City of Bellingham

CITY COUNCIL AGENDA BILL

SUBJECT FOR AGENDA OF COUNCIL ASSIGNMENT BILL NUMBER

Work-session on the draft Shoreline Master Program regarding Lake Whatcom.

FOR AGENDA OF COUNCIL ASSIGNMENT BILL NUMBER

TIME REQUIRED DEPART. CONTACT RECEIVED IN COUNCIL OFFICE

ATTACHMENTS
- Staff Report
- Nonconforming shoreline parcel map
- Shoreline Residential Designation map
- Proposed revisions

CLEARANCES INITIAL DATE

Steven Sundin, Planning

 ATTACHMENTS

CATEGORY

- Public Hearing
- Evening Presentation
- Committee Briefing
- Mayor's Report
- Consent Agenda

Legal

Mayor or CAO

SUMMARY STATEMENT:
A public hearing was held on July 27th, 2009 on the draft Shoreline Master Program (SMP). The main issues raised were: inadequacy of the proposed 50-foot buffer to provide sufficient water quality protection and habitat function, inclusion of the TMDL Response Plan into certain sections of the draft SMP including the Restoration Plan (Appendix B), eliminating the exemption for use of chemical applications to control noxious vegetation, nonconformity and implementation of Native Vegetation Protection Areas in order to restore lawn areas into properly functioning shoreline buffer area. Staff has proposed revisions to address and clarify these issues raised at the July 27th public hearing.

Previous Council Action: Two public hearings and seven work-sessions over the last two years.

FISCAL IMPACT:
Total Fiscal Impact:
None.

Source of Funds:

RECOMMENDED ACTION:

☐ Information only; no action required ☒ Provide direction to staff
☐ Move to adopt ordinance or resolution ☐ Move to approve appointment
☐ Other ☐ Award Bid to lowest bidder

COMMITTEE RECOMMENDATION / ACTION:

COUNCIL ACTION:
I. SUMMARY:

The draft Shoreline Master Program (SMP) includes policies and regulations for development within the waters of Lake Whatcom and those upland areas within 200-feet of the ordinary high water mark.

All of Lake Whatcom’s shoreline within the city limits is designated ‘Shoreline Residential’ with the exception of Bloedel Donovan Park, the west side of Scudder’s Pond and Old Mill Village.

The map for Lake Whatcom shoreline designations can be found in Section 22.11.10 of the draft SMP which can be accessed online here:

http://www.cob.org/services/neighborhoods/community-planning/environmental/index.aspx

The shoreline residential section of the draft SMP can be found in 22.03.30 C. on page 29.

This was drafted prior to the release of the TMDL study for Lake Whatcom and the code revisions to the Lake Whatcom Reservoir Regulatory Chapter (BMC 16.80) and the Stormwater Ordinance (BMC 15.42) passed earlier this year. The ongoing development of the TMDL Response Plan and these revisions are the most up to date and scientific information available for the protection and improvement of water quality of Lake Whatcom.

II. REVISIONS:

Staff proposes clarifying revisions in different sections of the draft SMP that will improve its effectiveness in protecting water quality and improving near-shore habitat of Lake Whatcom. These sections are:

- Shoreline Goals
- Allowed activity in buffers
- Shoreline Designations
- Shoreline Native Vegetation Management
- Buffer Widths
- Water Quality / Stormwater / Nonpoint Pollution
- Nonconformity
- Restoration Plan
- Exemptions

Conceptually, the revisions to the draft SMP should incorporate appropriate elements of BMC 16.80 as well as provide clarity about what is allowed outside of and inside of required buffer areas. BMC 16.80 represents the most up to date and scientific information for protection and improvement of water quality.

Furthermore, the ongoing work that is occurring on the TMDL Response Plan should be incorporated into certain sections the draft SMP and the Restoration Plan in Appendix B.

The proposed revisions can be found in ATTACHMENT 2.

Staff has consulted with City individuals who are directly involved in the development of the City’s TMDL Response Plan. Some of these same city staff were involved in the amendments to BMC 16.80 and BMC 15.42. The purpose of this consultation was to receive recommendations on how to integrate the TMDL Response Plan with the Restoration Plan in the City’s SMP. (The Restoration Plan is in Appendix B.)

