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LAKE STEVENS CITY COUNCIL
STAFF REPORT

Agenda Date: June 6, 2011

Subject: Lake Stevens Shoreline Master Program Update – Workshop (LS2009-11)

Contact Person/Department: Karen Watkins **Budget Impact:** Grant

RECOMMENDATION(S)/ACTION REQUESTED OF CITY COUNCIL: None as this is only a workshop to discuss Shoreline Master Program issues with Ecology, Fish & Wildlife and Makers Architecture.

SUMMARY: The workshop was scheduled based on discussion at the May 23rd SMP Public Hearing. Councilmembers had a lot of questions that staff has tried to answer in this staff report. Also, at the May 31 Council Workshop, Council provided staff with a list of topics and questions for Ecology, Fish & Wildlife, Consultants, and staff. These questions are included in this staff report. The Responsiveness Summary has been updated with the public testimony from the May 23, 2011 Public Hearing.

DISCUSSION: The first part of the workshop will be a discussion with representatives scheduled from the Washington Department of Ecology (Joe Burcar), Washington Department of Fish & Wildlife (Jamie Bails), Makers Architecture (John Owen) and The Watershed Company (Dan Nickel). The list below was provided to the invited guests, so they will be prepared to discuss your questions and comments. Staff has addressed other comments in writing.

Questions and Topics for Discussion by Guests

ECOLOGY

- What are the ramifications if the June 30, 2011 grant deadline is not met or the requested extension is not granted? If we get the extension to August 15, can we extend it longer if we need to in order to adopt an SMP the City can live with?
- What date does the SMP ordinance have to be passed?
- What is the appeal process if Ecology does not approve the City's plan? Is there an alternative appeal process before going to the Growth Management Hearings Board? *[NOTE: Staff is also seeking a preliminary legal opinion for Council's information regarding this question.]*
- The City's SMP language is being compared to Redmond's adopted SMP and there are differences (e.g., 6 foot wide docks with no specific requirements within the first 30 feet; smaller setbacks from the lake). Have there been changes in Ecology's requirements since Redmond's was adopted? If so, what motivated the change in Ecology's requirements?
- How is Ecology recognizing the small boat and recreational nature of Lake Stevens in their review? How do you take into account the differences in the different shorelines throughout the state?
- How does a property owner/applicant prove intent of the dock is for access to a boat and what type of proof or documentation needs to be provided to the City in order to obtain a permit for a dock?

ECOLOGY & FISH & WILDLIFE

- How can we create a comprehensive SMP aiming at protecting and restoring habitat knowing that most investment is private investment? Has this been done before? If so, can you provide examples? If not, how does the City of Lake Stevens become the first?
- There is not a one size fits all solution for all shorelines in the state, although each jurisdiction is told to follow the SMP Guidelines. How can the City create an SMP that specifically fits Lake Stevens?
- Where does the State allow for creativity by a jurisdiction?

FISH & WILDLIFE

- Are there any fish studies specifically on Lake Stevens showing Coho in the lake? Please provide a copy of these studies to the City. *[Please see the section in this staff report regarding Coho in Lake Stevens area.]*
- What is the functional value the City needs to identify upon before determining grating or size limits of docks is necessary?
- The concern for protecting fish is the area 30 feet from shore. However, doesn't the depth affect the use by fish more than just saying the first 30 feet? It could be really shallow far past the 30 feet or drop off really quickly, so wouldn't fish react differently? So one size doesn't necessary fit all sections of the lake and could the State support standards on lake depth?

CONSULTANTS

- What incentives are currently in the SMP?
- No Net Loss does not make sense and needs to be explained for the Council and residents to better understand
- If the existing docks are really only 800 square feet on average in size and not 1,200 square feet. How does this skew the calculation of No Net Loss? If so, how can it be corrected? Does a 400 square feet difference have any effect on the calculations of No Net Loss?
- What is the difference between "40% open grating" vs. "60% light penetration"?
- For 15% replacement of existing docks and 19 new docks, the proposed SMP seems to have very restrictive language; however, there is no proposed improvement in native vegetation. Is there another approach the City can propose to get more native vegetation?
- Concern with how SMP regulations will affect property values
- Why should the plan make a distinction between a boat structure built with wood vs. a boat lift with a fabric cover if it shades the same amount of area? What if the wood ceiling had partially clear panels in roof? Isn't the issue a bulk coverage issue?
- Redmond's SMP has a concept of a water coverage footprint and light penetration rather than prescriptive dock dimensions using a specific shape. Could the City use something like total overwater coverage rather than specific dock dimensions?

STAFF

- What flexibility does the Council have beyond June 13 for review? *The Council may continue the June 13 public meeting to June 27. If Ecology allows for the requested extension, the public hearing can be continued into July.*
- Does staff plan to respond to Ecology's email on dock widths? *The email in question was based on the meeting with Ecology and Fish & Wildlife to discuss dock dimensions. At this time, staff is not planning to respond to the email. If the Council wants to select different dock widths, staff can try to negotiate with Ecology and Fish & Wildlife before submittal of the SMP documents for final review. The negotiations would need to address the issues in the email. Additionally, consultant budget and time may be necessary to prepare the technical report amendments (e.g., cumulative impact analysis, SMP, No Net Loss Report, etc) that is required for final submittal.*

- Should we get an environmental attorney to look at avoid, minimize, mitigate? *The terms “avoid, minimize, mitigate” as related to environmental resources, including critical areas, is the main tenet of environmental protection. First avoid them; if not possible, and then try to minimize the impact, and third mitigate any impacts that can’t avoid. This sequencing is used in the National Environmental Policy Act, State Environmental Policy Act, and Critical Areas Regulations and would likely take a change in federal and state legislation.*
- How has SMP been prepared? *The SMP includes a summary of the SMP Public Process in Chapter 1 and is included below.*

Consultants. *The City hired experienced consultants with a grant provided by Ecology. Makers Architecture (prepared draft WAC SMP guidelines with Ecology and completed over seven SMPs including Marysville, Monroe, Kent, Bellevue, Lake Forest Park, and Issaquah) and The Watershed Company (completed over 17 SMPs including Marysville, Monroe, Kirkland, Lake Forest Park, Covington, and SeaTac) were hired for their experience in successfully completing SMPs for other cities, including local cities and their knowledge of Lake Stevens.*

Coordination with State Agencies. *Throughout the process, staff and consultants have had informal and formal consultation with Ecology and Fish & Wildlife. Informal consultations included emails and phone conversations. Formal consultations included:*

- December 7, 2010 – Ecology’s Bellevue Office with Ecology reviewer and biologist, City staff and consultants to discuss the Critical Areas Regulations for Shoreline Jurisdiction.
- December 22, 2010 – Lake Stevens Field Trip and Permit Center with Ecology reviewer and biologist and City staff to discuss downtown wetlands, Lundeen Creek wetlands and various minor issues.
- May 6, 2011 – Fish & Wildlife’s Mill Creek Office with Ecology reviewer, Fish & Wildlife biologist, City staff, Councilmember, and consultant to discuss dock regulations.

Ecology Review. *The Ecology grant requires continued review by Ecology of each document as it is drafted with written comments back to the City using the SMP Checklist. The City responds to the comments and Ecology determines if response was appropriate. In addition, a final packet with updated documents were sent to Ecology on December 15 for a final review before the Local Adoption Process began. The City received final comments from Ecology on April 12, 2011.*

City Public Process. *The following information is included in Chapter 1 of the SMP to describe the public process for the SMP:*

F. Public Process for SMP Adoption

The City of Lake Stevens involved the public and solicited feedback throughout the update process of this Shoreline Master Program. The City notified and solicited input from all relevant organizations and agencies at the beginning and throughout the local adoption process of the SMP update.

1. Shoreline Citizen Advisory Committee (CAC)

City staff and consultants worked closely with a Shoreline Citizen Advisory Committee throughout the update process. The CAC included seven Lake Stevens residents (City Council Representative, Planning Commission Representative, two Park Board Members, two shoreline property owners and one non-shoreline resident). Six meetings were held from March to December 2010. The CAC provide in-depth and structured input on draft policies and regulations, assisted in the outreach to various constituencies and interest groups, and helped to ensure that a broad spectrum of interests and considerations were incorporated into the SMP update.

2. Early Public Review

The City held a total of three public open houses during the writing phase of the SMP to solicit public input. For each open house, approximately 380 shoreline property owners and other property owners within shoreline jurisdiction were invited by a mailed postcard. The meetings were also advertised in the Lake Stevens Journal and/or Everett Herald. Each open house consisted of opportunities to talk with staff and consultants about proposed updates to the SMP, a presentation reviewing the SMP update and proposed changes, and opportunities to provide written feedback.

- Open House #1 (April 15, 2010) - ~70 people attended to provide meaningful feedback through a brainstorming exercise and by filling out questionnaires.
- Open House #2 (June 24, 2010) - ~24 people attended to provide feedback on a questionnaire.
- Open House #3 (November 18, 2010) - ~13 people attended to provide comments on the proposed SMP.

3. Local Adoption Process

The local adoption process began on April 4, 2011 with submittal of draft documents to the Washington Department of Commerce for the required 60-day review and ended with adoption of a resolution by the City Council on June 27, 2011 for approval of the final draft Shoreline Master Program documents and direction to staff to forward them to the Washington Department of Ecology for formal review and approval.

A summary of the local adoption process is provided below:

- April 5, 2011 – Draft Shoreline Master Program and associated documents submitted to Washington Department of Commerce for 60-day review of Comprehensive Plan amendments and Development Regulations, including SMP documents.
- April 12, 2011 – Postcard notice for the SEPA Determination of Non-Significance and Public Meetings mailed to 2,080 shoreline property owners or within 300 feet.
- April 13, 2011 – Notice of Planning Commission Public Hearing on May 4 published in Lake Stevens Journal.
- April 15, 2011 – Issued SEPA Determination of Non-Significance (DNS) and published in the Everett Herald.
- April 19, 2011 – Final Draft Shoreline Master Program documents completed.
- April 20, 2011 – Notice of Planning Commission Public Hearing on May 4 published in Lake Stevens Journal. Final documents uploaded to City of Lake Stevens website.
- April 29, 2011 – Comment period ends for SEPA DNS.
- May 4, 2011 – Planning Commission Public Hearing on the SMP documents. Attendance: ____.
- May 6, 2011 – Appeal period ends for SEPA DNS.
- May 11, 2011 – Notice of City Council Public Hearings on May 23 and June 13 published in Lake Stevens Journal.
- May 18, 2011 – Continuation of Planning Commission Public Hearing on the SMP documents and code amendments, and recommendation to City Council.
- May 23, 2011 – City Council Public Hearing and First Reading of Resolution to adopt Final Draft SMP documents. Attendance: ____.
- June 6, 2011 – 60-day Washington Department of Commerce review complete.
- June 13, 2011 – City Council Public Hearing and Second (& FINAL????) Reading of Resolution to adopt Final Draft SMP documents. Attendance: ____.
- June 27, 2011 – City Council Public Hearing and Third & Final Reading of Resolution to adopt Final Draft SMP documents. Attendance: ____.
- June 30, 2011 – Submittal of Draft Final SMP documents to the Washington Department of Ecology for formal review and approval.

