
**WHATCOM COUNTY
PLANNING & DEVELOPMENT SERVICES
STAFF REPORT**

I. OVERVIEW

File # PLN2011-00015

File Name: Lake Whatcom Watershed Overlay District

Applicant: Whatcom County Planning & Development Services

Requested Action:

Amend Whatcom County Code Title 20 to create a "Lake Whatcom Watershed Overlay District" for stormwater and land use regulations pertaining to Lake Whatcom.

Reason for Request:

Whatcom County is responding to a request made by the Washington State Department of Ecology to accelerate the timeline for the development and implementation of regulations addressing phosphorus loading resulting from new development in the Lake Whatcom watershed.

Recommendation:

Staff recommends approval of the requested Title 20 Zoning text amendment as shown in Exhibit A for the reasons stated in Section III of this report.

II. BACKGROUND

In March 2011, Whatcom County Planning and Development Services and Public Works Departments were tasked to respond to a request made by the Washington State Department of Ecology to accelerate the timeline for the development and implementation of regulations addressing phosphorus loading resulting from new development in the Lake Whatcom watershed. The proposed zoning text amendments address the development and implementation of those regulations.

Lake Whatcom has been placed on the Federal Clean Water Act 303(d) list for low dissolved oxygen and fecal coliform. The Lake Whatcom Watershed Total Phosphorus and Bacteria Total Maximum Daily Loads (TMDL): Water Quality Study Findings (November 2008) provides estimates of phosphorus loads into the lake, and through modeling, determined development scenarios to meet water quality standards. Low dissolved oxygen levels has been connected to phosphorus loading resulting in sediments entering into Lake Whatcom through land disturbance activities such as development. To comply with the Federal Clean Water Act, Whatcom County must develop a response to address development through the

local regulatory process.

Whatcom County has partnered with the City of Bellingham and Lake Whatcom Water and Sewer District since 1992 to develop goals and policies to guide actions in the Lake Whatcom watershed. In 1998, the three entities entered into an interlocal agreement for the joint management of Lake Whatcom, which was later called the Lake Whatcom Management Program (LWMP). Staff from each of the jurisdictions participate in an Interjurisdictional Coordinating Team (ICT) who develop the 5-year work plans to address water quality concerns through twelve different program areas. The 2011-2014 LWMP Work Plan has been submitted to the Department of Ecology as part of a Summary Implementation Strategy (SIS) for the Environmental Protection Agency to approve. Once approved, the Detailed Implementation Plan (DIP) will be developed to outline long term goals and tasks to achieve water quality compliance, and these documents would account as the Water Quality Cleanup Plan.

Currently, the 2011-2014 LWMP Work Plan outlines tasks to continue to assess the effectiveness of development regulations, particularly in regards to Lake Whatcom's listing, with its main focus on phosphorus loading from development in the watershed. The Department of Ecology has also submitted an outline of the technical criteria of which Whatcom County would be measured to meet allocations for new development for the TMDL. (Exhibit E) The proposed code changes have achieved this according to Department of Ecology.

Intent of Proposed Code Changes

Whatcom County currently has regulations regarding stormwater and land use in the Lake Whatcom watershed in three different sections of Title 20 (WCC 20.71 Water Resource Protection Overlay, WCC 20.80.635 Stormwater Special Districts, and WCC 20.80.735 Water Resource Special Management Areas). The proposed code changes would combine the current regulations from the three sections, add sections addressing the specific criteria to manage phosphorus loading on new development outlined by the Department of Ecology (Exhibit E), and make any necessary modifications to the existing sections to make them consistent to meet the intent of the chapter. (Ex. Impervious surface limitations were modified because they are no longer tied to the zoning, but the amount can be permitted to the extent that the stormwater runoff is treated to new standards.)

The Department of Ecology's criteria to meet phosphorus loading allocations refers to "new development". This term is defined in the Washington State Department of Ecology's 2005 Stormwater Management Manual for Western Washington (WSDOE SWMMWW) as:

" Land disturbing activities, including Class IV -general forest practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of impervious surfaces; and subdivision, short subdivision and binding site plans, as

defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development.”

