RESIDENTIAL SETBACKS/BUFFERS AND VEGETATION - OPTIONS FOR COUNCIL CONSIDERATION

1. * Flexible Setbacks with Greenscape Option and Council drafting changes	2. <u>Flexible</u> Setbacks with String Test and Menu Option	3. <u>Fixed</u> Setbacks with String Test Option
Dimensions: • Shoreline residential: 50 feet - 25 foot shoreline setback - 25-50 feet is structure setback (Council-directed drafting change) • Phantom Lake: larger wetland buffers would control where applicable	Dimensions: • Shoreline Residential: 50 feet - 50 foot structure setback • Shoreline Residential Canal: 25 feet • Phantom Lake: regulated pursuant to substantive wetland requirements (SMP setback does not apply)	Dimension: Shoreline Residential: 35 feet 25 foot shoreline setback 25-35 feet is structure setback Phantom Lake: larger wetland buffers would control where applicable
 Alternatives to Requirement: Footprint for all structures establishes applicable setback Development between 25-50 feet from OHWM allowed in compliance with Greenscape provisions 	 Alternatives to Requirement: Footprint for primary structure establishes applicable setback Development between 25-50 feet from OHWM allowed in compliance with String Test or Menu Options for Setback Reduction. 	Alternatives to Requirement: • Footprint for primary structure establishes applicable setback. • Development between 25-35 feet from OHWM allowed in compliance with String Test.
 Tailored Shoreline Greenscape Existing hardscape within 25 feet of OHWM can remain, is not considered nonconforming, and can be replaced but not expanded A minimum of 50 percent of the shoreline setback (within 25 feet of 	String Test Reduction in 50 foot setback allowed (to a minimum of 25 feet) with addition of native landscaping within 25 feet of OHWM in a quantity equal to two times the area of expansion into the setback	String Test Reduction in 35 foot setback allowed (to a minimum of 25 feet) with addition of native landscaping within 25 feet of OHWM in a quantity equal to two times the area of expansion into the setback

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OHWM) required to be living plant, tree or hedge material. No more than 15 percent hardscape within first 10 feet landward of OHWM In Residential Canal Environment, not more than 15 percent hardscape within the first 10 feet landward of any structurally integrated vertical bulkhead (Council directed drafting change). Mitigation and restoration plan required with adherence to mitigation sequencing - limitation on application removed to ensure no net loss of shoreline ecological function (Council directed drafting change).	Menu Option The overall 50 foot 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 prescribed menu options; for example: • 75% of shoreline frontage unmodified or soft – 25' reduction • Opening of piped on-site stream – 10' reduction • Installation of pervious material – 10' reduction • Preserve or restore 20% of lot in native vegetation – 10' reduction • Increase depth of vegetation conservation 5 feet beyond shoreline setback – 5' reduction • Limit total site impervious coverage by 10% below allowed maximum – 5' reduction Refer to end of matrix for comprehensive list of menu options developed by Planning Commission in 2011.	

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Additional Departures: Setback reduction within 25 feet of OHWM required a Shoreline Variance Director has authority to modify Greenscape provisions for nonconforming lots, lots with unique size or shape, or other special circumstances	Additional Departures: Setback reduction within 25 feet of OHWM required a Shoreline Variance Menu option modifications available through Critical Areas Report or Shoreline Special Report.	Additional Departures: Setback reduction within 35 feet of OHWM require a Shoreline Variance if String Test does not achieve project objectives.
Vegetation Conservation Citywide Tree Retention and Replacement requirements apply, and require retention of 30% of diameter inches of significant trees on site with new development or 20% increased impervious surface. No significant tree or native vegetation retention requirement specific to shoreline setback areas.	Vegetation Conservation Citywide Tree Retention and Replacement requirements apply, and require retention of 30% of diameter inches of significant trees on site with new development or 20% increased impervious surface. All significant trees and native vegetation required to be retained within 25 feet of OHWM. Shoreline Residential Requirements: Vegetation retention required on 60 percent of area within 25 feet of OHWM.	Vegetation Conservation Citywide Tree Retention and Replacement requirements apply, and require retention of 30% of diameter inches of significant trees on site with new development or 20% increased impervious surface. All significant trees and native vegetation required to be retained within 25 feet of OHWM. Shoreline Residential Requirements: Vegetation retention required on 60 percent of area within 25 feet of OHWM.