- The City received numerous phone calls from residents and property owners after sending the notice of the public hearings and during the public hearing process.
- What is the connection between the Shoreline Master Program and the Critical Areas Regulations? *The City's existing CAR are contained within the Land Use Code, Title 14 LSMC, and apply citywide. Ecology has review opportunities when the City changes or amends land use regulations and can bring legal action if the agency determines the regulations do not meet state environmental laws unlike the SMPs that require any amendments to be approved by Ecology under a state approval/adoption process.*

Critical areas include Fish and Wildlife Conservation Areas, geologically hazardous areas, flood hazard areas, wetlands, and streams. These areas exist citywide and can also be associated to the State Shorelines of Significance (e.g., wetlands around Stevens Creek, Lundeen Creek and Stitch Lake).

In the case of the state shorelines, Ecology has approval authority over protection regulations. In order to allow as much local authority as possible to the city, critical area regulations are contained in a separate appendix in the SMP for the purpose of applying CAR to the shoreline "associated critical areas".

Secondly, a comprehensive regulatory document, the SMP, will assist the public and permit applicants with its ease of use.

- Please explain if "shall" and "should" will be defined in Ordinance No. 855. *The addition of definitions for "shall" and "should" will not be included in Ordinance No. 855, which is for code amendments related to recent updates of the Shoreline Management Act and not the SMP. The definitions are included in Ordinance No. 856, which adopts the SMP documents, as applicable.*
- Have other jurisdictions been contacted? *Staff and consultants have informally talked with other planners in various stages of SMP updates, and the consultants have talked with other jurisdictions or been involved in other SMP updates. Additionally, staff has attended quarterly meetings held regionally by Ecology where there has been information exchanged and detailed guidance in preparing SMPs by Ecology. However, staff was able to speak with City of Redmond Planning staff regarding their adopted SMP (see information in separate section of staff report).*
- The City's SMP for repair vs. replacement, nonconforming provisions, etc and comparison with Snohomish County's proposed SMP? *Staff has been talking with Snohomish County staff regarding differences in the County's proposed SMP and the City's proposed SMP. It is important that SMPs on the same shoreline be consistent. The County's SMP is written for all County shorelines, not just those within Lake Stevens, although Lake Stevens is the only Shoreline of Statewide Significance in the County. Therefore, staff is coordinating with the Ecology reviewers for both documents and asking that the major regulations on the lake be consistent. Last week, staff contacted the two reviewers to ask about the differences in dock dimensions. The County's proposed SMP states 6 foot wide docks in freshwater lakes; however, Ecology was restricting dock width of new docks to 4 foot wide in the first 30 feet on Lake Stevens in the City's SMP. Staff received the following response from the Snohomish County's Ecology reviewer:*

"The intent of the County standards was to have 4 foot walkways out to pier and dock platforms. This is defined well for their marine piers & docks and not defined as well for the freshwater piers. Ecology will need to take a closer look at the County SMP lake pier/dock width standard and possibly request better clarity on freshwater pier/dock walkways. The main issue is reducing overwater coverage in the near shore freshwater and marine

environments.”

Staff will provide matrices comparing existing regulations and proposed regulations for repair vs. replacement, nonconforming provisions, etc. and additional information comparing the County’s and the City’s SMP regulations. This information will be sent separately.

- What is an accessory use? (definition) *The SMP has the following definition, which is fairly open:
Accessory use. Any structure or use incidental and subordinate to a primary use or development.*
- Is the City required to put helicopters in the SMP? *What is the result of not addressing helicopters in the SMP? There is nothing in the SMP Guidelines that requires a jurisdiction to address helicopters in the SMP. Currently, the Lake Stevens Municipal Code is silent on the permissible use of aircraft in the Permissible Uses table because there are no air fields in the Lake Stevens. According to FAA regulations, helicopters are allowed to be used on private property, so are not separately addressed in the current code. It is considered an accessory use to the use of the property.*

The City could continue to be silent on the use of helicopters in the SMP, but should also be consistent in the land use code. Therefore, if helicopters are not addressed in the SMP, staff recommends Section 5 of Ordinance No. 856 also be deleted as it adds language regarding float planes and helicopters and is really redundant to federal regulations.

Additional information regarding helicopters as an accessory use and/or nonconformity will be provided to Council under separate cover.

- Will restricting helicopters have an effect on current pilot’s use of his helicopter? *If prohibited in the SMP, an existing use that has occurred for years could be determined to be a legal nonconforming use and allowed to continue in the same capacity.*

Public Testimony and Responsiveness Summary from the May 23rd SMP Public Hearing

The draft verbatim public testimony is in Exhibit A. The Responsiveness Summary with the additional public comments and City responses is in Exhibit B. A letter was received on May 27th from Urban Concepts. The comments in the letter have not yet been added to the Responsiveness Summary, but will be before the June 13 Public Hearing.

Staff Conversation with City of Redmond Staff & Redmond’s Ecology Reviewer.

On June 1, 2011, staff was able to talk to a Planner with the City of Redmond. She was involved in drafting the Redmond SMP update. Redmond took 10 years to complete their SMP because they were an early adopter and the SMP Guidelines had not been completed by Ecology. Redmond adopted a first version in 2000. After the SMP Guidelines were adopted in 2003, Redmond revised their SMP and readopted in 2004. Then the City of Everett had discussions with Ecology and SMP requirements changed again. During this same time, the Army Corps of Engineers adopted the Regional General Permit (RGP) #3 for Lake Sammamish and other waterways. They changed their documents to be consistent and then the RGP was modified again. Ms. Beam said each time additional regulations, guidelines or permits were adopted or changed, they tried to update their proposed SMP and Ecology tried to keep up with the reviews.

A critical areas study and mitigation plan is required for all in-water structures on the lake. The dock width of 6 feet in the SMP and the requirement in the RGP for 4 foot width in the first 30 feet, created an inconsistency between the two documents. The RGP also requires docks to be no larger than 480 square feet in total area. However, applicants have to get permits from other agencies, so if they are more restrictive than Redmond's SMP, the applicant has to meet the more restrictive requirements. In addition, any in-water structure requires mitigation in the form of protection of existing vegetation and installation of native aquatic plants under and around the structure. In addition, some type of the following mitigation is also required for dock design with grating or light penetration or such and addition of native vegetation on shore. In otherwords, Redmond is still subject to the RGP dock standards.

In regards to setbacks, they do not have very many lake shore lots and only two vacant lots, so they adopted a 35 foot setback from the lake, which can be reduced to 20 feet with incentives. Staff is checking on whether a critical areas study is required for building a single family residence on the shoreline.

Staff also was able to talk to the Ecology reviewer on the Redmond SMP. He provided the information below:

“Redmond does allow six foot width. Their SMP was one of the earlier ones through the process, and if it was under review now, we would be looking more closely at defining pier/dock walkway width better. Most folks recreate on the platforms at the end of a pier/dock. There is more flexibility for platform sizing because they are usually in deeper water.”

Existence of Coho in Lake Stevens.

Several existing environmental documents have been relied on that indicated the presence of Coho Salmon including the City's adopted Best Available Science report dated March 2008 (Attachment C 1through 5). Additionally, it has been anecdotally reported to the City that Coho have been caught in the Lake in the recent past. These all provide indication that there is a likelihood of Coho in and around Lake Stevens. Staff has asked the consulting biologists to provide the City with information on the type, timing and potential cost of a study the City could commission to verify the existence of this salmon species. It will also be important to understand the protection approach the state agencies will take given there are or are not Coho but still critical fish habitat in the near-shore waters of the lake.

APPLICABLE CITY POLICIES: The State requires all cities to update their Shoreline Master Programs (SMP) on a specific schedule. The City's current SMP was adopted in 1974. The Comprehensive Plan includes shoreline goals and policies in Chapter 10 – Critical Areas Element. The Lake Stevens Municipal Code includes shoreline regulations in Chapter 14.92 (Shoreline Management) and Section 14.16C.100 (Shoreline Permits).

BUDGET IMPACT: The City received a two year, \$60,000 Shoreline Master Program Update grant from the Washington Department of Ecology for consultants. The grant does not include staff time. The grant funds have been spent, so if changes affecting the Cumulative Impacts Analysis or No Net Loss Report are made, then additional funding will be required for consulting biologist work.

STAFF RECOMMENDATIONS: Staff recommends the City Council hold a second and final reading of Ordinance No. 855 (Code Amendments related to the Shoreline Management Act) on June 13, 2011. Staff recommends the City Council hold a second reading of Ordinance No. 856 (Adoption of SMP documents, code amendments related to the SMP and Comprehensive Plan amendments) on June 13, 2011 with consideration of the proposed amendments based on Planning Commission recommendations and any additional amendments that may arise during the Council public hearings. Please note that there are a couple of alternatives if Council feels it necessary to add a third reading or allow for more public comment. June 27th is a scheduled regular meeting and Council could continue the hearing to that date. As indicated earlier this month, staff has requested a short extension to August 15, 2011 from Ecology for submitting a City adopted plan. The extension would allow for Council action into July.

EXHIBITS:

Exhibit A – Draft Public Transcript, City Council Public Hearing 5/23/11

Exhibit B – Responsiveness Summary including public comments and City responses from City Council Public Hearing 5/23/11

Exhibit C – Copies of Document Sections Related to Coho Salmon in Lake Stevens Watershed

1. Best Available Science, March 2008, through pages II-15
2. WSDOT Fish Passage Inventory, June 2008, pgs 17, 22, Map and chart
3. City of Lake Stevens Shoreline Analysis Report, pages 4 and 8
4. City of Lake Stevens Shoreline Analysis Report, Figure 11 WDFW Priority Habitat and Species
5. Grade Road PBD Master Plan, pages 29, D-13 to D-14

City Council Public Meeting

May 23, 2011

SMP Public Testimony

(Meeting begins at 7:02pm)

Public Hearing

Rebecca Ableman, Planning Director and Karen Watkins, Principal Planner provided brief overview of the Shoreline Master Plan (SMP) and issues that have arisen to date.

Public Testimony From Audience

Douglas Bell, Resident

10830 Vernon Road

Had the property since 1953. Been my permanent residence with my wife since 1973. In addition to my wife and myself, I've been asked to make this presentation on behalf of six additional waterfront families are residents of Lake Stevens the Burgoynes, the Powells, the Kosches, the Martins, the Molenkamaps and the Barnets.

The fourteen of us are strongly opposed to draft Ordinance 856, Section. 2 that adopts the SMP but only add to those provisions that deal with helicopters and Section 5 that amends Title14 a section of the Lake Stevens Municipal Code that also specifically addresses helicopters. We want the prohibition of helicopters. We want the prohibition of helicopters so that they may not utilize overwater structures to conform to that prohibition that was in your November 2010 draft SMP. We want that reimposed and want it restated in Ordinance 856 particularly Title 14.