“Redevelopment” is defined by the WSDOE SWMMWW as:

“On a site that is already substantially developed (i.e., has 35% or more of existing impervious surface coverage), the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities.”

The proposed amendments are intended to address “new development”, as well as address some retrofit opportunities when the development action is replacing existing impervious surface, that may be considered redevelopment per the WSDOE SWMMWW.

Through the initial discussions between the Department of Ecology and Whatcom County, both staffs agreed that the intent of these proposed regulations were to meet criteria of no additional phosphorus loading from new homes being built in the watershed. This would mean that new homes built in the Lake Whatcom watershed could not generate an increase in loading above that from a forested or native vegetated site, and maintenance of the treatment system into the future must be assured. It is also understood that Whatcom County still has a responsibility to address loading allocations from existing development and redevelopment in the watershed as part of the TMDL, and that the proposed regulations would be a first step towards achieving those goals of the TMDL.

New Thresholds For Stormwater Review

The proposed code has new thresholds that would require certain development actions to go through a stormwater review and would apply new stormwater standards to treat phosphorus. They are:

- (a) A land disturbing activity (per the Washington State Department of Ecology Stormwater Management Manual for Western Washington definition) of more than 5000 square feet of land, and/or
- (b) Creates or adds more than 200 square feet of new, replaced, or new plus replaced (as defined by the WSDOE SWMMWW):
 - 1. Impervious surface area, or
 - 2. Pervious or porous pavement or paver area,
- (c) Creates a subdivision or short subdivision

Stormwater Review and Standards

The standards for addressing stormwater come from the WSDOE SWMMWW as outlined by the DOE's criteria for addressing phosphorus loading allocations. The three options for development allow for flexibility in site design. If the any of the above new thresholds are reached, one of the following options must be employed to treat stormwater runoff from the particular development action:

- (a) Full dispersion, where the development is limited to 10% impervious surface area on the development site where stormwater runoff from that the site is dispersed on the ground through native vegetation, or
- (b) Full infiltration, all stormwater generated by new development is 100% infiltrated into the ground as calculated by Ecology's Continuous Runoff Computer Model through infiltration trenches, infiltration basins, infiltration drywells, etc, or
- (c) Engineered stormwater facility where a licensed engineer may employ all techniques and all technologies available to not exceed the phosphorus loading profile of the property from its native vegetated condition.

These options are included in the proposed code section 20.51.420.

Coordination With Other Jurisdictions and Agencies

Department of Ecology (DOE)

Whatcom County staff held five coordination meetings with DOE staff throughout the development of the proposed code changes to ensure that the technical criteria set forth by DOE was being met by Whatcom County, and that Whatcom County would be assured compliance with portions of the TMDL dealing with phosphorus loading from new development into Lake Whatcom.

Reports on permit activity in the Lake Whatcom watershed were submitted to the Department of Ecology from June 1, 2011 (start date of construction season in the Lake Whatcom watershed) and September 16, 2011 (last day of issuing permits in the Lake Whatcom watershed).

City of Bellingham

Whatcom County and City of Bellingham staff met and discussed the proposed regulations, and Whatcom County staff received questions and comments on the proposal from the City. Through the LWMP, Whatcom County and City of Bellingham staff coordinated on various projects, including land use and stormwater regulation updates to help maintain predictability and achieve consistency.

Sudden Valley

Whatcom County staff met with Sudden Valley staff to discuss the proposed regulations. Sudden Valley has made a commitment to support the proposed regulations, and will make any necessary amendments to the architectural design guidelines necessary to administer the code.

Public Outreach

Public Workshops were held on November 1, 2011 at the Whatcom County Council Chambers, and on November 2, 2011 at Bloedel-Donovan Park Facility. Notifications were sent out to the Lake Whatcom email list provided by the Interjurisdictional Coordinating Team (ICT) for the Lake Whatcom Management Program, the Bellingham Herald, The Cascadia Weekly, The Whatcom Watch, and posted on the Lake Whatcom Management Program and Whatcom County Planning and Development Services website.

