization.

(iii) Result in steep contours that trap drifting sediments, impede pedestrian access, or that result in unstable slopes.

(10) Protection and Replacement of Vegetation.

(a) Within waterfront building setbacks, areas disturbed by clearing, grading or excavation for shoreline protective structures, docks and other improvements allowed within waterfront building setback (see RCDG 20C.30.25-080(5), Waterfront Building Setbacks) shall be revegetated to ensure no net loss of shoreline ecological functions.

(b) Vegetation Restoration. Vegetation remaining after project construction, including areas disturbed by clearing, grading or excavation within shoreline buffers shall be restored to its native condition, equal alternative or an improved condition, pursuant to RCDG 20D.140.30-040, Wetlands Performance/Design Standards and RCDG 20D.140.20-060, Riparian Stream Corridor Performance Standards.

(c) Any removal of trees within the shoreline jurisdiction shall also meet the requirements of RCDG 20D.150.110, Tree Protection, Landscaping and Screening within Shorelines.

20D.150.110 Tree Protection, Landscaping and Screening Within Shorelines.

20D.150.110-010 Tree Protection

In addition to RCDG 20D.80, Landscaping and Tree Protection, all development within the shoreline jurisdiction shall comply with the additional tree protection, landscaping and screening requirements of this section. Where there is a conflict between regulations, the more restrictive regulation shall apply.

(1) Tree Protection Requirements. To maintain the ecological functions that trees provide to the shoreline environment, including air quality, wildlife habitat, temperature and glare attenuation, and aquifer recharge, significant trees shall be retained as follows:

(a) Consistent with 20D.180.20-070, Tree Protection Standards, a minimum of 35% of the existing significant trees shall be preserved on site.

(b) Within the waterfront building setback, significant trees shall be retained, except where the tree is dead, diseased, dying or hazardous.

(c) Within the shoreline buffer, trees shall be removed only where allowed under RCDG 20D.140.10-160, Buffer Areas, and 20D.140.20-020, Stream Buffers.

(d) Within the shoreline jurisdiction, significant trees shall not be removed or topped for the purpose of creating views. Nondestructive thinning of lateral branches to enhance views is allowed.

(2) Tree Replacement. Significant trees that are removed, or significant trees designated for protection that are irreparably damaged or destroyed shall be replaced. Replacement trees shall be planted as follows:

- (a) Each existing significant tree shall be replaced with two new trees.
- (b) For each additional three inches d.b.h. above six inches d.b.h., one additional replacement tree shall be planted, up to six trees.
- (c) Where on-site tree replacement is not feasible, the Administrator may allow up to 60% of the required replacement trees to be planted off-site, pursuant to RCDG 20D.80.20.080, Tree Replacement. Replacement trees shall be planted within or adjacent to the shoreline jurisdiction. Trees planted in proposed landscaping of the site perimeter, vehicle use areas, shoreline buffers and other areas of the site may be counted as replacement trees.
- (d) See RCDG 20D.80.20-080(5) for size, species and condition of replacement trees.

(3) Trees planted within shoreline public open space areas and public trail corridors shall be maintained only under the supervision of Redmond Parks Department.

20D.150.170 Vegetation Management

20D.150.170-010 Purpose

The purpose of this chapter is to protect shorelines, sensitive areas, fish and wildlife habitat, and other natural areas from potentially adverse management activities, and to implement the goals and policies for the protection of the natural environment contained in RCDG Title 20B, Goals, Policies and Plans.

20D.150.170-020 Vegetation Management Within Shorelines

(1) Preservation of Shoreline Vegetation. Trees and other vegetation within the shoreline shall be preserved consistent with 20D.150.110, Tree Protection, Landscaping and Screening Within Shorelines, 20D.150.60- 010, Shoreline Buffers, and 20D.150.60-020, Lake Sammamish Setback.

(2) Clearing and grading within the shoreline is regulated by RCDG 20D.150.90, Clearing, Grading, Landfill and Excavation Within Shorelines.

(3) Aquatic Vegetation Removal Prohibited.

(a) Removal of aquatic vegetation within the Aquatic, Natural or Urban Conservancy Shoreline Environments is prohibited, except where authorized under an approved habitat enhancement plan, adopted basin plan, or authorized aquatic weed management program; and where native plant communities and habitats are threatened or an existing water-dependent use is threatened by the presence of aquatic weeds.

(b) The removal of native aquatic plants is prohibited, except where an existing water-dependent use is threatened; or where the overabundance of the native plant threatens fish and wildlife habitat.

(c) The use of herbicides to control aquatic vegetation is prohibited, except where:

- (i) no reasonable alternative exists;
- (ii) the use of herbicides has been approved through a comprehensive vegetation management and monitoring plan; and where

(iii) authorized by the City or other agency through the environmental review process pursuant to WAC 197-11, the State Environmental Policy Act.

(d) Where aquatic vegetation removal becomes necessary, it shall be the minimum area and duration necessary to accomplish the stated objectives of the removal program, and shall minimize negative impacts on wildlife, fish and shoreline habitat.

(e) Aquatic vegetation management programs shall include preventive measures and monitoring recommendations.

(f) Aquatic vegetation removal activities within the shoreline jurisdiction shall comply with the requirements of the responsible agencies (i.e. Washington State Departments of Agriculture, Fish and Wildlife, or Ecology, or the Federal Environmental Protection Agency.)

(4) Vegetation Removal Restricted.

(a) Normal pruning and trimming of landscape plants within the shoreline jurisdiction are exempt from the requirements of this subsection.

(b) Vegetation removal within shoreline buffers and waterfront building setbacks shall be allowed only for the purposes of maintaining established landscaping, maintaining public safety, maintaining an allowed shoreline use or improvement, or to enhance fish or wildlife habitat; provided that:

(i) removal shall not be by mechanical means unless no feasible alternative exists;

(ii) the extent of removal is the minimum necessary to achieve the above purposes;

(iii) native plants are not removed for the purpose of establishing non-native plants; and

(iv) the timing and duration of such removal is demonstrated to not have long-term adverse impacts on wildlife or fish.

(5) Application of Herbicides, Pesticides and Fertilizers.

(a) The application of pesticides, herbicides or fertilizers within shoreline buffers or waterfront building setbacks is discouraged and shall be the minimum necessary for the long-term maintenance or restoration of fish or wildlife habitat, restoration or maintenance of native plants, or maintenance of existing landscaping.

(b) Herbicides and other agricultural and landscape chemicals shall be applied in a manner that minimizes their transmittal to adjacent water bodies. The direct runoff of chemical-laden waters into adjacent water bodies is prohibited. Aerial spraying of herbicides, pesticides and fertilizers within 500 feet of the o.h.w.m. of the adjacent water body is prohibited.

(c) Within 20 feet of the shoreline buffer or waterfront building setback, broad spectrum herbicides shall be used only for spot application with wicking or small spray equipment on noxious weeds.

(d) The use of time-release fertilizers and herbicides shall be preferred over liquid or concentrate application on turf within the shoreline jurisdiction.

(e) The use of pesticides, herbicides or fertilizers within the shoreline jurisdiction shall comply with regulations of responsible agencies (i.e. Washington State

Departments of Agriculture, Fish and Wildlife, or Ecology, or the Federal Environmental Protection Agency.)

(f) Sports fields, parks, golf courses and other outdoor recreational uses that require maintenance of extensive areas of turf shall provide a chemical management plan or integrated turf management program designed to ensure that existing water quality of adjacent water bodies and aquifers is maintained. The chemical management plan or integrated turf management program shall incorporate facilities and management methods sufficient to maintain water quality, including stormwater treatment facilities adequate to remove a minimum of 50% of excess phosphorous and nitrogen, and up to 25% additional shoreline and shoreline tributary buffers where necessary to protect water quality.

(6) Landscape Maintenance Required.

(a) All landscaped areas within the shoreline jurisdiction, shoreline buffers and shoreline setbacks shall be managed and maintained to prevent the excessive growth of noxious weeds as required by Redmond Municipal Code Chapter 6.12.030.

(b) Areas disturbed by removal of noxious or invasive plants shall be replanted in a timely manner with native vegetation.

(7) Where large quantities of plants are removed by vegetation control activities, plant debris shall be collected and disposed of in an appropriate upland location outside of shoreline buffers and waterfront building setbacks.

ATTACHMENT 5

	1974 Code	Existing Code	Option A	Option B	WSSA Option	Kirkland	Redmond	Sammamish	Renton
BUFFER/SETBACK	25' structure setback	All water bodies Developed site- 25' buffer/25' setback Undeveloped site- 50' buffer/0 setback	Lake WA, Sammamish, Phantom Lake, & Mercer Slough/Kelsey Creek 50' Newport Shores Canals 25'	Phantom Lake & Mercer Slough/Kelsey Creek 50' Lake WA and Sammamish 35' Newport Shores Canals 25'	All water bodies 25'	Residential-L 30% of the average parcel depth, except in no case is the shoreline setback permitted to be less than 30 feet or required to be greater than 60 feet Residential-M/H The greater of: a. 25' or b. 15% of the average parcel depth	Lake Sammamish 35'	Lake Sammamish 45'/5'	Lake WA 25-60
MINIMUM SETBACK	25'	n/a	25'	25'	25'	25'	20'		25'
MENU OPTIONS	NO	NO	YES	NO	NO	YES	NO	YES	YES
VEGETATION STANDARDS	Required plan for preserving vegetation. No additional tree preservation requirement.	Preserve all vegetation w/in buffer and within all critical areas and their setbacks. General Tree preservation- 20% of significant trees	Preserve significant trees and native vegetation within vegetation conservation setback. Preserve 30% of significant on remainder of site	Not detailed.	No vegetation conservation, management or restoration in/out of setback	Trees w/in setback must be preserved. Replacement for trees removed at 2-6 ratio. Plant native vegetation in 75% of the nearshore area- (10-15 feet in width) Nonconforming Shoreline Setback Vegetation: Must be brought into conformance when the cost of which exceeds 50 percent of the replacement cost of all structures on the subject property.	Trees within building setback must be maintained. 20' setback area with native vegetation. Establishment of a tree canopy is encouraged. General tree preservation standard-35% of the existing significant trees shall be preserved on site.	Vegetation enhancement area 75% of 15 foot-wide portion of the shoreline setback immediately landward of the OHWM is Unspecified tree preservation on Lake Sammamish.	Retain native vegetation w/in vegetation conservation buffer (10-25')

ATTACHMENT 6

	MENU OPTION	OBJECTIVES	FUNCTIONS	RELATIVE ECOLOGICAL CONTRIBUTION	RELATIVE SETBACK REDUCTION
1.	Presence of non-structural or soft structural shoreline stabilization measures located at, below, or within 5 feet landward of the lake's OHWM along at least 75 percent of the linear lake frontage of the subject property. This can include the removal of an existing hard structural shoreline stabilization measure and conversion to a non-structural or soft structure stabilization measure. This option cannot be used in conjunction with Option 2 below.	<p>Link upland and aquatic resources</p> <p>Provide space for wildlife</p>	<p>Habitat:</p> <ul style="list-style-type: none"> Fish habitat Invertebrate habitat Mammal and bird habitat Amphibian and reptile habitat Food chain support, structure, diversity <p>Vegetative:</p> <ul style="list-style-type: none"> Large woody debris Attenuation of wave energy Sediment removal and bank stabilization Bio-diversity <p>Hydrologic:</p> <ul style="list-style-type: none"> Water storage/flood control Collection woody debris/ organic transport Shoreline anchoring/wave attenuation Groundwater recharge/discharge <p>Hyporheic:</p> <ul style="list-style-type: none"> Sediment storage & collection Chemical cycling Vegetation support (Moisture) Nutrient and toxic compound removal 	<p>HIGH</p> <p>HIGH</p> <p>MEDIUM</p> <p>MEDIUM</p>	HIGH
2.	Presence of non-structural or soft structural shoreline stabilization measures located at, below, or within 5 feet landward of the lake's OHWM along at least 15 linear feet of the lake frontage of the subject property. This may include the removal of an existing hard structural shoreline stabilization measure and conversion to a non-structural or soft structure stabilization measure. This option cannot be used in conjunction with Option 1 above;	<p>Link upland and aquatic resources</p> <p>Provide space for wildlife</p>	<p>Habitat:</p> <ul style="list-style-type: none"> Fish habitat Invertebrate habitat Mammal and bird habitat Amphibian and reptile habitat Food chain support, structure, diversity <p>Vegetative:</p> <ul style="list-style-type: none"> Large woody debris Attenuation of wave energy Sediment removal and bank stabilization Bio-diversity <p>Hydrologic:</p> <ul style="list-style-type: none"> Water storage/flood control Collection woody debris/ organic transport Shoreline anchoring/wave attenuation Groundwater recharge/discharge <p>Hyporheic:</p> <ul style="list-style-type: none"> Sediment storage & collection Chemical cycling Vegetation support (Moisture) Nutrient and toxic compound removal 	<p>MEDIUM</p> <p>MEDIUM</p> <p>LOW</p> <p>LOW</p>	MEDIUM
3.	Opening of previously piped on-site watercourse to allow improvement to habitat function for fish for a minimum of 25 feet in length. Opened watercourses must be provided with a native planted buffer at least 5 feet wide on both side of the stream. A qualified professional must design opened watercourses.	<p>Link upland and aquatic resources</p> <p>Provide space for wildlife</p> <p>Pollutant removal and improved water quality</p>	<p>Habitat:</p> <ul style="list-style-type: none"> Fish habitat Invertebrate habitat Mammal and bird habitat Amphibian and reptile habitat Food chain support, structure, diversity <p>Vegetative:</p> <ul style="list-style-type: none"> Large woody debris Attenuation of wave energy Sediment removal and bank stabilization Bio-diversity Temperature regulation <p>Hydrologic:</p> <ul style="list-style-type: none"> Water storage/flood control Collection woody debris/ organic transport Water quality improvement Shoreline anchoring/wave attenuation Groundwater recharge/discharge <p>Hyporheic:</p> <ul style="list-style-type: none"> Sediment storage & collection Chemical cycling Vegetation support (Moisture) Nutrient and toxic compound removal 	<p>HIGH</p> <p>MEDIUM</p> <p>MEDIUM</p> <p>LOW</p>	MEDIUM
4.	Soft structural shoreline stabilization measures are installed waterward of the OHWM. They may include the use of gravels, cobbles, boulders, and logs, as well as vegetation. The material shall be of a size and placed to remain stable and accommodate alteration from wind- and boat-driven waves and shall be graded to a maximum slope of 1 vertical (v): 4 horizontal (h).	<p>Link upland and aquatic resources</p> <p>Provide space for wildlife</p>	<p>Habitat:</p> <ul style="list-style-type: none"> Fish habitat Invertebrate habitat Amphibian and reptile habitat Food chain support, structure, diversity <p>Vegetative:</p> <ul style="list-style-type: none"> Large woody debris Attenuation of wave energy Bank stabilization Bio-diversity <p>Hydrologic:</p> <ul style="list-style-type: none"> Collection woody debris/ organic transport Shoreline anchoring/wave attenuation <p>Hyporheic:</p>	<p>MEDIUM</p> <p>MEDIUM</p> <p>MEDIUM</p> <p>N/A</p>	MEDIUM

	MENU OPTION	OBJECTIVES	FUNCTIONS	RELATIVE ECOLOGICAL CONTRIBUTION	RELATIVE SETBACK REDUCTION
5.	Installation of pervious material for all pollution generating surfaces such as driveways, parking or private roads that allows water to pass through at rates similar to pre-developed conditions.	Pollutant removal and improved water quality	Habitat: <ul style="list-style-type: none"> Fish habitat Invertebrate habitat Mammal and bird habitat Amphibian and reptile habitat Food chain support, structure, diversity Hydrologic: <ul style="list-style-type: none"> Water storage/flood control organic transport Water quality improvement Groundwater recharge/discharge Vegetative: N/A Hyporheic: LOW <ul style="list-style-type: none"> Sediment storage & collection Chemical cycling Vegetation support (Moisture) Nutrient and toxic compound removal 	LOW HIGH	MEDIUM
6.	Preserving or restoring at least 20 percent of the total lot area outside of the reduced setback and any critical areas and their associated buffers as native vegetation.	Provide space for wildlife Pollutant removal and improved water quality	Habitat: <ul style="list-style-type: none"> Fish habitat Invertebrate habitat Mammal and bird habitat Amphibian and reptile habitat Food chain support, structure, diversity Vegetative: <ul style="list-style-type: none"> Large woody debris Attenuation of wave energy Sediment removal and bank stabilization Bio-diversity Hydrologic: MEDIUM <ul style="list-style-type: none"> Water storage/flood control Collection woody debris/ organic transport Water quality improvement Groundwater recharge/discharge Hyporheic: N/A	MEDIUM MEDIUM	MEDIUM
7.	Hard structural shoreline stabilization measures are setback from the OHWM between 2 ft. to 4 ft based on feasibility and existing conditions and/are sloped at a maximum 3 vertical (v): 1 horizontal (h) angle to provide dissipation of wave energy and increase the quality or quantity of nearshore shallowwater habitat.	Provide space for wildlife	Habitat: <ul style="list-style-type: none"> Fish habitat Amphibian and reptile habitat Vegetative: N/A Hydrologic: MEDIUM <ul style="list-style-type: none"> Shoreline anchoring/wave attenuation Hyporheic: N/A	MEDIUM MEDIUM	LOW
8.	Increasing the width the vegetation conservation setback to by 5 feet.	Provide space for wildlife Pollutant removal and improved water quality	Habitat: <ul style="list-style-type: none"> Fish habitat Invertebrate habitat Mammal and bird habitat Amphibian and reptile habitat Food chain support, structure, diversity Vegetative: <ul style="list-style-type: none"> Large woody debris Sediment removal and bank stabilization Bio-diversity Hydrologic: LOW <ul style="list-style-type: none"> Water storage/flood control Collection woody debris/ organic transport Water quality improvement Shoreline anchoring/wave attenuation Groundwater recharge/discharge Hyporheic: LOW <ul style="list-style-type: none"> Sediment storage & collection Chemical cycling Vegetation support (Moisture) Nutrient and toxic compound removal Hyporheic: N/A	LOW MEDIUM	LOW
9.	Limiting total site impervious coverage to at least 10% less than maximum allowed	Provide space for wildlife Pollutant removal and improved water quality	Habitat: <ul style="list-style-type: none"> Fish habitat Invertebrate habitat Mammal and bird habitat Amphibian and reptile habitat Food chain support, structure, diversity Vegetative: <ul style="list-style-type: none"> Large woody debris Bio-diversity Hydrologic: MEDIUM <ul style="list-style-type: none"> Water storage/flood control Collection woody debris/ organic transport Water quality improvement Groundwater recharge/discharge Hyporehic N/A	LOW LOW	LOW

Shoreline Master Program

U P D A T E

Planning Commission Meeting
October 20, 2010

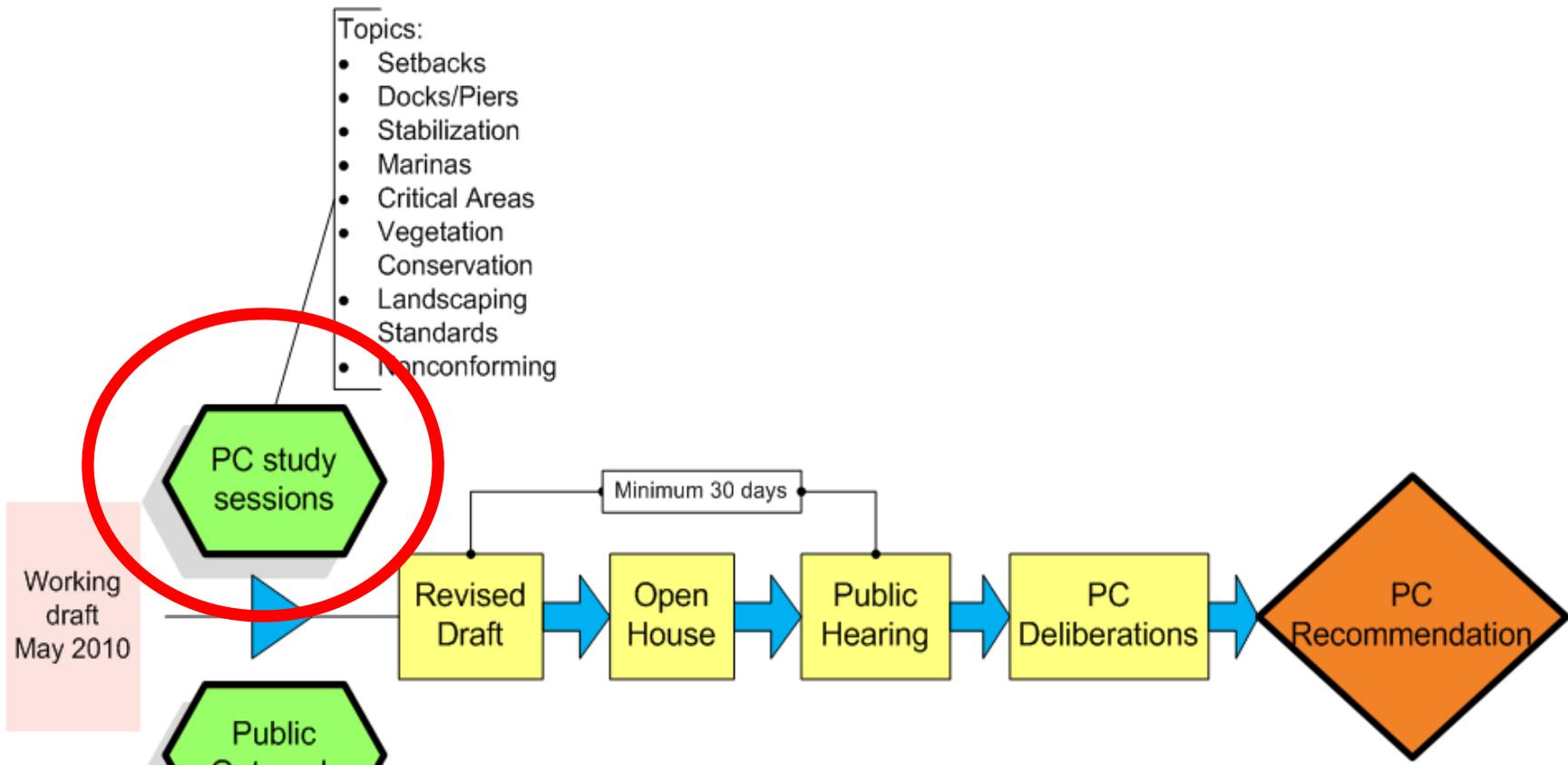


Direction Sought

Approach to residential shoreline development including:

- Residential setbacks
- Vegetation conservation
- Landscaping standards

Phone Survey, Focus Group, Boat Tour, Open House, Community and Special Interest Group Meetings
Inventory and Characterization Report
Environment Designations
Science Briefings



Project Schedule

Presentation Format

- What we've heard
- Summary of Option A
- Examples of application
- Working draft approach
- Public comment
- PC discussion

What We've Heard

- Code language is necessary
- Details of menu option are needed
- Protection of legally nonconforming structures and uses
- Provision of fast, predictable, inexpensive process for minor expansions and modifications

What We've Heard

- Accommodation of recreation uses
- Accommodation of new and legally existing accessory structures
- Accommodation of ornamental landscaping in veg. conservation area
- Protection of views

Summary of Option A

- Shoreline Setback 50 feet
- Vegetation Conservation and Primary Setbacks
- Menu Option
- Landscaping standard

Tools/Package Information

- Planning Commission Meeting Notes
- Policy Guidance on Setback Dimensions
- No Net Loss and Cumulative Impacts Assessment Summary
- Redmond Shoreline Setback Code
- Range of Regulatory Approaches
- Matrix of Menu Options

Current Rules

- Buffer and structure setback
- Buffer is no touch and protects existing vegetation.
- Footprint of existing primary structures excepted from buffer/setback requirements
- Management within buffer is subject to detailed performance standards
- Maintenance, pruning, noxious weed and hazard tree removal allowed
- Minor repair and maintenance of existing accessory structures

Shoreline Setback

- Overall setback dimension 50 feet
- Footprint exception- legally established structures
- Setback divided into two areas:
 - 25-foot Vegetation Conservation area
 - 25- foot Primary Structure setback

Vegetation Conservation Setback

- First 25' landward of OHWM
- Purpose protection of ecological functions and processes
- Up to 40% of area used for recreation
- No new structures
- Vegetation conservation is required
- Mitigation for impacts

Vegetation Conservation and Tree Preservation Standards

- Protect all significant trees and native vegetation within vegetation conservation setback
- Removal allowed with mitigation
- Retain 30% of all trees outside of 25 feet

Primary Structure Setback

- Second 25' measured from edge of vegetation conservation setback
- Purpose is protection of vegetation conservation setback and ecological functions and processes
- More flexible in range of uses allowed as compared to vegetation conservation setback

Primary Structure Setback

- Accessory structures allowed (up to 200 sq. ft.)
- Minor lateral expansions (up to 500 sq. ft) to existing primary structures are allowed without reducing setbacks
- May be reduced following a menu of mitigation options

Options Menu

- Predictable list of improvements or modifications
- Size of reduction corresponds to increased benefit in ecological function
- Allows increased site development flexibility

	MENU OPTION	RELATIVE SETBACK REDUCTION
1.	Presence of non-structural or soft structural shoreline stabilization measures	HIGH
2.	Presence of non-structural or soft structural shoreline stabilization measures on at least 15 linear feet of the lake frontage	MEDIUM
3.	Opening of previously piped on-site watercourse	MEDIUM
4.	Soft structural shoreline stabilization measures are installed waterward of the ordinary high water mark.	MEDIUM
5.	Installation of pervious material for all pollution generating surfaces	MEDIUM
6.	Preserving or restoring at least 20 percent of the total lot area outside of the reduced setback and any critical areas and their associated buffers as native vegetation.	MEDIUM
7.	Hard structural shoreline stabilization measures are setback from the ordinary high water mark.	LOW
8.	Increasing the width the vegetation conservation setback to by 5 feet.	LOW
9.	Limiting total site impervious coverage to at least 10% less than maximum allowed.	LOW

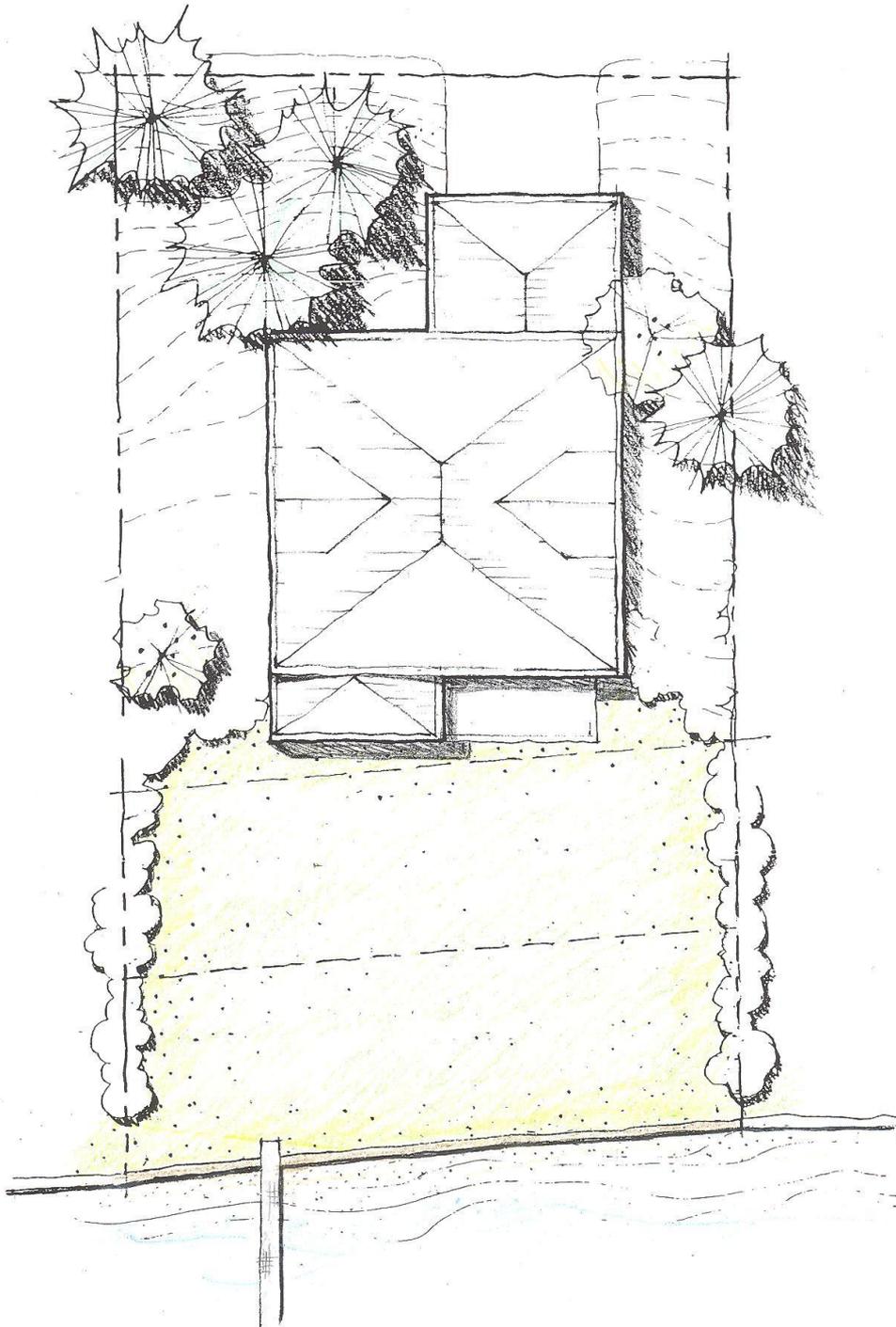
Proposed Landscape Standards

- Requires planting portion of vegetation conservation setback
- Required when:
 - New development (vacant/>footprint)
 - Expansion of an existing primary structure waterward
 - Expansion laterally >500 sq. ft.
 - Construction of an accessory structure greater than 200 sq. ft.
 - Impacts to veg. conservation setback

Example 1

New structure, no
building footprint
expansion

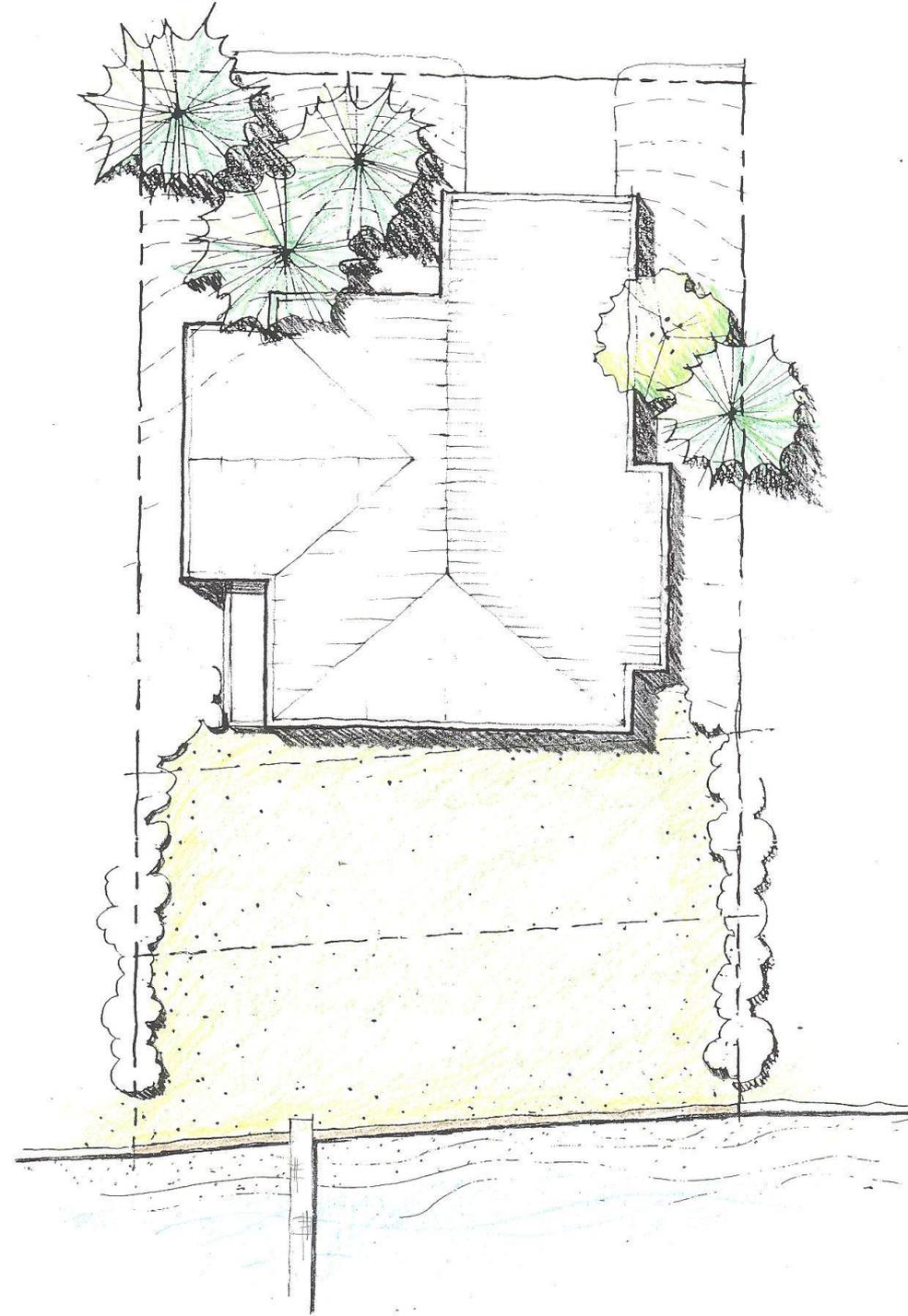
➔ Tree preservation



Example 2

Lateral addition (up to
500 sq. ft.)