Now there have been concerns expressed by others that our request will adversely affect one helicopters use of overwater structure that is not our intent. Our lay understanding of nonconforming use regulations of the City and as explained to us by staff is that a use, land use, helicopter use, established prior to the effective date of the new more restrictive ordinance will not impact that existing use. In other words what is may continue for that residence.

Helicopters in a residential neighborhood are both very noisy and extremely dangerous. Helicopters as stated are non-water dependent use. Your draft ordinance states that, the definition in the draft SMP is redundant in that regard as well.

Now many if not most existing overwater structures abut or very near adjacent upland shoreline and submerged property lines and in some instances other docks. The placement of helicopter landing pads on docks or other overwater structures may vary but in many instances the helicopter landing area will not be reasonably safe distance from people or adjacent homes.

For example, our property is only 20 feet from the dock and if this ordinance was proposed and authorized for a helicopter landing pad that isn't something that is not in place that you would intentionally build a home, fish, walk on the beach, or engage in other water dependent uses, it's incompatible in a residential zone. Just because the helicopter pad is on a structure over a body of water provides no justification for this unwarranted exposure to harm and potential injury to occupants of contiguous and adjacent properties. This is poor shoreline management, this is

inappropriate land use planning. Pilot's errors and equipment malfunctions albeit unintentional in both regards do happen.

We brought up early on in this process the failure of the draft SMP to address helicopters. The November 2010 draft that I referred you to rightly corrected this oversight stating at that time quote "Overwater structures used for landing helicopters are not considered water dependent and are therefore prohibited."

So that is where we left it in 2010 and that's not where we are today by a long shot. I will give you a copy of a more complete text or remarks as to the particular sections of the SMP and the zoning code that I am referring to you so I won't go on with a bunch of sub a's, sub b's and dot 6's, but I think it is important that you read those in context and understand as Karen indicated that there are provisions in the SMP as innocuous as they may seem upon first reading provide the foundation and the groundwork that then goes on to authorize the specific implementation of helicopter pads on all docks in Lake Stevens.

Mr. Bell said sorry, he was talking for 14 people but not asking for 42 minutes. Mr. Bell provided the City Clerk with his written statement (attached).

Angela Larsh

Urban Concepts LLC, 4509 Interlocken North, Seattle, WA 98003

I am going to tell you right now there is no way I tell you what I want to say in three minutes. I'm here representing Rich Meitzner, he is out of town tonight and asked me to come and speak on his behalf. There are several issues relating this matter before you today that I would like to talk about. First is to acknowledge the position of staff in the City is quite frankly between a rock and a hard place. I think you find yourself in a place where Department of Ecology is handing out rules from above, citizens are asking you to give something else, you guys are in the middle of that rock and hard place. So I do recognize that and do think that the staff has done an exceptional job trying to manage that position while I do commend their efforts.

There is a, it is important to recognize that under the current shoreline management program that we have right now that there is a very clear division between how critical area regulations apply and how shoreline regulations apply. So under the current rules, there is a House bill out of the State, House Bill 1653 that specifically limits the implication or the application of critical area regulations to properties within shoreline jurisdictions. Okay, so right now as it stands you either are subject to shorelines or you're subject to critical areas regulations, but not both. Under the amendment process that the State is requiring the City to go through, those things become one. They blend the critical area requirements with the shoreline management master program. And that is a big change and is an important one to understand.

Using the City's current critical areas regulations which will become applicable to shoreline properties once this amendment is accepted. Properties that currently do not comply with that 60 foot setback buffer or whatever you want to call it. The critical area regulations will prohibit you from replacing your structure or any other improvement that does not comply with the 60 foot buffer if it is destroyed by human activity or natural causes. Okay that is your code Section 14.88.330. That is important to understand because last week at Planning Commission I submitted some aerial photographs that were highlighted all the properties in the City, along the lake, that do not comply with the 60 foot setback currently. It is more than 60% of the properties. Is that included in their package? I really hope you take a look at that because we

are talking about huge numbers of lots in the City. This is not just a few properties it's more than half of the properties in the City.

The bulkhead language does not allow for existing structures to be replaced and I have a problem with that for several reasons. When you back what we talked about lots of jurisdictions and what they've got going on. Every jurisdiction in the State is being held to same standard, that's the state guidelines. The state is required to treat every jurisdiction equitable and consistently just like any other regulatory body. It was good for Whatcom County or City of Redmond or Sammamish or Bellevue if those people can build docks six feet wide or don't have to be grated and those regulations were found to be in conformance with the State guidelines then Lake Stevens should be held to the same standard. You shouldn't be held to higher standard than any other jurisdiction.

Now that being said, Lake Stevens is a special case to some degree, it is an urban lake, is different than say Puget Sound or Lake Washington where you have a marine environment or you are dealing with anadromous fish and those areas structures are held to a much higher standard they already have to get Army Corps permits, you do not need Army Corps permit to build a dock on Lake Stevens, it's not required they don't have jurisdiction. You need permits from Fish and Wildlife. You need permits from the State. So this four foot grated thing comes from Army Corps of Engineers, they don't apply here. So why are we using those rules that don't apply to the development that occurs on the lake.

One more thing helicopters – I do have to say something about helicopters. Rich Meitzner has been using his helicopter and I think he is a responsible citizen he only wants to. I submitted those series to comments relating to many many issues but didn't put helicopters in writing. Thank you.

Tom Matlack, Resident
2504 112th Drive NE, Lake Stevens

It was a very long process. I would have to thank the committee members, Planning Commission, and especially the planning staff and now you guys 'cause it is now in your lap. We all ran into this bewildering area of jurisdictions but we didn't get the Navy in there, sorry but the Coast Guard made it in and seven or eight different jurisdictions but I think the Planning Commission has heard much of the same testimony and I would like you to please accept the recommendations that were in the staff report tonight. Thank you. From the Planning Commission.

Ted Boysen, Resident
10432 Sandy Beach Drive

I respectfully disagree with Mr. Bell and I agree with the last lady that spoke. Ladies and gentleman we have to be very careful that we don't pit neighbor against neighbor here on Lake Stevens. Lake Stevens is a big lake, is a preferred recreational lake and there is plenty of room on Lake Stevens for fishing boats, for water-ski boats, for wakeboard boats, for sailboats, for float boats, float planes, and for helicopters and many other activities. And once we criticize or try and restrict a chosen method of enjoyment of one individual then later we are going to be screwed, excuse the way I am saying that, I apologize, but we have to be careful that we keep our rights here and there is plenty of room for everybody to have fun and to exercise our rights and I love seeing float planes. I love seeing helicopters and I love seeing boats on Lake

Stevens. And I hope to enjoy Lake Stevens and see other people enjoy Lake Stevens for many many years. Thank you.

Bruce Morton, Resident
11222 Vernon Road

Thanks for having this meeting. I want to focus on a very specific regulation that's in the proposed SMP that has to do with the boat lift canopies, that's in Chapter 4, Subsection C, Paragraph 30, Subparagraph d and e found on Page 63 of the SMP. Most of the regulations in the SMP have some sort of foundation and science studies based on helping the ecological function of the lake but this particular regulation having to do with boat lift canopies having to be made of fabric material versus solid material. I don't think the fish care whether the shade comes from fabric or a solid roof. So I don't think there is any rational basis for this. And I wasn't able to make it to the May 4 meeting so I would like to submit this as an amendment to strike the first sentence of that Subsection d and the whole sentence of Subsection e which would essentially allow any type of material to be used on boat lift canopies.

In conversations that I have had on previous public meetings that has been brought up that well that the solid boat lift canopies can be flimsy which is kind of a ridiculous argument because I think that fabric is more flimsy than solid wood or that the design or structure of it may be flimsy. I doubt that someone would put forth the effort and the expense of constructing a boat lift canopy just to make it so that it would supposedly fall over into the lake. But that is also something that can be controlled and regulated by the City through code regulations and inspections.

Other complaints or thoughts about why this regulation is being proposed is that the construction materials for solid roof can fall into the lake and thereby pollute the lake. Well the same sort of materials that are used in making the dock are also used in making a roof so why are we allowing docks at all on the lake if we are afraid the materials might fall into the lake. Also when the dock is inspected, the inspector simply has to look into the water and if he sees construction materials at the bottom of the lake he can ask the owner to clean it up.

Now that my time is up that is all I have to propose and I'll put in my two cents for saying I like helicopters on the lake.

Gigi Burke, Resident
920 E Lakeshore Drive

I appreciate the opportunity to say a few things. You know, this Becky Ableman stated that this is going to be a change that takes place that's going to last for the next 20 years that's a long time and it scares me and many other homeowners very much.

My husband and I, we built the house here on the lake within the last couple of years and we could not have built the house that we built under these regulations. We have a bulkhead and we would like to be able to maintain that bulkhead and there is no way we will be able to do that under these regulations.

I personally feel that some of the remarks that Ms. Larsh has made about the other lakes around the area in Whatcom, in Redmond have taken the regulations and eased the language to allow things to be handled on a local basis on a more case by case basis and I just really

hope as a constituent that you take these things into consideration and I said this before I cannot speak on behalf of all the homeowners on the lake but we all want this lake to be healthy we want to be able to feed the fish, continue to flourish and live and be here for generations. I am third generation in my family to be on this lake, my brother lives on the lake, my aunt lives on the lake, my parents who are now deceased, we still have their house on the lake. I love this lake and I grew up here not living full time, sometimes you live here in the summer, and is where I want to be and just like so many people we are proud of it we want to be here but we want to be able to maintain our properties and do it in a cost effective manner and think that is the key.

You know all the costs from I can tell that serious, the hard costs are going to be put back on the homeowners and it is not just rebuilding our docks or maintaining our bulkheads. Well the statement that was made today that scares me the most that I didn't even think of is if my house burnt down I wouldn't be able to rebuild it at all. So all these things are very very serious issues that I hope you will take into consideration before you adopt this. Of course, I didn't look at my notes at all. I think that given my time is up that all my points were made.

One last thing and this is just on behalf and Rich and Rhonda unsolicited letters were written in support of having helicopters on Lake Stevens and I just wanted to submit them on their behalf. Thank you. The good guy helicopter letters.

***Jennifer Soler, Resident
914 E. Lakeshore Drive.***

I am new to Lake Stevens. I bought a home on the lake we were lucky [*unable to transcribe*] probably one of the smallest pieces of property on the lake and we are so excited to live the lake life but I am really concerned now because it looks like I am not going to be able to do anything to my piece of property.

20 years is how long this management plan is going to be in place and I have a bulkhead. I bet the shoreline is going to be at my kitchen and I'll have real water when I open my bloody door and I'll have water.

So I am really concerned that I can't even build a little gravel level flat for a BBQ and I am concerned that I cannot replace my bulkhead and meet the shoreline management. It is the restrictive language, the "shall" and the "should" that basically mean that I'll have to hire some researchers and do mitigation and pay for all of that just to replace my bulkhead. I don't know, to me that doesn't fall under a reasonable use. When you buy a piece of property and a home, don't you have a reasonable use of that piece of property?