III. ANALYSIS OF THE PROPOSED AMENDMENT

The following analysis evaluates the amendments in relation to approval criteria for zoning amendments (WCC 20.90.050(2)(a)).

1. Evaluate amendment's relationship to the goals, policies and objectives of the comprehensive plan

GMA Goals

(10) Environment. Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.

Discussion: Lake Whatcom is the drinking water source for over half of Whatcom County. It had also been listed on the State's 303(d) list for an impaired waterbody. The proposed amendments address land use and stormwater controls for development to address contributions of phosphorus going into the lake and protect water quality.

Comprehensive Plan Goals and Policies

Land Use (LU) Policy 2U-6: Whatcom County and Bellingham should continue to coordinate protection and development within the Lake Whatcom Watershed.

Discussion: Through the Lake Whatcom Management Program, Whatcom County has been coordinating with the City of Bellingham on Lake Whatcom watershed development regulations working towards consistent standards between the jurisdictions, and is continually addressing this within tasks in the 2010-2014 Lake Whatcom Management Program 5-Year Work Plan.

LU Policy 2SS-3: Recognize that all users of Lake Whatcom water have an interest in the resource and should share in the cost of its protection.

Discussion: The Lake Whatcom Management Program's partners are Whatcom County, the City of Bellingham, and the Lake Whatcom Water and Sewer District. Other interested parties have participated in the Management Program, such as Sudden Valley Community Association.

LU Policy 2SS-7: Work cooperatively with the City and Water District 10 to develop benchmarks to determine the effectiveness of management options; when goals have been achieved; or when additional actions are necessary.

DISCUSSION: The five-year work plans developed by the Lake Whatcom Management Program identify performance measures for the tasks within the work plans. An annual update to the work plan is provided evaluating those measures, as well as identifying the accomplishments of that year.

Environment (ENV) GOAL 11F: Protect and enhance Whatcom County's surface water and groundwater quality and quantity for current and future generations.

- **ENV Policy 11F-4:** Support the completion and implementation of local/state Watershed Action Plans, the Lake Whatcom Management Program, NPDES Phase II Permitting, and the WRIA Watershed Management Projects as some of the means of addressing non-point source pollution.
- **ENV Policy 11F-5:** Pursue the adoption and implementation of ground and/or surface water management plans and integrate the plans into local comprehensive plans. Designate the Lake Whatcom and Lake Samish Watersheds as a high priority in this effort.
- **ENV Policy 11F-6:** In conjunction with all jurisdictions develop and adopt programs to protect water quality and quantity within watersheds, aquifers and marine water bodies which cross jurisdictional boundaries.

Discussion: The proposed amendments continue the Whatcom County's dedication to protecting water quality of Lake Whatcom as a drinking water source. They enhance and modify current regulations to meet water quality standards set forth by the State.

ENV GOAL 11G: Protect water resources and natural drainage systems by controlling the quality and quantity of stormwater runoff.

- **ENV Policy 11G-1:** Manage stormwater runoff to minimize surface water quality and quantity impacts and downstream impacts on channel morphology, property owners, and aquatic habitats.