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	Shoreline Canal Requirements: Vegetation retention required on 35% of area within 25 feet of OHWM	Shoreline Canal Requirements: Vegetation retention required on 35% of area within 25 feet of OHWM.
	Trigger: Land disturbing activity within the shoreline setback (25' of OHWM)	Trigger: Land disturbing activity within the shoreline setback (25' of OHWM)
Landscape Development Standard No landscape development standard beyond Greenscape provision	Landscape Development Standard Installation of additional landscaping required for new, replacement and expanded residential structures.	Landscape Development Standard Installation of landscaping required for new, replacement and expanded residential structures.
	Shoreline Residential Requirements: Installation of landscaping in 60 percent of the shoreline setback (within 25 feet of OHWM). Expansions less than 500 sf limited to proportionate replacement.	Shoreline Residential Requirements: Installation of landscaping in 60 percent of the vegetation conservation area (within 25 feet of OHWM). Expansions less than 500 sf limited to proportionate replacement.
	Shoreline Canal Requirements: Installation of landscaping in 35 percent of the shoreline setback (within 25 feet of OHWM).	Shoreline Canal Requirements: Installation of landscaping in 35 percent of the vegetation conservation area (within 25 feet of OHWM).
Other relevant provisions:	Other relevant provisions:	Other relevant provisions:
Citywide Greenscape requirement	Citywide Greenscape requirement applies	Citywide Greenscape requirement
does not apply.Hazard tree removal allowed	applies.Hazard tree removal allowed	applies.Hazard Tree removal allowed

^{*}Option recommended by the Planning Commission in the SMP Update

Menu Options developed during SMP Update Process in 2011

i. Setback Reduction Option Menu. The overall 50 foot shoreline setback in the Shoreline Residential environment may only be reduced to a minimum of 25 feet when setback reduction impacts are mitigated using a combination of the mitigation options provided in LUC Chart 20.25E.065.E.3.b.iii below to achieve an equal or greater protection of lake ecological functions.

Chart 20.25E.065.E.3.b.iii - Setback Reduction Menu Options

	MENU OPTION (*)	RELATIVE SETBACK REDUCTION
1.	Presence of unmodified shoreline or installed soft shoreline stabilization located at or landward of the ordinary high water mark along at least 75 percent of the linear lake frontage of the subject property. This option can include the removal of existing hard shoreline stabilization and conversion to soft stabilization using the options for soft stabilization at LUC 20.25E.080.F.4 c. This option cannot be used in conjunction with any options below.	25 feet
2.	Presence of unmodified shoreline or installed soft shoreline stabilization located at or landward of the 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 shoreline stabilization and conversion to soft stabilization using the options for soft stabilization at LUC 20.25E.080.F.4 c. This option cannot be used in conjunction with Option 1 above (*)	10 feet
3.	Opening of previously piped on-site stream to allow improvement to habitat function for fish for a minimum of 25 feet from OHWM within the vegetation conservation areas. Opened streams 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. (*)	10 feet

4.	Installation of soft structural shoreline stabilization measures waterward of the ordinary high water mark. These measures may include the use of gravels, cobbles, boulders, and logs, as well as vegetation. The material shall be sized 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). (*)	10 feet
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. Area must be greater than 1000 square feet. (*)	10 feet
6.	Preserving or restoring at least 20 percent of the total lot area as native vegetation, located outside of the reduced setback and any critical areas and their associated buffers (*)	10 feet
7.	Replacement of existing hard shoreline stabilization in accordance with LUC 20.25E.080.G.4.d.1 to provide dissipation of wave energy and increase the quality or quantity of nearshore shallow water habitat. (*)	5 feet
8.	Increasing the depth of the vegetation conservation area by 5 feet. (*)	5 feet
9.	Limiting total site impervious coverage to at least 10% less than maximum allowed. (*)	5 feet
10.	Installation of pervious material for a minimum of 1000 square feet of new or replaced hardscape. (*)	5 feet

Note: Setback Reduction Menu Options

^{*}Options 2-10 cannot be combined to total more than 20 feet. In no event shall the shoreline setback measure less than 25 feet from the ordinary high water mark.