I like fish, my son he took fourth place in the Lake Stevens fishing derby last week and that was great but I bought this piece of property I expected to be able to use it with some reasonable use and when you read through this management plan I just would really think about as if it were your property, your dream home and someone is telling you can't do anything, if your kid burns it down even if you have fire insurance you can't rebuild. I mean basically it is so restrictive that shall (*unable to transcribe*) you might as well use mandates from the way that they describe the definition of shall and what was the other thing, anyway the two things.

So again when you look at also I know some of the presentation on the map, over 60% of homeowners along the lake basically are out of compliance right now. So I think you will have a lot of unhappy people around the lake and I am not so sure that I would have bought on this

lake, especially look at now what we are going through and the fact that the taxes are going up, I imagine you guys are getting lots of revenue from those homes around the lake so it is really disappointing but I think I am happy to live here so but I would really encourage you to take a look at the nature of how restrictive the language is and think if it was your small piece of property that you were so excited to live on think how you would feel if it burnt down and that was it and that is all I have to say.

Paul Olliges, Resident
824 E Lakeshore Drive

[Resident] for over 15 years. Again thank you guys again for having a public hearing. I think it is very important to hear from people that I actually live on the lake that this is going to impact. In that 15 years I think I have paid over \$120,000 in taxes that helps drive this community and what I understand is my family was effected by the economic downturn, both my wife and I lost our jobs, I was out of work for two years, that puts a financial burden on my family to continue to live in Lake Stevens. So what you are saying here is some of the regulations you are going to force me to spend a lot of money just to maintain my property.

What is I understand, I have not read through the whole document, but I keep hearing this no net loss. But if you adopt some of these things the loss is going to be on me and you are not going to lower my taxes. You are actually going to take away my property.

I've got a bulkhead. I've got an 8 foot dock that was on the property when I bought it. The dock is in need of repair what you're going to tell me is if I am going to have to come in and modify the dock to 4 feet at the 30 foot section that's a burden on me that no one else is going to pay for except my family. The other thing that I need to repair, there is a liability issue, the boards are starting to fall through right now so do you want me to repair it over two seasons, three seasons, what about the liability on me. I need to repair it when it needs to be repaired. If you are going to put an additional burden cost on me to repair my property please take away my taxes.

I have a structure within the 60 feet of the property that is being used today and it needs to be repaired and you're not going to let me repair it. So please read through and understand the impact that you are putting on the people on the lake.

We enjoy the lake, we pay our taxes, and we are asking for your support tonight to not put burden on the people on the lake. I heard through the comments in here about making it for the public what about making for the people that actually live there also. So thank you for your time. Again look at the people that live on the lake we help to support the community please help support us. Thank you.

Jim McCord, Resident
9827 N Davies Road

I am a second generation individual that lived on the lake probably for a total of 48 years. The comments made by Ms. Larsh and that she submitted to you folks in writing are very important to me and I hope you take a clear look at what they say and how they affect the people that live on the lake. Not everybody's property conforms to the guidelines. Everybody is a little bit different.

I live on an area of the lake where it gets very deep very quick and a lot of the rules that you are asking for would not be applicable to my situation. So the water level changes and is different depths throughout the lake. So those are issues that would not work well for my property and then if they don't how are we going to manage that situation. So I hope that the Council will take a look at this and give her comments the due time that it deserves.

And one other comments that I have to make I also scuba dive a lot and the concerns about lake coverage docks and such just confuses me. Every time I go scuba diving when the suns out you see more fish hiding underneath the docks and in the shade and that you guys are trying to encourage the fish habitat but yet you are limited the dock structures. If you ever dive that's where the bass are that's where the fry are they are sitting underneath the docks. So those are my comments. Thank you.

Patricia Perry, Resident
1611 Vernon Road

And the main thing I wanted to say is that I would hope that, I haven't had time to read through everything but a lot of what I've heard the last couple of weeks, two weeks prior to this, that it appears that there is some restrictions there is perception that might cause in the future so let's go ahead and add these rules that cause more restrictions to that waterfront property because there might be problems later. And I recall that this lake would have a reputation of for having more restrictions than is necessary or required by the state or by our government that would make us less desirable for future homeowners to purchase our homes when we go to sell them. That would then lower value of our homes but that would also make us not be able to use our property the way we had hoped we would be able to use, just because there is a possible perception that there might be problems that are not really factual that are just ideas that certain people have perceived that could possibly be a future problem. And I hope that you all will have time to go over or whoever does these investigations will check thoroughly and make sure that their facts are actually accurate and not just taken as facts and make [not transcribable] our properties less useful. That's all I want to say.

Bill Tackitt, Resident
12009 Lakeshore Drive

I've been on the lake for about 35 years. Let's not be a group of sheep. The State DOE is a state agency that is trying to force local governments to impose standards that place the cost of their improvements on the backs of the private property owners. The State of Washington is in its great wisdom is telling the people of Lake Stevens we know what you people need and you should do it the way we say. This is the same state that as we all know is in 5 billion dollar hole. Maybe we should take financial information from them 'because they seem to be very adequate at that.

Property owners should be allowed to replace, repair and maintain their existing property improvements including docks, floats and bulkheads. Can we as a City government help property owners accomplish this in an environmentally improvement. The answer is yes. We can provide that locally. DOE does not give you a set of demands only suggestions because if they did they spend the rest of their entire budget in the court of law. Mr. Bell can attest to that.

So they give you a set of suggestions and they try to impose their will on local government and say you must do it their way. We all know that those are negotiated points and then we can

negotiate each and every one of them. And there should not be a rule that we feel that they were granted to someone else that we shouldn't be entitled to the same privilege. We're no worse off than Whatcom County or wherever so less not forget that. This is a negotiating document and we all can be part of the negotiations. Why should we assume that the local planning process is not adequate to provide flexible implementation measures to ensure no net loss of environmental standards? Why are we assuming that we can't do that?

We need to put this program a through and very precise study. Perhaps we need to bring in more expertise, outside expertise, 20 years. The last two houses I built on this lake I bought all my permits I went through all my environmental deal and they said Bill you got to build the house 25 feet from there. And now someone is going to tell me that when my house burns down Bill you can't build that house there anymore. That doesn't seem right to me. Let's not be sheep.

Cory Burke, Resident
920 E. Lakeshore Drive

The big issues I have if we need to do certain things to the shoreline to make this a more healthy lake for everybody I am for it. I just don't want to pay for it all myself. I'll pay my share which I think I do through taxes. But if new materials on docks is twice as much as what I have existing I don't really think it's my responsibility to pay that burden entirely on my own if it's benefiting the lake for the public. I'll pay my share but not the whole thing. Same thing.

Most of my house is within that 60 foot buffer. The house has been there for 60 years. If something happens to it what I am suppose to do. Your taxes are going to go away there is no house there. So maybe this is batted around maybe it's in these documents maybe it's not I haven't read it. But that does concern me. Saying with any other improvements you got all kinds of things within that 60 foot buffer, okay we have camp fires, all these things have been there for years and years and years and if you guys are saying okay it needs to be repaired now it has to go away, all of a sudden I don't get to enjoy the lake the way we use to we do now no more campfires nor more s'mores no more things the kids love to do.

The same with the dock. Our dock does not conform now. I am not opposed to making some changes and stuff, but I guess what I am looking for from you guys is a give and take system and what I am hearing the state trying to put on you is you have to do it this way. And all that is going to do is create problems at the Permit Center when I go in or anybody else on this lake goes in to get a permit and they say sorry Mr. Burke or sorry Mr. Smith you have to do it this way. I am sorry that your neighbor has that and that neighbor has that but you got to stay way back there.

Or what about houses or pieces of property are built 150 feet back and some guy comes in and goes up to 60 feet the neighbors aren't going to like that either. So I think you got to look, it can work both ways but I guess the bottom line is I agree with Bill you guys are smart people we can figure out how to do this we don't have to just take what the state says we have to do and do it. What we are trying to do is make this lake healthy healthier and the be here forever and ever for our kids and our grandkids and I think we are all here for that but I'm just a little worried about some of the verbiage that's going on. Thank you.

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#	Person/Group	Where	Issue (from Public Testimony)	City Response
A1	Urban Concepts LLC	Letter for Planning Commission Public Hearing 5/4/11	One of the overarching guidelines prescribed by the state is that each jurisdiction needs to define, for itself, “no net loss of ecological function”. This language should be carefully considered with reflection on the way the city wants to utilize and preserve its shoreline areas.	Shoreline Citizen Advisory Committee (CAC) was established to set the parameters for the Lake Stevens SMP under the SMP guidelines and State law. The CAC met six times to guide staff and consultants through the draft stage of the SMP as well as three public open houses were held.
A2	Urban Concepts LLC	Letter for PC PH 5/4/11	We also ask that the city consider whether or not it has been adequately shown that the existing land and shoreline use pattern is negatively affecting the fisheries, aquatic life and wildlife around Lake Stevens.	Studies of similar shorelines have shown certain shoreline modifications (e.g. piers and bulkheads) and uses (e.g. parking), to be detrimental to shoreline ecological functions, including aquatic and terrestrial species. Lake Stevens is an urbanized lake with little existing native vegetation and natural shorelines. The long-term vision is for a healthy lake into the future, so minimizing additional degradation is important.
A3	Urban Concepts LLC	Letter for PC PH 5/4/11	In the case of the SMP updates, the word “should” has been defined to mean “required”. Traditionally, words such as “should” and “may” were discretionary in nature. “Shall”, “will”, “required” were reserved for obligatory items. When the Council is reading through these proposed amendments, it is important to note that things you might have previously considered to be “optional” are now hard and fast requirements. We would recommend revisiting the language on many of the requirements to evaluate whether or not it is the intention of the City to require such a high standard in every case.	The WAC clearly defines ‘should’ and ‘shall’ and the policies and regulations in this SMP have been written based on those definitions.
A4	Urban Concepts LLC	Letter for PC PH 5/4/11	4.C3.c.21.: Neither of the cities of Renton or Redmond’s plans include the requirement for a “grated” surface on decking materials for docks and piers. They allow for alternative materials that will provide a minimum of 50% light passage. Consider allowing other options rather than a narrowly defined construction standard. The use of the term “grated surface” leads most people to believe that the materials that must be used is some form of metal grating. This is not the intention of the state guidelines. The intention is to allow light penetration to the waters below, without limiting construction material choice in such a narrowly defined way. Broad allowance of material types, as long as they can be shown that they do not adversely affect water quality, aquatic plants and animals over the long term, meets the intentions of the state guidelines.	The Lake Stevens SMP documents use a requirement of 60 percent light penetration. Staff has proposed new language to allow for other options that meet the same light penetration requirement rather than limiting it to grating by replacing the “grating” requirement and simply using “Decking shall allow for a minimum of 60 percent ambient light transmission.” The use of “ambient” would be important in this context, as many materials, including etched glass or Plexiglas, may not transmit the full amount of light available.