 Tree preservation

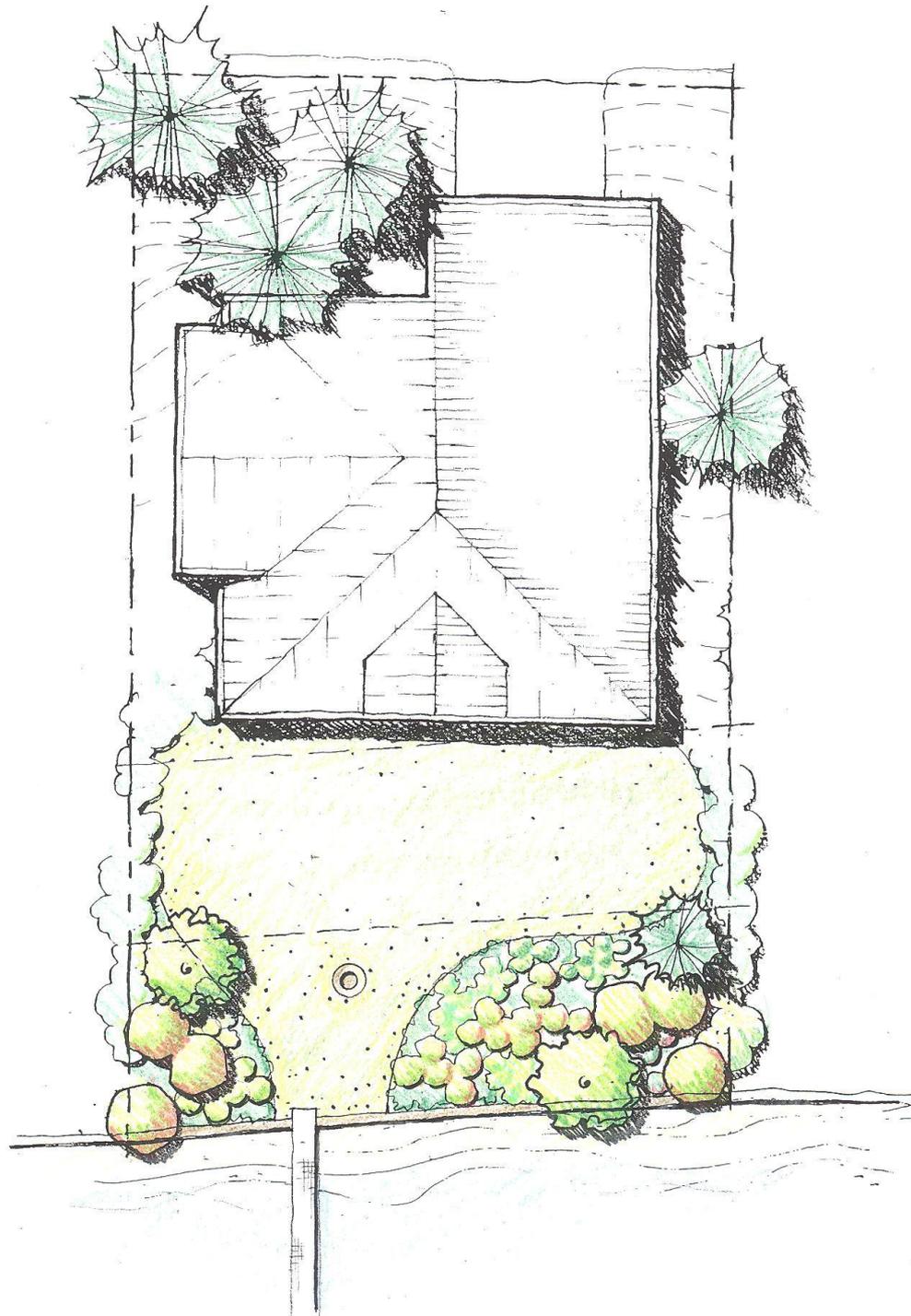


Example 3

New structure,
building footprint
expansion



Landscaping
Tree preservation

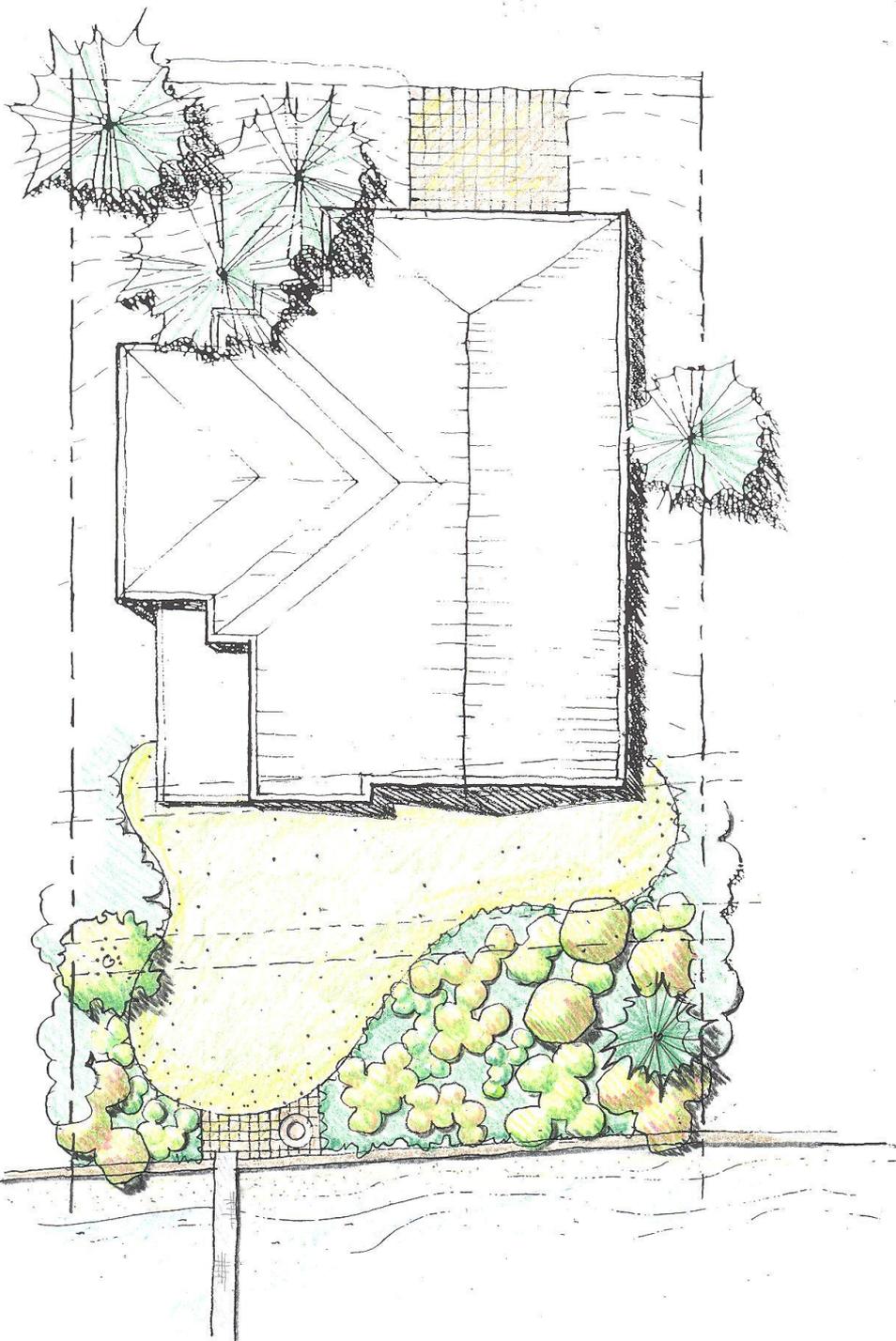


Example 4

New structure, building
footprint expansion
waterward

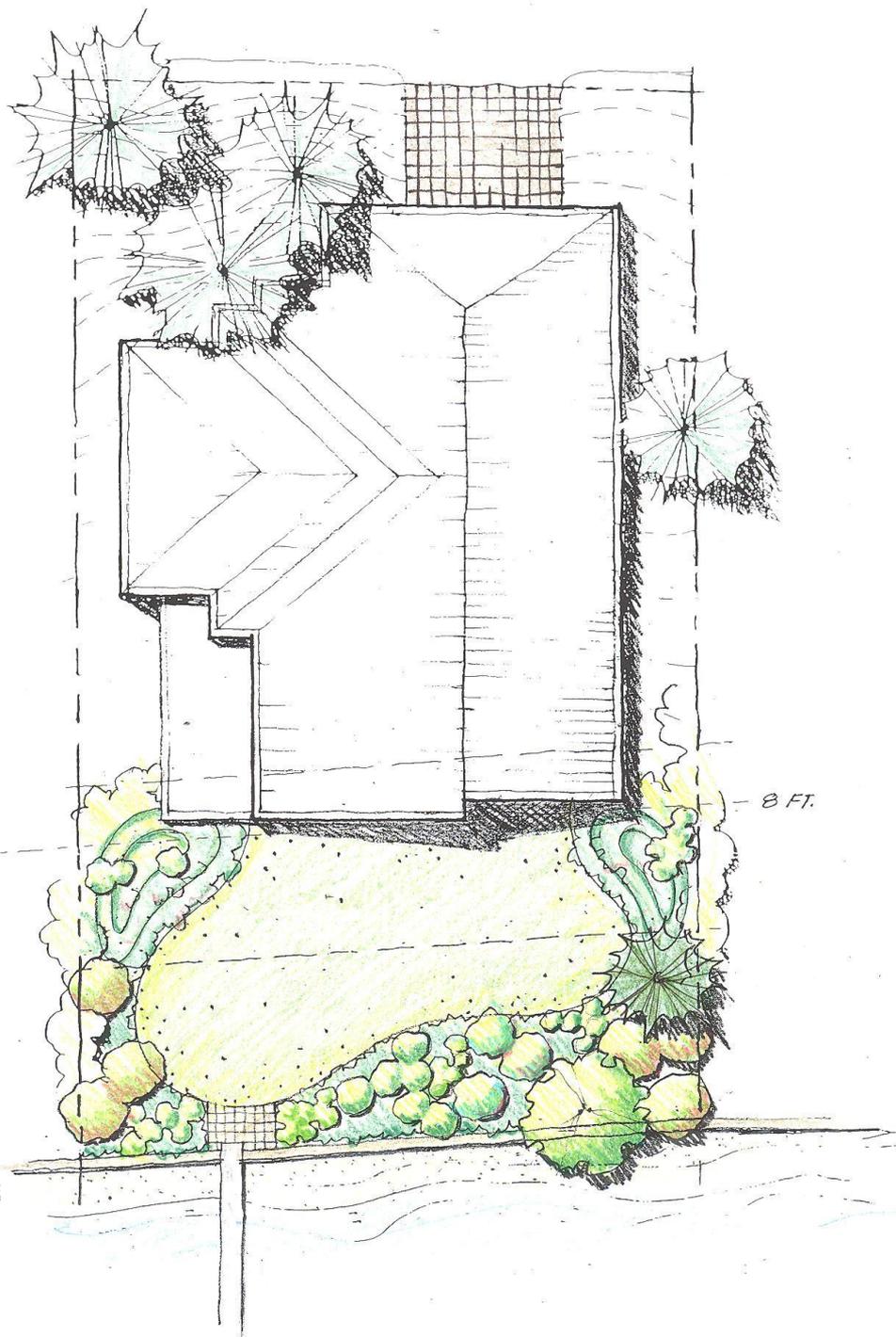


Menu Option
Landscaping
Tree preservation



Example 5

New structure, building footprint expansion waterward



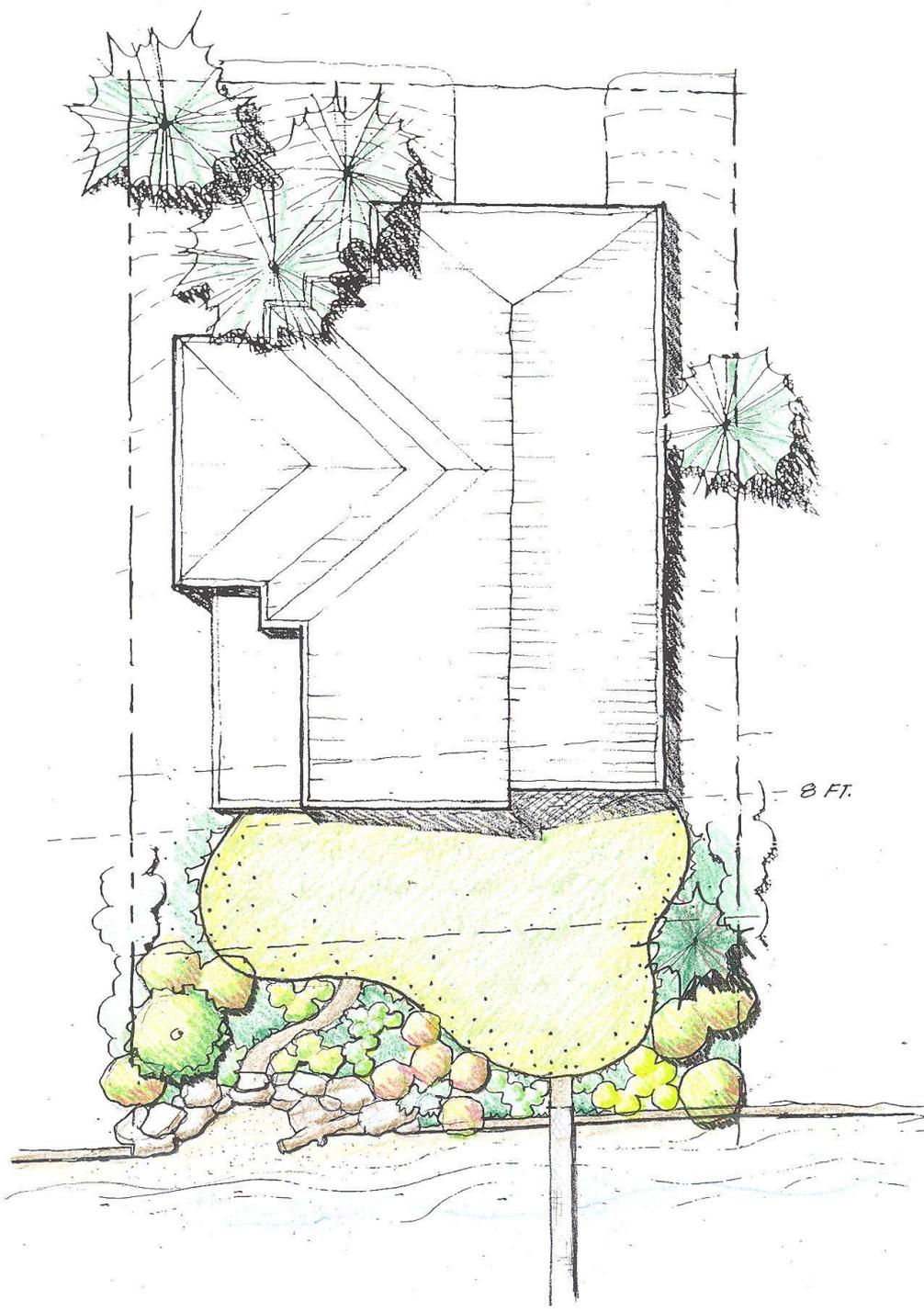
Menu Option
Landscaping
Tree preservation

Example 6

New structure, building footprint expansion waterward



Menu Option
Landscaping
Tree preservation

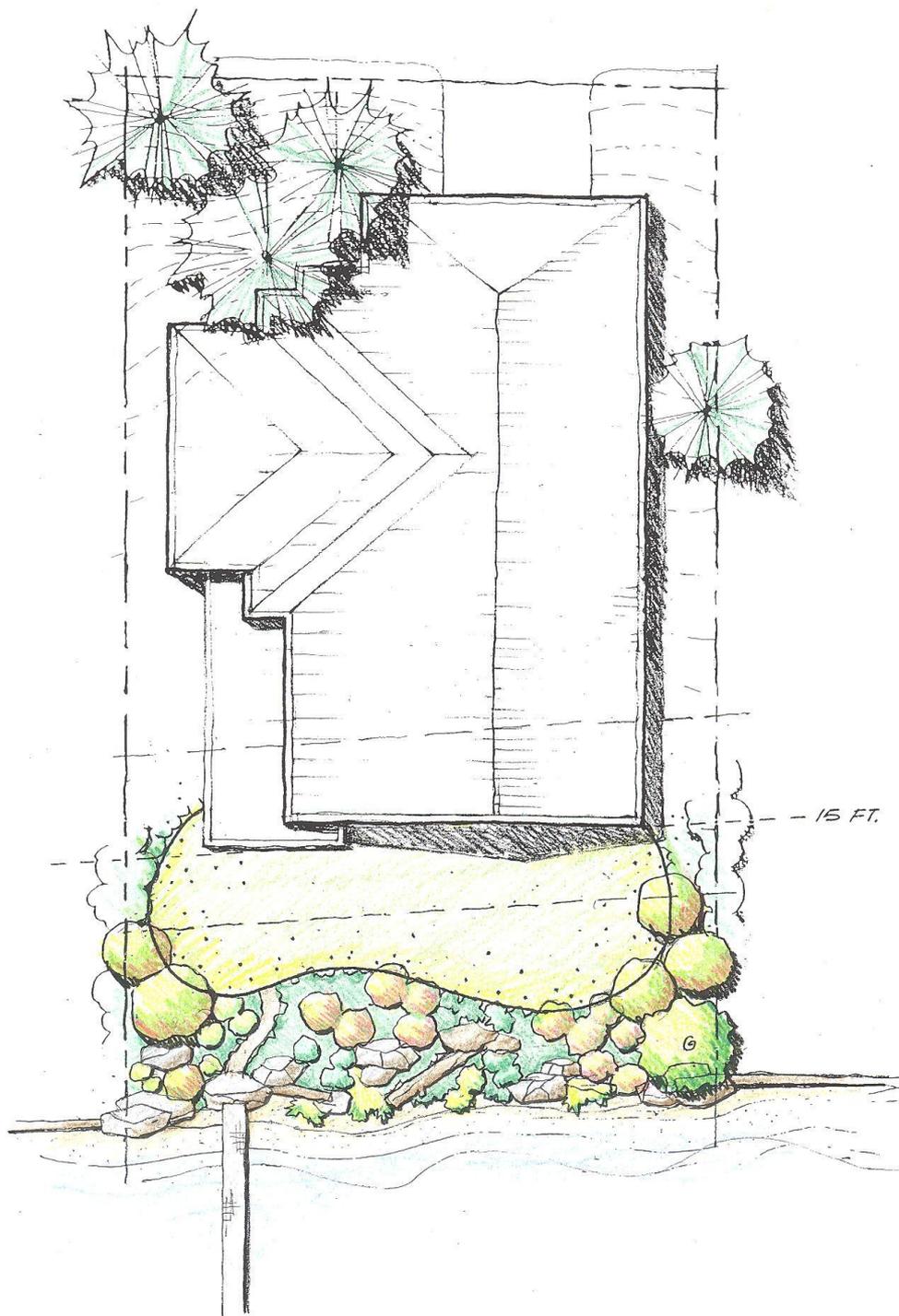


Example 7

New structure, building
footprint expansion
waterward



Menu Option
Landscaping
Tree preservation



Working Draft Approach To What We've Heard

Comment:



Working Draft Approach:



Predictable Setback Reduction

Comment:

Setback regulations should include a standard level of protection with a predictable means of adjustment.

Working Draft Approach:

Develop a predictable menu of options.

Existing Uses and Development

Comment:

Nonconforming uses and development must be removed.

Working Draft Approach:

Legally established existing uses and development may remain until development action requires change.

Process Simplification

Comment:

Minor expansions and modifications within setback not allowed without complicated permit process.

Working Draft Approach:

Allow minor changes to legally established existing structures under simple rules.

Recreational Use

Comment:

Recreational use of setback area in conflict with native vegetation objective.

Working Draft Approach:

Allow for use of a portion of the setback for recreational use.

Small Watercraft Storage

Comment:

Storage of small human powered watercraft not allowed in setback.

Working Draft Approach:

Permit storage of human powered watercraft in specified portion of setback.

New Accessory Structures

Comment:

Restrictions on location of new accessory structures within the shoreline setback.

Working Draft Approach:

Allow for the placement of an accessory structure within a specified portion of the setback.

Existing Accessory Structures

Comment:

Prohibition on maintenance and repair of existing accessory structures within the shoreline setback.

Working Draft Approach:

Allow for the maintenance and repair of legally established accessory structures within the setback.

Ornamental Landscaping

Comment:

Vegetation conservation rules will prohibit maintenance of existing ornamental landscaping.

Working Draft Approach:

Allow for the maintenance of existing landscaping until development action requires change.

View Protection

Comment:

Landscaping rules that require the placement of tall trees directly in view corridors.

Working Draft Approach:

Provide a landscape standard that allows for flexibility in the placement and design of landscaping when required.

Plant Palette For Landscaping

Comment:

Species list available for use for required landscaping too limiting

Working Draft Approach:

Provide for a mix of native and compatible non-native species.

Proposed Draft Setbacks Code

- Related to current regulatory regimes in LUC
- Focus is on basic requirements
- Soliciting feedback

PUBLIC COMMENT



Direction Sought- Planning Commission Work Session

Approach to residential shoreline development including:

- Residential setbacks
- Vegetation conservation
- Landscaping standards

Planning Commission Work Session



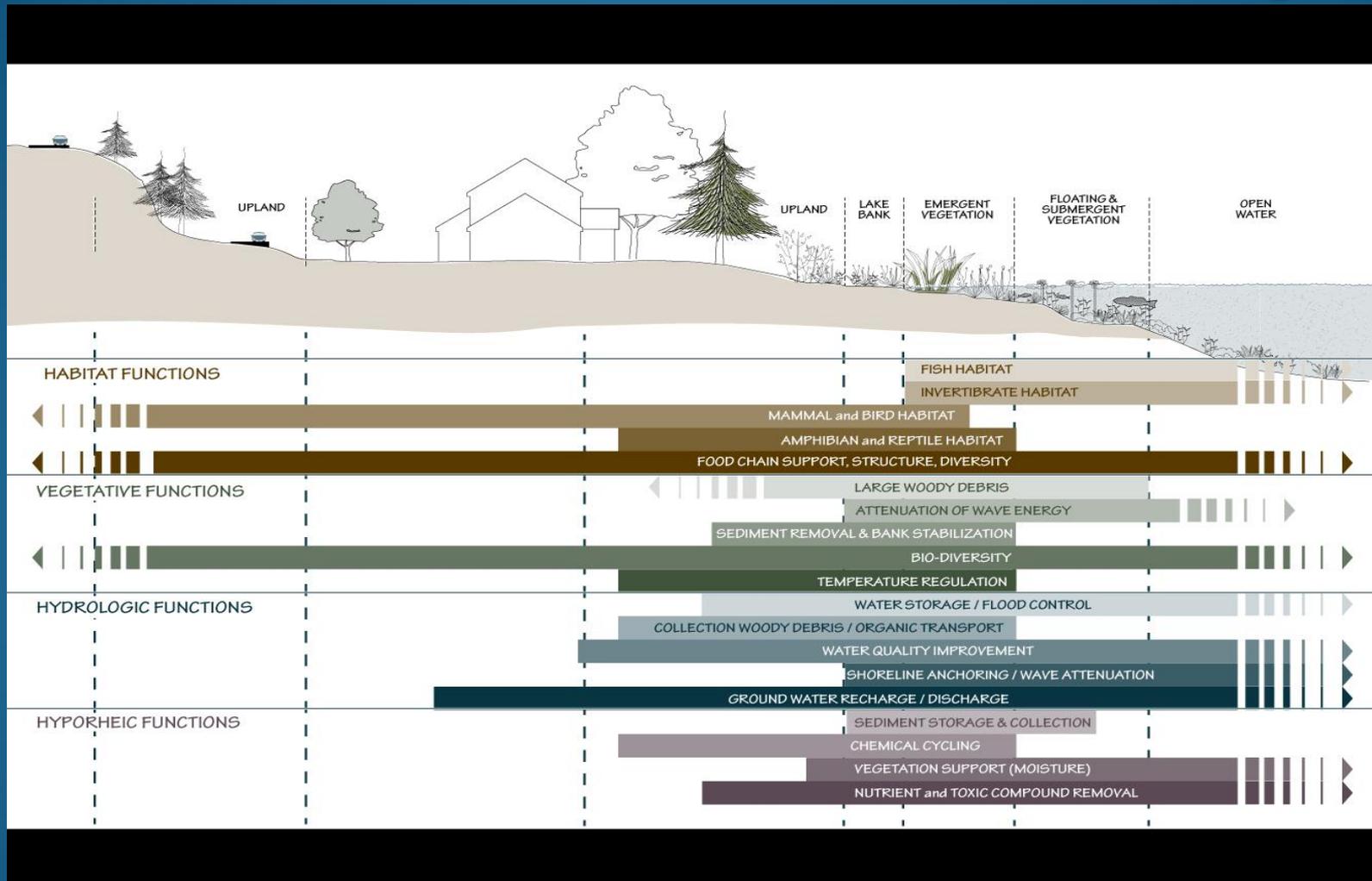
Equivalent Level of Protection – No Backsliding

- Current rules include a total of 50 feet of setback.
- Require preservation of vegetation in first 25 feet.

Determining Setback Width

- Establishing minimum width is key policy challenge
- Test options against science-based criteria:
 - Specific ecological functions targeted
 - Existing or potential resource value
 - Site characteristics
 - Intensity of abutting land use

What Functions Does Setback Target?



What Functions Does Setback Target?

- Bank stability
- Sediment removal/erosion
- Pollutant removal
- Aquatic habitat
- Terrestrial habitat
- Limited number of studies regarding width and effectiveness in lakes—but many studies done elsewhere are relevant—same functions provided

Setback Size and Key Functions

Function	Key Factors	Range of Effective Buffer Widths (per May 2003)	Recommended Buffer Widths for Lakes (Vermont, WQD, 2008)	Comments
Bank stability	Root structure		15 feet	Vegetation Required
Sediment Removal/ Erosion Control	Soils, width, slope, flow path, vegetation type	16-860 ft	NA	Grass filter strips very effective especially with adequate infiltration and low slope angle sheet flow
Pollutant Removal	Soils, slope, flow path, vegetative structure, width	13-860 ft	100 ft	Mature forest vegetation
Aquatic Habitat	Vegetative width structure,	98-295 ft	25 ft	Mature native vegetation preferred: mimic natural ecosystems.
Terrestrial Habitat	Vegetative width structure,	328-820 ft	Up to 600 ft	Mature native vegetation preferred:

Other Considerations

- Resource value—supports wider setbacks
- Site characteristics—impact particular but generally argues for narrower setbacks
- Intensity of use— residential consider lower in urban context
- Existing conditions—GIS analysis
- Property rights and economic efficiency

Choosing Setback Dimension

- Two approaches:
 - (1) Greatest width necessary to account for all functions
 - Greatest protection; lowest risk
 - (2) Smallest width that will take in all desired functions
 - Lower protection; higher risk

Cumulative Impacts and No Net Loss

- The baseline condition used is that identified in the inventory document.
- Objective of the SMP is to allow uses and development that cumulatively do not result in a net loss of ecological functions from the baseline condition.
- Uses indicators to gauge how specific development actions might impair processes and degrade ecological functions.
- Considers the entire SMP for net level of cumulative impact.

Importance of Vegetation

- Strong coupling relationship between terrestrial and aquatic systems
- Development can interfere with this relationship
- Shorelines devoid of vegetation cannot support critical habitat components
- Importance of vegetation to juvenile salmonid survival

Working Draft Policies

- Policies reflect concept of minimizing impacts to ecological services.
- Balance conservation goals with private recreational use
- Provide flexibility in application
- Allow hazard tree removal, pruning
- New development triggers shoreline landscape standard in shoreline setback

Vegetation Conservation

- WAC guidance focuses on:
 - Activities designed to protect vegetation along or near the shoreline
 - Intent is to maintain or restore ecological services provided by vegetation
 - Range of techniques suggested

CITY OF BELLEVUE
BELLEVUE PLANNING COMMISSION
STUDY SESSION MINUTES

October 20, 2010
6:30 p.m.

Bellevue City Hall
City Council Conference Room 1E-113

COMMISSIONERS PRESENT: Chair Ferris, Commissioners Himebaugh, Mathews, Sheffels, Turner

COMMISSIONERS ABSENT: Commissioners Hamlin, Lai

STAFF PRESENT: Paul Inghram, Department of Planning and Community Development; Carol Helland, Michael Paine, Heidi Bedwell, David Pyle, Development Services Department

GUEST SPEAKERS: None

RECORDING SECRETARY: Gerry Lindsay

1. CALL TO ORDER

The meeting was called to order at 6:31 p.m. by Chair Ferris who presided.

2. ROLL CALL

Upon the call of the roll, all Commissioners were present with the exception of Commissioners Hamlin and Lai, both of whom were excused.

3. PUBLIC COMMENT – None

4. APPROVAL OF AGENDA

The agenda as submitted was approved by consensus.

5. COMMUNICATIONS FROM CITY COUNCIL, COMMUNITY COUNCILS, BOARDS AND COMMISSIONS – None

6. STAFF REPORTS

Comprehensive Planning Manager Paul Inghram indicated that concurrent with the Commission meeting there was an open house regarding a greenway along Main Street at the Botanical Garden. The design concepts under review will improve pedestrian access in a way that will enhance the entrance to the garden. Information about the project is available on the project website.

Mr. Inghram reported that no decision has been made yet by the city with regard to hiring a new planning director. The candidates are Nathan Torgelson, who works for the city of Seattle; Ray Gaskill, who has a consulting firm; Stephanie DeWolf, deputy director for the city of Pasadena; and Mike Chinn, who works for the city of Tampa Bay. The candidates have been interviewed by a staff panel and by the city manager and deputy city manager, and an open house was held at which the public was invited to meet the candidates.

7. STUDY SESSION

A. Shoreline Master Program Update

Land Use Director Carol Helland reminded the Commission of the need to complete the drafting of the update and release the revised draft by the end of the year. She outlined the agenda for the meeting and the process for getting to a revised draft. She noted that the code language asked for by the Commission at its June 9 meeting had been included as Attachment 3 of the packet materials. She also commented that the menu options for reducing the 50-foot setback to 25-feet were provided in a table in preliminary regulatory form on pages 24 and 25 of the packet materials, and in Attachment 6.

Ms. Helland said staff also clearly heard from the Commission that any code approach will need to address the variety of issues of interest to the regulated community along the shorelines, including legally nonconforming structures and uses; a fast, predictable and inexpensive process for minor expansions and modifications; accommodations for recreational uses; accommodations for new and legally existing accessory structures; accommodating ornamental landscaping in the vegetation conservation areas where native plants are the preference; and view protections and landscape preservation.

Associate Planner Heidi Bedwell reminded the Commission that under the current rules there is a no-touch buffer scenario as well as a structure setback. The current rules also include the concept of a footprint exception that allows existing primary structures to be reconstructed on their footprint, which is something the Commission in June indicated it would like to see retained. There are performance standards for the buffer area and specific provisions for the maintenance of existing landscaping which should be clarified and retained in the code. There are provisions in place that limit the repair of accessory structures, which has been a hot topic as the code has been applied over the last four years.

The regulatory concepts discussed in June included an overall setback dimension of 50 feet. The revised language includes the footprint exception. The setback is divided into two areas defined as the vegetation conservation area and a primary structure area, both of which are 25 feet. The vegetation conservation setback focuses on the area with the most functions and is defined as the area landward 25 feet of the ordinary high water mark. As envisioned, up to 40 percent of the vegetation conservation area can be used for recreation uses, including patios and storage of personal watercraft. The concept includes a provision for no new structures within the vegetation conservation setback. Generally, vegetation is required to be preserved, and the removal of any vegetation within the 40 percent would have to be mitigated. The standard tree preservation requirements for the rest of the site require the retention of 30 percent of the significant trees within the shoreline jurisdiction.

The primary structure setback is measured from the edge of the vegetation conservation setback and is intended to protect the vegetation conservation setback as well as the ecological processes and functions in the second 25 feet landward of the ordinary high water mark. The primary structure setback has a more flexible range of uses allowed. The regulatory concept would allow new accessory structures up to 200 square feet to be placed in the setback without any commensurate mitigation. The provisions also allow for minor lateral expansions defined as up to 500 square feet over the lifetime of the development. Additional expansion, either waterward or greater than 200 square feet, would trigger a list of prescriptive menu options. The public has been clear about wanting to know what it will take to reduce a setback or place a structure in a particular location. The setback reduction allowed under the menu options corresponds to the

ecological function or benefit provided.

Ms. Bedwell noted that the nine menu options in the table included in Attachment 3 were based on other codes, including those from Kirkland and Sammamish. She reviewed the options with the Commissioners and noted that the greatest relative setback reductions would be allowed where the highest ecological contributions exist or are created along the shoreline. Conversely, where the ecological contributions are lowest, the relative setback reduction allowed will be lower. No specific dimensions have been determined yet, but staff believes reductions of ten to fifteen feet could be allowed in the higher category, five to ten feet for the medium category, and two to five feet for the lower category.

The Commissioners were informed that the regulatory concept also includes a landscaping standard. It is similar to other Land Use Code regulatory regimes that apply when development or redevelopment triggers compliance with development standards. A portion of the conservation vegetation setback would be required to be planted with vegetation, but there are a limited number of circumstances in which that requirement would be triggered; even then the requirement would apply only to 60 percent of the first 25 feet. Totally new development on a site that does not currently have any development would trigger a requirement to bring the site up to all current development standards for landscaping; an increase in the footprint size would do the same, as would the expansion of an existing primary structure waterward and closer than 50 feet from the ordinary high water mark, an accessory structure greater than 200 square feet, and impacts to the vegetation conservation setback. Lateral expansions up to 500 square feet would not require mitigation or trigger the landscape standards.