It is anticipated that the City Council will not review the initial draft of the TMDL Response Plan until January of 2010. It is anticipated that the Plan would be forwarded to the Department of Ecology in February 2010. After that the Plan would be packaged and submitted to the Environmental Protection Agency for final review and approval.

The concept is that the Inter-jurisdictional Coordination Team would blend its 2010 – 2014 Work Plan with appropriate elements from the Recommended Management Actions for the Protection and Restoration of the Lake Whatcom Reservoir put forward by the Lake Whatcom Reservoir Technical Review Task Force in May of 2009.

Summarized, the TMDL Response Plan is likely to evolve as it goes through its peer review process over the next several months and into 2010. Because of this – it would be problematic to pull out specific sections of the Draft TMDL Response Plan and place them into a Draft Restoration Plan within the Draft SMP.

REVISION CONCEPT: Incorporate by reference the TMDL Response Plan into the following sections:

- 22.02.20: Shoreline Goals
- 22.03.30.C: Management Policies for the shoreline residential designation (Lake Whatcom shorelines)
- Appendix B: Restoration Plan.

Please see REVISIONS 1-3 in ATTACHMENT 2.

NOTE: The list of specific projects from the Restoration Plan and include them as a separate attachment so that as restoration projects are identified, revising the list would not require a lengthy SMP amendment process. (The Appendices of the draft SMP are included and reviewed by DOE as part of the final SMP.)

BUFFER WIDTH AND NONCONFORMITY

City staff acknowledges that there is a range of best available science and also a range of implementation of that science into required buffers for lakes.

The draft SMP currently under review requires a 50-foot buffer. This was the Planning Commission’s recommendation after consideration of public comments, a work session as well as an additional meeting with Ann Eissinger, Clare Fogelsong and Public Works Operations staff to better understand how the lake is managed and how protection could be improved. (The City’s 1989 program requires 25-feet.)
Whatcom County's SMP requires a 100-foot buffer along nearly all portions of the northern half of Lake Whatcom. Other municipalities that are either currently or have recently updated their SMP's have lake buffers that vary from a minimum of zero for Redmond's Lake Sammamish to 25 feet for Kirkland and Mercer Island on Lake Washington as well as 25 feet for the developed portion of Lake Chelan to as much as 200-feet for Lake Wenatchee.

Available science generally states that a 100-foot buffer provides about 75-85% of the water-quality and habitat functions in order to be properly functioning. Further incremental additions of 25-feet provide less and less function on a percentage basis. Summarized, the law of diminishing returns has been documented.

There are approximately 161 total parcels within the Shoreline Residential designation. This includes parcels developed with single family residences and multi-family residences.

Number of structures within buffer ranges measured as a cumulative % (approx):

- 67 have structure within 50-feet
- 29 have structure between 50 and 75-feet
- 16 have structure between 75 and 100-feet
- 49 have structure beyond 100-feet

Whatever buffer width is chosen from the range above there will be resulting nonconformities. Please see ATTACHMENT 1; Nonconforming Shoreline Parcels.

REVISION CONCEPT: Revise the buffer width for the shoreline residential designation if appropriate.

Please see REVISION 4 in ATTACHMENT 2.

Single family residences that have structures such as a house, garden shed, patio or deck, within a required buffer would be considered nonconforming development.

On page 61 of the draft SMP expansion of nonconforming single family residences is addressed in Section 22.05.40 E. As written, expansion requires a shoreline conditional use permit. Shoreline CUP's require a public hearing before the Hearing Examiner and are then forwarded to Department of Ecology for final approval. This process can be cost prohibitive as well as time prohibitive given the seasonal restrictions in place for development within the watershed. If rules and process become too prohibitive there is a risk that property owners could choose to do nothing at all. This could result in little or no improvement of shoreline properties over time.

REVISION CONCEPT: Create an administrative Type II CUP process for expansion of single family residences that is less costly, is approved by the Director subject to the Conditional Use criteria in the SMP. Shoreline CUPs are required to be forwarded to the Department of Ecology for final approval. This would retain the opportunity for DOE to implement additional conditions on the permit in order to be consistent with the TMDL Response Plan. (This concept would require a revision to Title 21 – Administration – and could be done at the time the FINAL SMP Adopting Ordinance is approved.)