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A5	Urban Concepts LLC	Letter for PC PH 5/4/11	4C. 3.c.21.: The city of Redmond does not require dock widths to be reduced for the first 30' as is proposed in Lake Stevens. Redmond's plan has been accepted and approved by the DOE. Instead, Redmond identifies a maximum "water surface coverage" ranging from 20-25% of the water area as defined by specified "water lot boundaries". Consider an alternative such as this. Redmond allows piers and docks up to 6 feet in width. Floats can be up to 10' in width. There are no "grating" or "planting" provisions required by Redmond (or the DOE) in order to obtain the 6 foot width.	Every jurisdiction must determine the best way to reach No Net Loss for their shorelines. Based on discussions with CAC and public open houses, the 4-ft wide docks with grating in the first 30 feet was selected as one part of the analysis.
A6	Urban Concepts LLC	Letter for PC PH 5/4/11	4C. 3.c.21: The requirement to plant trees a minimum of 15 feet in height is onerous, at best. This is an extremely expensive tree to obtain. It is unduly difficult to move and place a tree of that size, and it can be argued that the impact to the shoreline caused in the digging of an adequately sized hole, using large equipment to locate the tree is disproportionate to the benefits of such a large specimen. Consider requiring evergreens approximately 5-6 feet in height at the time of planting.	This incentive was removed from the SMP in the Final Draft Document posted for review during the Local Adoption Process.
A7	Urban Concepts LLC	Letter for PC PH 5/4/11	4C.3.c.3.: We would like to suggest that language be added to this section relating to repair, maintenance or replacement of existing features that might not comply with the dimensional standards of this updated master program. In a case where a property owner proposed to replace a section of a seven foot wide dock, it could be found that this section would apply and that a formal variance process might be required. The city's intention is not clearly stated with the proposed language.	This section is only for new private docks, so the word "new" is proposed to be added before "private dock."
A8	Urban Concepts LLC	Letter for PC PH 5/4/11	4C. 3.c.7.: It appears that the intention of this language is to require that fingers and ells be located a minimum of 30 feet waterward of the OHWM. The second sentence in this section clearly states that. The first sentence does not add any value to that requirement and only serves to raise questions and inserts ambiguity into the regulation. Are handrails on piers allowed within 30 feet of the OHWM? Does the first sentence restrict construction to only piers and ramps landward or waterward of the OHWM? We respectfully recommend eliminating this first sentence.	The first sentence will be removed and 'floats' is proposed to be added to the second sentence, so it reads: "All floats, ells, and fingers must be at least 30 feet waterward of the OHWM."

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A9	Urban Concepts LLC	Letter for PC PH 5/4/11	4C.3.c.12.: Is it the intention of the city to require that applicants be required to provide a lighting report or study to show how the proposed lighting meets the maximum requirement of “no more than 1 footcandle measured 10 feet from the source”? Other jurisdictions have received approval from the DOE without including such a specific standard.	Applicants do not have to provide a lighting report. The applicant is required to show that the type of light to be used will meet the requirements. Footcandle specifications are included in the material provided when purchasing a new light.
A10	Urban Concepts LLC	Letter for PC PH 5/4/11	4C. 3.c.18.: In order for a property owner to construct a new private dock, the language proposed requires them to “demonstrate a need for moorage”. What evidence must a property owner provide to meet this standard?	Because the WAC clearly states that “a dock associated with a single family residence is a water-dependent use provided that it is designed and intended as a facility for access to watercraft” (WAC 173-26-231(3)(b)), the property owner must show that the dock is needed to moor a watercraft. The applicant should be able to show that they currently own a watercraft or are intending to purchase a watercraft.
A11	Urban Concepts LLC	Letter for PC PH 5/4/11	4C. 3.c.22.: Consider adding language that allows existing private pier or dock to be “replaced up to 100% of the size (square footage and dimension) of the existing pier or dock”.	Recommended change is proposed to the SMP document with specific requirement added of a maximum of 6 foot width within the first 30 feet.
A12	Urban Concepts LLC	Letter for PC PH 5/4/11	4C. 3.c.23.: Consider allowing the expansion of a non-conforming pier or dock subject to a Shoreline Conditional Use Permit. There might be cases where an applicant can modify a non-conforming dock in a manner that reduces its impact and might warrant allowing an expansion. These situations can be reviewed on a case-by-case basis and will receive a thorough environmental review.	Because this is expanding a nonconforming use, the applicant has to go through a shoreline variance process. Through the shoreline variance process, the applicant would have the opportunity to show how the expansion reduces its impact.
A13	Urban Concepts LLC	Letter for PC PH 5/4/11	4C. 3.c.28.: This section would require any property that currently includes two or more legal piers or docks greater than 6 feet in width to entirely remove one if ANY pier support piles need to be replaced. This seems like an extremely inflexible standard, for existing legal shoreline uses.	This is correct, one dock would need to be removed if one of the docks needed to be repaired, because it would be considered a nonconforming use and is consistent with the vision, goals and policies for the lake.
A14	Urban Concepts LLC	Letter for PC PH 5/4/11	Helipads are specifically allowed in the Single Family Residential shoreline environments in Renton. Renton has generous provisions for “existing non water-dependent uses” including the ability to retain and expand under certain terms and criteria.	Helipads have been discussed by the CAC and at public open houses. Each jurisdiction determines the uses allowed in each environment designation and zone.
A15	Urban Concepts LLC	Letter for PC PH 5/4/11	4C2 Bulkheads Consider allowing an applicant to provide a biological inventory to support a new bulkhead, even if the geotechnical criteria cannot be met. If an applicant can prove, through scientific evidence, that a proposed bulkhead will not adversely affect fisheries, aquatic life and wildlife, then it should be considered for approval. Fundamentally,	The WAC clearly states that “Structural shoreline modifications are only allowed to protect a primary structure or legally existing shoreline use.” (WAC 173-26-231). If the geotechnical criteria cannot be met, then there should be no need for a new bulkhead.

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			the state guideline merely requires no net loss of function and values. If this can be shown by a property owner then the project should be allowed to go forward.	
A16	Urban Concepts LLC	Letter for PC PH 5/4/11	4C2 Bulkheads As we have stated before, one of the fundamental parameters of this shoreline amendment process, as outlined by the state, is to maintain No Net Loss to the shoreline environment. With this being the focus, it is hard to understand why the city would not elect to allow existing bulkheads to be replaced by a new bulkhead built directly adjacent to the existing one. This work, appropriately constructed, is unlikely to result in any net loss of function to the shoreline ecosystem. Consider allowing such replacements to occur on this basis.	The WAC clearly states: “Replacement walls or bulkheads shall not encroach waterward of the ordinary high-water mark or existing structure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.” (WAC 173-26-231(3)(a)(iii))
A17	Urban Concepts LLC	Letter for PC PH 5/4/11	5.c.8.b.1: The definition of “should” within this proposed ordinance means “shall”; therefore, this section prohibits all residential development within critical areas without benefit of any kind of reasonable use process. This provision could result in the city facing situations of takings of private property rights. Consider alternative language and/or the inclusion of a reasonable use allowance.	This is a policy and not a regulation. Ecology’s comments on the SMP reasonable use exception was that it was not consistent with the SMP Guidelines and should require a Shoreline Variance.
A18	Urban Concepts LLC	Letter for PC PH 5/4/11	Redmond has a 35’ residential setback from lakes and 60% lot coverage allowance. Consider allowing a reduced building setback in situations where an applicant is willing to make shoreline improvements that provide a net increase and/or mitigates its impact upon function and value to fisheries, aquatic life and wildlife.	No changes are proposed to existing setbacks from the lake or lot coverage of 40 percent per residential lot is consistent with citywide regulations and therefore supports the unique “landscape” of the community and the comprehensive protection approach.
A19	Urban Concepts LLC	Letter for PC PH 5/4/11	5.c.8.c.2: This would prohibit a property owner from having a patio within 60 feet of the OHWM. Specifically, it would prohibit an existing homeowner from converting an existing lawn or graveled patio to concrete if it is within 60 feet of the OHWM. Consider language that allows for some kind of mitigation in exchange for work within the 60 foot.	See incentive in 5.c.8.c.2.c & d and 3 to add native vegetation for increased impervious surface or to add a deck on the lake.
A20	Urban Concepts LLC	Letter for PC PH 5/4/11	What percentage of existing homes on Lake Stevens are currently located a minimum of 60 feet from the OHWM? How many non-conforming uses are created by this setback requirement?	No changes are proposed to the existing critical area buffer or building setback from the lake. They are remaining consistent with current critical areas regulations. Table 6 in the Cumulative Impacts Analysis shows average setbacks for the north shoreline

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				at 98 feet, east shoreline at 103 feet and west shoreline at 64 feet. For our analysis, we looked at three 50-lot sample areas. Within these samples, 54 out of 150 parcels have structures less than 60 feet from OHWM, i.e. 36%.
A21	Urban Concepts LLC	Letter for PC PH 5/4/11	The city of Renton has building setbacks ranging from 25-45 depending upon the lot depth. And a vegetated buffer of 10-20 also depending upon the depth of the lot. They also make provisions to allow a property to make improvements to the site that will reduce the setback to a minimum of 25 feet. Buffer width averaging is also allowed. Consider adding provisions such as these.	See Response A19 above.
A22	Urban Concepts LLC	Letter for PC PH 5/4/11	<p>Nonconforming Uses (Chap 7G) It is clear from the City's Inventory Analysis and Cumulative Impacts Analysis that over 80% of the existing shoreline along Lake Stevens is currently developed. This is an important factor to consider when updating the Master Program and increasing the standards to which development must comply. Consider an analysis of the existing land and shoreline uses to determine what percentage of existing shoreline development will become "Non-conforming" under the proposed plans. With such a significant percentage of properties that may be affected by the nonconforming standards, it is our recommendation that greater attention be given to this particular section.</p> <p>Neither Renton nor Redmond include "legally permitted/conforming" language in their updates. This kind of language creates all kinds of difficulties in determining a process or clear standard to "prove" something was legally permitted. The existing language requires that if an existing nonconforming is use is "moved any distance", it must meet all the current SMP provisions.</p>	The SMP is using State nonconforming regulations from Washington Administrative Code 173-27-080 to be consistent with the Shoreline Management Act.
A23	Urban Concepts LLC	Letter for PC PH 5/4/11	Nonconforming Uses (Chap 7G) In the case of a dock/pier, for example, if in the normal maintenance and repair of that structure, you need to install a new pile directly adjacent to an existing pile in order to replace it, it could be interpreted to require that the entire dock/pier now come into full SMP compliance.	See 4.C.3.c.25-29 which allows for repair of existing docks.