- **ENV Policy 11G-2:** Maintain or enhance, when appropriate, natural drainage systems and natural water storage sites in order to better protect water quality, moderate water quantity, minimize environmental degradation, and reduce public costs.
- **ENV Policy 11G-3:** Limit the alteration of natural drainage systems and natural water storage sites without acceptable mitigating measures. Such measures should not significantly degrade water quality or fish and wildlife habitat, and should not increase hazards to the community.
- **ENV Policy 11G-5:** Evaluate the role of watersheds in the maintenance of water quality and quantity and determine what cumulative impacts development activity may have on watershed hydrology.
- **ENV Policy 11G-6:** Develop specific stormwater management programs for each drainage basin within the county's jurisdiction which may be impacted by urban levels of development. Recognize the Lake Whatcom Watershed, Lake Samish, and Drayton Harbor as high priorities in this effort. Coordinate efforts with the Lake Whatcom Management Committee program, the Lake Samish Watershed Management Advisory Committee, the shellfish protection districts, and other watershed management plans.
- **ENV Policy 11G-7:** Establish, as a high priority, a stormwater maintenance program which assures that stormwater systems function at or near design capacity.
- **ENV Policy 11G-8:** Encourage the use of Low Impact Development Strategies. Minimize the amount of impervious surface whenever practicable by using natural engineering design methods such as the use of open, grassed street swales instead of curbs and gutters. Where feasible, encourage alternate surfacing options and other techniques associated with low impact development.
- **ENV Policy 11G-9:** Develop and administer stormwater management standards as required by the NPDES Phase II Permit.
- **ENV Policy 11H-5:** Provide measures to mitigate water quality and quantity impacts from both public and private alterations of natural drainage systems.

Discussion: The proposed amendments continue the Whatcom County's dedication to protecting water quality of Lake Whatcom. They further address land use and stormwater management in the Lake Whatcom watershed, specifically phosphorus loading, and take into account site specific constraints and options.

2. Environmental Review

Environmental Review – State Environmental Policy Act (SEPA)

The Whatcom County Planning and Development Services SEPA Official reviewed the SEPA checklist for this non-project action, and issued Determination of Non-Significance (DNS) on November 2, 2011.

IV. PROPOSED FINDINGS OF FACT AND REASONS FOR ACTION

- 1) Whatcom County Planning and Development Services requested a Zoning Text amendment to Title 20 of the Whatcom County Code. The Zoning application was given the file number PLN2011-00015.
- 2) On March 10, 2011, Whatcom County sent a letter to the Department of Ecology communicating Whatcom County's commitment to accelerate the timeline for the development and implementation of regulations addressing phosphorus loading resulting from new development in the Lake Whatcom watershed. (Exhibit D)
- 3) Whatcom County received criteria from the Department of Ecology regarding phosphorus loading from new development to be utilized in developing regulations to comply with the TMDL. (Exhibit E)
- 4) Between March 23, 2011 and October 26, 2011, Whatcom County staff held (5) coordination meetings with the Department of Ecology to update and refine proposed regulations based on Whatcom County's letter of commitment dated March 10, 2011 to the Department of Ecology to expedite amending Title 20 to address criteria affecting development in the Lake Whatcom watershed.
- 5) Whatcom County provided the Department of Ecology reports on permit of activity within the Lake Whatcom watershed for the construction season (June 1, 2011 to September 16, 2011).
- 6) On October 6, 2011 a Request for an Expedited Review of Development Regulations was filed with the Washington State Department of Commerce.
- 7) On October 11, 2011 the Department of Commerce notified Whatcom County that the Expedited Review notice was received and the proposal was forwarded to public agencies for comment.
- 8) As required by WCC 20.90.050(2) environmental review through the State Environmental Policy Act was required. The Whatcom County SEPA official issued a SEPA determination of non-significance (DNS) for this non-project action on November 2, 2011.
- 9) Whatcom County staff held public workshops on November 1, 2011 at the Whatcom County Council Chambers, and on November 2, 2011 at Bloedel-Donovan Park Facility regarding the proposed amendments.

- 10) Notice of the Whatcom County Planning Commission public hearing was published November 5, 2011.
- 11) The Whatcom County Planning Commission held a public hearing on November 17, 2011 on the proposed zoning text amendment.

V. STAFF RECOMMENDATION

Based on the analysis described above, staff recommends that the planning commission recommend to the County Council approval of the proposed amendment.

Attachments:

- Exhibit A – Proposed Chapter 20.51 Lake Whatcom Watershed Overlay**
- Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**
- Exhibit C – New definitions**
- Exhibit D – Whatcom County letter of commitment to Department of Ecology**
- Exhibit E – Department of Ecology Criteria regarding new development regulations in the Lake Whatcom watershed**