Furthermore, new impervious area would not be allowed to encroach beyond the current extent of the footprint area into required buffer areas.

Please see REVISION 5 in ATTACHMENT 2.
EXEMPTIONS FOR CHEMICAL APPLICATIONS TO CONTROL AQUATIC / UPLAND NOXIOUS VEGETATION

Within Section 22.05.20 on Page 50 of the draft SMP certain activities are specified that are exempt from a shoreline permit and its associated process. (These activities still must comply with the standards in the program.)

Subsection B.1.n (page 54) allows – as an exempt activity - the control of noxious weeds through use of an herbicide or other chemical applications or treatment methods as established by the Department of Agriculture or Department of Ecology.

REVISION CONCEPT: Revise the specific exemption to require a shoreline permit for chemical applications for aquatic and upland noxious weed control within shorelines on Lake Whatcom.

Please see REVISION 6 in ATTACHMENT 2.

ALLOWED ACTIVITIES IN BUFFERS

If a property owner desires to develop or add to existing impervious footprint along the Lake Whatcom shoreline they first must comply with the requirements in BMC 16.80. This chapter regulates how much impervious area can be developed on individual lots. It also directs property owners to choose among two alternatives for stormwater management; establishment / retention of a native vegetation protection area or developing an engineered system such as a rain garden, infiltration gallery or filtration trench.

Whichever stormwater management mechanism is chosen it should be placed within the buffer nearer to the shoreline edge with certain conditions. In this way then, lawns are converted over time to buffer areas that would perform vital environmental services such as water quality protection and near-shore habitat.

REVISION CONCEPT: Add installation of either of these stormwater mechanisms required in BMC 16.80 to the allowed activities within buffers areas (specific only to Lake Whatcom) found on page 76 in Section 22.08.10 B.4. Conditions would include; specification on where native vegetation should be placed within the buffer, removal of lawn areas, distance from the shoreline edge that engineered mechanisms should be installed, preservation of existing native vegetation and allowances for maintenance.

Please see REVISION 7 in ATTACHMENT 2.

SHORELINE NATIVE VEGETATION MANAGEMENT

Native vegetation is important within shoreline buffers for lakes because it provides improvement and protection of water quality, near shore upland habitat structure for cover, refuge and food sources.

The recent code amendments to BMC 16.80 include a definition of and requirements for establishing a Native Vegetation Protection Area (NVPA) for certain thresholds of development in the watershed. This concept was implemented in order to protect further degradation of water quality in Lake Whatcom.

Whenever required, these NVPA’s should be established in a required buffer so that these buffer areas are performing vital ecological services. Grassy lawn areas within required buffer areas provide very little – if any - ecological function.
REVISION CONCEPT: Include references to the NVPA requirements in BMC 16.80 for development within the shoreline jurisdiction of Lake Whatcom.

Please see REVISION 8 in ATTACHMENT 2.

WATER QUALITY / STORMWATER / NON-POINT POLLUTION

REVISION CONCEPT: This section should be revised to allow for structurally engineered stormwater management facilities for development/redevelopment within the shoreline residential designation and to be consistent with the other revisions proposed.

Please see REVISION 9 in ATTACHMENT 2.

III. NEXT STEPS

Staff would make the revisions to these sections as directed by the City Council and provide them for review one final time before including them in the final draft SMP. The final draft SMP as well as the adopting ordinance will be considered at a final public hearing on November 23, 2009.

IV. STAFF RECOMMENDATION:

Direct staff to make the revisions as specified in ATTACHMENT 2 of this Staff Report.

Staff report prepared by: Approved for submittal by:

Steven Sundin, Planner

Tim Stewart, Planning Director
"Shoreline Residential" designations shown in bold black line.

Legend:
- **NATURAL** (NAT)
- **SHORELINE RESIDENTIAL** (RES)
- **URBAN CONSERVANCY** (UC)
- **PROPOSED WATERFRONT ACCESS**
REVISION 1: 22.02.20 SHORELINE GOALS

I. WATER QUALITY

All development actions taken Citywide affect water quality. This Program should implement policies and regulations that improve water quality of our shorelines.