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A24	Urban Concepts LLC	Letter for PC PH 5/4/11	Public Access 3B Public access has not been required by either the city of Renton or the city of Redmond for projects creating fewer than 10 new residential units. This differs from the city’s proposal to require some form of public access for any project creating three or more residential units (7.b.1.a)	This subsection is policy for these types of units. Regulations are located in 7.c.1 and is for greater than 4 lots, which is consistent with WAC 173-26-221(4)(d) in the Shoreline Management Act.
A25	Urban Concepts LLC	Letter for PC PH 5/4/11	Public Access 3B The regulations allowing mitigation payments in lieu of public access do not define an amount or how that will be determined and by whom. It is my understanding that the only legal mechanism for governments to collect mitigation fee payments is when they have a capital facilities plan that specifically identifies a project and cost for which the mitigation fee is to be collected and assigned. Does the city have a capital facilities plan for public access to shoreline environments? (7.c.3.)	While the City does not currently have a capital facilities plan for public access to shoreline environments, the City would like to keep the flexibility of the fee-in-lieu option. That way, if a capital facilities plan is adopted in the future, applicants would be able to take advantage of this option.
A26	Urban Concepts LLC	Letter for PC PH 5/4/11	Public Access 3B The language contained within regulation number (7.c.4.) is vague and extremely subjective. There is no standard to which this regulation can be applied. “Shoreline substantial development...shall minimize impact to public views of shoreline waterbodies from public land or substantial numbers of residences.” What constitutes “minimized” impact? How many is a “substantial number” of residences? “Shall minimize” is obligatory language that cannot be quantified.	We will remove this as a regulation and add it as a policy.
A27	Urban Concepts LLC	Letter for PC PH 5/4/11	Public Access 3B Do public access sites have to be connected to public streets or rights-of-way via public easement or via public rights-of-way? (7.c.6.) Can the lands associated with these public access areas still be used in the determination of lot/unit yield within a development? The city should consider allowing the areas set aside for public access to be used in a lot size averaging calculation. This would encourage developers to set aside the best and most useful areas for public access without “losing” lot yields in the process.	Yes, an easement or right-of-way would have to be recorded. The connection would need to meet the requirements of the Engineering Design and Development Standards and the Subdivision code (Chapter 14.18 LSMC). The Lake Stevens Municipal Code allows these easements to be included in determination of lot/unit yield or lot size averaging.
A28	Urban Concepts LLC	Letter for PC PH 5/4/11	Public Access 3B There is no definition of the “minimum width of public access easements. This needs to be clearly defined. (7.c.9.)	Access requirements are covered in the Engineering Design and Development Standards. For public access it requires at a minimum to meet Americans With Disability (ADA) Act requirements of 5 feet width. No change was made to SMP.

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B1	Futurewise, People for Puget Sound & Pilchuck Audubon Society	Letter for Planning Commission Public Hearing 5/4/11	Lakes and ponds are designated as a fish and wildlife habitat area under “waters of the state,” and classified using the WAC 222 water typing system (which is not limited to only streams). Please note that “waters of the state” are not defined in WAC 222, so the reference and how it is used needs to be described differently. Also the listing for waters planted with game fish references a WAC that does not exist.	Yes, you are correct and the City will propose updates to the references in state regulations.
B2	Futurewise, et.al.	Letter for PC PH 5/4/11	Streams are classified according to WAC 222 in one standard, but then there are details for each stream type that do not match WAC 222. Presumably the details in the SMP are to replace those of the WAC, but this is not stated. We recommend this be clarified.	Yes, the City will propose clarification.
B3	Futurewise, et.al.	Letter for PC PH 5/4/11	A clear statement that existing native vegetation within the buffer must be protected needs to be included, and is described more in our guidance document. While indirect statements might be construed to accomplish this, it needs to be stated in an explicitly clear manner. This can be done for individual critical area buffer requirements, or as a general statement for all buffers.	See Response to B9
B4	Futurewise, et.al.	Letter for PC PH 5/4/11	Almost all activities are allowed in fish and wildlife conservation areas, since they include “activities listed in this SMP.” As our guidance document describes, development in a buffer should be limited to uses and activities that are water-dependent and water-related - but not water-enjoyment and non-water-oriented. Specifically, this means those needing a location in or near the water; including some, but not all recreation; and including physical public access to water, but not just walking paths or viewpoints (which don’t need to be immediately on the water).	See Response to B9.
B5	Futurewise, et.al.	Letter for PC PH 5/4/11	There are no buffers for Type 4 wetlands, thus all activities can take place immediately adjacent to them. In addition, the wetland standards allow substantial impacts and elimination of these wetlands. This plans for a loss of ecological functions provided by wetlands. We recommend a 50 foot buffer for Type 4 wetlands.	Buffers are being added in response to Ecology’s comments.
B6	Futurewise, et.al.	Letter for PC PH 5/4/11	Buffers can be reduced based on intervening development. We have observed many cases around the Puget Sound where there is water-front development, but substantial habitat vegetation exists landward of it. These areas still need protection. The standard needs clarification	The proposed standard set forth meet the Washington Department of Ecology’s expectations for regulatory protection as shown by their comments on review of the SMP in the SMP Checklist dated May 7, 2011.

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			that wildlife habitat functions provided by remaining vegetation shall not be eliminated. Rather, such reductions need to be contingent on absence of intact vegetation.	
B7	Futurewise, et.al.	Letter for PC PH 5/4/11	Appendix section 3E regarding mitigation only discusses dedication of land or easement as avoidance, but it also seems to be used for compensation. Dedication of land does not compensate for impacts – it only potentially prevents future undefined impacts on certain areas, which should have been required anyway. Compensation for the impacts of the development still needs to be required to ensure no-net-loss of functions. In addition, there is no requirement that intact vegetation be present in the dedicated area – thus the dedication is treated as mitigation when no mitigation for impacts is actually happening.	See Response to B6.
B8	Futurewise, et.al.	Letter for PC PH 5/4/11	The absence of intact vegetation needs to be addressed more broadly in the buffer system. As our guidance document describes, meeting a buffer that is degraded does not prevent impacts. New development that is adjacent to a degraded buffer needs to enhance that buffer so it is capable of actually performing buffering functions.	See Response to B6.
B9	Futurewise, et.al.	Letter for PC PH 5/4/11	As described in our guidance document, almost all development has impacts – especially development using small buffers. Thus there needs to be explicit compensatory mitigation requirements in the regulations. Mitigation 2G seems to be a good start, but it needs a more explicit statement at the beginning that “compensatory mitigation shall be provided for all projects, except for restoration projects, and similar projects that the administrator determines will have no impacts to ecological functions.”	Amendments will be proposed based on and to meet the expectations of Ecology’s review comments in the SMP Checklist dated May 7, 2011.
B10	Futurewise, et.al.	Letter for PC PH 5/4/11	To provide specifics for compensatory mitigation in the context of buffers, we recommend that a minimum revegetation standard be added. This can take different forms. The City of Kirkland required all new development (including expansions) to plant a 10-foot buffer width on 75% of the shoreline frontage. The City of Issaquah draft SMP provides a detailed method of enhancement triggered by different stages/intensities of new development. Another method that could supplement the incentives (meaning in addition to them) would be a 1	See Response B9.

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			sq. ft. enhancement requirement each sq. ft. of new development, capping the enhancement at the size of the buffer. This kind of provision ensures that impacts will be compensated for so new development can be accounted for correctly in the cumulative impacts analysis.	
B11	Futurewise, et.al.	Letter for PC PH 5/4/11	While we may have missed it, we could find no description of the scientific basis for the use of the proposed buffer system. The SMA requires the use of current, up-to-date science, similar to the best available science requirement in the Growth Management Act. We recommend justifying the buffer system in the context of buffer science, and recommend using the scientific citations provided in our guidance document. We also recommend providing a policy basis for not using a science-based buffer system, as described in our guidance document.	As guided by Ecology, we are proposing requirements consistent with Ecology’s “Wetlands & CAO Updates: Guidance for Small Cities, Western Washington Version” dated January 2010.
B12	Futurewise, et.al.	Letter for PC PH 5/4/11	In reviewing the Cumulative Impacts Analysis, it appears that it does a good job of describing the protection measures, but it is vague in describing the impacts allowed by the gaps in the SMP, and by the special allowances in the SMP. The effective result is a “Cumulative Protection Analysis,” but not a “Cumulative Impact Analysis.” We recommend supplementing the CIA with a more careful assessment of the <u>impacts</u> that the SMP will allow.	Changes in Land Use per environment designation are detailed in Tables 1 and 2 of the Cumulative Impacts Analysis (CIA), likely development and the corresponding affect on functions is qualitatively discussed in Table 5, and a quantitative assessment impacts from specific shoreline modifications and uses is provided in Section 6.
B13	Futurewise, et.al.	Letter for PC PH 5/4/11	Some of the requirements in the Shoreline Master Program Guides require certain actions. For example, WAC 173-26-186(8)(b) provides that the “shoreline master program shall include policies and regulations designed to achieve no net loss of those ecological functions” within shoreline areas. So the policies implementing this requirement must be shall policies. However, the policies all use should. We recommend that policies implementing mandatory requirements use shall to meet these requirements.	The word should is used in the Policies because a policy is a directive, not a requirement.
C1	Kristin Kelly, Futurewise, People for Puget Sound &	Planning Commission Public Hearing	Policy uses ‘should’ not ‘shall’ throughout the document and that needs to be changed to ‘shall’.	See Response A3.

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	Pilchuck Audubon Society	5/4/11		
C2	K. Kelly	PC 5/4/11	Small Buffers options should be based on Buffer Science. (Submitted “Recommendations on Shoreline Buffer Options that Work with Buffer Science”)	As guided by Ecology, we are proposing requirements consistent with Ecology’s “Wetlands & CAO Updates: Guidance for Small Cities, Western Washington Version” dated January 2010.
D1	Brad Nysether	Planning Commission Public Hearing 5/4/11	Did not see anything addressing existing structures. If a new homeowner buys a property with existing non-conforming structure are they responsible for restoration and is there a process, a way for new property owners to know that.	Restoration or native vegetation plantings would only be required if the property owner was going to redevelop, expand, or repair beyond a certain threshold. If a homeowner buys a property with existing nonconforming structures, but does not intend to redevelop, expand, or significantly repair the structure, then the restoration requirements of this SMP would not apply.
D2	B. Nysether	PC 5/4/11	I know this is supposed to improve the shoreline but found it contradictory that the goals and policies are to improve economic activity in shoreline, public access; private use by clustering. Somewhat one sided, like planting trees within 20ft to get more dock space but what about the people whose properties already have numerous large trees on it or natural vegetation on it.	The Shoreline Management Act emphasizes accommodation of appropriate uses that require a shoreline location, protection of shoreline environmental resources, and protection of the public's right to access and use the shorelines. The regulation that allows wider docks by planting trees has been removed from the SMP.
D3	B. Nysether	PC 5/4/11	Haven’t seen anything about real public education, like what boat wakes do, how people walking on shoreline effect it, it’s all about the property owner.	Chapter 3 Section B.12.b.7 does address public education in terms of water quality. Public education is very important, however, because this SMP primarily deals with regulating land uses on shorelands, public education is not really in the scope of the SMP. This type of public education and outreach will be provided by the City as implementation of the SMP approved by Ecology.
D4	B. Nysether	PC 5/4/11	Read about short docks and long docks, now docks can be a maximum of 200ft, I had a dock of 110ft long and I thought that was long. I could see that being a potential boating danger, driving around at night and hitting the dock. Doesn’t a dock that long have to be lighted?	The first limit to dock length is to extend to attain 5.5 feet water depth. The second limit is 200 feet in length. Currently, some docks are up to 150 feet or a little longer. However, the SMP is in place for many years, so in the future, if deposits of sand continue in some areas of the lake, some people may need to increase the length of their dock to reach the 5.5. feet in depth. A regulation could be added to City land use code in the future requiring docks to be lighted if they reach a certain length if this becomes a safety concern, but it may not need to be in the SMP.