Ms. Bedwell demonstrated how the regulations would apply by using specific examples.

Chair Ferris asked how the setback reductions would be evaluated based on the ecological contribution. Ms. Helland said the range provided by staff was intended to be a starting point. She said it would be necessary to eventually get a specific square footage plugged into the chart in place of the high, medium and low designations.

Commissioner Sheffels observed that encroachment into a setback can be very small and for a good reason. She asked if a weighted system could be devised. Ms. Helland agreed the topic should be given some attention. She commented that an existing structure could extend into the setback and the property owner might want to take advantage of the 500 square foot expansion in the primary structure setback without mitigation.

Commissioner Turner said he saw little in the proposed language about employing incentives. He suggested establishing something like a 25-foot setback and including incentives to move back. Ms. Helland said that approach would be different and would change the analysis required for the cumulative impacts; it would essentially entail going back to the drawing board. She reminded the Commission that about 60 percent of the primary structures along Lake Sammamish currently are more than 50 feet back of the ordinary high water mark. The proposed approach in essence provides them the option of moving closer to the water. The framework of the critical areas approach is similar to what is proposed for the shorelines and it includes a great deal of flexibility. The shorelines regulations could employ the same kinds of flexibility.

Senior Environmental Planning Manager Michael Paine said options could be incorporated that would allow people to encroach into a critical areas hillside as opposed to going toward the shore. He suggested, however, that it would be very difficult with any package of incentives to encourage a structure to move back from the first 25 feet if they are already there.

Commissioner Mathews commented that the regulations applicable to shoreline areas will need to treat property owners the same way all property owners in the city are treated. To take the opposite approach with incentives to move back would certainly not be on a par with homeowners in critical areas.

Commissioner Mathews asked if the menu options are intended to be cumulative. He pointed out that a property could have a soft structure shoreline, Option 1, and a lot of vegetation covering more than 20 percent of the lot, Option 6. Ms. Helland said the contemplation was that under certain conditions one could get down to 25 feet. Mr. Paine added that if someone were to pay for a study showing that a different approach would work, they will certainly be allowed to do so.

Ms. Helland stressed that none of the regulations will apply where no new development or redevelopment is contemplated. One must do something to trigger the application of the regulations. Existing legally created structures will be allowed to remain and be maintained and repaired even if they are nonconforming. The proposed regulatory regime mimics others that exist in the city for reasons of consistency citywide.

Ms. Helland noted that the public had expressed concern about nonconforming uses and developments would have to be removed. She reiterated that the provisions will not apply if no changes are made, and legally established uses and developments will be allowed to remain and can be maintained and repaired. There is no intention to require such structures to be torn down.

With regard to process simplification, Ms. Helland said the provisions include minimal requirements relative to permitting and process which is evident in the context of the allowed primary structure expansions and lateral expansions, and in allowing accessory structures to expand up to 200 square feet. There is also allowance for minor building elements, such as bay windows and chimneys.

The provisions address the call by the public for gathering spaces, walkways and recreational uses by allowing for up to 40 percent of the vegetation conservation area to be used for those purposes, provided there is an offset of appropriate vegetative mitigation.

There are restrictions that apply to locating new structures within the setback. Structures are allowed within the primary structure setback, and up to 200 square feet can be added to existing accessory structures without having to turn to the menu options. No new accessory structures will be permitted within the vegetation conservation area.

Ms. Helland allowed that the public expressed concern about the vegetation conservation rules that could prevent the maintenance of existing ornamental landscaping. She clarified that as drafted the rules allow for the maintenance of existing landscaping, and the vegetation planted in the 60 percent of the vegetation conservation area that must be in landscaping is to be primarily native, though ornamental vegetation that is compatible with native vegetation will be deemed appropriate and will be allowed.

The concern that the landscaping rules will require the placement of tall trees directly in view corridors is addressed by including templates similar to those in the critical areas ordinance for planting plans that include view corridors. The landscape standard allows for flexibility in siting vegetation, especially trees.

The setbacks proposed total 50 feet, and through incentives property owners can buy down to 25 feet through a menu of options through a concept not dissimilar to buying up additional FAR.

B. Shoreline Master Program Update – Public Comments

Mr. Marty Nizlek, 312 West Lake Sammamish Parkway NE, said the proposed approach will work well for anyone not intending to do anything with their property, but anyone who so much as turns around will face the full force of the regulations. The regulations as outlined by staff sound palatable, but they will not be so by the persons having to comply with them. Table 2 in the staff report lists two references, the first by C.W. May which is 80 pages long and mentions lakes and lake shores only six times, but never pertinent to Puget Sound lakes. The listed Vermont study has no technical scientific references at all. With regard to ecological functions, hyporheic functions are stream based and have nothing to do with lake shorelines. There has been very little testimony provided with regard to hydrologic function; shoreline property owners are not the cause of the hydrologic problems and the proposed regulations will not solve those problems. The overall message appears to be that the shorelines are places where humans should not be. The city must recognize that humans already live along the shorelines and in an urban setting, not a wildlife setting; it would be very difficult to return the shorelines to a natural wildlife setting. The options matrix in Attachment 6 has three attainable objectives: linking upland and aquatic resources in an urban setting, though rationale and feasibility have not been justified; providing space for wildlife, though clear goals and objectives are needed; and pollutant removal and improving the water, though it has been shown that introducing large woody debris and leafy debris will produce both safety and pollution problems. Shoreline property owners should not be burdened with extraordinary or unreasonable attempts to solve municipal water quality issues. The proposed 50-foot setback is unreasonable; the current Shoreline Master Program setback is only 25 feet. The setback in Redmond is less than 50 feet and the proposed Bellevue setback will result in a tunnel effect. The 60/40 split for the vegetation conservation zone is arbitrary; there should be no vegetative requirement at all beyond what the stormwater code requires. The templates are onerous with regard to the type of vegetation required.

Ms. Lori Lyford, 9529 Lake Washington Boulevard, demonstrated from aerial photos that there are differences in vegetative cover from neighborhood to neighborhood. That should be taken into consideration when establishing setbacks and other shoreline regulations. Bridle Trails has a park associated with it where it is appropriate to retain trees and significant vegetative cover; that neighborhood is also less densely populated, which means there is far more room on which to retain vegetation. Surrey Downs has become far denser over the years, and the vegetation has been replaced with manmade objects such as houses, driveways and roads. Significant tree removal has occurred in most of Bellevue's non-shoreline neighborhoods. Even so, shoreline properties in Meydenbauer Bay have as great or greater retention of vegetation as elsewhere. Newport Shores has little native vegetation since the area developed from what was once a lakeside airstrip. The Somerset neighborhood stipulates that the trees on one person's property cannot block the views from another person's property, thus giving favor to views and reducing the number of mature trees. Lake Hills, one of the older neighborhoods, has a surprising retention of trees and other vegetative cover. Phantom Lake residents have shown good stewardship by retaining vegetation in an exemplary fashion. The Tam O'Shanter neighborhood is zoned three units per acre but can only be given passing grades on its vegetative cover. The East Lake Hills area has succumbed to the desire for views, thus there is far less tree coverage than the immediately neighboring areas along the edge of the lake. The pattern persists moving north, even in areas such as Bass Cove where lot depth is much shallower. Lochmore residents above the lake have much less vegetative cover than the neighbors on the lakeshore. The Urban Forest organization's report on tree canopy loss, delivered at last year's Commission retreat, attests to the fact that shoreline property owners have not been responsible for the losses witnessed over the last 20 years. The conclusion is obvious: development has been accompanied

by the removal of vegetation, with more recent higher elevation neighborhoods contributing greatly to tree removal, while shoreline properties provide exemplary coverage even down to the shoreline itself. That fact, along with the lack of fact-based wildlife needs and documented safety needs, and the very real potential for actual increases in phosphorous loading to the water bodies, should help the Commission conclude that tree requirements for shoreline properties should be dropped, and only sensible levels of vegetation should be required.

Ms. Elfi Rahr, 16509 SE 18th Street, said she has been luckier than most Phantom Lake shoreline property owners in that extensive monitoring of the food rep interaction has been done. For the past ten years it has been astounding to see how quickly the food rep has changed and shifted as the lake columns have warmed. The food supply is not available for July, August and September. When it comes to ecological functioning, the food rep must be considered because in the end it is what feeds the animals and the fish. Woody debris is not needed in Phantom Lake. A distinction must be made between peat bottom lakes and gravely lakes. In Phantom Lake the peat is 20 feet deep and to add to it would not be wise. With regard to vegetation along the shoreline, the focus should be on plants that are flood adaptable, especially for the Phantom Lake shoreline given that the water level fluctuates. A single approach will not fit all lake shorelines.

Mr. Scott Sheffield, 2227 West Lake Sammamish Parkway SE, spoke on behalf of himself and the board of the Washington Sensible Shorelines Association. He said there were a few positive points in the staff presentation, but the organization still has issues with regard to setbacks and vegetation. There still has not been an answer to the most basic question, which is what existing ecological functions will be harmed on the highly developed urban shorelines. The current staff report continues the mistaken references to large woody debris, temperature regulation, and vegetation as salmon necessities. Professor Pauley has pointed out that those are stream functions. Flawed science was the basis for the 25-foot vegetative shoreline buffer. The draft code refers to the critical areas handbook for the landscape standard; that requires trees for every nine feet that will grow to a height of 120 feet. The purported ecological basis is to create shade that will regulate water temperature, create a food source, and create large woody debris when trees die, all of which are needed by streams, not lakes. The concepts proposed by staff are not acceptable to WSSA. Staff stated previously that buffers would not be used and that lake shorelines are not critical areas, yet the code language creates a 25-foot buffer and then regulates it using the same highly restrictive critical area buffer rules. The rules requiring the planting of trees on 60 percent of the shoreline are not acceptable. The impetus for imposing a setback as outlined in the staff report is that projects near the shoreline will harm ecological functions, yet the specific harms are not identified, thus the requirement for a new 25-foot setback beyond the existing 25-foot setback is arbitrary. It is unacceptable to use minor construction projects to leverage planted buffers and other restoration projects. It is unacceptable to impose vegetation conservation buffer requirements on existing developed properties; even the WAC shoreline guidelines do not require that. The 25-foot historic setback is adequate and there has been no science shown to require a larger setback.

Ms. Anita Skoog-Neil, 9302 SE Shoreland Drive, said reading the staff reports is like reading past agendas. Presenting the same information over and over will not make it become true. The setback information presented by staff contains a new twist: it gives property owners only one choice from which to select, which is 50 feet. There should instead be a discussion about available choices. Prior to 2006, the structure setback was 25 feet. The staff said new science called for revisiting the standard and thus the critical areas ordinance 25/25 standard was created. At the June meeting staff said they cannot say if 25, 30 or 50 feet is better or what is necessary, but came down on the side of more being better. The staff report states that there are a limited number of studies regarding width and effectiveness of lakeshore setbacks, but claims that the

many studies done for wetlands and streams are relevant because lakes provide many of the same functions. That ignores the fact that there have been science presentations that clearly showed that stream, wetland and marine functions as distinct from lake shoreline functions. The Commission in fact previously instructed the staff to stop using inappropriate science references to support their positions. WSSA believes a 25-foot setback is sufficient; it is what has been in place for many years and to which most residential properties conform. Unlike the critical areas ordinance, the Shoreline Master Program is required to be based on valid science. If the shoe does not fit, it does not fit. The guidelines are only guidelines, not rules as staff seems to believe. The Commission must make its decisions based on science; no one should try to make the available science justify the guidelines, regardless of how much the Department of Ecology might like that. The same is true for the issue of vegetation; staff has not yet presented any science that validates the need for increased vegetation along the shoreline. Even if there were science to show more vegetation is needed, there is no science to show how much is needed. The guidelines simply state that vegetation conservation standards are not to apply retroactively to existing uses and structures. With regard to the issue of no net loss, the WAC is quoted as stating that local jurisdictions are to evaluate and consider the cumulative impacts of reasonable future development and draft policies, programs and regulations that address those impacts and which fairly allocate the burden of addressing cumulative impacts among development opportunities. Unless it can be shown that there are impacts from 25-foot setbacks and the current patterns of vegetation, the staff are only wildly speculating that intense urban development will come to the shorelines from which a vegetative mote is needed for protection. The guidelines require regulatory and non-regulatory actions. Where the city deems regulations are necessary, they should fall within the guidelines and do so responsibly.

Mr. David Radabaugh with the Department of Ecology, 3190 160th Avenue SE, said the department is willing to consider the notion of drawing buffers around existing residences, especially given that the provision is included in the existing critical areas ordinance. He said the staff has asked the department about the approach, and the department is considering it largely because of the efforts of city staff. He stressed that in fact the WAC guidelines are mandatory. The guidelines state that master programs shall include provisions to address vegetation conservation and regulatory provisions that address conservation of vegetation. When the city's draft Shoreline Master Program is finished, it will be given a thorough review by the department. The review of the vegetation conservation provisions will include an analysis of the cumulative impact analysis. He observed that Option A proposed by staff has a lot of merit; the concept is good in that it seeks to conserve vegetation on the shoreline while allowing of use of the shoreline. With regard to the issue of allowing additions of up to 500 square feet to structures within the setback without any mitigation, he said during his review he will look at what the cumulative impact could be; appropriate vegetation conservation measures should be considered along with additions in the setback area. The 60 percent vegetation conservation proposed for the first 25 feet landward of the ordinary high water mark may be a bit low and will need to be further reviewed. The area of most concern is the area closest to the ordinary high water mark; in theory, the 60 percent provision could yield a scenario in which the ten feet closest to the ordinary high water mark would have no vegetation at all. The menu options appear to have merit; many of them are in the approved Kirkland Shoreline Master Program.

Mr. Richard Johnson, 2824 West Lake Sammamish Parkway SE, read into the record a letter from Mr. Tom Shafer, a shoreline resident. The letter noted that in previous meetings the Commission asked staff to explain why certain rulings were applied and the staff was unable to provide answers, and no follow up has been done. Staff has not been able to say why a 50-foot setback would be better than a 25-foot setback, and there has been no follow up. Many other questions have been asked and never answered, and just seemingly discarded. Staff should be asked to explain why. Staff has presented an options list but is not able to explain the options or

their long-lasting consequences. The Commission will not be able to reach appropriate conclusions if the staff does not answer question or research answers and report back. The consequences are too great to do a poor job. The issues are great and the long-term consequences are even greater. The Commission may want to do its best, but has not been given the tools or the time to become informed and knowledgeable. The Commission should not just ask the questions: it should insist on getting answers. If the right answers are not forthcoming, the process should be stopped until those answers are provided. Staff has succeeded in creating a code that is exceedingly simple. It simply neglects water level changes; simply neglects trying to get plantings to survive; and simply neglects the issue of blocking the views of neighbors.

Mr. Norman Ballinger, 16226 SE 24th Street, said he is a resident on Phantom Lake. He stressed that one regulatory approach will not fit all circumstances. Phantom Lake is a different lake and the rules that apply to Lake Washington and Lake Sammamish do not apply. Phantom Lake is mostly developed and very few lots are left to develop. The area is largely wooded and vegetated, so setbacks are not even applicable. The lake is impacted by stormwater runoff and the plant material in the lake that contributes to the phosphorous loading. Nothing is said about how to measure ecological benefit and adverse impacts, nor the impacts of mitigation efforts. Steep slopes are not addressed at all but they should be.

Mr. John Strong, 1604 West Lake Sammamish Parkway NE, said he supports the work being done by WSSA. He said the organization has smart people who are problem solvers and he encouraged the Commission to work closely with them. He said he was not satisfied with the Option A approach for many of the reasons stated. He said he lives in Rosemont where there are 50-foot lots. The view corridors are already very narrow, and the notion of having to plant more trees will not be welcomed. Trees on a larger waterfront might be a good idea, but not on a 50-foot property.

Mr. Terry Lemke, 2016 West Lake Sammamish Parkway SE, said his family has lived on the lake for 90 years. In years past there was much more wildlife, including bears. He said his property on the west side of the lake is still more forested than other areas along the lake, but more habitat that would encourage additional wildlife is not wanted. Children live along the lake and play fearlessly along the lakeshore and in the woods. There are some deer in the area, but deer in greater numbers would possibly attract cougars and other predators. Consideration should be given to families and pets ahead of enhanced wildlife habitat that may attract dangerous animals. There has been an explosion in the mountain beaver population, and they would become even more prevalent with more dense habitat to hide in.

Mr. Brian Parks, 16011 SE 16th Street, said sometimes things sound good on paper but do not work well in real life. On Phantom Lake the ordinary high water mark is so high that vegetation required in the first 25 feet would basically yield a lot of lawn, the native planting area, and more lawn. That would seem out of place. What is not broken should not be fixed. The trees and vegetation coverage along Bellevue's shorelines is very well preserved, which is remarkable given that the shorelines are mostly developed with residential uses. That is particularly true along Phantom Lake where the highest shoreline analysis scores were given. Some clarification from staff is needed given that the draft states that buffers will no longer be required except on Phantom Lake. The 40/60 split is also confusing with regard to how it will be imposed on Phantom Lake. If lawns are properties are allowed to go native with willow trees and bramble, the phosphorous levels in Phantom Lake will escalate. The USGS white papers support that notion. It makes no sense to consider such an approach when Phantom Lake properties are intentionally being flooded by Utilities in an attempt to reduce the phosphorous levels. The consulting firm Entraco was hired by the city in 1996 to produce a report assessing the restoration activities being done on Phantom Lake. In their summary conclusions they stated

that improved consistency of performance on the restoration program could probably be achieved by maintaining high lake levels to reduce shallow groundwater nutrient loading. There is not, however, any data to support that notion. Responding to a letter from a Phantom Lake resident complaining about the higher water levels, Utilities staff stated that a minimum of two full years of data would need to be collected before any conclusions could be drawn as to the impacts or effectiveness on lake levels and water quality. Due to the kettle topography of Phantom Lake and the problems with nutrient loading, there is no practical reason for requiring additional vegetation. The average lake levels should be lowered by six to nine inches, and the phosphorous levels should continue to be monitored.

Mr. Dallas Evans, 2254 West Lake Sammamish Parkway SE, said much has been said about shoreline stabilization. He said staff and the Department of Ecology are simply not acknowledging the fact that Lake Sammamish is unique and different from Lake Washington. The Kirkland coves approach simply would not work on Lake Sammamish given that the water level during the summer is more than two feet lower than during the winter months. If the cove were to be established at the summer levels, it would be wiped out during the winter storms for most of the shoreline. The high water mark is so far above where the water line is during the summer there is about 20 feet of shoreline that is not being taken into account. A structure may need to be as much as 70 feet back from the shoreline during the summer months. The current regulation regime does not work for people on Lake Sammamish. A soft shoreline treatment simply will not work, especially during the winter months when the storms will wipe them out. Bulkheads are needed to hold back parts of the shoreline. The WSSA has been instrumental in getting the weir cut back by working with King County. With regard to the Department of Ecology, the fact is the buck will stop with Mr. Radibaugh. City staff graciously agreed to take a guided tour of the shoreline to see how the Kirkland shoreline differs from the Bellevue shoreline, but Mr. Radibaugh has refused to do the same. It is disingenuous for him to say one approach or another looks good to him without really seeing the shoreline for himself.

C. Shoreline Master Program Update – Commission Discussion

Commissioner Turner asked if the proposed 25/25 buffer is directly the result of the critical areas ordinance. Mr. Paine said the city has never had a 50-foot buffer for developed sites; there has been a 50-foot buffer for undeveloped sites. The critical areas ordinance has a 25-foot buffer and a 25-foot structure setback. The proposal does not include a buffer, only a vegetation conservation area of 25 feet that is only applicable with development, 40 percent of which can be used as the property owner sees fit for recreational purposes. In the critical areas ordinance the first 25 feet landward of the ordinary high water mark is truly a buffer and touching it in any way triggers a requirement for restoration. Commissioner Turner suggested that regardless of what it is called, the proposal appears to be for a 50-foot buffer. Mr. Paine said the overall dimension is 50 feet, and that was established primarily on the GIS data and the fact that the city cannot backslide from its prior regulation, which is the critical areas ordinance. Most of the functions in need of regulation are encompassed in the 50 feet. The proposed approach is different in that it does not involve a buffer, which must be held inviolate without triggering restitution.

Commissioner Turner asked how taking a less aggressive approach, by calling for a vegetation conservation area and a building setback, is not backsliding from the city's prior regulation. Mr. Paine said the issue with shorelines is the cumulative analysis process. All of the regulatory pieces of the program must be balanced, but that approach allows for giving a little in one area provided the loss is made up somewhere else. The critical areas ordinance aims at particular best available science standards, so each individual critical area has its own bundle of science attached to it. The shoreline approach is focused on balancing what is being done with docks, bulkheads, setbacks and vegetation. It will be up to the Commission to decide what the right

balance is.

Ms. Helland further explained that the Shoreline Master Program requires equivalency with prior regulations. What staff has been focused on is formulating a package of tradeoffs which will achieve equivalency from a cumulative impacts standpoint while allowing for some flexibility. Under the adopted critical areas ordinance, for developed sites in shoreline critical areas there is a 25-foot buffer and a 25-foot structure setback; for undeveloped sites there is a 50-foot buffer and no structure setback. Currently, 60 percent of all dwellings are located more than 50 feet from the shoreline. The proposal allows structures to be closer to the water through a series of incentives.

Commissioner Himebaugh said it was his understanding that the 50-foot number was chosen based on the fact that the city currently regulates shorelines as critical areas. He also noted that the intent is to not treat shorelines as critical areas but asked if they will be defacto critical areas if the new approach simply adopts the old 50-feet, even if the area is less aggressive in that it is not called a buffer. He asked if there is an ecological basis for doubling what previously applied to the shoreline, which was 25 feet. Ms. Helland said the 50 feet was identified as an appropriate buffer and setback combination in critical areas to address the functions and values that occur in that range landward of the ordinary high water mark. The effective buffer for terrestrial habitat has been shown to range from 300 to 820 feet; no one is proposing a buffer anywhere near that width. The call for a 50-foot vegetation conservation and building setback combination is aimed at addressing the most functions and values as possible without being too onerous. Science does not work in minimums: it works in optimums. Scientists focus their work on optimal conditions; accordingly, there is little or no research aimed at determining the minimum a system can bet by with before tipping the balance in favor of being fatally flawed. That is where the policy discussion and the application of a cumulative impacts analysis come into play.

Commissioner Himebaugh commented that the Commission has been told a number of times that it will need to weigh the facts as presented in making a policy decision. The effective buffer range for terrestrial habitat width shown in the staff report is based on stream science, which was used to develop the critical areas ordinance. That in essence ties the hands of the Commission. The Commission must make decisions based on the science, particularly applicable science, but it has not been given any applicable science. He asked if the city should follow the precautionary principle in developing the Shoreline Master Program update, and if so how it should be interpreted, and how it relates to the protection of private property rights, which the Shoreline Management Act requires be promoted. Ms. Helland the precautionary principle is embedded in the cumulative impact analysis. The starting point is the functionality for the use that is to be accomplished, such as recreational uses; everything works upward from there. It will not be possible to know how any of the elements will fit together until a regulatory package is developed on which a cumulative analysis can be run. It would be safe to say that allowing a structure within 25 feet of the shoreline on every property along Lake Sammamish would create an unacceptable impact. The code adopted in the 1970s included a 25-foot setback. The legislature in its wisdom concluded that the shoreline regulations needed to be updated. During the intervening time the city updated its critical areas code.

Ms. Helland said she understood the concerns of the Commission with regard to the science, and the comments of the public to the effect that the science is flawed. However, the city must use the information it has. The Sammamish Council grappled with the same issue when holding a public hearing on its proposed Shoreline Master Program update and came to the conclusion that the various systems cannot be looked at in isolation. The available science from wetlands, rivers and streams and shorelines offer the best starting place. Staff has provided the Commission with science, as has the public.

Mr. Paine said he recognized the concern of the public over using stream science and applying it to lakes. He said there is no question that lakes have unique biological characteristics. That, however, is not what is in question. What is in question is the individual functions. For example, sediment removal occurs in a buffer from a stream and a buffer from a lake in exactly the same way. Staff agrees that vegetative lawns properly designed with a certain slope are great for removing sediment. Sediment loading from shoreline areas is not a huge issue given that most of the sediment load coming into the lakes is coming from storm pipes, Issaquah Creek and other streams. Pollutants are filtered by soil particles in the same way for streams and lakes. Terrestrial habitat adjacent to streams serves exactly the same functions as terrestrial habitat adjacent to lakes. With aquatic habitat, however, there are differences. There is no question that large woody debris in a salmonid stream is critical to habitat; good salmon habitat simply does not occur without it in the Northwest, particularly in the upper reaches of the streams where the salmon breed. That does not mean that coarse woody debris is not important in lakes, it is just not as important. He said the Commission can decide not to require the introduction of coarse woody debris into the lakes through the planting of large trees on the shoreline that will eventually die and fall into the lake, but it can still decide that bank stability is vitally important and can be enhanced through root structure. The Commission can show its interest in aquatic habitat by not allowing for the creation of a swimming pool in the lake. The Commission may also be interested in pollutant removal that can be brought about by having a certain amount of open, non-impervious area where rainwater and runoff can penetrate and be filtered.

Mr. Paine said the science indicates that a buffered area of 50 feet can do a pretty good job of protecting and providing the necessary functions. He said 60 feet might be better but there is no specific study to support that notion, in the same way there is no study that says the same functions can be provided in only 40 feet. The genius of the critical areas process was that it allowed for studies to be done on specific sites to support specific proposals and appropriate levels of mitigation.

Commissioner Himebaugh suggested it all comes down to buying the premise. He said that was where he was having trouble and is also why the Commission early in the process requested a matrix that would connect regulation with ecological functions.

Commissioner Turner said the economic or financial impact on property owners will be a big deal. He said he fully understood the need for regulation but needed to know more about the impacts in all senses of the word. He asked if the desired matrix would be forthcoming. Ms. Helland said the preliminary matrix that had the menu options was included on page 42 of the packet materials. She allowed that it did not include the economic side of the issue. When the options are narrowed down, some economic analysis will be included, at least with regard to the relative cost of some of the options. It will make the most sense to conduct that analysis after the revised draft is in hand. With regard to property rights, she said the legal department has been asked to provide an analysis with respect to code regulations. That analysis should be delivered to the Commission on November 3.

Chair Ferris suggested that it would be very difficult to provide a cost analysis given that every site along the lakes is different. It is unlikely that it will be possible to apply commonalities. The analysis may in fact open more points to argument than it will solve because everyone will look at the issues differently.

With respect to the information in the packet regarding the vegetation conservation area, Commissioner Sheffels noted that the language used talks about "...to protect and restore ecological functions." She suggested the no net loss concept does not necessarily include

restoration of functions. Mr. Paine agreed. He said the primary purpose of the vegetation conservation setback is to protect existing riparian or lake shoreline vegetation. The phrase in question comes from the WAC. The guidelines blend the protect and restore concepts frequently, but clearly the drafters and the agreement between the environmental and development interests never fully got their hands around the issue of restoration. Commissioner Sheffels suggested that since the definition of restore is fuzzy, the word should be removed if possible. Mr. Paine agreed.

Chair Ferris said his reading of the language was that someone with a shoreline property intending to take no action that would change the ecology would not need to do anything. However, if the same property owner were to seek to encroach into the setback or otherwise disrupt an existing ecological function, restoration would be required as a mitigation. Ms. Helland said that was her reading of it as well. She allowed the language could be more clear.

Commissioner Sheffels commented that the same section states that "...conserving vegetation provides additional benefits, such as protecting human safety and property..." and suggested the concept is too fuzzy. The language should be more indicative of what is to be accomplished.

Answering a question asked by Commissioner Himebaugh, Ms. Bedwell said the paragraph in question was taken from Section 173.26.221.5 of the WAC. The references to restoration and human safety are included there, and the latter appears to be a reference to stabilization areas that might be prone to erosion or landslides.

Commissioner Himebaugh asked how the vegetation retention standard would affect the owner of a shoreline property not wanting to make any changes to the shoreline after the new Shoreline Master Program takes effect. Ms. Bedwell said the property owner would be required to retain the vegetation, except that up to 40 percent of the vegetation could be removed to accommodate recreation uses having a pervious surface. Any existing lawn and ornamental vegetation could remain and could be maintained over time.

Commissioner Mathews asked if a property owner could remove existing vegetation and replace it with another type of vegetation provided a workable plan were submitted to the city. Mr. Paine said that could be done. The process already exists in the critical areas ordinance. An approved vegetation management plan is required. Ms. Bedwell added that the focus must be on the significant trees and native vegetation. A property owner wanting to remove some ornamental landscaping in order to replace it with some other type of ornamental landscaping can do so as routine maintenance.

Commissioner Sheffels pointed out that the proposed language prohibits the use of fertilizers, herbicides and pesticides and suggested that anyone with roses growing in the setback area will want to use an appropriate fertilizer on them. She also asked how the city would go about enforcing such a provision. Mr. Paine agreed to take a look at that issue, commenting that the language sounds overly broad. Ms. Bedwell added that the emphasis would be on education over enforcement.

Answering a question asked by Chair Ferris, Mr. Paine suggested the issue of course woody debris has been largely misunderstood. He said where space should be carved out for course

woody debris is in the building of the integrated stabilization structures; all of it would be anchored and unable to move about. He said there is no interest in just randomly throwing trees into the lake, nor is anyone wanting to see trees cut and placed vertically out in any lake; that is not and never has been a proposal made by the city.

Commissioner Sheffels said the public has often raised the differences between Lake Washington and Lake Sammamish, and certainly Phantom Lake. She noted that the Newport Shores area has been singled out for the way in which they are handling things. She said she would support creating a matrix approach aimed at treating the different shorelines differently by condition. Mr. Paine said specific site conditions are taken into account in permitting the construction of bulkheads. He agreed that Phantom Lake is simply not the same as the other lakes and should be looked at and treated separately. It must be kept in mind, however, that for Phantom Lake the Shoreline Master Program is not the primary regulatory driver, and what is done in the Shoreline Master Program must not upset other regulations already in place. He also agreed that parts of Lake Washington have very high winds and very high waves, and those areas will get special treatment with regard to how bulkheads are addressed. All existing bulkheads will be allowed to remain in place and be maintained over time, but if they degrade to the point of being replaced, a different approach will need to be considered.

Commissioner Sheffels commented that several from the public have pointed out that high winds and high waves will only wipe out any vegetation homeowners may be required to plant. Mr. Paine said the argument is relevant, though he added that staff had not been given direct evidence of that happening. He pointed out that wave heights and wind forces are much higher along the shores of Puget Sound where integrated stabilization is also used. It is all a matter of design.

Chair Ferris said one of the major differences between Lake Washington and Lake Sammamish is the fact that Lake Sammamish has a variable water level. He agreed that design will have the greatest impact on how structures hold up over time.

Commissioner Himebaugh asked why certain activities under the proposal would trigger a 60 percent landscaping requirement and how the trigger activities were selected. He said it appeared the requirement was quite onerous, even though the Department of Ecology representative testified that he did not think it was enough. Ms. Bedwell called attention to the bullet items on page 8 of the packet that describe the scenarios that would trigger the landscaping standard. She reviewed the list with the Commissioners and noted that each entails a significant action. However, she said the Commission would be free to determine if the entire 60 percent would need to be planted for a given action, or if there should be a relative scale based on the amount of expanded footprint.

Ms. Helland said the 60 percent figure was arrived at because it represents a majority of the shoreline without being overly restrictive. Ms. Bedwell stressed that the 60 percent does not all have to be in a single block; there can be patches of vegetation scattered around so long as the total reaches the 60 percent mark.

Commissioner Himebaugh said he could not see how the requirement to vegetate up to 60 percent of an area fits with the notion of no net loss, unless one is very careful about establishing what activities are going to trigger the planting requirement. He suggested it should be proportional to the actual impacts of development. Ms. Bedwell said in Redmond, new development adhering to the 35-foot setback, or redevelopment that involves more than 50 percent of the existing value of improvement, triggers a requirement for 50 percent of the minimum 20-foot building setback to be planted in vegetation.

Commissioner Turner expressed some confusion about the relationship of the critical areas ordinance to the Shoreline Master Program. He said it would be useful for staff to show how they are different or the same. Ms. Helland said the chart on page 40 of the packet materials gave some details but said staff would be willing to provide a more robust comparison between the existing code and Option A.

Commissioner Himebaugh said he would not be in favor of going forward with the proposal. It is generally too restrictive, and there are portions of it that are borderline arbitrary based on gaps in the science. He said he did not think the city should err on the side of regulation if it cannot be said for sure how something will affect something else.

Commissioner Mathews said he would favor moving ahead with the general proposals, specifically Option A, so many of the blanks can be filled in. He suggested that improvements have been made since the Commission last discussed the topic, including more flexibility. There are no costs associated with doing nothing, and the flexibility kicks in when some changes are desired. With some creativity things can be allowed for fairly minimal cost.

Commissioner Turner voiced concern about moving forward with the current proposal. He said there is little in the language about the shorelines already being urban environments and even less about leaving them that way; there is the potential that things could be reversed in terms of making the shorelines less urban, particularly with regard to the vegetation conservation area. The property owners have not been given enough credit for being good stewards of the shorelines. The staff have said they do not want to over-regulate, yet the proposal appears to do just that. There are no real incentives included. For each regulatory category, there needs to be an explicit tie to the science, as well as to the economic impacts. While the proposal will not in any way seek to regulate stormwater runoff, it must be noted that those systems are negatively impacting the shoreline environments.

Commissioner Sheffels agreed that the newest draft is more positive than the last version. The vast majority of properties on the shoreline will not be affected in any way by choosing the status quo. A small percentage, however, will want to build something new or redevelop a property, they will be subject to the new regulations. She suggested the menu options do represent incentives in the form of tradeoffs. She said she looked forward to seeing the next iteration of the proposal.