1. Goal

   a. All development along the shorelines of the City should include measures to protect and/or improve water quality.

2. Objectives

   The 2006-2009 Lake Whatcom Work Plan should be implemented. This represents the second five-year work plan developed for the management of Lake Whatcom as a drinking water reservoir. Both plans were developed from a list of goals and policies adopted by the Joint Councils and Commissioners in a 1992 Joint Resolution. In addition, the plans are based on priorities established by the Joint Councils and Commissioners in 2004.

   g. As of 2009, the TMDL Response Plan is the most current and up to date scientific information available to protect and improve the water quality of Lake Whatcom. This response plan includes elements of the 2010-2014 Work Plan established by the Inter-jurisdictional Coordinating Team (ICT) as well as the Recommended Management Action for Protection and Restoration of the Lake Whatcom Reservoir, prepared by the Lake Whatcom Reservoir Technical Review Task Force in May 2009. This plan should be implemented either through future code revisions or in the development of future watershed protection programs.

The complete text of this excerpt can be found on page 19: Section 22.02.20 I.

ACCEPT REJECT REVISE

REVISION 2: 22.03.30 SHORELINE ENVIRONMENT DESIGNATIONS

C. SHORELINE RESIDENTIAL – MANAGEMENT POLICIES

3. As of 2009, the TMDL Response Plan is the most current and up to date scientific information available to protect and improve the water quality of Lake Whatcom. This response plan includes elements of the 2010-2014 Work Plan established by the Inter-jurisdictional Coordinating Team (ICT) as well as the Recommended Management Action for Protection and Restoration of the Lake Whatcom Reservoir, prepared by the Lake Whatcom Reservoir Technical Review Task Force in May 2009. This plan should be implemented either through future code revisions or in the development of future watershed protection programs.

The complete text of this excerpt can be found on page 29: Section 22.03.30 C.

ACCEPT REJECT REVISE

The Interjurisdictional Coordinating Team (ICT) manages the work plan that details all of the current and planned activities / programs that help implement the LWMP. The ICT has updated its recommendations for the 2006-2009 2010 – 2014 Lake Whatcom Work Plan. Each program area from above has a task, an action and a finished work product.

The work plan can be viewed at http://lakewhatcom.wsu.edu or on the City’s website: http://www.cob.org/pw/lw/index.htm
REVISION 3: RESTORATION PLAN – APPENDIX B

Include references to the ongoing development of the TMDL Response Plan in the following sections:

Section 4: Restoration Priority Goals and Objectives: page 4

Section 5: Restoration Implementation Strategies and Opportunities: page 16 – insert at top of the list

Table 1: Restoration Goals and Objectives: This is a matrix that includes the following items: Goal / Objective / Restored Natural Process / Ecologic Function / Potential Metrics (measurements) Table 1 begins on page 8 – insert at top of list

Table 2: Restoration Opportunities and Objectives: This is a matrix that includes the following items: Restoration Opportunity / Restoration Objective / Restoration Activity / Monitoring Activity Table 2 begins on page 24 – insert at top of list.

REVISION 4: BUFFER WIDTHS

Section 22.03.30.C.10.c refers to the table in 22.11.30.C for setbacks, buffers and height in the shoreline residential designation.

Currently, the buffer requirement is 50-feet as measured from the elevation of the OHWM (elevation 314-feet above sea level)

The complete text of this excerpt can be found on page 32: Section 22.03.30.C.10.

REVISION 5: 22.05.40 NONCONFORMANCE

E. Enlargement or Expansion of a Single family residence. A single family residence may be enlarged or expanded subject to approval of a conditional use permit. Expansion of a non-conforming single family residence shall be subject to approval of a Type II administrative conditional use permit provided the following conditions can be met (in addition to those in Section 22.06.50.C.):

1. There is no further encroachment into the required buffer beyond the furthest extent of the foundation of the existing structure but not including foundations for patios, decks, pier abutments and other appurtenances.