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D5	B. Nysether	PC 5/4/11	Want to know how the new rules for floating docks and inflatable will be enforced are there going to be police driving around issuing tickets.	We will be educating the public on the final regulations approved by Ecology and adopted by the City Council. The City works with residents on any issues not meeting code before starting a code enforcement process. If something does not meet new rules, the property owner is contacted and asked to meet the requirements. Often, a property owner isn't knowledgeable about the regulations.
D6	B. Nysether	PC 5/4/11	It sounds like listening to this tonight based on the information here this document is still not complete so how can you rule on something that is not completed.	The document is complete except for a final decision on whether 8 foot wide docks will be allowed by Ecology and Fish & Wildlife and a few subsections of Appendix B. So the documents in front of the Planning Commission could have a few minor changes based on final discussions with Ecology.
E1	Angela Larsh, Urban Concepts LLC for Rich Mietzner	Planning Commission Public Hearing 5/4/11	Is it necessary to take these huge steps in dock widths and materials and setbacks and all these things in order to maintain the existing conditions? (Submitted four sections of code from other SMPs: 2 sections from Lake Sammamish on Setbacks; and 2 sections from Redmond on Docks and Shoreline Modifications)	Ecology requires dimensional criteria to be clearly described in the SMP. Specifically, Ecology looks for dock dimensions (especially in the nearshore area) and building setbacks. This applies to new development, but also those lots which are already developed with structures and/or shoreline modifications.
E2	Angela Larsh	PC 5/4/11	There is also some semantic issues that happen when putting these documents together, for example when I read grating is required. When I hear the word grating I picture a metal grate. There are lots of things that can meet that, we ask that don't narrow technology don't restrain people to one kind of material. There are lots of things that can be thought of, as long as the function can be met, the goal is for light to meet the water.	See response to A4.
E3	Angela Larsh	PC 5/4/11	Bulkheads, the replacement of bulkheads - If someone already has a bulkhead and they want to simply replace that by putting a new one behind it, I have a really hard time seeing that there is a real net loss impact by doing that. I think there maybe some short term construction mitigation that needs to be done but in the long run there is not a lot of impact overall by replacing that feature.	Existing bulkheads can be replaced if they are needed to protect primary structures from erosion caused by currents or waves and a nonstructural measure is not feasible. Following the mitigation sequencing laid out in Chapter 3 Section B.4, the property owner must first avoid (so if it isn't necessary, then not allowed), then minimize (if it is necessary, make it the minimum size necessary).
E4	Angela Larsh	PC 5/4/11	...new regulations for setbacks, so 114 of those 183 parcels counted did not conform. In my world to create a new regulation that has the majority of properties that already don't comply with it is problematic, that is asking for trouble. All those properties owners are now nonconforming and their properties are being restricted in a very meaningful way.	No change to regulations for current critical area buffers or building setbacks to the lake are proposed, so there will be no new properties becoming nonconforming in regards to setbacks.

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F1	Rich Mietzner, Resident	Planning Commission Public Hearing 5/4/11	60 ft from the water and 20ft from the road leaves you with 20ft, the language is flawed and it effects too much real estate, we must correct it before it moves on. If we are going to create legislative then it needs to work for the majority of the people, we need to put the time in to make it work.	No change to regulations for current critical area buffers or building setbacks to the lake or setbacks from road rights-of-way is proposed, so there will be no new properties becoming nonconforming in regards to setbacks or roads.
F2	R. Mietzner	PC 5/4/11	Small item that keep resurfacing is the first 30ft, it's just nineteen houses. It seems simple to me, we looked at other municipalities and they didn't drop the first 30ft down to 4ft... If you have kids running up and down a dock this is to narrow. If other municipalities recently got it approved by DOE, then we can't allow the Makers guy tell us it that DOE won't let it happen. It must be changed it's a safety issue, all the people in the Advisory Board meeting raised their hands and said this needs to be changed and the document has not been updated.	Ecology has continued to point out that as the lake is a critical area, we must first try to avoid, then minimize and then mitigate impacts to the lake. The four foot width for new docks is minimization. The allowance for existing docks to go to six feet and the requirement for grating in all docks in the first 30 feet is mitigation for the overwater structure. Please see Ecology's comments to the City(attached). The Army Corps of Engineers General Permit #3 (attached) covers new and modified overwater structures and pilings in Lk. WA, Lk Sammamish, Sammamish River and Lake Union. It clearly states 4 ft width on docks as well as grating of 60% open area. The Corps permit is required in these areas like the JARPA is required for over and in-water work in Lake Stevens.
F3	R. Mietzner	PC 5/4/11	Bulkheads – If 80% is already bulkheads, then if the goal of DOE is no net less then we need something more than what is in here. No one changes 50% of their bulkhead over 5 years, if it needs to be repaired then it needs to be done. If the bulkhead is already there and it is damaged then they should be able to replace it.	Existing bulkheads can be replaced if they are needed to protect primary structures from erosion caused by currents or waves and a nonstructural measure is not feasible. Following the mitigation sequencing laid out in Chapter 3 Section B.4, the property owner must first avoid (so if it isn't necessary, then don't know allowed), then minimize (if it is necessary, make it the minimum size necessary).
G1	Douglas Bell, Resident	Planning Commission Public Hearing 5/4/11	Testimony follows submitted materials related to helicopters. Also providing testimony for neighbors Burgoyne, Powell, Kosche, Martin, Molenkamp, and Barnet. Opposed to sections authorizing helicopters landings, takeoffs and storage on docks, piers or other over-water structures... Want prohibition of helicopters utilizing over-water structures...inherently dangerous to public health and safety.	Staff talked with Kris Kern, Federal Aviation Administration (FAA) Inspector, FAA Seattle Flight Standards District Office regarding the use of helicopters on a lake and landing on a private dock. If the helicopter is approaching and departing the dock over water, there are no safety concerns. It would be considered to be flown in a safe manner and is a safe use of a helicopter. In addition, both the helicopter and the pilot are licensed by the FAA.
G2	D. Bell	PC 5/4/11	FAA has some regulatory authority, but that is not totally preemptive of the city's SMP and zoning jurisdiction.	City could ban helicopters from the lake if there was a rational justification for prohibiting the use. However, float planes are allowed on the lake as a water-dependent use, which require more area for takeoffs and landings, are on the lake for

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				a longer period, and have a higher potential for conflict with other lake uses than a helicopter. So the City may need to make some type of distinction between a float plane and a helicopter use in terms of safety concerns. Float planes and helicopters have a short period of noise, but do not have more noise impacts than jet skis and motor boats and are used less on the lake than boats and jet skis.
G3	D. Bell	PC 5/4/11	The dock is not a principal use, it is a structure with an accessory use to the lakefront lot's residential principal use. There is absolutely nothing in the nature of a dock-based helicopter pad that even remotely relates to boat moorage at a dock. Moreover, an operating, dock-based helicopter does in fact hinder and obstruct ("impede") the water-dependent use of the dock, e.g., boat moorage, fishing and swimming.	The WAC clearly states that "a dock associated with a single family residence is a water-dependent use provided that it is designed and intended as a facility for access to watercraft" (WAC 173-26-231(3)(b)). If the dock is built in support of watercraft and meets the dimensional standards, the SMP neither prohibits nor encourages other uses of the dock.
G4	D. Bell	PC 5/4/11	If private ownership of property is the determining factor regarding the scope of the city's SMP and land use ordinances, then there is no need to process either document any further if one may do what he or she wishes merely based upon private property title.	The FAA regulates aircraft. The City of Lake Stevens does not currently have regulations related to aircraft in the municipal code. The City has regulations, including the SMP that regulate certain issues related to land use and environmental protection.
G5	D. Bell	PC 5/4/11	In conclusion, we respectfully request the Planning Commission condition any approval of both the Draft SMP and Draft Ordinance No. 856 with the express prohibition of helicopter use for any purpose on all existing and future over-water structures.	Planning Commission could consider the request.
H1	Bill Barnet, Resident	Planning Commission Public Hearing 5/4/11	Does anything in the plans address older and newer cabanas and boathouse that are being converted in living space/residences and apartments, with bedrooms and kitchens.	No new boathouses or cabanas are allowed within City jurisdiction on Lake Stevens.
I1	Rose Granda, Resident	Planning Commission Public Hearing 5/4/11	Think it interesting that the City can manipulate its idea of proper use of the lake and the shoreline sometimes to its own benefit. Whether its restrictions on the property owner on how they want to rebuild or maintain structures. Now there is going to be more regulations, money in permits and fees for people trying to improve their homes. If the City had more of a conscience and the best interest of the wetlands and wildlife then they would be spending more time taking care, improving and maintaining their own lake front property.	Lake Stevens is a water of the state including the shorelines, and as so is protected for all of Washington's residents. Therefore, the State has the jurisdiction to protect the water and shoreline as necessary. The Shoreline Master Program is mandated by the State of Washington in the Shoreline Management Act in Revised Code of Washington (RCW 90.58.020) and the Shoreline Master Program Guidelines in the Washington Administrative Code (Chapter 173-26 WAC). The City is following the SMP guidelines in preparing the SMP for Lake Stevens shorelines. The City will need to follow all the regulations in the updated SMP for city property the same as all

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				other property owners.
I2	R. Granda	PC 5/4/11	Now you want all these young people to take tests to drive boats and jet skis, there is nothing about staying away from the shoreline. You want more money and more certification but it is hypocritical.	Washington's boater education law is a statewide law enforced by the state. The City of Lake Stevens does not require additional certification.
J1	Fred Schmidt, Resident	Planning Commission Public Hearing 5/4/11	I live next to a helicopter I don't care, we don't know if it is coming or going. Banning helicopters has no validity.	No response necessary.
K1	Cory Burke, Resident	Planning Commission Public Hearing 5/4/11	My apologies for not knowing all the details of this, but who is supposed to pay for all these new materials and restoration? If it is for the public's benefit then why do I have to pay for all of it?	Project applicants and property owners who are developing their property are expected to pay for improvements to their property as part of the development permit process.
K2	C. Burke	PC 5/4/11	Setbacks – I recently rebuilt our home, because of the setbacks we couldn't build the single large storey home that we wanted so we had to build a tall narrow two storey home. Lots should be looked at and topography should be looked at, each lot should be looked at not just given the 60ft set back. The nature of the intent of a 60ft set back should be looked at.	The SMP states: "Where the City's Shoreline Administrator finds that an existing site does not provide sufficient area to locate the residence entirely landward of this setback, the City's Shoreline Administrator may allow the residence to be located closer to the OHWM, provided all other provisions of this SMP are met and impacts are mitigated." (Chapter 5 Section 8.c.2.a.i)
L1	Rosanne Cowles, Resident	Planning Commission Public Hearing 5/4/11	Does anyone here know what Agenda 21 is? (Submitted article titled, "Assault On Property Rights)	The Shoreline Master Program is mandated by the State of Washington in the Shoreline Management Act in Revised Code of Washington (RCW 90.58.020) and the Shoreline Master Program Guidelines in the Washington Administrative Code (Chapter 173-26 WAC).
M1	Tom Matlock, Resident	Planning Commission Public	The 200ft length for a dock is not how long the dock is going to be, it's going to be an average of two docks one to the left and one to the right. So we still need to take out that 200ft language...	The regulation on the length of the two docks on either side is the one in the current SMP. The new SMP restricts dock length to that to reach 5.5 foot depth, but in no way can it go over 200 feet in length. Current docks reach 150 feet and over in areas