Chair Ferris concurred that the document has come a long way from where it started out. He said he had come to conclude that science is not always a measurement of specific factors; it is

often judgmental factors that contribute to the overall ecological functions. The staff have answered most of the questions asked along the way. The matrix captures what the Commission talked about in June and gives a measurable way to show how incremental contributions can offset functions that have been taken away through development or redevelopment. He agreed that the stormwater system and associated regulations do have an impact on the lake systems; many of them were not in place when the upland areas were developed, and as they redevelop they trigger compliance with the new regulations. He voiced support for moving ahead with Option A, the 25/25 setbacks, and the revisions called for by the Commission.

Motion to extend the meeting to 10:15 p.m. was made by Commissioner Sheffels. Second was by Commissioner Himebaugh and the motion carried unanimously.

10. PUBLIC COMMENT

Ms. Anita Skoog-Neil, 9302 SE Shoreland Drive, said a comment made by staff at a WSSA meeting about the vegetation conservation area was that the WAC guidance is not clear but the Department of Ecology will not let an Shoreline Master Program pass without that component. She said there is already wildlife along the shorelines, including coyotes near Meydenbauer Bay; an increase in wildlife is not desired. The whole point of the Growth Management Act was to concentrate growth in urban areas; it makes no sense to take areas that are developed as urban and force them to become more rural. The WAC says that replacement is a form of maintenance and repair; there is no reason for incremental actions to trigger some of the things that are being suggested by staff. The statement that the city cannot backslide from its current position makes no sense in light of the fact that one of the options offered the Commission included a setback of 35 feet, which is less than what is required by the critical areas ordinance. Too much vegetation along the shoreline will block views from the nearby homes, which could mean mothers will not be able to see what their children are doing there; that is a safety concern.

Mr. Brian Parks, 16011 SE 16th Street, said the critical areas committee had a CAC that did not even mention lakes. Accordingly, there was no citizen input regarding lakes in the critical areas study. That would seem to be a legal liability issue for the city. Language should be included stating that fire, earthquakes and other acts of God will not trigger the regulations. Two Phantom Lake residents have been told they must leave large fallen trees in the lake; there are active beavers on Phantom Lake so the number of trees in the water could pile up. About ten percent of the residential lots on Phantom Lake are undeveloped currently.

Mr. Scott Sheffield, 2227 West Lake Sammamish Parkway, showed the Commissioners photos depicting the loss of trees over a ten-year period. He pointed out that Weowna Park includes a large greenbelt. The property was acquired from Warehouse by private citizens and in the 1970s it was sold to King County for use as a park area. Stewardship of the land was paramount from the start and it still is for waterfront property owners. The regulation concept should be thrown out in favor of education and incentives.

Mr. Marty Nizlek, 312 West Lake Sammamish Parkway, said there will be economic impacts associated with the proposed approach. Over the last four years applicants have faced stiff fees

associated with the critical areas ordinance. With just the looming potential of new regulations, many shoreline property owners are questioning if they want to stay on the lake, and people who are looking at properties are hesitant to buy them. Property values could fall, and that is an economic impact that should be considered.

Mr. Don Kirth, 408 West Lake Sammamish Parkway SE, said he has lived on the lake since 1978. He said he was under the impression that his floating dock had been grandfathered, but he said he was approached about taking the dock out. The dock is out of the water from the first of November through the first of June. To go through the process of getting the dock re-permitted cost more than \$50,000. Staff says they have leeway to do certain things, but they do not abide by it; they see everything as very black and white. It was disheartening to have to spend so much money only to end up with what was already there.

Ms. Lori Lyford, 9529 Lake Washington Boulevard, said the slogan "It's Your City" does not seem true. The Commission should think carefully about how the proposed regulations will stifle economic growth. People will choose not to remodel their homes or redo their docks. There will not be any long-term consequences for staff, but there will be for the property owners, the taxpayers.

Mr. Dallas Evans, 2254 West Lake Sammamish Parkway, said he was puzzled by the non-answers provided by staff. Staff just dances around the issues, such as how they came up with the arbitrary 60 percent figure and 50-foot setback. The fact is there are only 30-some properties on the lake that are not developed. He said since he has lived on the lake, four of the six homes near his property have been either rebuilt or completely leveled and started over. That is a lot of economic activity. The proposed setbacks and buffer zones will have a huge impact on redevelopment activities and on property sales. The shoreline area represents only 0.2 of one percent of the total watershed area for Lake Sammamish and it is totally arbitrary to choose 60 percent of the first 25 feet versus 50 percent, or 40 percent, or 30 percent; the actual land area is only a very small fraction of the total.

8. OTHER BUSINESS – None

9. APPROVAL OF MINUTES

A. September 22, 2010

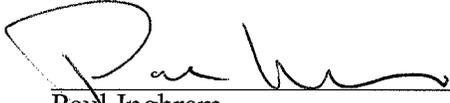
Motion to approve the minutes as submitted was made by Commissioner Mathews. Second was by Commissioner Turner and the motion carried without dissent; Commissioner Himebaugh abstained from voting.

11. NEXT PLANNING COMMISSION MEETING

There was agreement not to meet on October 27 and to meet next on November 3 and then again on November 17.

12. ADJOURN

Chair Ferris adjourned the meeting at 10:18 p.m.



Paul Inghram
Staff to the Planning Commission

1/26/2011
Date



Hal Ferris
Chair of the Planning Commission

1/26/2011
Date



DATE: May 5, 2011

TO: Chair Ferris and Members of the Bellevue Planning Commission

FROM: Carol V. Helland, Land Use Director
Shoreline Master Program Update Team
Development Services Department

SUBJECT: Shoreline Master Program Comprehensive Plan Amendments (07-122342 AC)
and Land Use Code Amendments (11-103227 AD)
May 25, 2011 Public Hearing

I. PROPOSAL SUMMARY

The proposal would amend the Bellevue Comprehensive Plan and the Land Use Code (LUC) to include an updated Shoreline Master Program (“SMP”). The update was mandated by the State Legislature to be completed by all cities and counties that have shorelines of the state within their jurisdictional limits. The City’s SMP was originally developed in 1974 and has not had a substantial update since. As a result, it lacks a number of required components and is not aligned with current scientific information relevant to protecting shoreline functions and values. These gaps, combined with a lack of detailed performance standards aimed at guaranteeing use priority and public access, dictated that the City update its SMP in a manner consistent with the procedural and substantive requirements of the Shoreline Management Act (SMA) and its implementing rules, including WAC 173-26, Shoreline Master Program Guidelines (Guidelines).

The updated master program will reside as a stand-alone SMP codified within Chapter 20.25E and apply to all areas of the City within shoreline jurisdiction. The comprehensive SMP amendment is intended to supplant the City’s existing SMP policies in their entirety. A subsequent proposal will also include clean-up amendments to other land use code sections, including the Critical Areas Overlay District Part 20.25H LUC, as necessary to remove conflicts and ensure cross-reference accuracy with the package ultimately recommended by the Planning Commission. The proposed amendments are needed to comply with the statutory deadline for comprehensive update of the local Shoreline Master Program pursuant to RCW 90.58.100.

Under state law, the Bellevue Shoreline Master Program (SMP) is required to include the following components:

1. Shoreline Element of the Comprehensive Plan (policies)
2. Shoreline Overlay of the Land Use Code (regulations)
3. Critical Areas Overlay of the Land Use Code (regulations)
4. Shoreline Environment Designations (maps)
5. Shoreline Jurisdiction (maps)
6. Shoreline Inventory and Analysis (study)

7. Shoreline Restoration Element (guidance document)
8. Shoreline Cumulative Impact Analysis

A subsequent proposal will include amendments to other land use code sections, including the Critical Areas Overlay District Part 20.25H LUC, for the purposes of conflict removal, correction, and clarification.

More information about the SMP update and copies of past documents are available for public review at the SMP update website at <http://www.bellevuewa.gov/shoreline-master-plan.htm>. Submit written comments to Carol Helland, Land Use Director at Development Services Department, P.O. Box 90012, Bellevue, WA, 98009-90012 or at chelland@bellevuewa.gov.

II. STAFF RECOMMENDATION

The Planning Commission is being asked to hold a public hearing, to deliberate on public comment received, and to formulate a recommendation to City Council for final adoption of the draft Shoreline Master Program including the Shoreline element of the Comprehensive Plan (policies); the Shoreline Overlay of the Land Use Code (regulations); the Shoreline Environment Designations (maps); Shoreline Jurisdiction (maps); Shoreline Inventory and Analysis (study), and Shoreline Restoration Element (plan).

III. REVIEW PROCESS

Planning Commission Approach to Draft SMP

The draft SMP reflects the Planning Commission's stated preference that new regulations be balanced, predictable, and flexible while attentive to Bellevue's heavily urbanized condition and neighborhood character. (See discussion of Planning Commission goals in Section V of this report.) Property owners are stewards of the City's shorelines and by and large want to manage them appropriately because they recognize the value shorelines impart to their property and to the community generally. The draft SMP provides additional tools to property owners to protect or enhance shorelines while at the same time enjoying their benefits; compared with current code, the changes incorporated in the draft SMP enhance flexibility and choice while ensuring that shorelines are adequately protected. Examples include: a prescriptive option menu for setback reduction—allowable only with a science-based critical areas report under current code—additional recognition that a recreational use component is appropriate in what was previously designated as no-touch shoreline buffer; a new approach for managing shoreline vegetation; user-configurable moorage; enhanced repair options for stabilization; and a wide range of “allowances” for which mitigation is not required. In addition, a “shorelines special report” process is included in the draft SMP to recognize that the prescriptive regulations should not be the only choice in an area with significant existing development and highly modified shorelines.

The process leading up to the draft SMP has been a deliberate one in order to ensure that the City's response to the State Guidelines requirement to meet “no net loss” fits within Bellevue's long-standing principles of environmental protection and sustainability. Environmental stewardship is a core value that has informed many past City actions, including the acquisition of shoreline wetlands like Mercer Slough or farmsteads like

Newcastle Beach Park. These past activities have ensured that the community at large both participates in the cost of preserving these areas and enjoys the benefits of preservation, including aesthetic and recreational benefits. In addition, the City's approach to shoreline protection has helped define the neighborhood character that residents describe today as being fundamental to the creation of places where people can gather and interact. This recognition that urban development can occur without significantly degrading the natural environment has led to a vision of a growing urban place represented by the term "City in a Park" that underlies many of Bellevue's development and planning decisions.

With the release of the draft SMP, the Planning Commission is seeking public comments on the draft policies and regulations contained within it. The draft SMP is the culmination of nearly three years of work by consultants and staff, more than two years of review and discussion by the Planning Commission, the work of three of the City's boards and commissions, and hundreds of comments from stakeholders, including shoreline property owners, non-profits, scientists, and agency personnel.

While the draft SMP was prepared based on direction from the Planning Commission and found sufficient to release for public hearing, this draft SMP has not been fully endorsed by the Planning Commission for recommendation to the City Council. Following the public hearing, the Planning Commission is anticipated to continue its discussion and refinement of the draft policies and code language. Continued input from the public, business and property owners, neighborhood groups and other stakeholders will help the Planning Commission review the draft SMP. When the Planning Commission is satisfied that the draft SMP meets its stated goals, it will transmit their recommendation to the City Council for review and approval.

A public hearing before the Planning Commission on the draft SMP is scheduled for May 25, 2011, at 6:30 p.m. in Council Chambers at Bellevue City Hall. An open house was held on April 20 where more than 100 interested citizens attended.

IV. PUBLIC INVOLVEMENT PROCESS

Outreach and Review

Table 1 details the scope of the public involvement and outreach effort undertaken by staff and the Planning Commission. The process began with an October 28, 2008 boat tour of Bellevue's Lake Washington shoreline hosted by the Planning Commission. Over the next two-and-half years, staff put on three open houses, conducted a statistically valid telephone survey, held two focus groups, met 40 times with more than 20 interest groups and individuals, held 30 study sessions with the Planning Commission, of which 6 were dedicated to science briefings, and met a total of 8 times with other City Commissions and the East Bellevue Community Council. In addition to this effort, staff has made a concerted effort to keep the community informed via articles in *It's Your City* and *Neighborhood News*, mailed and emailed notices to hundreds of property owners and interested parties, kept the project website updated, launched a shoreline blog, posted to the City's Facebook page, and put up project notice signs. To this was added three specialize informational trips, and interviews at a selection of local marinas.

Table 1: Public Involvement and Outreach

Association/Organization Name	Meeting Date
Bellefield Office Park – Brian Woidneck	May 13, 2009
Meydenbauer Yacht Club	June 12, 2009
Meydenbauer Yacht Club	June 17, 2009
Futurewise	June 25, 2009
Seattle Boat Newport	June 30, 2009
Bayshore East Condominium Owners Association	July 1, 2009
Newport Shores Community Club and Marina	July 2, 2009
Futurewise	August 27, 2009
Newport Yacht Basin	December 16, 2009
Newport Shores Community Club and Marina	February 5, 2010
Seattle Boat Newport	February 26, 2010
Councilmember Wallace	March 4, 2010
Newport Shores Community Club and Marina	March 9, 2010
Dave Douglas – Integrity Shoreline Permitting	March 12, 2010
Vasa Park Resort	March 11, 2010
Brian Parks – Phantom Lake property owner	April 9, 2010
Meydenbauer Yacht Club	June 23, 2010
Newport Yacht Basin Association	June 23, 2010
Greg Ashley – Ashley Design and Permitting	July 2, 2010
Ted Burns – Seaborne Pile Driving	July 2, 2010
Dave Douglas – Integrity Shoreline Permitting	July 9, 2010
Becky Henderson- Marine Restoration and Construction	July 16, 2010
Meydenbauer Bay Neighborhood Association	August 3, 2010
Bill Stazer – Sambica	August 5, 2010
Newport Shores Community Club and Marina	August 10, 2010
Meydenbauer Bay Neighborhood Association	August 11, 2010
Dallas Evans- Lake Sammamish property owner	August 12, 2010
Alfie Rahr- Phantom Lake property owner	August 13, 2010
Mike McCorkle- Sambica Rep.	August 13, 2010
Jim Kramer – Strandvick Board Rep.	August 18, 2010
Dallas Evans - Lake Sammamish property owner	August 19, 2010
WSSA	August 20, 2010
WSSA	August 26, 2010
WSSA	August 24, 2010
MBNA	September 10, 2010
Meydenbauer Yacht Club	September 15, 2010
WSSA	September 15, 2010
Newport Yacht Basin Association	September 22, 2010
Brian Parks and Utility staff	October 26, 2010
Councilmember Wallace and WSSA	October 27, 2010
Dave Douglas – Integrity Shoreline Permitting	November 19, 2010
Meydenbauer Yacht Club	March 17, 2011
Newport Shores Community Club and Marina	March 29, 2011
Greg Ashley – Ashley Design and Permitting	April 6, 2011
Planning Commission Meetings	
Study Sessions	March 12, 2008
	July 23, 2008
	Sept. 10, 2008
	January 28, 2009
	Feb. 25, 2009
	May 27, 2009
	July 8, 2009
July 22, 2009	
Science briefings w/ the Commission	Sept. 23, 2009
	Oct. 14, 2009

	Oct. 28, 2009
	Nov. 4, 2009
	Nov. 18, 2009
	Dec. 9, 2009
Study Sessions	Feb. 24, 2010
	March 24, 2010
	May 12, 2010
	June 9, 2010
	July 14, 2010
	July 28, 2010
Planning Commission Meetings cont'd	
	Sept. 8, 2010
	Sept. 22, 2010
	Oct. 20, 2010
	Nov. 3, 2010
	Nov. 17, 2010
	Dec. 8, 2010
	Jan. 12, 2011
	Jan. 26, 2011
	March 9, 2011
	March 23, 2011
Other Boards and Commissions	
East Bellevue Community Council	June 2, 2009 and May 3, 2011
Environmental Services Commission	Oct. 1, 2009, Feb. 3, 2011 and April 7, 2011
Parks and Community Services Board	April 14, 2009 and April 12, 2011
Open Houses	
Overview of update process guidelines and schedule	February 25, 2009
Introduction to process, and shoreline inventory	May 21, 2009
Draft SMP	April 20, 2011
Other Outreach	
Boat Tour	September 20, 2008
Phone Survey	June-July, 2008
Residential Property Owner Focus Group	Nov. 18, 2008
Construction and Marina Industry Focus Group	February 2009
Mailers/Outreach etc.	
Boat Tour Invitation	September 2008
It's Your City	Feb. 2008, Oct. 2008, Oct. 2010, Feb. 2011
Neighborhood News	Mtg notices 2008-present Articles May 2009 and April 2011
Neighborhood Associations	Email to all spring 2008 Met with MBNA Spring 2008
Shoreline Blog	May 2009- October 2009
Project Website	January 2008-present
May 2009 Open House direct mailing	May 2009
April 2011 Open House direct mailing	April 2011
News Releases	May 2009, April 2011
Facebook posting	April 2011
City Website	May 2009, April 2011
Project Notice Signs	Posted May 2010
Research/Background Information	
Interview and Tour Marinas	February 27, 2009 and March 2, 2009
Boat Street Marina – Document Design	August 10, 2010

Review of Draft SMP

In response to direction from the Planning Commission and feedback from the public, staff released the public hearing draft of the SMP on April 8, 2011. The Planning Commission will hold a public hearing May 25, 2011. Additional public hearings may be required before the Planning Commission makes its recommendation to the Council if provisions included in the final could not have been reasonably foreseen from the draft SMP. Once Council completes its process and adopts the draft SMP, the Washington State Department of Ecology will review the draft SMP for conformance with state law requirements, and generally will hold a public hearing on the SMP. If necessary, an iterative process may ensue between Ecology and the City to finalize the draft SMP for Ecology's approval.

V. BACKGROUND

Purpose of the Shoreline Management Act

The state adopted the Shoreline Management Act ("SMA" or the "Act") in response to concerns arising from the "uncoordinated and piecemeal development" of the state's shorelines occurring without sufficient concern for the resource or the public interest. A primary focus of the SMA is to protect and restore the valuable and fragile natural resources the state's shorelines represent, while fostering those "reasonable and appropriate uses" that are dependent upon waterfront proximity, enhance public access, or increase recreational opportunities for public enjoyment of the shoreline.

Jurisdiction

The SMA applies to shorelines of the state, which include Shorelines of Statewide Significance (Lakes Sammamish and Washington) and other types of shorelines and shorelands as defined in the Act. The jurisdictional area generally includes lakes 20 acres in size or greater and streams with a mean annual water flow exceeding 20 cubic feet per second and the lands underlying waters of the state and the areas extending landward from waters of the state for 200 feet including floodways, floodplain areas, wetlands associated with such streams and lakes.

The SMA requires shoreline master programs to ensure no net loss of ecological functions. (See discussion of no net loss in this section.) To evaluate if the standard of no net loss of ecological function has been met through the policies, regulations, and programs included in the SMP, the City is required to complete a cumulative impacts assessment that demonstrates the effectiveness of the shoreline master program when tested against future development scenarios. The Cumulative Impacts Assessment is included as part of the Shoreline Master Program that is forwarded to the State Department of Ecology for review.

The following areas are included in Bellevue's shoreline jurisdiction:

- Lake Washington, including Mercer Slough upstream to Interstate 405 – The lake waters, underlying lands and the area 200 feet landward of the ordinary high water mark, plus associated floodways, floodplains, and wetlands;

- Lake Sammamish – The lake waters, underlying lands and the area 200 feet landward of the ordinary high water mark, and associated wetlands;
- Lower Kelsey Creek – The creek waters, underlying lands, and territory between 200 feet on either side of the top of the banks, plus associated floodways, floodplains, and wetlands;
- Phantom Lake – The lake waters, underlying lands and the area 200 feet landward of the ordinary high water mark, and associated floodways, floodplains, and wetlands (Lake Hills Greenbelt Wetland Complex);
- On lakes Sammamish and Washington, waterward from the ordinary high water mark to the City’s jurisdictional line, typically halfway across the waterbody.

Shoreline Context

Bellevue’s two shorelines of statewide significance, Lake Washington and Lake Sammamish, are heavily modified by residential, marina, and park development. The City’s Shoreline Analysis Report notes that 81 percent of the Lake Washington shoreline is armored.¹ (Armored shorelines are those protected by vertical or near vertical rockwalls or revetment made out of hardened materials, usually rock or concrete.) Slightly less armoring (71 percent) is reported for Lake Sammamish, and more shorelines were judged natural or semi-natural on Lake Sammamish. Similarly, docks are abundant with 40 structures per mile reported for Lake Washington representing an estimated 1,632,233 square feet of coverage, and 66 structures per mile on Lake Sammamish representing an estimated 331,940 square feet of overwater coverage.

The Newport Shores Canal area on Lake Washington is distinctive in that much of the development is laid out along artificial canals connecting to Lake Washington. Properties abutting the water are dependent upon the continued existence of vertical engineered bulkheads greatly limiting the coupling a number of physical, biological and chemical processes that create and maintain habitat.

Phantom Lake is Bellevue’s other lake meeting the minimum requirements for shoreline jurisdiction which, when taken with its associated wetland system, also includes Larson Lake. At approximately 65 acres in size, Phantom Lake is too small to generate wind-driven waves and so has not prompted construction of extensive shoreline stabilization. The lake does not support motorized boat use and those docks that do exist, there are an estimated 22, are smaller and have less overall impact than do piers on Lake Washington and Lake Sammamish that support a large diversity of sail and motorized pleasure craft. As a consequence, Phantom Lake’s shoreline is more intact and vegetative cover is more prevalent because much of the shoreline is designated as wetland.

¹ Bulkhead surveys of Lake Washington and Lake Sammamish were conducted in August - October of 1999. The field work was done by City of Bellevue survey crews using survey grade dual-frequency Trimble 4800 RTK GPS rovers differentially referenced to a continuously operating Trimble 4700 CORS GPS Base station receiver. Each point was shot twice with the two points being automatically checked for consistency and averaged in the GPS controllers. Any point pairs that failed to meet 0.10 foot tolerances were rejected and the point was re-acquired. Concrete, metal and wood and rockery bulkheads were located wherever they could be reasonably expected to function as stabilization or flood protection. Additionally, staff located stream centerlines and storm drainage outfalls for the Utilities Department. This was all done using a boat for waterside access to the properties.

As noted above, the City's shorelines include the lower reaches of the Kelsey Creek and Mercer Slough and their associated wetlands. Kelsey Creek is a spawning stream for Puget Sound Chinook and other salmonids. In addition, during parts of their outmigration from these and other spawning streams and hatcheries on Lake Washington and Lake Sammamish, juveniles depend upon nearshore habitats for prey, cover, and refuge. (Consult science presentations and documents at <http://www.bellevuewa.gov/shoreline-science-documents.htm> for more details.)

The City's Current Shoreline Master Program

Bellevue adopted its first Shoreline Master Program ("SMP") in 1974. Components of that SMP included Comprehensive Plan policies under the Shoreline Element and development regulations in Parts 20.25E (Shoreline Overlay District) and 20.25H (Critical Areas Overlay District) LUC.

In the intervening years since the first adoption, the plan was not substantially updated. As a result, it lacks a number of required components and is not aligned with current scientific information relevant to protecting shoreline functions and values. These gaps, combined with a lack of detailed performance standards aimed at guaranteeing use priority and public access, dictated that the City update its SMP in a manner consistent with the procedural and substantive requirements of the Shoreline Management Act (SMA) and its implementing rules, including WAC 173-26, Shoreline Master Program Guidelines (2003 Guidelines). Some gaps, however, were closed with the City's update of its critical areas ordinance in 2006. Changes made then provided partial protection to some critical shoreline resources via critical area buffers and significantly revised dock and bulkhead standards. Pursuant to Council direction received when the SMP update was initiated and funded, the SMP Update was to build on the adopted 2006 regulatory framework in order to protect Shoreline ecological functions and ensure compliance with state update guidelines.

No Net Loss of Shoreline Ecological Functions

Shoreline ecological functions are those habitat-forming processes, roles, or services that shorelines perform. They are the building blocks of habitat types on which species depend. For example, plants and animals depend on certain physical conditions and ecological processes for their survival. Such conditions include water depth, soil type, and water temperature. Ecological processes include water flows and movement, nutrient recycling, sediment movement, and predator-prey (food web) relationships. A change or disruption to specific ecological functions may have a range of impacts, some negative, to the habitat on which specific species depend; loss of habitat can often lead to species loss.

The SMA provides a broad policy framework for protecting the natural resources and ecology of the shoreline environment. The SMP Guidelines establish the standard of "no net loss" of shoreline ecological functions as the means of implementing this framework through shoreline master programs. Local governments must achieve this standard through both the SMP planning process and by appropriately regulating individual developments as they are proposed in the future.

At its most basic, the concept of no net loss is that any loss of ecological function caused by an action must be offset by an equivalent gain in ecological function. For example, when the physical condition of the shoreline is altered by removing existing native vegetation to clear

for lake views, or when nearshore habitat is altered by construction of a dock, there occur measurable impacts to a range of functions (vegetative, hydrologic, and habitat) that may have a direct impact on the ability of certain species to persist.

To counter this loss, any mitigation must address both the function that is lost, its spatial location, and the temporal dimension associated with that loss. For example, the habitat function lost by removing mature trees on the shoreline cannot be replicated by simply planting an equivalent number of trees somewhere else on the site because the location, next to the shoreline, is extremely important relative to the habitat it provides. Likewise, the functions provided by mature trees cannot be easily replicated by planting an equal number of juvenile trees. The temporal loss must be considered and calculated when assigning appropriate mitigation amounts. The SMP Guidelines rely on a six part mitigation “sequencing” to ensure adequate consideration of all elements that affect net loss of ecological function. Such mitigation sequencing includes: (1) avoiding the impact; (2) minimizing the impact; (3) rectifying the impact; (4) reducing or eliminating the impact through preservation and maintenance; (5) compensating for the impact; and finally, (6) monitoring the impact and ensuring corrective action is taken when failure is apparent. However, the SMP Guidelines recognize that not all impacts can be completely mitigated in this manner, and thus they recognize the importance of a restoration plan to address cumulative loss over time.

Central Role of the Guidelines

The SMP Guidelines provide process and substantive direction to local jurisdictions when preparing their shoreline master programs. Under RCW 90.58.200, Ecology is authorized to adopt rules to implement the provisions of the Shoreline Management Act; and under RCW 90.58.060 Ecology was required to adopt guidelines for the development and review of shoreline master programs. The SMP Guidelines were adopted as rules pursuant to the Washington Administrative Procedure Act (Ch. 34.05 RCW).

While the SMP Guidelines are designed to allow local government substantial discretion to adopt master programs that reflect local circumstances; for example, buffers in one community might be smaller, reflecting the prevalence of gradually sloping shoreline without extensive shoreline hardening while in another they are larger to address the hazard of actively eroding, high-bluff shoreline, they are nonetheless the standards and criteria that Ecology uses to review, and ultimately, to adopt local master programs under RCW 90.58.090.

For each master program provision addressed in the guidelines, there is a discussion of applicability, a set of general principles, and a list of standards. The meat of the guidance is in the principles and the standards. The principles are essentially mandatory policies. The term “shall” is typically used in the imperative voice, meaning an action is mandated or required—see WAC 173-26-191(2) *Basic Requirements*. The standards are also obligatory but differ in specificity; for example, in residential areas, in the absence of critical areas, the Guidelines do not spell out that one must use buffers or special vegetation management areas to ensure no net loss of ecological function. What the Guidelines insist upon is that there be no net loss of ecological function; buffers and management areas simply happen to be a very

effective means to that end and are the most commonly accepted regulatory practice. At the other end of the spectrum, the standards addressing structural stabilization provide detailed and mandatory direction, including the requirement that structural stabilization shall not be permitted or replaced except in very specific and difficult to demonstrate circumstances.

In summary, the Guidelines establish specific principles and standards that must be met to ensure successful adoption of a local shoreline master program by Ecology. As discussed above, the key is the concept of *no net loss of ecological function*; it is the end result to which all the principles and standards point. It is also the principle standard by which Ecology judges whether a master program meets the intent of the Guidelines.

The Relationship of Science to the Guidelines and Policy Making

Science played a very important part in creating the SMP Guidelines and is a required component of any Shoreline Master Program. For example, following RCW 90.58.100 (1), local governments are instructed to “utilize a systematic interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts and consider all plans, studies, inventories and systems of classification made or being made by federal, state, regional or local agencies . . . or by organizations dealing with pertinent shorelines of the state.” This legal direction is implemented in the Guidelines in the requirement to incorporate “the most current, accurate, and complete scientific and technical information available that is applicable to the issues of concern.”

In preparing the regulatory concepts for Planning Commission review that went into the draft SMP, staff consulted a wide range of scientific information including peer reviewed articles, published “gray” literature, and detailed studies by consultants working for the city of Bellevue. Staff also consulted with a number of agency personnel and listened to hours of public testimony. Much of this has been posted to the website or is available in the project file. In addition, city consultants prepared a detailed shoreline inventory and analysis report that assesses ecological and ecosystem processes at the reach scale. This analysis served as the basis for deciding where environment designations should be placed and will function as the baseline against which generalized estimates of the impacts of future development actions on the shoreline will be measured.

The Planning Commission was introduced to many of the key concepts through a combination of staff and consultant briefings, direct panel discussions with scientists and state regulators, and through presentations by Washington Sensible Shoreline Alliance (WSSA). Based on the information presented or contained in the record, it is clear that our activities that occur along lake shorelines today affect a number of physical, biological and chemical processes that create and maintain habitat, and therefore affect the species that live in lakes or on shorelines they abut. Development such as boathouses, sheds, impervious surface, bulkheads and docks abutting shorelines affects riparian and littoral habitat structure, shading, shoreline habitat conditions, and water and sediment quality. These impacts are generally measureable or can be estimated by proxy, and they suggest there is considerable risk in letting the current state of affairs continue unabated. (See Attachment 2 *Department of Ecology Potential No Net Loss Indicators*.)

So while there is ample evidence that there is clear association between development on shorelines and a marked decline in ecological function, scientists often disagree about causes, or can identify associations but cannot tease out all the causative factors. So, while scientists can assist in formulating policy options and assessing risk, they cannot provide the degree of certainty that might be ideal. Instead, policy makers need to act under scientific uncertainty and with the understanding that ecological health could deteriorate if their response is insufficiently protective. In this regard, they must act to some extent as risk managers, carefully weighing the potential for further loss of ecological function against the degree of intrusion on private property rights that regulation inevitably entails. The draft SMP reflects the notion that there is sufficient scientific information to support the level of regulation required by the State Guidelines to protect against no net loss of ecological function.

Information Record

To date staff has provided the Commission with a substantial amount of information. A partial list is provided below. A more complete list is available for public review at <http://www.bellevuewa.gov/shoreline-master-plan.htm>

Original Binder Provided to Planning Commission Included:

- Current SMP from Comprehensive Plan (Source: Comp Plan).
- Published WAC Guidelines (Source: WAC).
- History of adoption of WAC Guidelines (Source: Ecology).
- Summary of SMP (Source: Ecology).
- Project scope with task/phase chart (Note: Contract which included project scope and stages approved by Council).

Supplemental Information Provided to Planning Commission (To Date) Includes:

- List of frequently asked questions and responds to those questions (also on the web).
- Direct responses to the questions raised by the Commission.
- Guide to “Waterfront Titles in the State of Washington.”
- Anacortes v. Futurewise summary.
- Written correspondence with property interests.
- Copy of the complete shoreline inventory and characterization document (Available Online).
- Draft shoreline environment maps.
- Copies of other jurisdiction SMP’s (excerpts from Redmond, Sammamish, Kirkland).
- To the extent practicable summarize WAC identifying what is required vs. what is optional. Used color scheme to facilitate reading.
- Map Book- Results of GIS study on affects of buffers/setbacks on single family residential. How many properties are affected broken down by geographic areas.

- Use standard table format to compare/analyze policies to other jurisdictions. Currently being prepared by project consultant team.
- Best Available Science and Risk Analysis for CAO.
- Lake Sammamish OHWM Study with correspondence between City and Ecology.
- Land Use Planning for Salmon, Steelhead and Trout. Washington Department of Fish and Wildlife, Olympia, Washington.
- [Waterfront Property Owners Focus Group](#) (Nov. 18, 2008)
- [Resident Telephone Survey](#) (June-July, 2008)
- Draft Restoration Plan
- WAC 173-27 Shoreline Management Permit and Enforcement Procedures
- WAC 197-11-800 Categorical Exemptions
- RCW 90.58 Shoreline Management Act of 1971
- RCW 36.70B Local Project Review
- Agency Panel Presentation 12/9/09
- [Participants](#) PDF
- [Behavior and Habitat use of Chinook Salmon](#) - Roger Tabor, US Fish and Wildlife
- [Movement and Habitat Use of Chinook Salmon Smolts and Two Predatory Fishes in Lake Washington and the Lake Washington Ship Canal](#)
- [Nearshore Habitat Use by Juvenile Chinook Salmon in Lentic Systems of the Lake Washington Basin](#)
- [Shoreline Stabilization and the importance of shoreline vegetation](#) - Jose Carrasquero, Herrera Environmental Consultants
- [Late-Run Kokanee](#) - David St. John and Hans Berge, King County Department of Natural Resources and Parks,
- [2003 King County Report](#)
- [Lake Sammamish Late-Run Kokanee Synthesis Report](#)
- [Effects of a Temperature-Oxygen Squeeze on Distribution, Feeding, Growth and Survival of Kokanee in Lake Sammamish](#)
- [2008-09 Lake Sammamish Late-Run Kokanee Survey and Escapement Summary](#)
- [Lake Sammamish Kokanee Video](#)
- [Effects of Shoreline Urbanization and Aquatic Ecosystems](#) - Tessa Francis, NOAA Fisheries
- [Storm and Surface Water Management in Bellevue](#) - Denny Vidmar, Bellevue Utilities Department

Council Principles for SMP Update

In developing the draft SMP, care was taken to ensure an approach that conformed to the following principles, previously put forward by the Council when the SMP Update was initiated and funded and subsequently acknowledged by the Planning Commission to guide the update effort. As previously outlined to the Commission, the scope of the SMP Update was designed and initiated by Council based on the following five key policy assumptions:

1. The project scope was designed to achieve the most value for the budgeted project dollars by focusing the Update on three key components: shoreline restoration planning, public access, and potential use changes.
2. The Update work program was designed and funded to build on the existing 2006 regulatory framework adopted to protect ecological functions on the shoreline, and to comply with the Ecology mandate.
3. Any changes to the 2006 regulations would be necessarily limited, and would be based on experience gained from three years of permit review, significant changes in scientific understanding, changes in the environmental context that was identified during the shoreline characterization (Phase 2), and ideas advanced by the regulated community that would achieve the same outcome at less cost or impact on private property owners.
4. The Planning Commission, in lieu of a Citizen Advisory Committee, was identified as the representative group of citizens best suited to consider and make policy recommendations on code changes for SMP Update that was scheduled to extend over a protracted three year project timeline.
5. Ecology has the final say and must ultimately decide if the balance of interests provided in the Update adequately meets the intention of the Shoreline Management Act, and Ecology would be consulted throughout the process to avoid the creation of regulations that would not likely be approvable.