2. The expansion is compliant with all other BMC requirements.

The complete text of this section can be found on page 60: Section 22.05.40.E

REVISION 6: 22.05.20 EXEMPTIONS

A. Exempt Developments

1. The following activities shall be considered exempt from the requirement to obtain a shoreline substantial development permit:

   n. The process of removing or controlling aquatic noxious weeds, as defined in RCW 17.26.020, through the use of an herbicide or
other treatment methods applicable to weed control that are recommended by a final environmental impact statement published by the Department of Agriculture or the Department of Ecology jointly with other state agencies under Chapter 43.21C RCW except that, within the shorelines of Lake Whatcom this exemption shall not apply and a shoreline permit shall be required.

The complete text of this section can be found on page 54: Section 22.05.20.B.1.n.

ACCEPT
REJECT
REVISE

REVISION 7: 22.08.10 ALLOWED ACTIVITIES IN SHORELINE BUFFERS

B. Regulations

4. The following specific activities may be permitted as part of an authorized use and subject to submittal of a critical area report within a shoreline, or a critical area within shorelines and/or their required buffers when they comply with the applicable policies and regulations in Chapters of this chapter and BMC 22.03, 22.04, 22.08 and 22.09:

i. Establishment of a Native Vegetation Protection Area and / or an engineered stormwater management mechanism(s) that is required per BMC 16.80 for development or redevelopment within the shorelines of Lake Whatcom provided that:

   i. Existing native trees and shrubs are not removed or, they may be relocated on site.

   ii. Structural engineered stormwater mechanisms shall be setback a minimum of 25-feet from an existing bulkhead or from the OHWM or as otherwise required by BMC 15.42, whichever is greatest.

The complete text of this excerpt can be found on page 77: Section 22.08.10.B.4.i.

ACCEPT
REJECT
REVISE

REVISION 8: 22.08.100 SHORELINE NATIVE VEGETATION MANAGEMENT

B. Regulations

1. For development on all shorelines, including within a required buffer area, the following shall apply:

   a. Removal of or alteration to any native vegetation within the shoreline jurisdiction including within critical areas is strictly prohibited unless such activity is required for a permitted use or is determined to be a hazard tree as specified below.

   b. Proposed removal of native vegetation for a permitted use shall be reviewed per the mitigation sequencing specified in BMC 22.08.2040 of this Title.

   c. The following standards shall apply for removal and replacement of existing native vegetation to all shoreline designations except as specified in iv and v, below:

      i. Removal of native trees greater than 6 inches diameter at breast height (dbh) shall be replaced at a 3:1 ratio with native species and shall be re-established within any required buffer on the project site, except as specified in iv, below.

      ii. Required buffer areas for riparian, marine and Lake Padden shorelines shall be installed with additional native vegetation that yields a total density mix of 2 native trees, 10 shrubs and groundcover where none is present
per every 100 square feet. (EXCEPT for as specified in iv. and v., below.)

New native vegetation to be installed within required buffers shall include species types that are capable of achieving the objectives specified in the 2004 SCI Functional Analysis per the subject reach.

iii. For development that includes expansion of more than 10% of an overall existing development footprint, including single-family residences, the requirements in i and ii, above, shall apply to every 100 square feet of additional footprint above the aforementioned 10% and shall be installed within any required buffer. (EXCEPT within the Urban Maritime shoreline designation, and New Whatcom the Waterfront District ‘water-oriented use’ sub-areas.)

iv. Required buffer areas for Lake Whatcom shall include the same densities as specified in ii and iii, above, however, required trees are not required to be planted in buffer areas. New shrubs and groundcover shall be installed within buffer areas, within close proximity to or adjacent to the shoreline and may be clustered or combined with other existing vegetation.

v.iv. There are no required buffers for those Urban Maritime and New Whatcom ‘water-oriented use’ sub-areas and hence no required native vegetation management standards apply.

d. For development or redevelopment, as defined in BMC 16.80, that occurs within the shoreline residential designation, native vegetation shall be installed in required buffer areas as required in subsection 3, below and BMC 16.80.