Jurisdictiona	l Comparison	Issaquah	Redmond	Sammamish	Kirkland	Renton	Lake Forest Park
Dimension	Dimension Average Required Width: 46.6	Required Width: 50' (35' buffer w/ 15' structure setback)	Required Width: 35'	Required Width: 50'	Required Width: 50' (actual setback based on % of parcel depth and development character in 10 separate residential zones)	Required Width: 45' (20' vegetated buffer included in this amount)	Required Width: 50' (for lots >100' in depth; 40 feet for <100' depth)
					Range: 15'- 80' (based on percentage of lot depth and residential zone)	Range: 25'- 45' dependent on lot depth, includes buffer)	Range: 40' - 50'
		Minimum: 25' (10' buffer and 15' structure setback) achievable through common line standard or single alternative	Minimum: 20' achievable through single alternative	Minimum: 20' achievable through footprint exception or options menu	Minimum: 25' (except in three zones 15') achievable using averaging (in one zone) or options menu	Minimum:25' with options menu	Minimum: 20' if lot depth less than 100'; otherwise 25'

Jurisdictional	Comparison	Issaquah	Redmond	Sammamish	Kirkland	Renton	Lake Forest Park
Administrative Alternatives to reduce required setback or buffer	a. Footprint Exception b. String test/comm on line c. Average of adjoining d. Single Alternative e. Options Menu	Common line (can both reduce and expand buffer) Single Alternative (mechanism to achieve minimum buffer width with removal of bulkhead)	Single Alternative (mechanism to achieve minimum setback width with planting 20' from OHWM)	Footprint Exception	Footprint Exception (primary structure only) Average of adjoining setbacks (for one shoreline zone only)	Footprint Exception (Yes; for primary structure remodel or minor expansion outside setback)	Footprint Exception (Yes; increases in structure footprint outside of setback allowed)

Jurisdictional Comp	parison	Issaquah	Redmond	Sammamish	Kirkland	Renton	Lake Forest Park
				Options Menu (mechanism to achieve minimum setback width with prescriptive mitigation options with greater dimensions for activities close to water)	Options Menu (Complex system grants reductions in % of parcel depth; for example removing 75% linear footage of bulkhead results in the reduction of required setback by 15% of parcel depth or 30% if greater than 60.' Maximum reduction allowed is to 25' from OHWM in all zones except three where limit is 15')	Options Menu (modify down to 25' with simple options menu; additional reduction is possible with lake study and a shoreline conditional use permit.)	Options Menu (modify down to 20' with mitigation if buildable depth is less than 100'; otherwise 25')
Development Remeeting the b. No	anting equired o anting	Plant 80% of buffer	Plant 50% of 20' setback from OHWM	No Planting	Plant 75% of 10' from OHWM	Plant 75% of 15' from OHWM	Plant 75% of 15' from OHWM

Jurisdictional	Comparison	Issaquah	Redmond	Sammamish	Kirkland	Renton	Lake Forest Park
Expansion of Existing Structure	Base Standard	>500 sq. ft. expansion of any impervious surface/primary or accessory structures within shoreline jurisdiction requires 1:1 planting of buffer Expansions within the setback/buffer cannot go waterward (lateral only)	Expansion requires planting 50% of 20' setback from OHWM	200-500 sq. ft. expansion requires 1:1 planting of 15' vegetation enhancement area (VEA) >500 sq. ft. plant all of VEA	Allowed outside setback; expansion within setback requires variance except that an increase up to 10 percent of the gross floor area of the existing primary structure prior to the expansion is permitted with setback restoration.	Allowed with partial compliance to existing standards	Expansion outside setback allowed when no net loss standard is met with mitigation sequencing
Vegetation Conservation	a. Within Buffer/Set back b. Site-wide	Within buffer: 100% native vegetation retention required	Within Setback: All trees require retention	Within Setback: Preserve 75% of 15' Vegetation Enhancement Area (VEA)	Within setback: All significant trees shall be retained; tree replacement required for allowed activities	Within setback: All significant trees shall be retained; tree replacement required for allowed activities	Within setback: All significant trees shall be retained; tree replacement required for allowed activities

Jurisdictional Comparison	Issaquah	Redmond	Sammamish	Kirkland	Renton	Lake Forest Park
	Site-wide: 35% significant tree	Site-wide: 35% significant tree	Site-wide: No Tree Preservation	Site-wide: preservation of significant trees	Site-wide: preservation of significant trees	Site-wide: preservation of significant trees