Principles for Review of Draft SMP

The Council principles for updating the SMP were later amplified by an additional set of goals that had been used in the past by the Planning Commission to review environmental regulations in Bellevue. The goals were used to inform the Planning Commission process and to ensure that the approach to protecting shoreline functions and values is accomplished through regulations and incentives that exemplify the following characteristics.

- **Bellevue appropriate:** regulations should recognize that Bellevue is heavily urbanized and should be designed to preserve shoreline ecological functions that exist today, rather than require a return to predevelopment conditions
- **Neighborhood character:** the City's history of environmental protection has resulted in neighborhoods that include natural areas juxtaposed with the built environment. Efforts to protect shoreline ecological functions should focus on preserving or creating places and neighborhoods that people can use and enjoy;
- **Balance:** the impact of regulatory changes should not overburden Bellevue property owners and should be balanced against other SMA goals, including recreational use and water-dependent use;
- **Predictable and Flexible:** consistent with other City efforts to improve the permitting experience for citizens, the draft SMP is designed to be user-friendly, predictable and flexible.
- **Inclusive:** the process by which the SMP is drafted should seek and include input from a variety of stakeholders. This commitment began with a boat tour and community-wide

survey, followed by focus groups, and two years of discussion about policy options with the Planning Commission acting in lieu of a Citizen Advisory Committee. This work was supplemented by multiple mailings to affected property owners, an exclusive shoreline website, and two open houses designed to educate citizens about the issues and the process.

Principles for Review of Draft SMP

When the Planning Commission concluded that the draft SMP was sufficient for public release, the Commission articulated the community objectives that it had tried to address in direction provided to guide staff preparation of the draft. Based on Planning Commission feedback, the draft polices and regulations were intended to:

- To acknowledge the substantially urbanized condition that was identified during the inventory of Bellevue shorelines;
- To ensure no net loss of existing shoreline functions rather than requiring a return to pre-development conditions;
- To enhance neighborhood livability by focusing on preservation of natural features and the creation of places and neighborhoods that people enjoy;
- To facilitate stewardship efforts that start with the shoreline property owners, and to recognize that effective stewardship of shoreline resources requires partnership with all Bellevue residents and the City of Bellevue departments responsible for managing public lands and programs;
- To foster reinvestment that maintains existing shoreline ecological functions through adoption of a user friendly and predictable regulatory framework that is flexible, and requires a minimum of technical expertise;
- To recognize that resource management practices undertaken by city departments provide an environmental foundation for allowing increased regulatory flexibility for private shoreline property owners;
- To affirm that SMP goals are not achievable through regulations alone, and that regulatory changes should be pursued only to the extent that such changes are consistent with constitutional and other legal limitations on the regulation of private property rights;
- To provide an SMP that is tailored to unique characteristics of land designated as shoreline jurisdiction in Bellevue; and
- To provide guidance and opportunities for public and private entities to voluntarily fund and implement restoration projects to improve degraded conditions.

VI. DRAFT SMP

Introduction

The draft SMP is needed to comply with the statutory deadline for a comprehensive update of the City's local Shoreline Master Program pursuant to RCW 90.58.080. This amendment is also needed for compliance with use regulations and program content requirements of Chapter RCW 90.58. As the existing Bellevue SMP has been in effect since 1974, this SMP update is needed to address land use changes that have occurred along the City's shorelines

over the past 37 years, and to bring the SMP current into alignment with the environmental protection and land use management policies and practices provided by the City's 2006 Critical Areas Ordinance, Comprehensive Plan elements, and the 2003 SMP Guidelines (Chapter 173-26 WAC).

The City's statutory deadline pursuant to RCW 90.58.080 is December 1, 2010. The City entered into a grant agreement authorized by Ordinance No. 5775 with Ecology in late 2007, receiving a total of \$175,000 in grant funds to complete this draft SMP update by June 30, 2011.

Unlike the City's current SMP, the draft SMP is designed as a stand-alone document located in Part 20.25E LUC (including in part, use charts, permitting and appeals, administration, enforcement provisions, and definitions), and will replace the current Part 20.5E LUC in its entirety. Subsequent amendments to certain provisions of the LUC and the Bellevue City Code are required for consistency with the draft SMP. The update will close gaps in the City's current SMP related to state-required components, align the SMP with current scientific information relevant to protecting shoreline functions and values, provide for a broader range of shoreline uses, and include detailed performance standards to provide use priority and public access opportunities to the shoreline.

SMA Required Components: The SMA requires the Bellevue SMP to include the following components:

1. Shoreline Element of the Comprehensive Plan (policies)
2. Shoreline Overlay of the Land Use Code (regulations)
3. Critical Areas Overlay of the Land Use Code (regulations)
4. Shoreline Environment Designations (maps)
5. Shoreline Jurisdiction (maps)
6. Shoreline Inventory and Analysis (study)
7. Shoreline Restoration Element (guidance document)
8. Shoreline Cumulative Impact Analysis

Implementation

As previously discussed with the Planning Commission, a conscious effort has been made to include virtually all SMP development regulations in Part 20.25E of the Land Use Code. As a consequence, this section includes nearly all of the regulations related to the SMP including those specific to shoreline environments, uses, nonconformities, dimensional standards, development standards, design standards, and other requirements. The full range of draft regulations is included in this list:

- General section of the SMP
- Non-Conforming Uses
- Shoreline Uses
- Use Charts
- Dimensional Requirements
- General Requirements Applicable to All Shoreline Development and Use
- Residential Uses and Development
- Specific Use Regulations
- Shoreline Modifications

- Review and Appeal Procedures
- Shoreline Processes
- Shoreline Project Permits
- Administration and Enforcement
- Definitions

Other changes are proposed for sections of the Land Use Code outside of Part 20.25E, such as related amendments to other land use code sections, including the Critical Areas Overlay District Part 20.25H LUC for the purpose of removing conflicts and ensuring cross reference accuracy with the packet ultimately recommended by the Planning Commission correction and clarification.

Regulatory Approach to the Draft SMP

The draft SMP applies to that part of a property or properties 200 feet from the ordinary high water mark and the aquatic area waterward of that mark to the City's jurisdictional boundary. Associated floodways and wetlands area also included. While the entire shoreline area is subject to regulation under the draft SMP—the Guidelines requirement of no net loss applies to each increment of development no matter its location on the site—the impact on property owners can be greatly reduced, and the immediate benefit to aquatic habitat potentially increased, if regulations and incentives are targeted to protecting a smaller area on either side of the ordinary high water mark. Regulations aimed at moderating development impacts to this interface between land and water may result in the most positive effects on a range of critical water quality and habitat functions, including those components most important to juvenile Chinook survival in Lake Washington and Lake Sammamish.

Consequently, the regulations in the draft SMP are mostly focused on the first 50 feet above Ordinary High Water Mark (OHWM)—the area represented by the 50-foot setback—and the area below OHWM out 30 feet or until 9 feet of water depth is reached. This approach is justified because the coupling between terrestrial and aquatic systems is particularly strong along the lakeshore and it is in this area where human activities and their impacts can most interfere with this relationship.

Shorelines that are heavily modified with bulkheads, devoid of native vegetation or covered by structures, concrete, and pavers simply cannot contribute to this crucial interaction between land and water in the same manner less developed shorelines can. While not the only source of contributions, the absence of shoreline inputs can negatively affect the productivity of benthic habitats supporting both rooted and floating vegetation within littoral or photic zone (the depth to which light penetrates). This is important because the array of species found in the littoral zone is generally more diverse than in either open or deep water areas and is attributed to the variety of substrates and vegetation comprising the habitats present. Shading by docks, damage from propeller and jet-ski wash, and other impacts associated with active use of shallow water areas are believed to have negative impacts on these important habitat components. Other areas on a shoreline property, being further removed from this sensitive zone, are simply more resilient, and the draft SMP reflects this fact by providing policies and regulations aimed primarily at protecting an area around this interface between land and water rather than the entire shoreline area outside this zone.

General Requirements in the Draft SMP Applicable to all Shoreline Environments

The following provisions and performance standards apply generally across all substantive elements of the draft SMP.

No Net Loss of Ecological Function: The SMP Guidelines establish the standard of “no net loss” of shoreline ecological functions as the means of implementing the framework of the SMA through shoreline master programs. Local governments must achieve this standard through both the SMP planning process and by appropriately regulating individual developments as they are undertaken in the future. The draft SMP requires shoreline uses and development to be located and designed to prevent or mitigate adverse impacts to natural shoreline resources, wildlife habitat, and fish and other aquatic habitat to ensure no net loss of shoreline ecological functions and processes. Accordingly, projects developed that comply with all applicable standards required by the draft SMP are presumed to satisfy the no net loss of ecological standard.

Specific analysis of no net loss of ecological function is required, however, when applying for a Shoreline Conditional Use Permit, a Shoreline Variance, as part of a Special Shoreline Report, or as part of a site specific mitigation plan when required under the draft SMP.

Technical Feasibility Analysis: The draft SMP requires a technical feasibility analysis for those uses that are allowed in shoreline jurisdiction subject to a finding that no technically feasible alternative exists to an alignment or location outside the area. Typical uses subject to this test are road alignments, bridges, utility facilities, and similar public infrastructure. A similar test exists in the Critical Areas Overlay District already at LUC 20.25H.055.C.2. The decision on whether an alternative is technically feasible is made by the Director, with an opportunity for appeal to the City Hearing Examiner, and is based on a report prepared by a qualified professional that address six criteria having to do with: (1) site conditions; (2) location of the existing infrastructure; (3) the function or objective of the proposed facility; (4) the level of risk to a facility from shoreline erosion and the ability to mitigate this risk; (5) whether the cost of avoiding the shoreline is disproportionate when compared to the environmental benefit; and (6) the ability of permanent and temporary impacts to be mitigated.

Where a demonstration is made that no technically feasible alternative exists to locating in the shoreline jurisdiction, then an applicant must comply with a series of general and specific performance standards designed to further limit damage to shoreline ecological functions.

Mitigation Sequencing The SMP Guidelines rely on a six-part mitigation “sequencing” approach to ensure adequate consideration of all these elements. (See LUC 20.25E.060.D for details.) Such mitigation sequencing includes: (1) avoiding the impact; (2) minimizing the impact; (3) rectifying the impact; (4) reducing or eliminating the impact through preservation and maintenance; (5) compensating for the impact; and finally, (6) monitoring the impact and ensuring corrective action is taken when failure is apparent. Special location preferences, mitigation ratios, and mitigation plan requirements are included as well.

Water Quality: In an effort to acknowledge the importance of other codes and programs in controlling stormwater inputs and associated water quality pollution, the Draft SMP makes specific reference to the applicable provisions of Chapter 24.06 BCC (Storm and Surface Water Utility Code), the Storm and Surface Water Engineering Standards (2011), and Chapter 23.76 BCC (Clearing and Grading Code) and the Clearing and Grading

Development Standards. In addition, specific material standards are required that limit the leeching or discharge of harmful pollutants to aquatic areas. The use of coal tar sealants that contain high levels of Polycyclic Aromatic Hydrocarbons (PAH) is specifically prohibited.

Special Shoreline Report: Similar to the approach adopted in the critical areas update, prescriptive standards are included to provide clear options for complying with the no net loss standard that create a regulatory “safe harbor.” Additional details regarding the prescriptive standard are provided below. However, when the prescriptive standards do not provide the necessary flexibility an off-ramp is provided.

The draft SMP includes provisions that allow a property owner to suggest modifications to the prescriptive standards, using a science-based report, where it can be demonstrated that the resulting protection of shoreline ecological functions is as good as or better than would otherwise result from application of standard requirements. The process is intended to provide flexibility for sites or proposals providing unique design, or protection of shoreline area and functions and values, not anticipated by the prescriptive regulations, and to ensure that strict implementation of certain requirements will not thwart the policy enumerated in RCW 90.58.020. The application of the special shoreline report is specific to proposed modifications of setbacks, moorage and shoreline stabilization requirements included in the draft SMP. The shoreline special report process was tailored after the critical areas report process and is used to modify impervious surface standards set forth in LUC 20.20.010.

Shorelines of State Wide Significance: The SMA identifies certain shorelines as “shorelines of the statewide significance” and raises their status by setting use priorities and requiring “optimum implementation” of the act’s policies. Both Lake Washington and Lake Sammamish are classified as shorelines of statewide significance because they exceed 1000 acres in size. Optimum implementation involves special emphasis on statewide objectives and consultation with state agencies. Paramount in regulating Shorelines of Statewide Significance is placing the state-wide interest over local interest RCW 90.58.020. For example, the presence of threatened anadromous fish species means, at a minimum, that the City, in developing its SMP, must consult with the Washington Departments of Fish and Wildlife and Ecology, the Governor’s Salmon Recovery Office, and the Muckleshoot Indian Tribe.

New SMP Provisions with Greatest Influence on Shoreline Ecological Functions

The following prescriptive provisions and performance standards are expected to be most important in moderating the negative effects of development on a wide range of shoreline ecological functions. As a result, they are expected to be the main standards in the draft SMP that guarantee no net loss of ecological function. (For a jurisdiction-by-jurisdiction comparison of regional standards see Attachment 1.)

Environment Designations: An important addition to the SMP is the classification of Bellevue’s shorelines into environmental designations (similar to a zoning overlay). The 1974 SMP had only one environmental designation—urban residential—and its designation was implied since the plan did not contain specific policies or regulations specifically acknowledging such a designation. In contrast, the updated SMP now has six designations consistent with state update guidelines: (1) Aquatic; (2) Urban Conservancy - Open Space; (3) Urban Conservancy; (4) Shoreline Residential; (5) Shoreline Residential Canal; and, (6) Recreational Boating.

The designations are based on an analysis of shoreline uses and shoreline ecological functions on an aggregate basis by shoreline reach, including the biological and physical characteristics of the shoreline. Based on these results, the shoreline is divided into specific units called environment designations. Because the environment designations represent varying levels of ecological function, different regulations are often prescribed. The objective of the designation and its associated regulations limit development to protect presently intact ecosystem functions and allow the continuation and redevelopment of existing uses, using new standards, to protect existing ecological conditions and enhance degraded functions through incentives and regulatory requirements. For example, a mostly undeveloped shoreline with high ecological benefit would have corresponding policies and regulations that mostly preserve and support those characteristics. In contrast, a highly-developed shoreline with lower ecological benefit would have corresponding policies and regulations appropriate to continuing shoreline uses while preventing further degradation of the remaining biological and physical characteristics of the shoreline.

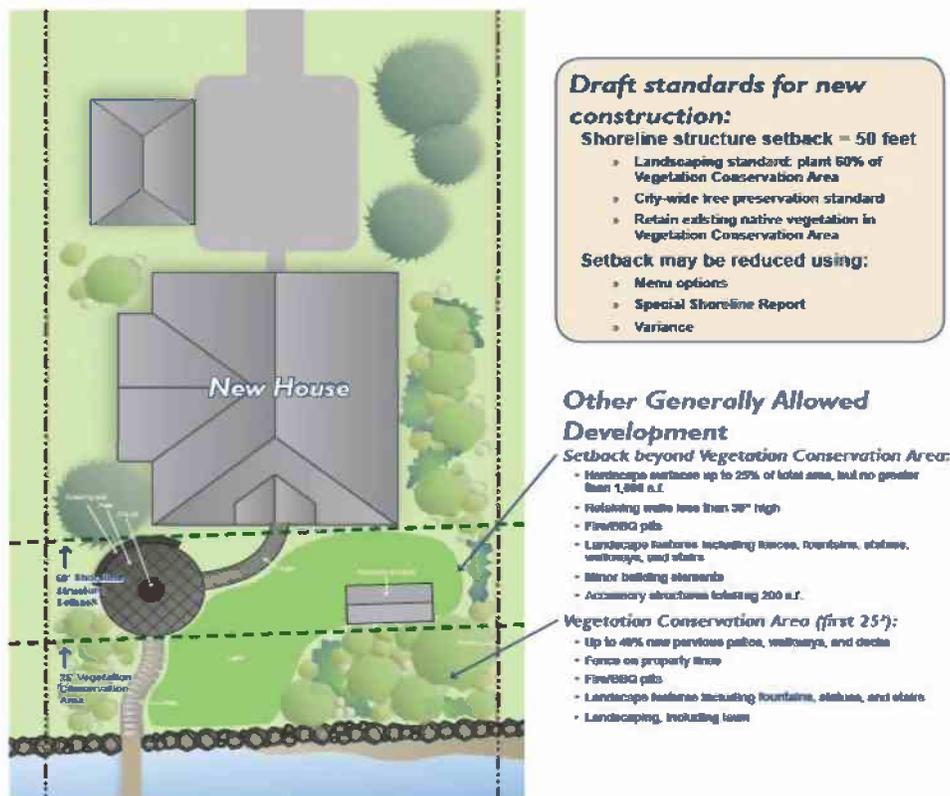
Shoreline Protection – Setbacks: Bellevue’s existing regulatory approach (1974 SMP with 2006 Critical Areas Update) gives special attention to protecting the shoreline interface by employing structure setbacks and “no-touch” buffers, along with stabilization and dock standards designed to meet the requirements of the Guidelines and federal agencies. The idea is to limit development impacts on habitat functions important to aquatic species of local importance. Regulatory buffers associated with native vegetation provide one of the best means to ensuring maintenance of the crucial connection between land and shore and the habitat and water quality benefits that come with it. The imposition of setbacks and buffers naturally constrain development within this sensitive area by limiting the actions and types of development that can occur there. Under Bellevue’s current rules, some departures from the required setback and buffer dimensions are authorized; however, such departures require a science-based report demonstrating net improvement in ecological function above what otherwise would have occurred under the prescriptive critical area standard.

Assuming continued development pressure, such an approach generally results in vegetative improvements within the 25-foot buffer from OHWM. On some occasions, bulkheads or portions of bulkheads are removed to offset the impacts of new development within the setback or buffer. These improvements are generally deemed sufficient to offset impacts to hydrologic, vegetative and habitat functions that arise from development within the setback or buffer, primarily because they accelerate the reestablishment of a vegetative connection close to the water’s edge. Moreover, such improvements have the benefit of having been based on a site specific science-based study and arguably reflect a more accurate assessment of actual site conditions and impacts.

In drafting a new SMP, staff faced a substantial challenge in crafting standards to meet the Planning Commission’s interest in creating more Bellevue-appropriate regulations, while protecting ecological functions in the manner similar to that provided by the shoreline buffers of the existing critical areas ordinance. To offset the loss of the existing “no touch” shoreline buffer, the draft SMP maintains the same overall structure setback dimension (50 feet) while replacing the 25-foot no touch buffer with a vegetation conservation area designed to occupy at most 60 percent of the previous buffer area. The remaining 40 percent is made available for water dependent recreation and enjoyment but with a limitation on the development new structures and impervious surfaces. (See Figure 1 below for details.)

To further offset the loss of protective benefits associated with the no touch shoreline buffer, the Draft SMP adds a landscape standard for new residential development wherever it occurs on the site, and for redevelopment within the setback area. Since this draft standard applies to new development outside the setback—something not previously regulated under the critical area protections—it may foster planting of the vegetation conservation area at a rate similar to or exceeding the mitigation typically required as an outcome of the critical area report process. This requirement is further supplemented with a mitigation options menu that includes prescriptive regulations based on common mitigation options previously seen in science-based site specific analysis done as part of the existing critical area report process. Since some measure of the existing buffer is almost always occupied by existing development, and required access to docks and beaches is needed under both the no touch buffer and the draft SMP setback approaches. The actual difference in outcome between the existing critical area no touch buffer and structure setback protections and those proposed in the draft SMP is assumed to be small and in keeping with the balancing required to provide for two potentially conflicting policy goals of the Shoreline Management Act: recreational access to the shoreline and no net loss of shoreline ecological functions.

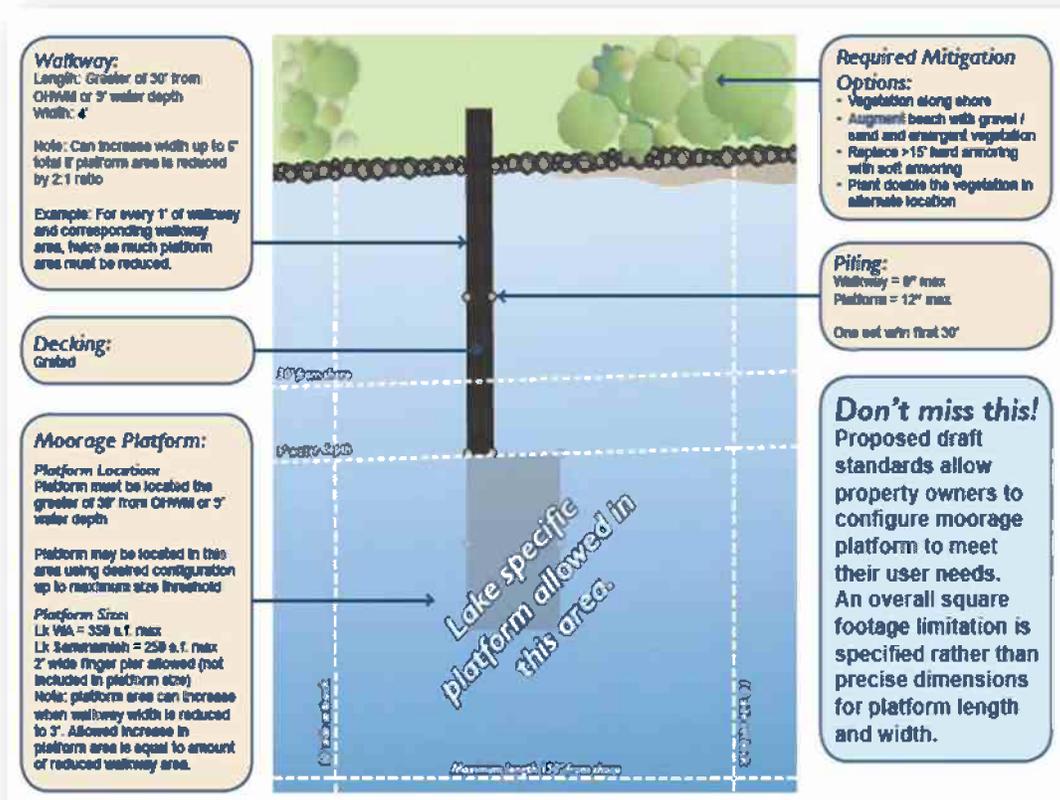
Figure 1: Shoreline Setback for New Development



Vegetation Management Standards: Because Bellevue’s current critical areas regulations require a 25-foot “no-touch” buffer on the shoreline, preservation of existing native vegetation within the area included in that buffer is a reasonable expectation. In removing the no touch buffer requirement, the City needed to ensure protection of existing native vegetation within some part of the newly established 50-foot structure setback to ensure no net loss of ecological function. The draft SMP employs a vegetation overlay designed to protect native vegetation existing within the first 25 feet from OHWM. Instead of protecting a fixed area, this approach protects native vegetation, thereby making recreational development of a component of the shoreline more likely since detailed science-based reports are not required to justify intrusions. Such an approach makes sense given the highly developed nature of Bellevue’s major shorelines, the impact of existing development, and the demand for recreational use of the shoreline area. Protection provided by this approach may be supplemented by replanting of up to 60 percent of this vegetation conservation area when necessary to mitigate for new development elsewhere on the site.

Shoreline Modification – Residential Moorage: The purpose in updating the existing critical area dock standards was to simplify and clarify the standards while ensuring no net loss of ecological functions. As a result, the draft standards, much like the existing critical area rules, focus on limiting the overwater coverage in the nearshore while pushing the moorage function out a minimum of 30 feet from OHWM or to a length necessary to reach a depth of 9 feet, whichever is greater. Walkway width is restricted to four feet and the walkway must be grated. (See Figure 2 below for details.)

Figure 2: New Residential Moorage Standards



When compared to prior CAO standards, the key difference, however, is that new standards do not specify a particular moorage configuration or specific dimensional standard for piers or floats beyond restricting the amount of total overwater coverage of the moorage platform (e.g., 250 square feet for Lake Sammamish and 350 square feet for Lake Washington), while requiring grating throughout. The result is an owner-configurable moorage platform, the ultimate approval of which depends on state and federal agencies. The difference in size of moorage platforms is in response to the larger deepwater boats typically moored on Lake Washington compared with Lake Sammamish where smaller runabouts are common. Other lake-specific standards are included in the draft SMP for Phantom Lake and the Residential Canal Environment that reflect the vessel diversity seen in those areas and respect Homeowners Association Rules where applicable.

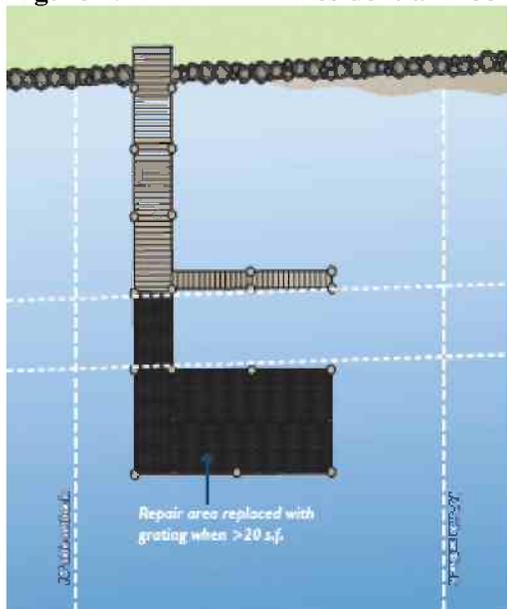
Since total overwater coverage is considered a potential indicator of net loss of ecological function, it is worth comparing the total overwater coverage allowed under the current critical area rules with the standards in the draft SMP. The current code restricts new docks to 480 square feet of total overwater coverage. This amount can be increased but only by means of a science-based critical areas report and with additional mitigation.

Comparing this standard with that provided by the draft SMP is complicated because of the uncertainty about how far the walkway will need to extend to reach the minimum depth requirement of nine feet. Assuming that, on average, a Lake Washington dock will have to extend at least 40 feet to reach the 9 foot depth, the amount of overwater coverage would total 510 feet comparing relatively favorably with the current requirement of 480 square feet. Similar calculations on Lake Sammamish result in 410 square feet of overwater coverage, somewhat less coverage than the maximum allowed under current code. Under the same assumption of a 40-foot walkway length, the maximum average over water coverage is 460 square feet across the two lakes. On balance, the dock standards in the draft SMP compare favorably with the existing critical area standards while ensuring no net loss of shoreline ecological functions.

Residential Moorage -- Repair: Given the urbanized character of Bellevue's lake frontage, most properties already are developed with a dock, maintenance and repair is an important concern. Under current rules, maintenance and repair of legally-established docks is permitted subject to a specific repair threshold above which proportional compliance to the new standard is required. Under the draft SMP, the repair thresholds have been liberalized with the result that docks can be fully repaired without triggering complicated proportional compliance provisions. Instead material standards and grating have been made mandatory for all but the most modest repair actions. Only replacement of more than 50 percent of the pilings triggers compliance with the standards for new docks. (See Figure 3 for details.)

Residential Moorage – Reconfiguration: Proposals to reconfigure or replace existing residential docks are similarly treated in both the existing critical area standards and the draft SMP. Such proposals must meet the requirements associated with new docks at LUC 20.25E.065.I.3 and 4. These provisions permit reconfiguration without significant coverage penalty, provided that the existing moorage platform is existed beyond the nine-foot depth limitation. Thus moorage platforms over the coverage limitation in the standards for new piers may be retained provided they are located beyond nine feet. However, a property owner is always guaranteed the maximum moorage platform under the new standard.

Figure 3: Residential Moorage Repair Standards



Standards for Dock Repair / Maintenance:

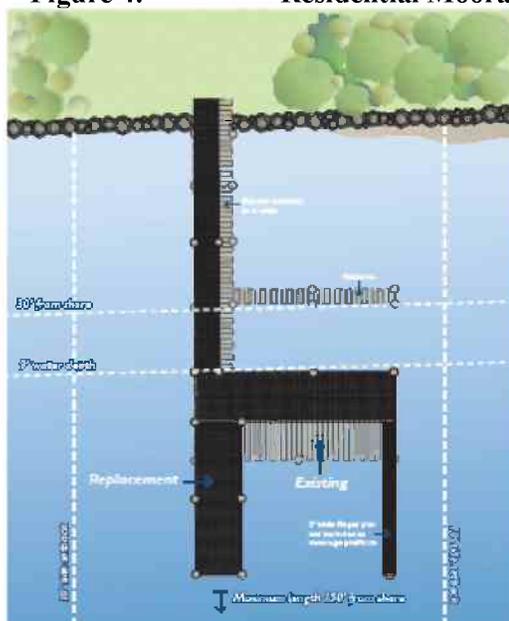
The proposed draft identifies the following activities as repair and maintenance:

- Repair / replacement of 100% of decking
- Repair / replacement of 100% of substructure
- Repair (cutting, splicing, capping) of 100% of piling
- Replacement of up to 50% of piles (note: cumulative over 3 year period)
 - > Grated decking required for repair of decking >20 s.f.

Don't miss this!

For example, on an existing dock with 20 piles: up to 10 piles may be replaced, the remaining 10 spliced or capped, all decking and substructure replaced, and the entire surface grated.

Figure 4: Residential Moorage Reconfiguration



Standards for Dock Replacement:

Walkway:

- Length = greater of 30' from OHWM or 9' water depth
- Width = 4' (Note: can increase width up to 6' total if platform area is reduced by 2:1 ratio)

Moorage Platform:

- May be equal to existing platform area or maximum allowed for new dock, whichever is greater.

Decking:

- Must be grated

Piling:

- One set within first 30'
- Walkway = 8" max; Platform = 12" max

> Mitigation: four options to meet standard

Don't miss this!

- Existing moorage platform size does not need to change when dock is rebuilt and reconfigured.
- Alternative designs to the prescriptive standard are considered through a Special Shorelines Report.

Shoreline Modifications—New Stabilization: Bellevue’s existing rules regarding shoreline stabilization were designed to be consistent with the standards provided in the Guidelines, allowing for minor repair of existing hard stabilization, but limiting new and replacement stabilization to those situations where need is clearly demonstrated to protect existing primary structures. The draft SMP approaches the subject in a similar way.

Avoiding the need for new stabilization is a primary policy objective of the Guidelines, so development that purposefully avoids erosion hazards by locating the primary structure at a safe distance from OHWM to avoid those risks is preferred. Where an applicant perceives the need for stabilization on a site without it, necessity must be shown by hiring a qualified professional to conduct a feasibility analysis. The analysis assesses a number of site specific factors, information about wind direction, speed, fetch and likely wave height, as well as risk to the existing primary structure and other factors.

Where stabilization is allowed, the draft SMP mirrors the existing critical area standards by articulating a clear preference for soft stabilization; hard stabilization is an option only when soft options are not technically feasible or the structure to be protected is so near (less than 10 feet) to OHWM that hardened stabilization is the default option. (See Figure 5 below for details of options.)

In picking soft solutions, the draft SMP provides applicants with a wide range of better defined options, outlined in order of priority, ranging from vegetative and bioengineered techniques to a combination of the first two options with some rigid structures incorporated for additional safety. When site conditions warrant the use of hard stabilization, an applicant is directed to a list of prioritized solutions ranging from 3:1 revetments with extensive live staking and other vegetative enhancement all the way to a near-vertical rock structure not to exceed 1.5:1. Under the draft SMP, new vertical stabilization is not permitted.