2. Within a critical area report as specified within Chapter 22.06 BMC 16.55.210 and the additional requirements within BMC 16.55.480.C.1. (Fish and Wildlife Habitat Conservation Areas) (OLCR), a Native Vegetation Management Plan for the project site including the associated buffer shall include the following information except as provided in 3, below:

a. The predevelopment quantity, species type, distribution, approximate height of native vegetation, diameter at breast height (dbh) for trees only, successional stage of overall vegetative cover, potential native vegetation types, soil type characteristics, a reference site and any existing hazard trees on the entire site. Said information shall be indicated and represented on a site plan drawn to scale and shall be reflected on an accompanying species and count matrix.

b. Identification of native vegetation to be removed and protected as a result of the proposed site plan.

c. Identification of any non-native or noxious vegetation.

d. Identification of the following; new trees to be installed and that specify installation size of a minimum height of 12 inches – 18 inches and minimum of ¾ inch caliper in size; shrubs shall be of at least four different varieties or those recommended by said professional that will accompany the potential native vegetation types; ground cover and a minimum of 4 inches of wood chip mulch distributed over the entire planting area.

e. Methodology for removal of any noxious or non-native vegetation, necessary soil amendments, installation and maintenance as described above.

f. Preparation of a financial surety (an assignment of funds or surety bond) that accounts for 150% of the cost of a five-year maintenance and monitoring plan that ensures a survival rate of 100% for trees and 85% for all other vegetation. The five-year maintenance and monitoring period shall commence at the time the required native vegetation has been installed, and inspected and verified by a representative from the Planning and Community Development Department.

g. 'Volunteer' native vegetation is allowed to be counted towards the survival rate percentage requirement as specified in f., above.
3. For Native Vegetation Protection Areas that are required for development or redevelopment within the shorelines of Lake Whatcom as required by BMC 16.80 the critical area report shall contain the information specified in BMC 16.80.080 E.2.

The complete text of this excerpt can be found on page 103: Section 22.08.100.B.

ACCEPT  REJECT  REVISE

REVISION 9:  22.08.110  WATER QUALITY, STORMWATER AND NONPOINT POLLUTION

A. Policies

1. Shoreline master programs shall, as stated in RCW 90.58.020, protect against adverse impacts to the public health, to the land and its vegetation and wildlife, and to the waters of the state and their aquatic life, through implementation of the following principles:
   a. Prevent impacts to water quality and stormwater quantity that would result in a net loss of shoreline ecological functions, or a significant impact to aesthetic qualities, or recreational opportunities.
   b. Ensure mutual consistency between shoreline management provisions and other regulations that address water quality and stormwater quantity, including public health, stormwater, and water discharge standards. The regulations that are most protective of ecological functions shall apply.
   c. Existing public stormwater management systems and facilities should be retrofitted and improved to incorporate Low Impact Development techniques whenever feasible and as specified in BMC 15.42.
   d. Improving water quality is one of the primary goals within the Restoration Plan (APPENDIX B). The water quality improvement objectives should be considered and implemented into future watershed planning including prioritization and identification of retrofitting opportunities.
   e. Drainage from single-family residences should not be tight-lined directly to or over shoreline bluffs or steep banks. Drainage, to the maximum extent feasible, should be designed or retrofitted to include water-quality measures that filter out pollutants common to single-family residences such as fertilizers and pesticides and should be discharged at a point that does not prematurely erode the shoreline or the face or toe of said bank / bluff.
   f. Boating practices on Lake Whatcom, Lake Padden and Bellingham Bay including operation and maintenance should be conducted in such a manner that prevents harmful substances from entering the water such as gasoline, two-stroke engine fuel, paint and wood conditioner and other boat related substances.

B. Regulations

1. Stormwater management facilities shall be developed in such a manner that there is no net loss of ecological function.

2. At a minimum, all phases of development shall be consistent with the requirements within BMC 15.42, as amended.

3. When permitted to be located within shorelines, critical areas or their required buffers, stormwater management facilities shall also be subject to the applicable requirements in BMC Chapter 22.08.40., BMC 16.55, BMC 16.80 and BMC 15.42. (OLCR)

4. All phases of development shall provide an 'enhanced' level of stormwater management per the latest version of the Department of Ecology Stormwater Manual for Western Washington.

5. Low Impact Development (LID) techniques shall be considered and implemented to the greatest extent practicable throughout the various stages of development.
including site assessment, planning and design, vegetation conservation, site preparation, retrofitting and built-out management techniques.

6. Stormwater management facilities that are proposed within a required buffer of a Shoreline Residential designation shall not include any surface structures (except for catch basin covers or cleanouts) or require engineered shoreline stabilization.