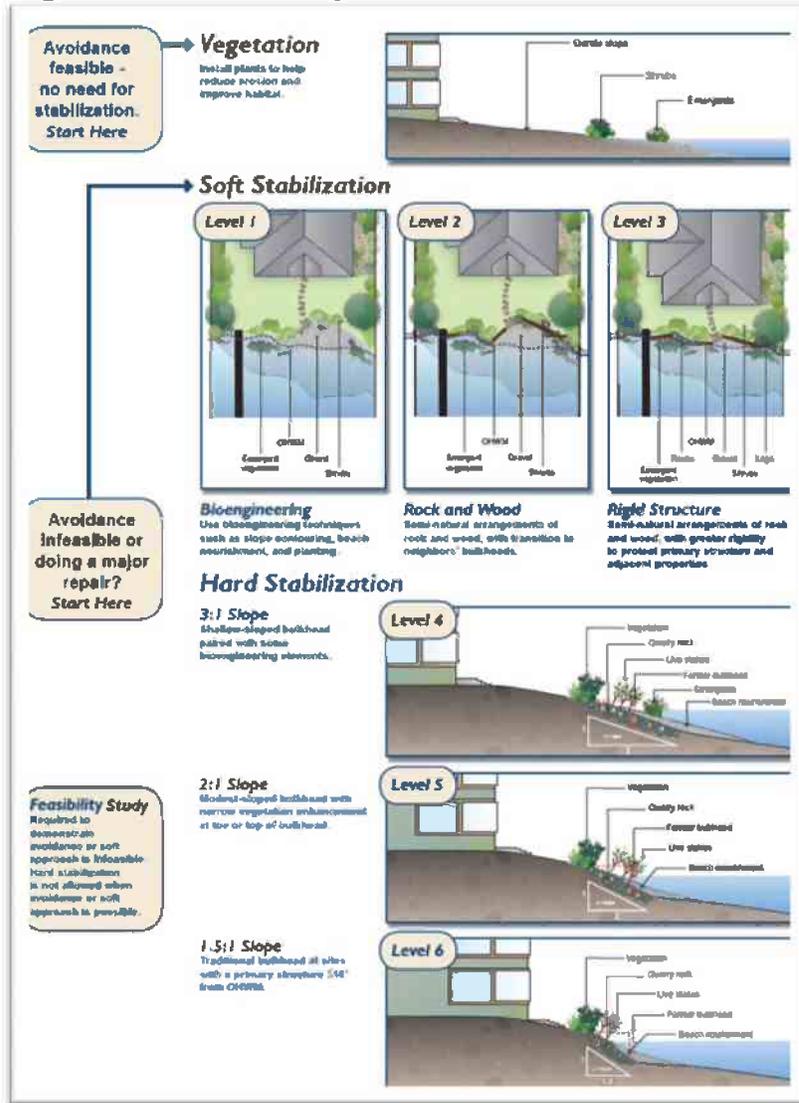
In an improvement over the existing rules, the draft SMP clarifies where stabilization may be located when a documented flood hazard area exists; only soft stabilization is permitted within the area of special flood hazard except that low-angle planted revetments are permitted due to their limited impact on flood storage. In general, stabilization measures are prohibited waterward of the OHWM with the notable exception of those measures that incorporate approved habitat improvements.

Shoreline Modifications—Repair of Existing Stabilization: As provided under existing rules, repair of existing legally-established shoreline stabilization is allowed subject to certain thresholds, provided the damage or destruction is not so severe as to cause loss of structural integrity that is sufficient enough to jeopardize its erosion protection function. The draft SMP contains similar provisions but is clearer about when the regulatory compliance threshold is met; only when cumulative reconstruction exceeds 50 percent of the structure’s linear length over a three year period does the draft SMP define such repair as major, making it subject to the standards for new stabilization measures. Irrespective of the level of repair required, legally-established stabilization is presumed necessary and the feasibility analysis to demonstrate whether it is need or not is not required.

As a result, the draft SMP sets a clearer standard regarding what constitutes repair, allowing maintenance and repair of legally-established stabilization to occur where necessary, but

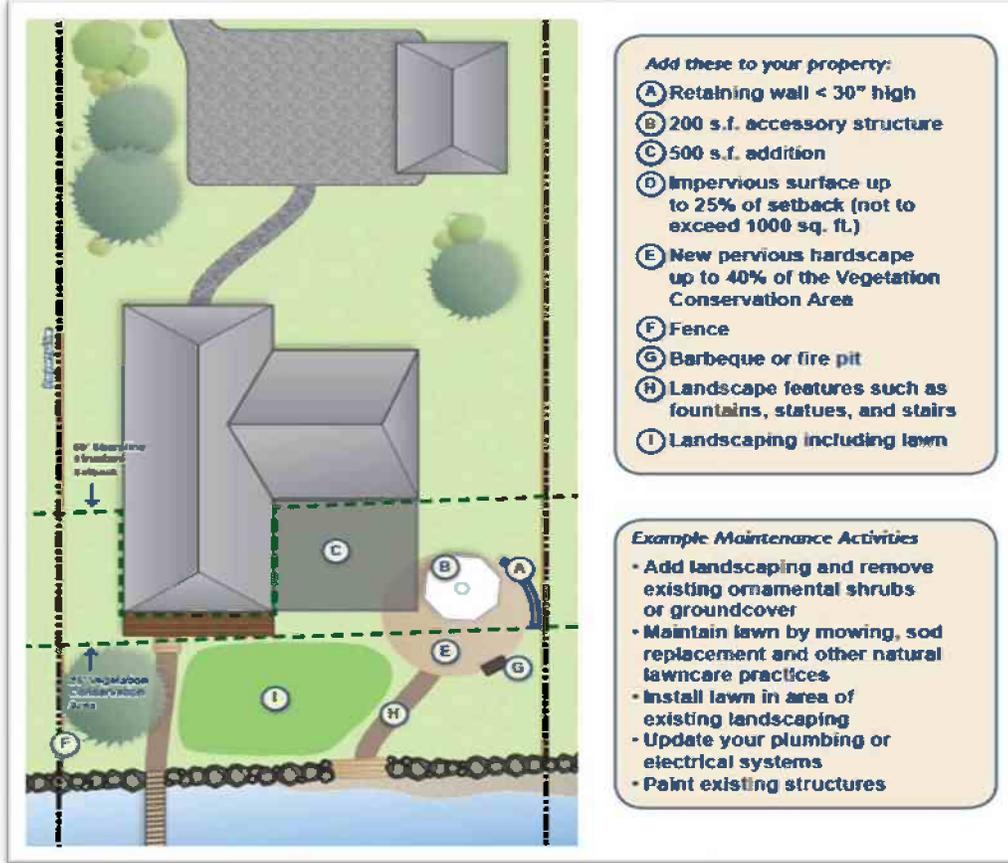
requiring neglected or heavily damaged stabilization to be rebuilt according to the new standards. On balance, the stabilization standards in the draft SMP ensures no net loss of shoreline ecological functions.

Figure 5: Stabilization Options



Accommodation of Existing Residential Development: Existing primary structures and landscaping are accommodated in the draft SMP. Under the existing rules, expanded critical area buffers were modified to follow the footprint of the existing primary structures, ensuring none of those structures would be rendered nonconforming. This allowance is retained in the draft SMP, despite the fact that the draft SMP provides for no increase in buffers or setbacks. (See Figure 6 below for details.)

Figure 6: Accommodation of Residential Development



Residential Nonconformities: When a primary structure exists in the vegetation conservation area (the first 25 feet from OHWM), that structure is considered nonconforming. This approach is taken because the structure setback has been in place since 1974 and thus does not represent a new burden on property owners. Routine maintenance and repair is permitted up to a defined threshold of 50 percent of replacement value over a three-year period.

Other Important Draft SMP Provisions

Nonresidential Nonconforming Use: The draft SMP fosters reinvestment and ongoing maintenance of legally-established uses while discouraging new office uses that no longer conform to the requirements of the draft SMP. This approach applies most liberally in the Bellfield Office Complex where incentives are offered to allow limited conversion to existing non conforming development as necessary to accommodate allowed shorelines uses. The draft SMP allows reconstruction of up to 100 percent when structures are destroyed by events outside the owner’s control. Tailored after the recently adopted Bel-Red regulations governing existing conditions, the standards clarify how to document a legally-established nonconformity; maintain existing vested entitlements; allow ongoing repair and maintenance; require proportional compliance for alterations over the 50 percent of replacement value; and allow structures to be moved to reduce nonconformity.

Recreation Development: The draft SMP divides recreation uses into four categories: parks, marinas, yacht clubs and community clubs. The range of activities allowed is reflective of diverse recreational interests with the focus on water-dependent activities. Maintenance and repair of existing facilities is permitted up to an established threshold above which improvements such as compliance with landscape standards, use of light penetrable materials, and visual screening are required. New siting and design standards are intended to limit and mitigate impacts to ecological functions and protect adjacent uses. New recreation uses are subject to a 50-foot shoreline setback from OHWM with specific allowances for development of recreation facilities within the setback including provisions for trails, promenades, viewing platforms, and safety improvements. Construction of new recreation uses may trigger installation of vegetation and landscaping in the required vegetation conservation area. All provisions included in the draft SMP were drafted to ensure consistency with the recently adopted Meydenbauer Bay Park and Land Use Plan.

Transportation Uses: The draft SMP allows new transportation uses in the shoreline subject to the shoreline use charts (LUC 20.25E.030) and subject to a showing that there is no technically feasible alignment or location with less impact on shoreline ecological functions. The showing of feasibility must meet the criteria discussed in this section above under General Requirements, and at LUC 20.25E.060.C in the draft SMP. Once a case is successfully made that the transportation uses are appropriate in the shoreline, projects must be designed to further limit their impacts by staying clear of critical areas and their buffers, aquatic areas, and the shoreline setback and other sensitive areas on the site. Other performance standards include: minimization of disturbance of shoreline features; use of low impact development techniques, minimization of topographic disturbance, and selection of landscaping to enhance public views of the shoreline.

Routine maintenance, repair, and minor expansion of transportation facilities is permitted to the edge of the right-of-way provided that the area of disturbance does not impact critical areas or critical area buffers and shoreline ecological functions are not adversely affected.

Utility Uses: The draft SMP allows new utility uses in the shoreline subject to the shoreline use charts (LUC 20.25E.030) and subject to a showing that there is no technically feasible alignment or location with less impact on shoreline ecological functions. The showing of feasibility must meet the criteria discussed in this section above under General Requirements, and at LUC 20.25E.060.C in the draft SMP. Once a case is successfully made that the utility uses are appropriate in the shoreline, projects must be designed to further limit their impacts by staying clear of critical areas and their buffers, aquatic areas and the shoreline setback and other sensitive areas on the site. Other performance standards include: minimization of disturbance of shoreline features; use of low impact development techniques, minimization of topographic disturbance, and the requirement to incorporate public access consistent with the requirements at LUC 20.25E.060.I.

Routine maintenance, repair is permitted provided the repair is in-kind restoration to a state comparable to the original condition within a reasonable period after decay has occurred. Minor expansions are permitted by up to 20 percent when necessary to comply with a mandated code update, or to accommodate changes in technology, design or maintenance practice, or minor changes in volume from an area served by the specific utility facility or system. (See LUC 20.25E.070.)

Subdivision standards: As part of the 2006 Critical Areas Update, a conservation short plat was added to the subdivision section of the City's Land Use Code. However, it applies only to those sites that abut a critical area of an acre or more, sites that abut known salmon streams, or sites where critical areas abut larger critical areas offsite, or large publically owned land managed for parks use or open space. To ensure no net loss of ecological function in the Shoreline Overlay District, the draft SMP includes some new criteria applicable to subdivisions of more than four lots. Included is a provision for lot clustering, tree retention requirements, dedication of the vegetation conservation area, and shared moorage provisions. These the criteria included in the draft SMP resemble those in the previously required conservation short plat but in the absence of critical areas represent additional protection not previously included in the existing SMP. In addition to the provisions intended to ensure no net loss, compliance with public access standards consistent with state guidelines has been added for subdivisions of more than nice lots.

Public Access: The existing SMP contains policy language supporting improved public access, but this policy language lacks regulatory implementation. Given the emphasis in the Shoreline Management Act and the Guidelines supporting public access to shorelines (see especially Chapter 173-26-221(4) WAC, the draft SMP includes regulations designed to protect, preserve and enhance the public's opportunity to enjoy the physical and aesthetic qualities of the shoreline and the water. These changes result in additional protection of public access not previously existing in the prior regulations. (See 20.25E.060.I for details.) While single-family residences are explicitly exempted in addition to existing subdivisions, the requirement applies to multifamily development or redevelopment of (9 or more units); construction or expansion of transportation and above-ground utility facilities; and, recreation projects that propose new uses or reconstruction or replacement of existing uses. Public access need not be supplied where an applicant can demonstrate one of the following: legitimate safety hazards, environmental impacts, or disproportionate costs.

Restoration Plan: The Guidelines include a requirement for a restoration plan designed, in part, to assist in offsetting long-term cumulative impacts of development in the Shoreline Overlay District and to avoid incremental and unavoidable degradation to shoreline ecological functions. The restoration plan is a new element, not previously included in the existing SMP, and while its force is only felt when implemented, it represents an important planning step to set the stage for potential future restoration of degraded shoreline conditions

VII. COMPREHENSIVE PLAN AMENDMENT DECISION CRITERIA

The decision criteria for a Comprehensive Plan amendment are set forth in the Land Use Code, Section 20.30I.150. Based on the criteria, Development Services Department staff has concluded that the proposed amendment merits recommendation to the City Council. This conclusion is based on the following analysis:

B1. The proposed amendment is consistent with the Comprehensive Plan and other goals and policies of the city, the Countywide Planning Policies (CPP), the Growth Management Act and other applicable law; and

The draft SMP amendment is consistent with the Comprehensive Plan and other goals and policies in these planning documents for shoreline development and environmental protection. The draft SMP is consistent with the overall Comprehensive Plan, including common policy themes, such as encouraging redevelopment and economic development of existing areas, protecting single-family neighborhoods, preserving and enhancing open space, enhancing public access and recreation in the shoreline, and protecting the natural environment. Areas of the specific policy support from some of the individual sections of the Comprehensive Plan are listed below.

Land Use Element

The land use element provides broad support for the concepts included in the draft SMP including support for redevelopment of existing developed areas, the inclusion of residential uses in commercial areas, provision of a range of housing choices, provision of open space, and creation of land use patterns that support walking and public health.

Land use changes affect the entire City, but major impacts are usually borne by residents in the immediate vicinity of a particular project. Policies LU-8, LU-9 and LU-22 address the issue of land use compatibility.

POLICY LU-8. Ensure that commercial land uses are contained within carefully delineated areas.

POLICY LU-9. Maintain compatible use and design with the surrounding built environment when considering new development or redevelopment within an already developed area.

POLICY LU-22. Protect residential areas from the impacts of non-residential uses of a scale not appropriate to the neighborhood.

Bellevue emphasizes a high quality of life and the creation and fostering of livable neighborhoods that have people coexisting with nature not apart from it. The creation of unique commercial spaces coupled with the provision of parks, open space, recreational opportunities and preservation of trees and wildlife habitat are an important part of creating that quality of life. Policies LU-12 through LU-16 focus on creating the conditions for that quality of life by promoting sensitive site development, the preservation of green space and recreational opportunities throughout the City.

POLICY LU-12. Retain land availability for specific commercial uses which are important to the community.

POLICY LU-13. Reduce the regional consumption of undeveloped land by facilitating redevelopment of existing developed land when appropriate.

POLICY LU-14. Distribute park and recreation opportunities equitably throughout the city.

POLICY LU-15. Encourage dedication of open space and preservation and restoration of trees and vegetation to perpetuate Bellevue's park-like setting and enhance the city's natural environment.

POLICY LU-16. Promote a variety of techniques to preserve open space and key natural features, such as sensitive site planning, conservation easements, and open space taxation.

Housing Element

The Housing Element sets forth the broad policy direction for Bellevue's perspective on housing. The Housing Element establishes five goals and 41 policies that define the City's intent regarding housing. The overall focus is on ensuring stable and healthy neighborhoods, promoting a variety of housing opportunities, addressing affordability and housing for those with special needs. Of the 41 policies, 4 are specifically relevant to analysis of the draft SMP for consistency with the Comprehensive Plan.

Maintaining a focus on creating the ingredients for a high quality of life while being attentive to compatibility between different land uses and densities is a common theme in several housing policies. For example, policies HO-2, HO-3, HO-5 concentrate on promoting quality development while being attentive to compatibility between different land uses and densities.

POLICY HO-2. Promote quality, community-friendly multifamily development, through features such as enhanced open space and pedestrian connectivity.

POLICY HO-3. Refine Land Use Code standards to improve the compatibility of single family infill development with the neighborhood.

POLICY HO-5. Assure that site and building design guidelines create an effective transition between substantially different land uses and densities.

Creative site planning is one of the best means to ensure long-term protection of shoreline ecological functions. Policy HO-18 encourages the use of innovative site planning techniques that cluster density and provide open space like the ones included in the conservation subdivision draft provisions.

POLICY HO-18. Provide opportunities and incentives through the Planned Unit Development (PUD) process for a variety of housing types and site planning techniques that can achieve the maximum housing potential of the site.

Transportation Element

Relevant transportation policies provide support for development of a comprehensive transportation system that provides transportation choices by various modes of travel, including transit, cars, pedestrians and bicycles. Such policies support the policy direction in the draft SMP to provide enhanced opportunities for direct shoreline access and recreation as well as passive view opportunities from transportation corridors.

POLICY TR-1. Integrate land use and transportation decisions to ensure that the transportation system supports the Comprehensive Plan Land Use vision.

POLICY TR-8. Incorporate transit-supportive and pedestrian-friendly design features in new development through the development review process.

POLICY TR-24. Incorporate pedestrian and bicycle facility improvements into roadway projects, and incorporate transit/high-occupancy vehicle improvements where feasible.

POLICY TR-44. Design arterials and streets to fit the character of the areas through which they pass.

POLICY TR-77. Consider pedestrians and bicycles along with other travel modes in all aspects of developing the transportation system.

The Economic Element

The economic element has a section that specifically calls for investment in making Bellevue more livable. The draft SMP supports a key component of economic health by proper attention to environmental impacts and community concerns.

POLICY ED-17. Recognize the economic development benefits of city and private sector investments in urban amenities like arts and culture, open space and recreational facilities, and high quality urban design. Strengthen the city's assets in these areas as an explicit component of the city's economic development strategy.

Environmental Element

The Environmental Element sets forth the broad policy direction for Bellevue's stewardship of nature in an urban context and provides significant policy support to the draft SMP policies and code update. The organizing focus is the realization that the community is fundamentally embedded in a natural environment and the seven major goals and 94 policies work to sustain a quality of life based on integration of the natural and developed environment and preservation and restoration of the functions and values that sustain that system. The key to ensuring that such attention occurs is to ensure that environmental values are integrated into all decision-making processes. The two major goals relevant to the SMP update are:

Goal 1: To integrate the natural and developed environments to create a sustainable urban habitat with clean air and water, habitat for fish and wildlife, and comfortable and secure places for people to live and work.

Goal 2: To promote a sustainable urban environment by weighing environmental concerns in all decision-making processes.

Other goals outline appropriate responses to more specific environmental issues like water quality, vegetation and earth hazard, fish and wildlife habitat, air quality and noise.

A large number of policies are aimed at promoting sustainable practices that conserve materials, energy and natural systems. An important component of fostering these ideas is the consideration of environmental impacts when making a policy or regulatory decision. Because of the focus of this element, virtually all policies can be read to be supportive of the draft SMP; therefore the focus in this section is on those policies that seem most relevant in the SMP update.

POLICY EN-1. Consider the immediate and long-range environmental impacts of policy and regulatory decisions and evaluate those impacts in the context of the City’s commitment to provide for public safety, infrastructure, economic development, and a compact Urban Center in a sustainable environment.

POLICY EN-2. Conduct city operations in a manner that provides high quality municipal services to the community while ensuring resource conservation, promoting an environmentally safe workplace for its employees, and minimizing adverse environmental impacts.

POLICY EN-3. Minimize, and where practicable, eliminate the release of substances into the air, water, and soil that may degrade the quality of these resources or contribute to global atmospheric changes.

POLICY EN-4. Encourage the wise use of renewable natural resources and conserve nonrenewable natural resources.

The next group of policies, policies EN-7 through EN-15, focus on planning and regulatory issues, including the need to utilize the best scientific information in an ongoing adaptive management approach to preserve or enhance functions and values of critical areas like wetlands, streams, earth hazards, and floodplains. The need for both a prescriptive regulatory approach and a programmatic, science-based alternative (or off ramp) is outlined here too. As described in Policy EN-14, the need for ongoing adaptive management based on a foundation of monitoring and scientific study is an important component of the overall strategy. Policy EN-13 gives prominence to science-based mitigation for adverse impacts while Policy EN-15 recognizes the watershed scale in which regulatory actions need to fit to be effective. (Note term “protection zone” used below refers to an area dedicated to protection critical areas functions and values. The policies anticipated a combination of buffers and setbacks with differing intensities of protection and allowed development.)

POLICY EN-7. Promote growth management strategies that protect air, water, land, and energy resources consistent with Bellevue’s role in the regional plan to contain an Urban Center.

POLICY EN-8. Provide regional leadership on environmental issues that extend beyond Bellevue’s boundaries and require regional cooperation.

POLICY EN-9. Promote and lead education and involvement programs to raise the public awareness about environmental issues, advocate respect for the environment, and demonstrate how individual actions and the cumulative effects of a community’s actions can create significant improvements to the environment.

POLICY EN-10. Utilize the best scientific information available in an adaptive management approach to preserve or enhance the functions and values of critical areas through regulations, programs, and incentives.

POLICY EN-11. Utilize prescriptive development regulations for critical areas based on the type of critical area, and the functions to be protected; and as an alternative to the prescriptive regulations, allow for a site specific or programmatic critical areas study to provide a science-based approach to development that will achieve an equal or better result for the critical area functions.

POLICY EN-12. Recognize critical area function in preparing programs and land use regulations to protect critical areas and to mitigate the lost function due to unavoidable impacts.

POLICY EN-13. Utilize science based mitigation for unavoidable adverse impacts to critical areas to protect overall critical areas function in the watershed.

POLICY EN-14. Implement monitoring and adaptive management plans for critical areas mitigation projects to ensure that the intended functions are maintained or enhanced over time.

POLICY EN-15. Integrate site-specific development standards with urban watershed-scale approaches to managing and protecting the functions of critical areas.

POLICY EN-16. Facilitate the transfer of development potential away from critical areas and the clustering of development on the least sensitive portion of a site.

POLICY EN-17. Establish land use regulations that limit the amount of impervious surface area in new development and redevelopment citywide.

Policies EN-18 through EN-22 stress the importance of incentives to ensure long-term success in protecting critical areas. The draft SMP utilizes incentives to allow applicants to deviate from prescriptive standards consistent with this policy direction.

POLICY EN-18. Implement land use incentives to minimize the amount of impervious surface area below that allowed through prescriptive standards, in new development, redevelopment, and existing development city-wide.

POLICY EN-19. Provide incentives to private property owners to achieve specific habitat improvement goals, including retention and enhancement of native vegetation.

POLICY EN-20. Encourage property owners to incorporate suitable indigenous plants in critical areas and buffers, consistent with the site's habitat type and successional stage.

POLICY EN-21. Reduce or eliminate regulatory barriers to protecting and enhancing critical areas.

POLICY EN-22. Develop partnerships with land conservation organizations to acquire critical areas and buffers to protect and restore critical areas functions.

Policies EN-23 and EN-24 work to focus acquisition efforts on those properties possessing habitat that is most sensitive to urbanization or where critical area functions are largely intact. The draft SMP creates no barriers to these acquisition strategies and suggests that they should continue.

POLICY EN-23. Explore opportunities for public acquisition and management of key critical areas of valuable natural and aesthetic resources, and fish and wildlife habitat sensitive to urbanization through a variety of land acquisition tools such as conservation easements and fee-simple purchase.

POLICY EN-24. Prioritize efforts to preserve or enhance fish and wildlife habitat through regulations and public investments in critical areas with largely intact functions and in degraded areas where there is a significant potential for restoring functions.

In many cases, existing single-family residential development already intrudes into existing buffers from critical areas. Policies EN-25 and EN-26 address how expansion of these structures can occur in critical areas. Such policies underlay the approach in the draft SMP to exempt footprints of existing primary structures from setback requirements in most cases.

POLICY EN-25. Provide for limited building footprint expansion options for existing single-family structures in the Protection Zone only in a manner that does not degrade critical area functions.

POLICY EN-26. Require mitigation proportional to any adverse environmental impacts from development or redevelopment in the Protection Zone.

The next group of policies addresses a variety of issues from low impact development to prioritization of public projects to improve habitat. Such policies give support to the draft SMP's inclusion of a Restoration Plan in the draft SMP.

POLICY EN-27. Implement the citywide use of low impact development techniques and green building practices that provide benefits to critical areas functions.

POLICY EN-28. Utilize best management practices and technology in city projects to demonstrate effective environmental stewardship and long-term fiscal responsibility.

POLICY EN-29. Recognize and support the broad benefits and educational value of public access to critical areas and appropriate low-impact uses such as trails.

POLICY EN-30. Identify, prioritize and implement public projects to improve habitat.

POLICY EN-31. Pursue grants to support habitat improvement projects.

For a long time Bellevue has pursued a strategy of retaining open streams in as natural a state as possible while working to restore conditions that are degraded. Policy EN-32 provides the

underlying support for this policy approach. Policies EN-33 through EN-41 address issues associated with water quality, water quantity and preservation and restoration of fish and wildlife habitat. Many of the policies are to be applied watershed wide and some are focused on proactive steps Bellevue might take to correct past problems in an effort to enhance water quality and habitat. Such policies are supportive the focus in the draft SMP on ensuring no net loss of ecological functions. Note also specific support for protecting the 100-year flood plain.

POLICY EN-32. Retain existing open surface water systems in a natural state and restore conditions that have become degraded.

POLICY EN-33. Maintain surface water quality, defined as meeting federal and state standards and restore surface water that has become degraded, to the maximum extent practicable.

POLICY EN-34. Monitor surface water quality and implement measures to identify and address the sources of contamination.

POLICY EN-35. Employ the best management practices and technology, education, and enforcement strategies to minimize non-point source pollution.

POLICY EN-36. Retrofit public storm drainage systems and prioritize investments where there is a significant potential for restoring surface water quality important to preserving or enhancing aquatic life.

POLICY EN-37. Reduce runoff from streets, parking lots and other impervious surfaces and improve surface water quality by utilizing low impact development techniques in new development and redevelopment.

POLICY EN-38. Restore and protect the biological health and diversity of the Lake Washington and Lake Sammamish watersheds in Bellevue's jurisdiction.

POLICY EN-39. Restrict the runoff rate, volume, and quality to predevelopment levels for all new development and redevelopment.

POLICY EN-40. Preserve and maintain the 100-year floodplain in a natural and undeveloped state, and restore conditions that have become degraded.

POLICY EN-41. Preserve and maintain fish and wildlife habitat conservation areas and wetlands in a natural state and restore similar areas that have become degraded.

Promoting slope stability and preserving the forested character of Bellevue has been a long-term policy goal of the City. Policies EN-44, EN-45, EN-48, EN-49 and EN-50 focus on preserving or enhancing slope stability and native vegetation. Policies EN-51 through EN-58 guide the regulatory environment for steep slopes and related hazards. The draft SMP relies on the critical areas regulations derived from these policies for regulation of the steep slopes and geohazards when located within Shoreline jurisdiction.

POLICY EN-44. Regulate land use and development to protect natural topographic, geologic, vegetational, and hydrological features.

POLICY EN-45. Protect geologically hazardous areas, especially forested steep slopes, recognizing that these areas provide multiple critical areas functions.

POLICY EN-48. Promote soil stability and the use of the natural drainage system by retaining critical areas of existing native vegetation.

POLICY EN-49. Preserve existing vegetation or provide or enhance vegetation that is compatible with the natural character of Bellevue.

POLICY EN-50. Prohibit development on unstable land and restrict development on potentially unstable land to ensure public safety and conformity with natural constraints.

POLICY EN-51. Require an analysis of soil liquefaction potential, where appropriate, in the siting and design of structures and infrastructure.

POLICY EN-52. Utilize geotechnical information and an analysis of critical areas functions and values to evaluate the geologic and environmental risks of potential development on slopes between 15% and 40%, and implement appropriate controls on development.

POLICY EN-53. Require a structure setback from the top and the toe of a steep slope (40%+) to protect public safety.

POLICY EN-55. Minimize and control soil erosion during and after development through the use of the best available technology and other development restrictions.

POLICY EN-56. Allow land alteration only for approved development proposals.

This next set of policies provides the direction for preserving fish and wildlife habitat in the City. Designated fish and wildlife habitat conservation areas in Bellevue include riparian corridors, wetlands, naturally occurring ponds, lakes and shorelines, and steep slopes over 40 percent. Other lands may be given special consideration for fish and wildlife habitat if there is a primary association with an endangered, threatened, or sensitive species or species of local interest. Since such fish and wildlife habitat exists on Bellevue's shorelines, these policies support the emphasis of the draft SMP on shoreline ecological functions.

POLICY EN-59. Manage aquatic habitats, including shoreline and riparian (streamside) habitats, to preserve and enhance their natural functions of providing fish and wildlife habitat and protecting water quality.

POLICY EN-61. Give special consideration to conservation or protection measures necessary to preserve or enhance anadromous salmonids, recognizing that requirements will vary depending on the aquatic resources involved, including differing stream classification, and that additional efforts may be identified in the regional salmon recovery planning process.

POLICY EN-62. Prohibit creating new fish passage barriers and remove existing artificial fish passage barriers in accordance with applicable state law regarding water crossing structures.

POLICY EN-63. Require and provide incentives for the opening of piped stream segments during redevelopment where scientific analysis demonstrates that substantial habitat function can be restored, and where the cost of restoration is not disproportionate to the community and environmental benefit.

POLICY EN-64. Preserve and enhance native vegetation in the Protection Zone and integrate suitable native plants in urban landscape development.

POLICY EN-65. Improve wildlife habitat especially in patches and linkages by enhancing vegetation composition and structure, and incorporating indigenous plant species compatible with the site.

POLICY EN-66. Minimize habitat fragmentation, especially along existing linkages and in patches of native habitat.

POLICY EN-67. Preserve a proportion of the significant trees throughout the city in order to sustain fish and wildlife habitat.

POLICY EN-68. Encourage residents and professional landscaping firms to utilize native plants in residential and commercial landscapes.

POLICY EN-69. Promote urban backyard wildlife habitat programs, and support “certification” of community and private backyard wildlife habitats.

POLICY EN-70. Develop and support additional habitat enhancement demonstration projects.

POLICY EN-71. Protect wildlife corridors in subdivisions, plats, and city projects.

POLICY EN-72. Develop programs and regulations acknowledging that designated critical areas such as wetlands, shorelines, riparian corridors, floodplains, and steep slopes provide multiple functions including fish and wildlife habitat.

POLICY EN-73. Utilize studies and management recommendations to protect important wildlife habitat characteristics on land that is not a designated critical area.

POLICY EN-74. Obtain, for protection and restoration, areas that are sensitive to urbanization, represent valuable natural and aesthetic resources to the community, or provide the functions of critical areas that benefit the community’s environment.

POLICY EN-75. Manage fish and wildlife habitat conservation areas to protect overall habitat functions and values (food, water, cover, space), except where a “special status species” requires targeted habitat management.

POLICY EN-76. Rely on federal, state, and county agencies to identify “special status” wildlife species, but allow for a process to identify species of local importance to Bellevue.

POLICY EN-77. Manage naturally occurring ponds to provide fish and wildlife habitat, promote good water quality, and control invasive aquatic plants.

Parks, Open Space and Recreation Element

The Parks Element sets forth the broad policy direction for Bellevue’s stewardship of Bellevue’s existing parks and provides the policy underpinning for future acquisition. Several policies are relevant to the draft SMP. The focus is on acquisition sufficient to ensure parks resources are available as the City continues to grow. Parks policies are aimed at creating a range of park opportunities to sustain Bellevue’s quality of life. Specific to the draft SMP, there are several policies having to do with coordinated park planning, sensitivity to uses within natural areas and providing additional public access to Lake Washington and Lake Sammamish while ensuring continued recreation opportunities within the City-owned open space system.

POLICY PA-6. Obtain, for preservation, natural areas that are sensitive to urbanization or represent a valuable natural and aesthetic resource to the community.

POLICY PA-7. Provide additional public access to Lakes Washington and Sammamish.

POLICY PA-12. Determine the appropriate uses within natural areas based on the environmental sensitivity of the site.

POLICY PA-30. Design, construct, operate, and maintain parklands and facilities to preserve the ecology of natural systems of parklands.

POLICY PA-32. Conserve energy, water, and other natural resources, and practice efficient and environmentally responsible maintenance and operation procedures.

Growth Management Act

The draft SMP is consistent with the Growth Management Act (GMA) planning goals. The draft SMP includes a complete integration of both state shoreline (Chapter 90.58 RCW) and local project review (Chapter 36.70B RCW) procedures. This approach ensures permit processing rules for projects located within shoreline jurisdiction are included in a single code, are integrated to proactively avoid conflicts between state shoreline procedures and Bellevue land use code procedures, and are clear and predictable.

This approach adds additional sections to the draft SMP procedural provisions, in order to avoid the need for applicants to understand and navigate both local and state permit approval processes, in an effort to save applicants time and money associated with permit review. Streamlined and integrated process provisions such as those included in the draft SMP, also protect property rights by helping to ensure that similarly situated landowners are treated fairly and consistently. This integration approach has been a hallmark of Bellevue’s

regulatory reform efforts that originally began with the adoption of well defined land use procedures in 1995. This clarity of definition and regulatory certainty is now being carried forward to the shoreline jurisdiction with the adoption of well defined shoreline permit procedures. Refer to LUC 20.25E.100 through 20.25E.200.

The draft SMP is also intended to meet state shoreline update guidelines while continuing to protect the natural environment as envisioned when the City adopted its Critical Areas Update in 2006 in response to state mandate. Lakes Sammamish and Washington are both identified as critical areas consistent with state guidelines due to the presence of threatened species that inhabit these lakes. Using best available science, no-touch buffers of varying widths were identified as one of the regulatory tools fundamental to the protection of identified critical areas. With the mandate to update local SMPs, inherent conflicts between the protections traditionally afforded to critical areas under GMA, and the public access and recreation goals of the SMA, were identified in the Bellevue policies and codes. The draft SMP seeks to reconcile these conflicts by recognizing that recreational use components are appropriate at the aquatic/terrestrial interface in the area that was previously designated as a no-touch buffer under the critical areas ordinance.

Countywide Planning Policies

Countywide Planning Policies for King County are organized by topics in nine separate chapters. The framework policies in each chapter are implemented through local plans and regulations. Evidence of the consistency of the proposal with the framework policies is as follows:

- **Critical Areas:** The draft SMP will not affect the implementation of regulations dealing with critical areas located within shoreline jurisdiction. Proposed incentives will help protect and restore area located at the aquatic and terrestrial interface.
- **Land Use Pattern:** The draft SMP proposal is consistent with the implementation of the desired land use pattern by maintaining the opportunity to optimize urban levels of development where urban services are available.
- **Transportation:** The draft SMP encourages enhanced connections between regional trails, shoreline access areas and city parks.
- **Community Character and Open Space:** The draft SMP will not affect the implementation of regulations dealing with historic resources. The draft SMP will advance “City in a Park” goals that foster community character by fostering shoreline recreation uses that are consistent with the community vision.
- **Affordable Housing: Not applicable** to this proposal.
- **Contiguous and Orderly Development and Provision of Urban Services to Such Development:** Not applicable to this proposal.
- **Siting Public Capital Facilities of a Countywide or Statewide Nature:** The draft SMP does not preclude siting of such facilities provided there is no technically feasible alternative.
- **Economic Development:** The draft SMP supports reinvestment through clear identification of maintenance and repair standards, and by providing opportunities for modifications and expansions of existing development.
- **Regional Finance and Governance:** *Not applicable to this proposal.*

B2. The proposed amendment addresses *the interests and changed needs of the entire city as identified in its long-range planning and policy documents*; and

The draft SMP addresses the interests and changed needs of the entire City. The City and the State of Washington have an overriding interest in maintaining the ecological health and recreation opportunity afforded by Bellevue's shoreline lakes and wetlands. The City also has an interest in planning for appropriate development and redevelopment of these areas and ensuring that any new uses are sensitive to neighborhood context and shoreline ecology.

B3. The proposed amendment addresses significantly changed conditions since the last time the pertinent Comprehensive Plan map or text was amended. See LUC 20.50.046 [below] for the definition of "significantly changed conditions;" and

Significantly changed conditions are defined as: Demonstrating evidence of change such as unanticipated consequences of an adopted policy, or changed conditions on the subject property or its surrounding area, or changes related to the pertinent Plan map or text; where such change has implications of a magnitude that need to be addressed for the Comprehensive Plan to function as an integrated whole. *This definition applies only to Part 20.30I Amendment and Review of the Comprehensive Plan (LUC 20.50.046).*

The draft SMP addresses the significant changes affecting Bellevue's shoreline jurisdiction since it adopted its first SMP in 1974. Components of the first SMP included Comprehensive Plan policies under the Shoreline Element and development regulations in Parts 20.25E (Shoreline Overlay District).

In the intervening years since the first adoption, the SMP has not been substantially updated and now the state is requiring that Bellevue revise its SMP to bring it into compliance with state law. It lacks a number of required components and is not aligned with current scientific information relevant to protecting shoreline functions and values. These gaps, combined with a lack of detailed performance standards aimed at guaranteeing use priority and public access, dictated that the City update its SMP in a manner consistent with the procedural and substantive requirements of the SMA and its implementing rules, including WAC 173-26, Shoreline Master Program Guidelines (2003 Guidelines). Some gaps, however, were closed with the City's update of its critical areas ordinance in 2006. Changes made then provided partial protection to some critical shoreline resources via critical area buffers and significantly revised dock and bulkhead standards.

B.4 If a site-specific proposed amendment, the subject property is suitable for development in general conformance with adjacent land use and the surrounding development pattern, and with zoning standards under the potential zoning classifications; and

N/A

B5. The proposed amendment demonstrates a public benefit and enhances the public health, safety and welfare of the city.

The draft SMP seeks to enhance the economic and ecological vitality of the Bellevue’s shorelines by including predictable and flexible regulations for repair and maintenance of existing structures, and development or redevelopment of new structures, while complying with the requirements imposed by the State Department of Ecology to update the City’s 1974 SMP to better protect aquatic habitat by complying with the shoreline Guidelines.

VIII. LAND USE CODE AMENDMENT DECISION CRITERIA

The decision criteria for an amendment to the text of the Land Use Code and legislative map amendments are set forth in the Land Use Code, Section 20.30J.135. Based on the criteria, Development Services Department staff has concluded that the draft SMP merits **recommendation to the City Council**. This conclusion is based on the following analysis:

A. The amendment is consistent with the Comprehensive Plan; and

The Land Use Code amendments in the draft SMP are the means to implement the draft Shoreline policies and existing environmental policies specific to the shoreline. The Code amendments are consistent with the Comprehensive Plan as outlined in detail above.

B. The amendment enhances the public health, safety or welfare; and

The Land Use Code amendments in the draft SMP enhance the public health, safety and welfare by implementing regulations that achieve no net loss of shoreline ecological function while being attentive to the recreational focus that makes shoreline living so enjoyable. Additional attention to creation of shoreline environments, detailed uses charts, enhanced public access, update administrative procedures, and a comprehensive restoration plan similarly enhance the public health, safety and welfare.

C. The amendment is not contrary to the best interest of the citizens and property owners of the City of Bellevue.

The draft SMP provides additional tools to shoreline property owners to protect or enhance shoreline resources while at the same time enjoying their benefits. Compared with current code, the changes incorporated in the draft SMP enhance flexibility and choice while ensuring that shoreline is adequately protected. Examples include: a prescriptive option menu for setback reduction—allowable only with a critical areas report under current code; recognition that a recreational use component is appropriate in what was previously designated as no touch shoreline buffer; options for managing shoreline vegetation; user-configurable moorage; enhanced repair options for stabilization; and a wide range of “allowances” for which mitigation is not required. In addition, a “shorelines special report” process is included in the draft SMP to recognize that the prescriptive regulations should not be the only choice in an area with significant existing development and highly modified shorelines.

IX. STATE ENVIRONMENTAL POLICY ACT

A Determination of Nonsignificance and adoption of 2005 Critical Areas EIS was issued by the City of Bellevue on May 5, 2011. The DNS compared the impacts of the draft SMP with the current critical areas regulation currently in place on the shoreline and concluded that on balance the draft SMP was similar in its ability to protect Bellevue's shoreline jurisdiction against no net loss of ecological function even though additional flexibility was provided for repair, maintenance, expansion and redevelopment of existing structures.

X. PUBLIC NOTICE AND COMMENT

Notice of the application and public hearing, together with information on how to obtain a copy of the draft SMP, was published in the Weekly Permit Bulletin on April 14, 2011.

Release of the draft SMP in preparation for a public hearing before the Planning Commission follows more than two-and-half year public process beginning with a boat tour of Bellevue's Lake Washington shoreline hosted by the Planning Commission in the fall of 2008. Over the next two-and-half years, staff held three open houses, conducted a statistically valid telephone survey, carried out two focus groups, met separately with 40 interest groups or individuals, held 30 study sessions with the Planning Commission, of which 6 were dedicated to science briefings, and met 8 times with the EBCC, the Parks Board and the Environmental Services Commission. To this effort there has been a substantial attempt to keep the community informed via articles in It's Your City, Neighborhood News, mailed and emailed notices, project website updates, shoreline blog, Facebook posting and project notice signs. To this was added three specialized informational trips and interviews at a selection of local marinas.

The draft SMP analyzed in this staff report was drafted in response to direction from the Planning Commission and feedback received from the public. The Planning Commission will hold a public hearing May 25, 2011. Additional public hearings may be required before the Planning Commission makes its recommendation to the Council if provisions included in the final recommendation should not have been reasonably foreseen from the draft SMP. Once Council completes its process and adopts the draft SMP, the Washington State Department of Ecology will review the draft SMP for conformance with state law requirements, and hold a public hearing on the SMP. If necessary, an iterative process may ensue between Ecology and the City to finalize the SMP for Ecology's approval. Comments from those engagements will be made available, along with other comments received prior to or at the hearing, to the Planning Commission for its consideration.

A courtesy hearing with the East Bellevue Community Council (EBCC) on those amendments with EBCC jurisdiction and a general briefing to the EBCC on the entire set of Draft SMP amendments was held on May 3, 2011. The proposed amendments to the LUC are within the jurisdiction of the East Bellevue Community Council. Staff provided the EBCC with an update on the SMP process on June 2, 2009. A courtesy hearing was held before EBCC at their regular meeting on May 3, 2011. Notice of the courtesy hearing was published on April 22, 2011. T

The EBCC received no public comment regarding the draft SMP and the EBCC voiced no concerns regarding the draft. Comments received after release of the staff report will be forwarded to the Planning Commission before the public hearing. Staff will return to the EBCC for a final hearing on the draft SMP LUC amendments once Council has adopted the proposed amendments.

It is important to note that all areas of shoreline jurisdiction located within the boundary of the EBCC and identified as wetland are also regulated under the City's Critical Area Overlay District (Part 20.25H LUC). Most private property owners will not be affected by the SMP Update, except that in limited circumstances a shoreline substantial development permit may be required when pursuing development activity within a wetland associated with shoreline jurisdiction. In all cases within the EBCC jurisdiction wetlands are protected through the Critical Areas Overlay District by buffers that exceed the limits of the shoreline jurisdiction.

XI. NEXT STEPS

We request the Planning Commission to conduct and close the public hearing at its regular meeting on May 25, 2011, discuss the proposal, and ask questions of staff. It is anticipated that the Commission will continue its review, deliberation, and refinement of the proposals at additional meetings following the public hearing, and will make a recommendation to the City Council later this year.

XII. ATTACHMENTS

1. Jurisdictional Comparison of draft SMP provisions
2. Potential No Net Loss Indicators for Shoreline Master Programs
3. SEPA Documents

	City of Bellevue- Draft	Kirkland (approved by DOE)	Renton (DOE Hearing)	Redmond (approved by DOE)												
Shoreline setback or buffer	<p>Lake WA, Sammamish, Phantom Lake, & Mercer Slough/Kelsey Creek 50'</p> <p>Newport Shores Canals 25'</p> <p><u>Options to move closer:</u> <i>Exceptions-</i> • Footprint exception <i>Prescriptive-</i> • Menu options to 25' <i>Administrative-</i> • Shoreline Special Report (SSR) • Variance beyond 25'</p>	<p>Residential-Low 30% of the average parcel depth, (no less than 30' or no greater than 60')</p> <p>Residential-Med/High The greater of: 25' or 15% of the average parcel depth</p> <p><u>Options to move closer:</u> Menu of options to reduce setback Variance</p>	<p>Single-Family Setbacks and Buffers- Variable based on lot depth</p> <table border="1"> <thead> <tr> <th>Lot Depth</th> <th>Building Setback</th> <th>Vegetated Buffer</th> </tr> </thead> <tbody> <tr> <td>>130'</td> <td>45'</td> <td>20'</td> </tr> <tr> <td>100-130'</td> <td>35'</td> <td>15'</td> </tr> <tr> <td>100'</td> <td>25'</td> <td>10'</td> </tr> </tbody> </table> <p><u>Options to move closer:</u> Prescriptive mitigation options or alternate mitigation proposed by qualified professional Variance</p>	Lot Depth	Building Setback	Vegetated Buffer	>130'	45'	20'	100-130'	35'	15'	100'	25'	10'	<p>Lake Sammamish 35'</p> <p><u>Options to move closer:</u> Reduce by 15' if 20' setback area revegetated with primarily native vegetation. Establishment of a tree canopy is encouraged. Variance beyond 20'.</p>
Lot Depth	Building Setback	Vegetated Buffer														
>130'	45'	20'														
100-130'	35'	15'														
100'	25'	10'														
Vegetation Conservation	<p>No frontyard greenspace requirement (required for properties outside shoreline jurisdiction) Vegetation conservation area- all native vegetation and significant trees preserved. Removal permitted up to 40% of dimension but must be replaced.</p> <p>Within setback and shoreline jurisdiction- tree preservation standards apply.</p>	<p>Trees w/in setback must be preserved</p> <p>Plant native vegetation in 75% of the nearshore area- (10-15 feet in width)</p>	<p>Vegetation Conservation buffer- variable 10-20'</p> <p>Preserve vegetation in buffer and all new residential required to plant full required Vegetation Conservation buffer.</p>	<p>Trees within building setback must be maintained.</p> <p>Site tree retention standards.</p>												
Residential Docks	<p>New construction standards: Length- 150' Side setback-10 feet. Walkway width- 4' Moorage platform- Flexible moorage platform configuration – no restriction on moorage platform design. Maximum sq. ft: Lake WA 350 sq. ft. Lake Samm. 250 sq. ft.</p> <p>Boat lift- 2 boatlifts, or 4 watercraft lifts, or 1 boatlift and 2 watercraft lift. Fabric canopy cover for 1 boat lift.</p> <p>Boat houses-Prohibited Mitigation: Options to choose from:</p>	<p>New Construction standards: Length- 150' Side setback- Maximum Area- 480 sq. ft. for single property owner 700 sq. ft. for joint-use facility (2 Residential owners) 1000 sq. ft. for joint-use facility (3 or more residential owners)</p> <p>Walkway width- 4' Ell- max 26'x 6' Finger- 20' x 2'</p> <p>Boat lift- 1 free-standing or deck-mounted boatlift 2 jet ski lifts or 1 fully grated platform lift 1 boatlift canopy- translucent fabric materials</p> <p>Boat houses-Prohibited</p>	<p>New Construction Standards: Length- 80' (or until a depth of 10' at ordinary low water. Side setback- 5' Width- 6' Ell size- Max 26' x 6' Additional Fingers- max 26' x 2' Boat lifts-all lifts are placed as far waterward as feasible and safe; platform lifts are fully grated. Covered moorage is not allowed on any moorage facility unless translucent materials</p> <p>Boat houses-Prohibited Mitigation: Not specified</p> <p>Repair Standards: When 30% of surface materials are replaced, light penetrating materials (such as grating) must be used. Reconfiguring of dock shape, moving of dock</p>	<p>New Construction Standards: Length- The lesser 80 feet, or a length necessary to reach a water depth at the end of the pier of 13 feet below ordinary Maximum Areas- 480 sq. ft. Side setback- No pier or dock located closer than 25' from another pier or dock or the maximum distance possible from any adjacent dock or pier, whichever is less. The minimum setback from any side property line is ten feet. Walkway width- 4' Finger piers supported by pilings are prohibited. Finger floats or docks are allowed Moorage platform-Pier platforms shall be designed and located to</p>												

	City of Bellevue- Draft	Kirkland (approved by DOE)	Renton (DOE Hearing)	Redmond (approved by DOE)
	<ul style="list-style-type: none"> Vegetation along shore Augment beach with gravel/sand and emergent vegetation Replace hard armoring with soft Plant double the required vegetation in alternate location <p>Repair Standards: Replacement of decking, substructure (stringers and joists), and up to 50% of existing piling allowed. 100% of existing piling may be repaired by capping or splicing the pile base.</p> <p>Departure from prescriptive standard allowed through shoreline special report.</p>	<p>Mitigation: existing in-water and overwater structures shall be removed Emergent vegetation required. Native riparian vegetation shall be planted in at least 75 percent of the nearshore (10' width). Mixture of trees, shrubs and groundcover and be designed to improve habitat functions. At least three (3) trees per 100 linear feet of shoreline and 60% shrubs must be included in the plan. Maintenance/monitoring 5 yrs. Woody debris existing on-site or contributed to the site as part of the mitigation efforts not be removed.</p> <p>Repair Standards: Replacement of 50 percent or more of the decking or 50 percent or more of decking substructure. Must replace any solid decking surface located within the nearshore 30 ft. of the pier or dock with a grated surface material that allows a minimum of 40% light transmittance through the material. Replacement of entire existing pier or dock, including piles OR more than 50 percent of the pier-support piles and more than 50 percent of the decking or decking substructure (e.g. stringers)- Must meet the dimensional decking and design standards for new piers (mitigation required)</p>	<p>any distance or replacing more than 50% piling- requires compliance with new construction standards. When the existing dock/pier is moved or expanded or the shape reconfigured, the entire structure shall be replaced in compliance with these regulations.</p>	<p>avoid or reduce shallow water (less than nine feet deep) shading. Piling-steel pin pilings Decking-50% light passage Boat lift- Number not specified Height limit of four feet above OHWM. Boat houses-Prohibited Mitigation: None specified</p> <p>Variance to deviate from standard.</p> <p>Repair Standards: Non-conforming structures may be maintained and repaired and may be enlarged or expanded provided said enlargement does not extend the structure closer to the shoreline.</p>
Shoreline Stabilization	<p>New Construction Standards: Preference for avoidance and "soft" stabilization; hard stabilization is an option only when soft options are not technically feasible or the structure to be protected is so near (less than 10 feet) to OHWM.</p> <p>Repair Standards: Allowed to repair up to 50 percent of the structure's</p>	<p>New Construction Standards: Nonstructural methods preferred, but if there is a demonstrated need for a structural stabilization measure to protect primary structure, then soft structural stabilization must be considered prior to hard structural stabilization. When existing primary structure is greater than 10 ft. from OHWM, requires geotechnical report to show need, an evaluation</p>	<p>New Construction Standards: Preference for avoidance. Structural shoreline stabilization measures should be used only when more natural, flexible, non-structural methods such as vegetative stabilization, beach nourishment and bioengineering have been determined infeasible.</p> <p>Repair Standards: An existing shoreline stabilization structure may be repaired as</p>	<p>New Construction Standards: New and replacement shoreline structures not allowed: (a) A hydraulic analysis prepared by a licensed professional engineer demonstrates that shoreline stabilization is necessary to prevent damage to or loss of the following facilities, due to erosion or wave action, and no practicable alternative exists:</p>

Attachment 1

	City of Bellevue- Draft	Kirkland (approved by DOE)	Renton (DOE Hearing)	Redmond (approved by DOE)
	<p>linear length over a three year period.</p> <p>Major Repair: Reconstruction exceeds 50 percent of the structure's linear length over a three year period, new stabilization measures apply, except that major repair of a legally-established stabilization is presumed necessary—and the feasibility test required to establish whether or not stabilization is necessary is not required.</p> <p>Where replacement of hard stabilization with soft stabilization moves the OHWM, applicable structure setbacks may be measured from the previously determined OHWM.</p>	<p>of the feasibility of soft rather than hard structural shoreline stabilization measures and design recommendations for minimizing structural shoreline measures.</p> <p>Requires mitigation plantings</p> <p>Repair Standards: A major repair is a collapsed or eroded structure or a demonstrated loss of structural integrity, or repair of toe rock or footings; and is more than 50% in continuous linear length; or more than 75% of the linear length of structure that involves replacement of top or middle course rocks or other similar repair</p> <p>Allowed when existing primary structure is 10 ft. or less from OHWM</p> <p>For existing primary structure is more than 10 ft. from the OHWM, requires a written narrative that provides a demonstration of need</p>	<p>long as it serves to perform a shoreline stabilization function for a legally established land use.</p> <p>Waterward replacement of stabilization prohibited for structures protecting residences.</p> <p>Additions to or increases in size of existing shoreline stabilization measures considered new structures.</p>	<p>(i) Existing structures, where the structure is a single-family residence or where the fair market value of the structure to be protected equals or exceeds the construction cost of the shoreline protective structure;</p> <p>(ii) Existing private roads and bridges;</p> <p>(iii) Public roads and bridges;</p> <p>(iv) Public Shoreline access facilities; or</p> <p>(v) Raw land/property.</p> <p>Stabilization cannot be located in salmon and steelhead spawning areas or freshwater clam beds, except under the following circumstances:</p> <p>(a) A hydraulic analysis demonstrates that the protective structure will have no adverse impacts on long-term stream or lake hydraulics affecting salmon and steelhead spawning areas or freshwater clam beds;</p> <p>(b) A biological inventory and analysis demonstrates that impacts to salmonids and freshwater clams are negligible; and</p> <p>(c) For non-structural solutions, the proposed measures are necessary to protect or rehabilitate eroding shorelines, and are designed to protect or restore water quality and aquatic habitat.</p> <p>Not allowed when:</p> <p>(a) Increased or expanded residential development in undeveloped areas of the floodplain or upland of ecologically intact shorelines;</p> <p>(b) Creation of dry land waterward of the ordinary high water mark of a lake, stream or wetland;</p> <p>(c) Loss of significant flood storage capacity in the floodplain; or</p> <p>(d) Deflection or constriction of flood flows</p>

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				<p>Structural solutions to stabilize or reinforce shorelines unless it is demonstrated that planting of vegetation, biotechnical measures, relocation or re-design of affected structures, or other nonstructural solutions are infeasible or ineffective in preventing or correcting significant erosion. Applies to new, replacement, repaired and emergency protective structures. Replacement or repair of bulkheads shall not be allowed except where it can be demonstrated that replacement with a non-structural solution is ineffective or infeasible.</p>
<p>Public Access</p>	<p>Required for:</p> <ul style="list-style-type: none"> Subdivisions or Planned Unit Developments consisting of 9 or more new lots or dwelling units, or reconstruction or replacement of more than 9 single-family dwelling units in a subdivision or PUD; Multifamily projects consisting of 9 or more new dwelling units, or the reconstruction or replacement 9 or more existing dwelling units in a multifamily project; Transportation use and above-grade utility use projects that propose new uses or the reconstruction or replacement of structures supporting existing uses; and Recreation use projects that propose new uses or the reconstruction or replacement of existing uses. <p>Community access required for Short subdivisions or Planned Unit Developments of less than 9 residential lots or dwelling units</p>	<p>Required for:</p> <p>Public entities, such as government facilities and public parks; or Divisions of land containing five (5) or more new lots located within the shoreline jurisdiction.</p>	<p>Required for:</p> <ul style="list-style-type: none"> Water-dependent uses and developments Non-water-dependent development and uses Developments of ten (10) or more single-family residential lots or single-family dwelling units, including subdivision Developments of more than four (4), but less than ten (10) single-family residential lots or single-family dwelling units, are required to provide community access. Development of any non-single family residential development or use Use of public aquatic lands, except as related to single-family residential use of the shoreline. Publicly financed or subsidized flood control or shoreline stabilization shall not restrict public access to the shoreline and shall include provisions for new public access to the maximum extent feasible. Public access provided by shoreline street ends, public utilities, and rights of way shall not be diminished by any public or private development or use 	<p>Required for:</p> <p>More than ten (10) new dwelling units will be constructed or renovated; Subdivision greater than ten (10) lots; The value of a proposed re-development of non-residential structures and improvements is greater than 25% of the assessed value of existing site improvements.</p> <p>Private access- required for residential developments of ten (10) or fewer dwelling units or lots.</p> <p>Shorelines Public Access System map prepared.</p>

	City of Bellevue- Draft	Kirkland (approved by DOE)	Renton (DOE Hearing)	Redmond (approved by DOE)
Marina standards	<p>New Marina permitted: Conditional Use or Permitted through Parks Master Plan- Recreation Boating</p> <p>New siting and design standards are intended to limit and mitigate impacts to ecological functions and protect adjacent uses.</p> <p>Minor expansion (<20%) allowed when expansion is in compliance with new standards.</p> <p>Repair Standards: Maintenance and repair is allowed when: - It does not include expansion or reconfiguration of facility components; and - Is the minimum necessary to restore facility to its original design condition and capacity; and - Prescribed mitigation is included in the design (use of light penetrable materials) or alternative mitigation is proposed.</p>	<p>New Marina Permitted: Conditional Use- Urban Conservancy Allowed- Residential-M/H and Urban Mixed Prohibited- Natural, Residential- L</p> <p>Moorage structures shall not be larger than is necessary to provide safe and reasonable moorage for the boats to be moored. Specific dimensions limit configuration and overall size.</p> <p>Enlarged portions must comply with the new pier dimensional standards for pier or dock length and width, height, water depth, location, decking and pilings and for materials Mitigation required.</p> <p>Repair proposals that replace only decking or decking substructure and less than 50 percent of the existing pier-support piles require material change, grating and translucent roof change.</p>	<p>Marinas on Lake Washington shall be permitted only when:</p> <ul style="list-style-type: none"> Detailed analysis of ecological conditions demonstrate that they will not result in a net loss of ecological functions and specifically will not interfere with natural geomorphic processes including delta formation, or adversely affect native and anadromous fish. Future dredging is not required to accommodate navigability. Adequate on-site parking is available. Parking areas not associated with loading areas shall be sited as far as feasible from the water's edge and outside of vegetated buffers. Adequate water area is available commensurate with the actual moorage facilities provided. The location of the moorage facilities is adequately served by public roads. <p>New covered moorage for boat storage is prohibited.</p>	<p>Prohibited use.</p>
Nonconformities	<p>Residential Standard: Allow routine maintenance and repair of structures up to 50% of replacement value over 3 year period.</p> <p>Structures located in vegetation conservation setback are nonconforming and those accessory structures greater than 200 square feet located in the shoreline setback.</p>	<p>Nonconforming Shoreline Setback Vegetation: Must be brought into conformance when the cost of which exceeds 50 percent of the replacement cost of all structures on the subject property.</p> <p>Nonconforming structures: Legally established nonconforming structures may be maintained, altered, remodeled, repaired and continued; provide that nonconforming structures cannot be enlarged, intensified, increased, or altered in any way that increases the nonconformity.</p> <p>Accessory structures within the shoreline setback, must be brought into conformance if the applicant is</p>	<p>Partial compliance standard for alterations of an existing structure that do not meet setback standards.</p>	<p>Nonconforming structure may not be expanded or altered so as to increase nonconformity.</p> <p>Nonconforming structures may be maintained & repaired & may be enlarged or expanded provided that expansion does not extend the structure close to the shoreline.</p> <p>Structure shall be brought into full compliance with code when alteration or expansion of the structure takes place and the following takes place within any 3-yr period:</p> <ul style="list-style-type: none"> The GFA is increased by 100% or more, <p><u>OR</u> The costs stated on approved building permit equal or exceed the</p>

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		<p>making an alteration to the primary structure, the cost of which exceeds 50 percent of the replacement cost of the structure.</p> <p>Expansion or enlargement in shoreline setback requires a variance.</p> <p>Specific circumstances where a nonconforming structure can be expanded without a variance:</p> <ul style="list-style-type: none"> ○ Constructed prior to City's Final Shoreline Report in 12-2006 ○ Implement setback reduction provisions for all structures. ○ Structure located landward of the OHWM. ○ Enlargement of footprint within shore. setback not exceed 10% of GFA. Upper floor additions may be permitted ○ Enlargement cannot extend waterward than existing structure. ○ Applicant must restore a portion of shoreline setback area with riparian veg. ○ Comply with BMP's ○ Must use fully shielded cut off light fixtures ○ Remodel not cause adverse impact to ecological functions and/or processes. ○ Provision can only be used once within any 5 year period 		<p>assessed value of the structure at the beginning of that 3-yr. period.</p>

Attachment 2: POTENTIAL NO NET LOSS INDICATORS for SHORELINE MASTER PROGRAMS

Indicator (all in shoreline jurisdiction)	Functions affected - key categories - water quality, water quantity and habitat	Type of Impairment**	Limitations of indicator	Where	Is data available or reasonable to obtain
Forest cover: <u>Acres</u> converted from forest land to other land uses.	Water quality-sediment, nutrients & toxic filtration, conversion, and/or retention; temperature regulation. Water quantity-flow regulation. Habitat-structure for habitat life needs; input of organics & LWM*.	Reduces forest buffers and decreases filtering, conversion, and/or retention of pollutants from surface & subsurface flow; increases quantity of pollutants to aquatic habitats. Alters the delivery and timing of water to aquatic areas, increasing quantity of water delivered to aquatic habitats during high and low flows, which affects habitat structures. Increases water temperature. Loss of nesting sites, rearing, refuge & foraging areas.	Doesn't identify future land use. May be difficult to determine acres in shoreline jurisdiction without finer scale analysis.	Rural.***	Details of application available from DNR and local government. Class IV forest practice applications. CCAP data.
Shoreline stabilization: <u>Linear length</u> or area of bulkheads, revetments, bioengineering, seawalls, groins, retaining walls, gabions. (Includes decrease in length, change to soft structure.)	Habitat-Riparian and aquatic habitat, sediment supply. Input of organics, prey base, & LWM. Structure for habitat life needs.	Interrupts habitat-forming processes, such as beaches & channel migration, by impacting sediment supply and transport. Loss of nesting sites, rearing, refuge & foraging areas. Loss of prey base with associated loss of riparian vegetation.	Combines different types of stabilization measures into one general category; impacts may vary.	Rural, urban.	Is data available from local government, including permits & SDP exempt projects? Can locals track over time? HPA information can supplement other data, but is not sufficient on its own. Detailed aerial photos may also show stabilization changes.

Attachment 2: POTENTIAL NO NET LOSS INDICATORS for SHORELINE MASTER PROGRAMS

Indicator (all in shoreline jurisdiction)	Functions affected - key categories - water quality, water quantity and habitat	Type of Impairment**	Limitations of indicator	Where	Is data available or reasonable to obtain
<p>Marine & freshwater riparian vegetation: <u>Linear measurement</u> of mature native riparian vegetation of a given width (buffer width) or <u>percent cover</u> of different vegetation classes.</p>	<p>Water quality-sediment, phosphorus & toxic filtration, conversion, and/or retention; temperature regulation. Water quantity-flow regulation.</p> <p>Habitat-input of organics, prey base, & LWM. Structure for habitat life needs.</p>	<p>Removes capacity of riparian vegetation to filter surface flows, sediment, phosphorous and toxics; subsurface removal or conversion of nitrogen, pathogens. Increases overland and subsurface flows. Increases water temperature. Reduces prey base. Loss of LWM that provides instream structure. Loss of nesting sites, rearing, refuge & foraging areas.</p>	<p>No permit, so no record of change. Focused project needed to track. Useful only if a baseline exists. Methodology needs to be able to measure change. May be difficult to measure over short time frame.</p>	<p>Rural, urban.</p>	<p>Can locals measure and track? Use sample areas, aerial photos. Puget Sound LIDAR consortium has some data.</p>
<p><u>Acres</u> of permanently protected areas, with no or limited development: Public ownership, current use/PBRS, conservation easements, fee ownerships, NGOs.</p>	<p>Water quality-sediment, phosphorus & toxic filtration, conversion, and/or retention; temperature regulation. Water quantity-flow regulation. Habitat- Riparian and aquatic habitat, sediment supply. Input of organics, prey base, & LWM. Structure for habitat life needs.</p>	<p>Loss of nesting sites, rearing, refuge & foraging areas.</p>	<p>How measure degree of protection? Limit to protected areas with no development? Difficult to connect with specific functions.</p>	<p>Rural, urban.</p>	<p>Need info on ownership, PBRS, easements. Other info available from county auditor and assessor? Land trusts. NRCS and state agencies are also sources for permanently protected lands.</p>

Attachment 2: POTENTIAL NO NET LOSS INDICATORS for SHORELINE MASTER PROGRAMS

Indicator (all in shoreline jurisdiction)	Functions affected - key categories - water quality, water quantity and habitat	Type of Impairment**	Limitations of indicator	Where	Is data available or reasonable to obtain
Piers/docks/floats, overwater structures: <u>Number</u> of structures, <u>square footage</u> of new and replacement. Or track grating, piling, construction materials.	Habitat. Water quality-toxics.	Increase in predation, reduction in light and aquatic vegetation and simplification of food web.	All docks not same - i.e. grating, materials vary, location affects impacts. New docks partially mitigate impacts.	Rural, urban.	Is data available from local government, including permits and SDP exempt projects? Can locals track over time? Use DNR data - number of and area over water. HPA information can supplement other data, but is not sufficient on its own. Good to monitor late spring/early summer.
Road lengths (<u>feet</u>) within 200 feet of water body.	Water quantity. Water quality. Habitat- connectivity.	Intercepts and changes timing of flows to aquatic habitat. Increases sediment and toxics.	Is there much new road development in shoreline jurisdiction?	Rural, urban.	Data available from DNR, local governments and WSDOT. CCAP data needs analysis to provide relevant information.
<u>Number</u> of road crossings of water bodies -bridges, culverts.	Habitat - Instream functions. Water quality.	Simplifies stream habitat structure, increases channel confinement and interrupts habitat forming processes. Increases delivery of pollutants.	Is there much new road development in shoreline jurisdiction? Distinguishing between fish friendly crossings and others. Combining broad range of activities.	Rural, urban.	Culvert inventories vary in quality. WDFW has fish passage barrier data, but it is incomplete. Remote sensing data? SHIAPP data? CCAP data needs analysis to provide relevant information.
Water quality: 303(d) <u>list</u> . All water quality	Water quality.	Impairment is specific to type of listed 303(d) issue (e.g. increased temperature, low dissolved oxygen,	How relate to functions? Some impacts from outside shoreline jurisdiction. Only	Rural, urban.	Accessible data from Ecology. Is water body on or off list? In some cases, only a portion (e.g., reach)

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Indicator (all in shoreline jurisdiction)	Functions affected - key categories - water quality, water quantity and habitat	Type of Impairment**	Limitations of indicator	Where	Is data available or reasonable to obtain
<p>parameters such as temperature, dissolved oxygen, fecal coliform, heavy metals, toxics, organics and biological indices (e.g., Biological Index of Biotic Integrity).</p> <p>Shellfish listings <u>closures.</u></p>		<p>increased fecal coliform, heavy metals and toxic organics.)</p>	<p>impaired waters are listed & measured; no WQ improvement project in place. No criteria to remove from list. Sampling methodology changes, not always comparable. Marine & fresh water lists updated in alternating 2-year cycles.</p> <p>Some impacts from outside shoreline jurisdiction and municipality. Emergency closures updated regularly. Uneven data. Changes may be too frequent for NNL purposes. Limited to fecal coliform. Reflects impacts on human health, not shellfish health.</p>		<p>of a water body is listed. 303(d) - comprehensive,</p> <p>Dept of Health Shellfish Program.</p>
<p>Levees/dikes: <u>Linear feet</u>, floodplain area gained from levee setbacks.</p>	<p>Water quality -sediment removal, temperature regulation. Water quantity-water</p>	<p>Impairs natural flooding regime. Reduces floodplain sediment retention, denitrification and</p>	<p>Can change in habitat quality as a result of levee/dikes be easily measured?</p>	<p>Rural, urban.</p>	<p>Measure increase/decrease in lineal feet, quality of levee related to riparian</p>

Attachment 2: POTENTIAL NO NET LOSS INDICATORS for SHORELINE MASTER PROGRAMS

Indicator (all in shoreline jurisdiction)	Functions affected - key categories - water quality, water quantity and habitat	Type of Impairment**	Limitations of indicator	Where	Is data available or reasonable to obtain
	storage, flooding. Habitat-structure for habitat life needs (e.g., low LWM, stream bed aggradation, river mouth progradation).	hyporheic functions. Decreases groundwater storage and base flows. Interferes with formation of habitat structure such as distributary channels in tidal and riparian and in-channel and off-channel habitat in freshwater settings. Removes habitat structure for nesting, rearing, refuge and foraging.	Various types and locations of levees & dikes are lumped together. Types of openings in levees and dikes vary; impacts may vary.		vegetation & slope. Is data from local governments or FEMA?
Floodplain area: <u>Acres</u> allowed to flood -tidal and river (lack of flood control and lack of other structures such as houses.)	Water quality - removal of toxics, sediment, phosphorous and pathogens through adsorption, filtration and retention. Removal of nitrogen through denitrification. Temperature regulation. Water quantity - water storage and flow regulation and reduction in downstream flooding. Habitat - formation of habitat structure from LWM, vegetation communities and sediment type/channel configuration that support habitat life	Impairment similar to that for levees & dikes with loss of floodplain from diking & filling.	Availability of data, maintenance of data.	Rural, urban.	Do local governments measure this for shoreline inventory? FEMA floodplain info available.

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Indicator (all in shoreline jurisdiction)	Functions affected - key categories - water quality, water quantity and habitat	Type of Impairment**	Limitations of indicator	Where	Is data available or reasonable to obtain
	needs. Input of organics and prey base.				
<u>Number</u> of bald eagle & osprey nests & roosts & great blue heron rookeries.	Habitat - structure for habitat life needs.	Indicator of impaired habitat.	More suitable for counties than cities.	Rural.	WDFW data - most up-to-date for eagles.
<u>Percent cover</u> of invasive species in riparian zones.	Habitat - Riparian and aquatic habitat, sediment supply. Input of organics & LWM. Structure for habitat life needs.	Overwhelms native plants, compromising ecosystem. Potential effect on physical structure and food web dynamics.	Requires field work. May be useful if data set is available. Use Noxious Weeds list to define invasive species?	Rural, urban.	Is data available? Conservation districts? WA Invasive Species Council? (working on baseline assessment due in May 2011)
<u>Impervious surface area.</u>	Water quality - removal of toxics, sediment, phosphorous and pathogens through adsorption, filtration and retention. Removal of nitrogen through denitrification. Temperature regulation. Water quantity - water storage and flow regulation and reduction in downstream flooding. Habitat - formation of habitat structure from LWM, vegetation communities and sediment	Reduces vegetative buffers and decreases filtering of pollutants from surface & subsurface flow. Alters the delivery and timing of water to aquatic areas, increasing quantity of water and pollutants delivered to aquatic habitats during high and low flows, which affects habitat structure. Increases water temperature Reduces prey base (by	Covered by other indicators? Percentage increase in developed urban areas would be small and may not be useful indicator. Some land surface cover layers are inaccurate, e.g. showing impervious for clearcut forest.	Urban	Aerial photos or other remote sensing techniques show impervious cover. Local governments require new impervious information in permit applications.

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Indicator (all in shoreline jurisdiction)	Functions affected - key categories - water quality, water quantity and habitat	Type of Impairment**	Limitations of indicator	Where	Is data available or reasonable to obtain
	type/channel configuration that support habitat life needs. Input of organics.	associated removal of vegetation) Loss of nesting sites, rearing, refuge & foraging areas.			
Wetlands acreage: Fill of natural wetlands and constructed or engineered wetlands. This includes nearshore tidal estuaries.	Water Quality - Wetlands filter pollutants and store sediment. Water Quantity - Affect groundwater storage and flow regulation. Habitat - Affects habitat structure, results in loss of wetland vegetation communities that support habitat life needs.	Changes to natural hydrological, chemical, and physical regimes affect the production and succession of a wetland's ecology, and therefore its functions and values.	Difficult to track. Could be covered in other indicators (impervious surface and water quality), however other indicators don't get at wetland conversion to non-impervious land use such as landscaping or agriculture. May require field work.	Rural, urban	Is data available? Local permit tracking? Ecology? Core of Engineers?
<u>Area</u> of seagrasses, kelp and emergent aquatic vegetation.	Habitat - structure for habitat life needs, including food and shelter for many species.	Decreases in aquatic vegetation such as eelgrass and kelp results in loss of food and shelter for many species.	Multiple factors affect growth and sustainability of aquatic vegetation.	Aquatic	Seagrass, kelp and emergent aquatic vegetation data along shoreline available from DNR Shorezone. (1994-2000) More recent local data available at those sites that are among the stratified randomly sampled sites.

* LWM - Large Woody Material

** For some indicators, decreasing the length or area of the indicator would result in a benefit to shoreline functions (e.g., shoreline stabilization, piers & docks.) For other indicators, increasing the length or area of the indicator would result in a benefit to functions (e.g. forest cover, riparian vegetation.)

*** Rural includes rural residential, agricultural and forestry areas.

CCAP - Coastal Change Analysis Program

NGO - Non-government organization

PBRS - Public Benefit Rating System

NRCS - National Resource Conservation Service



DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: City of Bellevue Development Services Department

LOCATION OF PROPOSAL: City-wide

DESCRIPTION OF PROPOSAL: The Planning Commission is being asked to hold a public hearing, to deliberate on public comment received, and to formulate a recommendation to the City Council for final adoption of the draft Shoreline Master Program including the Shoreline element of the Comprehensive Plan (policies); the Shoreline Overlay of the Land Use Code (regulations); the Shoreline Environment Designations (maps); Shoreline Jurisdiction (maps); Shoreline Inventory and Analysis (study), and Shoreline Restoration Element (plan). Incorporation by reference of Draft Critical Areas EIS issued June 2005; Final Critical Areas EIS issued May 2006 for the Update of the Critical Areas regulations (05-113010 LE) pursuant to WAC 197-11-625 and 754. Both documents are available in Records Room at City Hall for review.

FILE NUMBER: 07-122342 AC, 11-103227 AD

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with Land Use Division. This information is available to the public on request.

- This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.
- This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so that it is likely to have significant adverse environmental impacts; if there is significant new information indicating, or on, a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project), or if the DNS was procured by misrepresentation or lack of material disclosure.

This DNS is only appealable as part of the City's action on the amendment to the Land Use Code. In order to comply with requirements of SEPA and the State of Washington Growth Management Act for coordination of hearings, any appeal of the SEPA threshold determination herein will be considered by the Growth Management Hearings Board along with an appeal of the City Council's action. See LUC 20.35.250C.

Carol M. Holland
Environmental Coordinator

May 5, 2011
Date

OTHERS TO RECEIVE THIS DOCUMENT:
State Department of Fish and Wildlife
U.S. Army Corps of Engineers
Attorney General
King County
Muckleshoot Indian Tribe

CITY OF BELLEVUE
ENVIRONMENTAL CHECKLIST
(Integrated SEPA/GMA Process)

A. BACKGROUND INFORMATION

PROPOSAL TITLE: Shoreline Master Plan Update (Files No. 07-122342 AC; 11-103227 AD)

PROPERTY OWNERS' NAME: N/A; applies City-wide

PROPOSAL LOCATION: Applies within the Shoreline Overlay District

PROPONENT'S NAME: City of Bellevue, Development Services Department

CONTACT PERSON'S NAME: Michael Paine, Environmental Planning Manager

CONTACT PERSON'S ADDRESS: Development Services Department
City of Bellevue
P.O. Box 90012
Bellevue, WA 98009-9012

CONTACT PERSON'S PHONE: (425) 452-2739

BRIEF DESCRIPTION OF THE PROPOSAL'S SCOPE AND NATURE:

1. **General description:** The City of Bellevue will amend the Bellevue Land Use Code (LUC) to include an update Shoreline Master Program (SMP). The updated master program will reside as a stand-alone SMP codified within Chapter 20.25E LUC and apply to all areas of the City within the shoreline jurisdiction. The comprehensive SMP amendment is intended to supplant the City's existing SMP in its entirety. The proposal also includes consistency amendments to other land use code sections, including the Critical Areas Overlay District Part 20.25H LUC to ensure internal consistency with the SMP as required under the Growth Management Act, Chapter 365.70A RCW.. The proposed amendments are needed to comply with the statutory deadline for comprehensive update of the local Shoreline Master Program pursuant to RCW 90.58.080.

2. **Site acreage:** Applies City-wide in shoreline jurisdiction (see attached map).

3. **Number of dwelling units/buildings to be demolished:** N/A

4. **Number of dwelling units/buildings to be constructed:** N/A

5. **Square footage of buildings to be demolished:** N/A

6. **Square footage of buildings to be constructed:** N/A

7. **Quantity of earth movement (in cubic yards):** N/A
8. **Proposed land use:** Shoreline uses and development consistent with the requirements of the Shoreline Management Act.
9. **Design features, including building height, number of stories and proposed exterior materials:** N/A
10. **Other:** N/A

Proposed timing or schedule (including phasing, if applicable):

A public hearing before the Planning Commission on the proposal is anticipated on May 25 of 2011. Further review by the Planning Commission will terminate in a recommendation and transmittal to the City Council for final local action prior to transmittal to the Department of Ecology. An additional public hearing may be part of City Council review.

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- City of Bellevue Revised Jurisdictional Determination
- City of Bellevue Shoreline Inventory and Analysis Report (January, 2009)
- City of Bellevue Shoreline Environment Designations
- City of Bellevue Restoration Plan (January, 2011)
- City of Bellevue BAS Review (March, 2005)
- Critical Areas Protection Measures DEIS (June, 2005)
- Critical Areas Protection Measures FEIS (May, 2006)
- City of Bellevue Lake Sammamish Ordinary High Water Mark Study (August, 2004)
- A Summary of the Effects of Bulkheads, Piers, and Other Artificial Structures and Shorezone Development on ESA-listed Salmonids in Lakes (July, 2000)

Draft and Final Critical Areas EIS File No. 05-113010 LE (June 2005 and May 2006)

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

09-124777 WG Cabrera Pier Project

N/A

11-104406 WG Whitlock Dock

11-110807 WG Suignard Pier Reconfiguration

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

Ordinance adoption by the City Council, Final approval by Department of Ecology

B. Environmental Elements

No discussion of the individual Environmental Elements is required for GMA actions per WAC 197-11-235.3.b.

C. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (do not use this sheet for project actions)

SUMMARY

Project Summary: The City of Bellevue will amend the Bellevue Land Use Code (LUC) to include an update Shoreline Master Program (SMP). The updated master program will reside as a stand-alone SMP codified within Chapter 20.25E LUC and apply to all areas of the City within shoreline jurisdiction. The comprehensive SMP amendment is intended to supplant the City's existing SMP in its entirety. Under state law, the Bellevue Shoreline Master Program is required to include the following components:

1. Shoreline Element of the Comprehensive Plan (policies)
2. Shoreline Overlay of the Land Use Code (regulations)
3. Critical Areas Overlay of the Land Use Code (regulations)
4. Shoreline Environment Designations (maps)
5. Shoreline Jurisdiction (maps)
6. Shoreline Inventory and Characterization (study)
7. Shoreline Restoration Element (plan)

The proposal also includes consistency amendments to other land use code sections, including the Critical Areas Overlay District Part 20.25H LUC to ensure internal consistency with the SMP as required under the Growth Management Act, Chapter 36.70A RCW. The proposed amendments are needed to comply with the statutory deadline for comprehensive update of the local Shoreline Master Program pursuant to RCW 90.58.

Environmental Summary per WAC 197-11-235(3)(b)

State the proposal's objectives: To update the City's Shoreline Master Program consistent with the requirements of Chapter 90.58 RCW, the Shoreline Master Program, including the Washington State Department of Ecology's implementing regulations, Chapters 173-26 and 173-27 WAC

Specify the purpose and need to which the proposal is responding: This update was mandated by the State Legislature to be completed by all cities and counties that have shorelines of the state within their jurisdictional limits. The City's SMP was originally developed in 1974 and has not had a substantial update since. As a result, it lacks a number of required components and is not aligned with current scientific information relevant to protecting shoreline functions and values. These gaps, combined with a lack of detailed performance standards aimed at guaranteeing use priority and public access, dictated that the City update its SMP in a manner consistent with the procedural and substantive requirements of the Shoreline Management Act (SMA) and its implementing rules, including Chapter 173-26 WAC, Shoreline Master Program Guidelines (Guidelines), and Chapter 173-27 WAC (Shoreline Management Permit and Enforcement Procedures). However, the update of the City's critical areas ordinance in 2006 provided partial protection to some critical shoreline resources via critical area buffers and significantly revised dock and bulkhead standards.

The Shoreline Master Program Guidelines (Guidelines) require a number of formulaic steps in developing an SMP beginning with a shoreline inventory and analysis designed to record existing conditions and assess, in a generalized way, ecological functions and ecosystem wide processes. This effort also provides a baseline of ecological functions and processes against which to measure the impacts of future development and change through time. This analysis included a series of management recommendations, many of which were incorporated in the proposed SMP. In response to this work, past experience with similar requirements, direction from the Guidelines, and extensive public input, the City also made adjustments to existing land uses, crafted new environment designations, and developed new shoreline policies and regulations as needed while incorporating existing critical areas policy and regulation as required. Significant in this effort was the preparation of a restoration plan. A cumulative impact analysis will be prepared once the final content of this draft plan is settled.

State the major conclusions, significant areas of controversy and uncertainty: When compared to the existing SMP and overlapping critical areas regulations, the proposed SMP will more closely comply with the consistent with the requirements of RCW 90.58.020, the approval criteria of RCW 90.58.090(3), the procedural requirements of RCW 90.58.090, the substantive requirements of RCW 90.58.100, and the requirements of Chapters 173-26 and 173-27 WAC. The table below compares how the existing and proposed SMP addresses important required elements. The table, and the discussion that follows, focuses primarily on changes to residential shoreline regulations as the Urban Residential environmental designation encompasses the majority of Bellevue's shorelines so changes there have the most environmental significance. The second largest area in terms of acreage is publically-owned shoreline wetland that, apart from uses, is governed almost entirely by existing critical areas regulations.

Required SMP Element	Existing SMP and CAO	Proposed Draft SMP
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Environment Designations	<ul style="list-style-type: none"> • Single residential environment only • Conditional use approval for other uses 	<ul style="list-style-type: none"> • Six new environments based on completed Shoreline Analysis
Priority given to water-dependant, water related uses	<ul style="list-style-type: none"> • Limited recognition • CAO gave priority to protecting ecological functions 	<ul style="list-style-type: none"> • Explicit recognition of water dependent recreational use of the shoreline
Enhance Public Access	<ul style="list-style-type: none"> • Policy focus limited 	<ul style="list-style-type: none"> • Policy language enhanced
Protect Ecological Functions:	<ul style="list-style-type: none"> • 25' buffer with structure 25' setback on developed lots; • 50' buffer on undeveloped lots; • Existing legally-established development protected by "footprint" exception • Any development in setback or buffer triggers science-based report and mitigation • Setback and buffer may be reduced to accommodate proposed development with science-based report where buffer quality is low or net environmental benefit can be demonstrated. <p>Setback dimension may be reduced a maximum of 25 feet where the shoreline critical area buffer on all developed properties immediately abutting the site is less than the buffer required.</p>	<ul style="list-style-type: none"> • structure 50' setback on developed lots; • uses and development in setback allowed without special science-based studies • Explicit recognition of recreation use of shoreline • Existing legally-established development protected by "footprint" exception except where structure is located with conservation area. • Some uses allowed in setback without mitigation • Mitigation required for new development and for small-scale development over certain thresholds in setback • Setback dimension may be reduced a maximum of 25 ft. using prescriptive options • Special shoreline report for unique circumstances
Vegetation Conservation	<ul style="list-style-type: none"> • Strict preservation required as part of CAO buffer; • With the exception of routine landscape maintenance, any disturbance requires mitigation—generally native vegetation <p>In order to mitigate the impacts of new or expanded moorage facilities, a buffer of vegetation a minimum of 10 feet wide is required along the entire length of the lot immediately landward of ordinary high water mark.</p>	<ul style="list-style-type: none"> • Flexible retention requirements for existing native vegetation • Imposition of a vegetation conservation area across 60% of the first 25 feet of setback on residential lots with new residences and certain other types of development • Area expanded to 50 feet in Urban Conservancy environments • Institution of landscape standard with new development • Mitigation standards require planting in conservation area when development exceeds certain thresholds in setback
Shoreline Modifications		

<ul style="list-style-type: none"> • Shoreline Stabilization 	<ul style="list-style-type: none"> • New stabilization allowed only when avoidance shown to be infeasible • Clear preference for soft stabilization • Location limited to at or above OHWM • Height controlled • Repair permitted up to a minor threshold, beyond which applicant must show need • Soft stabilization required when engaging in major repair unless shown to be infeasible 	<ul style="list-style-type: none"> • New stabilization allowed only when avoidance shown to be infeasible • Clear preference for soft stabilization • Range of options for both soft and hard • Location flexible based on type of stabilization installed; • With one exception, hard stabilization not permitted in floodplain unless residence is within 10 ft. of OHWM • Maximum height specified • Repair of existing stabilization permitted with measurable distinction between minor and major repair • Stabilization assumed to be required when doing major repair but soft preferred—hard allowed only when soft not feasible or residence located within 10 ft. of OHWM
<ul style="list-style-type: none"> • Residential Moorage Standards 	<ul style="list-style-type: none"> • New residential docks subject to a single standard conforming closely to RGP-3 standard of USACE; • Total overwater coverage limited to 480 sf. • Dimensions established for walkways, ells and finger piers • Strict limit on number of boat and watercraft lifts • Floats allowed subject to depth requirement • Standards for materials • Repair of legally-established docks allowed up to specified threshold at which point proportional mitigation is required. • Reconfiguration or expansion involving the same or more overwater coverage must meet standards for new 	<ul style="list-style-type: none"> • Standards for docks reflect local circumstances; • Side setbacks reduced from 12 to 10 ft. • Fewer specific design standards • Dock divided into walkway and moorage platform • No square footage limitation for walkway • Walkway limited to 4 ft. in width except expansion possible with 2:1 reduction to moorage platform • Platform must be located 30 ft. from shore or in 9 ft. of water • Platform limited to 250 sf. in Lake Sammamish and 350 sf. in Lake Washington. • Moorage platform user configurable—no specific standards in code • Increase in number of boat and watercraft lifts • Liberal repair standard allows entire dock surface, including stringers and joists and piling, to be repaired in the same

		<p>configuration and dimension except grating required</p> <ul style="list-style-type: none"> • Grated surface required with minor repair of decking • Reconfiguration permitted provided allowed moorage platform does not exceed legally-established platform or allowed maximum.
<p>Non-Residential Moorage</p>	<ul style="list-style-type: none"> • Walkways only in first 30 feet from OHWM • Grating required to maximum extent feasible • Skirting prohibited • Ells minimum size necessary to allow use • Floats permitted in depths over 10 feet subject to minimum necessary standard • Limitation of 150 ft. on length • Piling sizing and spacing standards • Construction material standards 	<ul style="list-style-type: none"> • Mitigation required for all impacts to ecological function • New skirting and covered moorage prohibited • Ramp access required • Ramps and walkways only up to 9 ft. below OHWM • Light penetrable materials required on gangways, walkways and floats • Construction material standards expanded • New standards for new marina location and design • Liveboards allowed • Stacked Boat storage allowed subject to standards • Setbacks required • Lighting designed to minimize glare and habitat impacts • Gangways • Public access required • Waste services required • Maintenance and repair plan required • Aircraft moorage allowed with mitigation
<p>Residential Nonconforming development</p>	<ul style="list-style-type: none"> • Legally-established primary structures subject to footprint exemption in buffer • May rebuild in footprint • Legally-established accessory structures deemed nonconforming in the shoreline buffer • Repair limited to minor nonstructural repairs 	<ul style="list-style-type: none"> • Primary structures are subject to footprint exemption except in 25 ft. vegetation conservation area • May be repaired up to the 50% replacement threshold with allowances • Legally-established accessory structures in the vegetation conservation area may be repaired up to 50% replacement threshold with allowances
<p>Subdivision Standards</p>	<ul style="list-style-type: none"> • No special shoreline standards 	<ul style="list-style-type: none"> • New proposed criteria requiring clustering, dedication of

		vegetation conservation area, shared moorage and public access 9 lots or more
Restoration Plan	• None	• Required by Guidelines

State the issues to be resolved, including the environmental choices to be made among alternative courses of action:

Shoreline Protections: Bellevue’s existing regulatory approach gives special attention to protecting the shoreline interface by employing structure setbacks and “no-touch” buffers, along with updated stabilization and dock standards, to limit development impacts to habitat functions important to aquatic species of local importance. Regulatory setbacks associated with native vegetation provide one of the best means to ensuring maintenance of the crucial connection between land and shore and the habitat and water quality benefits that come with it. The imposition of setbacks and buffers naturally constrain development within this sensitive area by limiting the actions and types of development that can occur there. Under Bellevue’s current rules, some departures from the required setback and buffer dimensions are authorized; however, such departures require a science-based report demonstrating net improvement in ecological function above what otherwise would have occurred under the prescriptive standard. Such an approach generally results in vegetative improvements with the 25-foot buffer from Ordinary High Water Mark (OHWM). On some occasions, bulkheads or portions of bulkheads are removed to offset the impacts of new development within the setback or buffer. These improvements are generally deemed sufficient to offset development impacts to hydrologic, vegetative and habitat functions that arise from development within the setback or buffer, primarily because they accelerate the reestablishment of a vegetative connection close to the water’s edge. Moreover, such improvements have the benefit of having been based on a site specific science-based study and arguably reflect a more accurate assessment of actual site conditions and impacts.

In drafting a new SMP, the City faced a substantial challenge in crafting more flexible standards to meet the water-dependent recreational objectives of the Shoreline Management Act and the Guidelines, while protecting ecological functions in the manner similar to that provided by the buffers of the critical areas ordinance. To offset the loss of the existing “no touch” buffer, the City maintained the same overall structure setback dimension (50 feet) while replacing the 25-foot buffer with a vegetation conservation area designed to occupy 60 percent of the previous buffer area. The remaining 40 percent was made available for water dependent recreation and enjoyment but with a limitation on new structures and impervious surfaces.

To further offset the protective benefits of the existing shoreline buffer, the City added a landscape standard for new residential development both outside and inside of the setback and vegetation conservation area and redevelopment within the setback area. Since this new standard applies to new development outside the setback—something not previously regulated

under the critical area protections—it may foster planting of the vegetation conservation area at a rate similar to or exceeding the mitigation typically required as an outcome of the critical area report process. This requirement is further supplemented with a mitigation options menu that incorporates into prescriptive regulation common mitigation options previously coming out of science-based, site specific analysis associated with the existing critical area report process. Since some measure of the existing buffer is almost always occupied by legacy development, and required access to docks and beaches is needed in both approaches, the actual difference in outcome between the existing critical area setback and buffer protections and those proposed in the updated SMP is judged to be relatively small and in keeping with the balancing required to provide for two potentially conflicting policy goals of the Shoreline Management Act: recreational access to the shoreline and no net loss of shoreline ecological functions.

Vegetation Management Standards: Because Bellevue’s current critical areas regulations require a 25-foot “no-touch” buffer on the shoreline, preservation of existing native vegetation within the area included in that buffer is a reasonable expectation. In removing the buffer requirement, the City needed to ensure protection of existing native vegetation within some part of the newly established 50-foot structure setback to ensure no net loss of ecological function. The City chose to employ a vegetation overlay designed to protect native vegetation existing within the first 25 feet from OHWM. Existing tree protection standards apply elsewhere on the site outside of the 50-foot setback. Instead of protecting a fixed area, this approach protects native vegetation, thereby making modest recreational development of the shoreline more likely since detailed science-based reports are not required. Such an approach makes sense given the highly developed nature of Bellevue’s major shorelines, the impact of legacy development, and the demand for recreational use of the shoreline area. The addition of new development elsewhere on the site may trigger replanting of up to 60 percent of this vegetation conservation area. This requirement further ensures conservation of native vegetation and planting of new vegetation. On balance, the proposed vegetation conservation requirements in the updated SMP compare favorably with the existing critical area standards requiring a “no-touch” buffer while ensuring no net loss of shoreline ecological functions.

Shoreline Modification (Docks): The City's purpose in updating the existing critical area dock standards was to simplify and clarify the standards while ensuring no net loss of ecological functions. As a result, the proposed standards, much like the existing critical area rules, focus on limiting the overwater coverage in the nearshore while pushing the moorage function out a minimum of 30 feet or to a length necessary to reach a depth of 9 feet, whichever is greater. Walkway width is restricted to four feet and the walkway must be grated. The key difference, however, is that new standards do not specify a particular moorage configuration or specific dimensional standard for piers or floats beyond restricting the amount of total overwater coverage of the moorage platform—in this case 250 square feet for Lake Sammamish and 350 square feet for Lake Washington—and requiring grating throughout. The result is an owner configurable moorage platform the ultimate approval of which depends on state and federal agencies. (The difference in size of moorage platforms is in response to the larger deepwater boats typically moored on Lake Washington compared with Lake Sammamish where smaller runabouts are common.

Since total overwater coverage is considered a potential indicator of net loss of ecological function, it is worth comparing the total overwater coverage allowed under the current critical area rules with that proposed under the proposed SMP. The current code restricts new docks to 480 square feet of total overwater coverage. This amount can be increased but only by means of a science-based critical areas report and with additional mitigation. Comparing this standard with that provided by the proposed SMP is complicated because of the uncertainty about how far the walkway will need to extend to reach the minimum depth requirement of nine feet. Assuming that, on average, a Lake Washington dock will have to extend at least 40 feet to reach the 9 foot depth, the amount of overwater coverage would total 510 feet comparing relatively favorably with the current requirement of 480 square feet. Similar calculations on Lake Sammamish result in 410 square feet of overwater coverage, substantially less coverage than the maximum allowed under current code. Under the assumption of a 40-foot walkway length, the maximum average over water coverage is 460 square feet across the two lakes. This number is actually overstated since the moorage platform is typically divided into a slip designed to accommodate a boat thereby reducing the total overwater coverage. On balance, the proposed dock standards in the updated SMP compare favorably with the existing critical area standards while ensuring no net loss of shoreline ecological functions.

Dock Repair: Given the urbanized character of Bellevue's lake frontage, most properties already are developed with a dock, making maintenance and repair an important concern. Under current rules, maintenance and repair of legally-established docks is permitted subject to a specific repair threshold above which proportional compliance to the new standard is required. Under the proposed SMP, the repair thresholds have been liberalized with the result that most docks can be fully repaired without triggering compliance with new standards. Complicated proportional compliance provisions have been eliminated and some items like material standards and grating have been made mandatory for all but the most modest repair actions; however, replacement of more than 50 percent of the piling triggers compliance with the standards for new docks.

Since the proposed repair standards in the updated SMP are modestly less restrictive than existing code, it is likely that a few repairs that would have previously triggered partial compliance based on more ecologically protective standards will not occur. However, such situations were rare as property owners preferred to make repairs just under the threshold so as not to trigger these provisions. Given such outcomes, the proposed dock standards in the updated SMP compare favorably with the existing critical area standards while ensuring no net loss of shoreline ecological functions.

Dock Reconfiguration: Proposals to reconfigure or replace existing residential docks are similarly treated in both the existing critical area standards and the proposed SMP. Such proposals must meet the requirements associated with new docks at LUC 20.25E.065.I.3 and 4. These provisions permit reconfiguration without significant coverage penalty provided the existing moorage platform is existed beyond the nine foot depth limitation.

Shoreline Modifications—New Stabilization: Bellevue's existing rules regarding shoreline stabilization were designed to be consistent with the standards provided in the Guidelines, allowing for minor repair of existing hard stabilization, but limiting new and replacement stabilization to those situations where need is clearly demonstrated to protect existing primary structures. The proposed SMP approaches the subject in the same way.

Avoiding the need for new stabilization is a primary policy objective of the Guidelines so development that purposefully avoids erosion hazards by locating the primary structure at a safe distance from Ordinary High Water to avoid those risks is preferred. Where an applicant perceives the need for stabilization on a site without it, he must prove it is needed by hiring a qualified professional to conduct a feasibility test. The test assesses a number of site specific factors, information about wind direction, speed, fetch and likely wave height, as well as risk to the structure and other factors.

Where stabilization is allowed, the new rules follow the prior critical area standards by articulating a clear preference for soft stabilization; hard stabilization is an option only when soft options are not technically feasible or the structure to be protected is so near (less than 10 feet) to OHWM that hardened stabilization is the default option. In picking soft solutions the applicant is now provided with a wide range of better defined options, outlined in order of priority, ranging from vegetative and bioengineered techniques to a combination of the first two options with some rigid structures incorporated for additional safety. When site conditions warrant the use of hard stabilization, an applicant is directed to a list of prioritized solutions ranging from 3:1 revetments with extensive live staking and other vegetative enhancement all the way to a near-vertical rock structure not to exceed 1.5:1. Under the proposed SMP, new vertical stabilization is not permitted.

In an improvement over the existing rules, the proposed SMP clarifies where stabilization may be located when a documented flood hazard area exists; only soft stabilization is permitted within the area of special flood hazard except that low-angle planted revetments are permitted due to their limit impact on flood storage. In general, stabilization measures are prohibited waterward of the OHWM with the notable exception that those measures that incorporate approved habitat improvements.

Shoreline Modifications—Repair: As previously provided under existing rules, repair of existing legally-established shoreline stabilization is allowed subject to certain thresholds, provided the damage or destruction is not so severe as to cause loss of structural integrity so sufficient as to jeopardize its erosion protection function. Where such a condition exists, or where the cumulative reconstruction exceeds 50 percent of the structure's linear length over a three year period, the proposed SMP defines such repair as major, making it subject to the standards for new stabilization measures, except that legally-established stabilization is presumed necessary; the feasibility test required to established whether or not stabilization is necessary is not required. The proposed SMP sets a clearer standard regarding what constitutes repair allowing maintenance and repair of legally-established stabilization to occur where necessary. On balance, the proposed stabilization standards in the updated SMP compare favorably with existing rules in terms of the protection afforded critical aquatic and shoreline resources while ensuring no net loss of shoreline ecological functions.

Subdivision standards: As part of the regulatory updates made in conjunction with the 2006 Critical Areas Update, a conservation short plat was added to the subdivision section of the City's Land Use Code. However, it applies only to those sites that abut a critical area of an acre or more, sites that abut known salmon streams, or sites where critical areas abut larger critical areas offsite, or large publically owned land managed for parks use or open space. While these conditions may sometimes occur in the Shoreline Overlay District, the proposed SMP includes some new criteria applicable to subdivisions of more than four lots to ensure no net loss of ecological function. Included is a lot clustering provision, compliance with public access standards for subdivisions of more than nine lots, tree retention requirements, dedication of the vegetation conservation area, and shared moorage provisions. These proposed criteria are new and represent additional protection not previously included the existing SMP, and represents improved protection for shoreline ecological functions.

Public Access: The existing SMP contains policy language supporting improved public access but this policy language lacks regulatory implementation. Given the emphasis in the Shoreline Management Act and the Guidelines supporting public access to shorelines, the proposed SMP includes regulations designed to protect, preserve and enhance the public's opportunity to enjoy the physical and aesthetic qualities of the shoreline and the water. These changes result in additional protection of public access not previously existing in the prior regulations.

Restoration Plan: The Guidelines include a requirement for a restoration plan designed, in part, to assist in offsetting long-term cumulative impacts of development in the Shoreline Overlay District, in an effort to avoid incremental and unavoidable degradation to shoreline ecological functions. The restoration plan is a new element, not previously included in the existing SMP, and while its force is only felt when implemented, it represents an important planning step to set the stage for potential future restoration of degraded shoreline conditions

State the impacts of the Proposal, including any significant adverse impacts that cannot be mitigated: Long-term cumulative impacts of development in the shoreline will continue to degrade shoreline ecological functions absent a robust restoration initiative by the City of Bellevue. This is because many development actions fall below permit or mitigation thresholds, or permitted actions are not fully mitigated because of poor impact identification, mitigation design and implementation, or long-term temporal effects. Over time these small impacts accumulate further degrading shoreline ecological functions.

Describe any proposed mitigation measures and their effectiveness: No specific development is being approved with this proposal. No significant environmental impacts have been identified, therefore no mitigation measures are proposed.

1. **How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

See discussion above

Environmental Summary

Proposed measures to avoid or reduce such increases are: N/A

2. **How would the proposal be likely to affect plants, animals, fish or marine life?**

The proposal should result in fewer significant impacts to plants, animals and fish because standards have been included that lessen impacts of new development like docks and shoreline stabilization and mitigation is required for those actions that have an impact on shoreline ecological functions.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:
N/A

3. **How would the proposal be likely to deplete energy or natural resources?**

See items 1 & 2 above.

Proposed measures to project or conserve energy and natural resources are: NA

4. **How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

The proposal has no direct impact on these resources. Development authorized under this proposed SMP has the impacts outlined above.

Proposed measures to protect such resources or to avoid or reduce impacts are:
N/A

5. **How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

The proposal is a regulatory overlay designed to provide specific guidance with respect to uses in the shoreline.

Proposed measures to avoid or reduce shoreline and land use impacts are: N/A

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

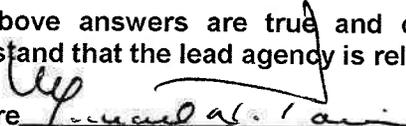
None of the proposed amendments to the Land Use Code are likely to change the demands on the transportation system.

Proposed measures to reduce or respond to such demand(s) are: N/A

7. Identify, if possible, whether or not the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

This proposal will require consistency amendments to the City of Bellevue land use code as required under the Growth Management Act, Chapter 36.70A.RCW.

- D. The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature 

Date Submitted 4/14/2011