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		Hearing 5/4/11		of the lake where it is shallow. In the future, as these areas continue to collect sediment, the docks may need to be extended. The SMP update will regulate use of the lake for years to come.
M2	T. Matlock	PC 5/4/11	I drove around the lake today and looked at jet ski lifts, and there around three kinds of jet ski lifts and I think one of those is going to be a problem. Those are the self standing on a lever or a wheel by its self, those are going to become a non-conforming use will they not Miss Watkins? If you can wade out to a jet ski lift that is not attached to a dock, it's just in the middle of your clomp of water. Because there is something in the SMP's that states you cannot drive anything into the lake bed except for a pier, boat or a dock.	Jet ski lifts have been discussed at both the Citizen Advisory Committee and public open houses. The Planning Commission could consider amendments to address the concerns in their recommendation to Council.
M3	T. Matlock	PC 5/4/11	Then an unlimited number of the pull up ramp jet ski lifts, if you have a long dock and a lot of friends do we really want 15-20? On a process that even though I was on the Committee I didn't really understand this, we went from no pull up ramps to unlimited. So I think we need to take a look at that again before some people get rich parking jet skis at their dock.	Jet ski lifts have been discussed at both the Citizen Advisory Committee and public open houses. The Planning Commission could consider amendments to address the concerns in their recommendation to Council.
M4	T. Matlock	PC 5/4/11	The helicopter thing just came out of the air so to speak so maybe we should take another look at that.	Planning Commission could consider your request.
N1	Gigi Burke, Resident	Planning Commission PH 5/4/11	I think some of the most valuable and best research and points that have been made tonight by Angela Larsh with Urban Concepts. I believe you have received her document and I strongly hope you take those points into consideration and that we take a closer look at this before we make those decisions.	Thank you for your comments. The City is looking at all the comments. It is noted that all waterbodies have different requirements and therefore different regulations to meet No Net Loss.
O1	Darrell Moore	Planning Commission Public Hearing 5/4/11	I guess my concerns are that all these rules that you are proposing, or that is being proposed....They want to protect it and take care of it but when you put all these cookie cutter rules on it and we have high bank, low bank, short docks long docks, but now we are going to have all the same rules for everything.	Throughout the SMP we have incorporated flexibility by allowing the Shoreline Administrator to have some discretion, to ensure that unique characteristics around the lake are taken into account.
O2	D. Moore	PC 5/4/11	This needs to be looked at a lot more, things like the language 'shall' and 'should' are we trying to be deceptive?	The SMP Guidelines from the state provide a definition for the terms shall, should and may as used in the SMPs.

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P1	Rich Mietzner, Resident	Planning Commission Public Hearing 5/4/11	I am landing a helicopter on the dock, if you to operate a heli pad heli port that is for multiple aircraft and that is not my intention.	No response needed.
Q1	D. Molenkamp, Resident	Planning Commission Public Hearing 5/4/11	On the issue of helicopters... This is not an airport that we live on here, there is a public danger with operating helicopters and they are a nuisance and are certainly not water dependent, they are a danger to the public.	See Responses to G1 and G2.
R1	Douglas Bell, Resident	Planning Commission 5/18/11	Comments regarding helicopters, a non-water dependent use, landing on a private dock. Concerned with safety of residents.	No response needed
S1	Angela Larsh, Urban Concepts LLC	Planning Commission Public Hearing 5/18/11	(Submitted map identifying parcels on lake not meeting 60 ft setback.) If your existing setback is 60ft and more than 60% of the properties subject to that are not meeting that then it needs to be re-evaluated. Maybe it should be something less than that since most people are already not complying with that. If this is an existing condition and the point is to have no net loss then why would make a requirement that all these people already don't meet. They are not meeting it now, then there is no loss to the function or value to the lake if you keep letting people do what they are doing now, so why don't you change the rule to reflect the existing condition.	See Response A20
S2	Angela Larsh	PC 5/18/11	With regard to helicopters I personally like to see it remain silent, it seems that this is a small handful of operators. No one seems to be objecting to operators that you have, to regulate a problem that you don't already have makes the issue muddy. No one has an issue right now, no one is abusing their rights so why try to regulate something that's not a problem.	See Response G3

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S2	Angela Larsh	PC 5/18/11	I do disagree respectfully with Mr. Bell, that I do not think it is fair to say that somehow a floatplane is without risk and helicopters are. That doesn't make any sense to me, anything that flies away has some risk, they all have risk. To regulate one and not the other based on risk doesn't make sense. I think restrictions on hours are reasonable, early morning hours, late at night, I think that's reasonable, I think people would comply with that.	No response needed
T1	Gigi Burke, Resident	Planning Commission Public Hearing 5/18/11	We rebuilt a very old run down house last year and my house would not be there right now if these regulations had been in effect then... There is a lot of old house that are run down, my dad's house, that need to be remodeled and rebuilt, lot of old house on the lake that are old and need to be re built. I would hate to see this not happening, by softening the language that exactly what that does it takes each individual residence on piece-by-piece basis and helps the people to be able to do what they need to do... I think our fear is to see these restrictions in place where people can't do anything.	The 60 foot setback from the lake, which is a critical area (Fish & Wildlife Conservation Area) has been in effect in Lake Stevens since 2007 when the Critical Areas Regulations were updated. Your house was built with the 60 foot setback requirement from the lake in place. Additionally, the SMP update has a number of requirements that provide flexibility/incentives and non-conforming provisions to existing development.
T2	G. Burke	PC 5/18/11	Back to the helicopter issue, I have several letters of support that I will be bringing to the Council. I understand the safety issues, but we don't see the helicopters as being any unsafe than float planes. Whether existing helicopters are grandfathered in or not, I don't think any of us want unsafe environment for our children or our families and we don't see that as being unsafe at all.	No response needed
U1	Tom Matlack	Planning Commission Public Hearing 5/18/11	So what has been the setback from the lake for five or six those years? So, we are in 2011 right now, so you (Gigi Burke) re did a house under the same setbacks that we are talking about for SMP.	See Response T1
V1	Snohomish County Public Works	Planning Commission Public Hearing	Public Works has reviewed your draft document and, at this time, offers no comments. Thank you for the opportunity to comment.	No response needed

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		5/18/11		
W1	Ted & Linda Boysen, Residents	Planning Commission Public Hearing 5/18/11	Letter about concerns raised over helicopter usage on Lake Stevens. Know current helicopter pilot and he is a safe pilot. Want to continue to allow helicopters, float planes, boating, rowing, fishing and other lake activities.	No response needed
X1	James & Judith Gottschalk	Planning Commission Public Hearing 5/18/11	Letter about concerns raised over helicopter usage on Lake Stevens. Knows current helicopter pilot and has been a float plane pilot himself. Believes helicopters and float planes are a great part of community. Current pilot is a safe pilot. Looks forward to seeing helicopters, sea-planes, boating and other activity on the lake.	No response needed.
Y1	Gigi & Cory Burke, Residents	City Council Public Hearing 5/23/11	Letter to support allowing residents to own helicopters and park them on lake front property on Lake Stevens.	No response needed.
Z1	Jeremy Clites, Resident	City Council Public Hearing 5/23/11	Email in support of Mr. Richard Meitner's use of helicopter on his dock. Commenter lives next door.	No response needed.
AA1	Robert M. Wade	City Council Public Hearing 5/23/11	Letter in support of storage and operation of a private helicopter owned and operated by Rich Mietzner.	No response needed.
AB1	Ray Granda & Family, Residents	City Council Public Hearing	Letter supporting helicopter use on the lake. Commenter is employed in aviation industry for over 25 years. Helicopters are one of the safest ways to travel. Richard Mietzner is a professional and experienced	No response needed.

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		5/23/11	pilot.	
AB2	R. Granda & Family	CC PH 5/23/11	Letter voices caution to limit the rights of other families on the lake. Saddened to see local government increasingly strangle the property rights of this community by over regulations and costs.	The SMP update is mandated by the State of Washington. Lake Stevens and the shoreline 200 feet landward of the ordinary high water mark is a “water of the state” and under state jurisdiction for the benefit of state residents. Ecology provided the City with SMP Guidelines and an SMP Checklist of what requirements are necessary in the SMP. The overall purpose of the SMP is to meet No Net Loss of Ecological Functions for what exists now. The proposed SMP regulations will do this for future health of the lake.
AC1	The Lee Family, Residents	City Council Public Hearing 5/23/11	Letter supporting helicopters on the lake and current pilot as safe.	No response needed.
AD1	Leif Holmes, Resident	City Council Public Hearing 5/23/11	Letter supporting helicopter use on the lake.	No response needed.
AE1	Earl & Amanda Rotherick, Residents	City Council Public Hearing 5/23/11	Letter supporting the use of a helicopter by Rich and Rhonda Mietzner on the lake.	No response needed.
AF1	Michael White, Pacific West Financial Group	City Council Public Hearing 5/23/11	Letter stating Rich Mietzner’s professional focus on safety.	No response needed.
AG1	Kathy Nysether, Resident	City Council Public Hearing	Letter from a former helicopter instructor supporting continued use of helicopter by Rich Mietzner.	No response needed.

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		5/23/11		
AH1	The Lee Family, Residents	City Council Public Hearing 5/23/11	Same letter but with signatures.	See Response AC1
AII	Jon & JoAnn Youngquist, Residents	City Council Public Hearing 5/23/11	Letter stating aviation has been a frequent and important part of the lake for nearly half-a-century. Restricting its activity at this point in history seems like a needless exercise of power and an imposition on those who use the lake for this purpose. The background noise generated by ski boats, jet skis, other personal water craft, and aircraft are part of the culture of the lake.	No response needed.
AJ1	Bill Tsoukalas, Boys & Girls Club	City Council Public Hearing 5/23/11	Letter regarding continued allowance of helicopter take offs and landings from the lake and in support of continued use by Mr. Rich Mietzner.	No response needed.
AK1	Angela Evans, Resident	City Council Public Hearing 5/23/11	Letter from a near neighbor or current helicopter pilot stating it is not noisy or a nuisance.	No response needed.
AL1	Douglas Bell, Resident	City Council Public Hearing 5/23/11	Read and submitted testimony from Mr. Bell and on behalf of six additional lakefront residents (Burgoyne, Powell, Kosche, Martin, Molenkamp & Barnet families). Comments from both verbal and written testimony. The fourteen of us are strongly opposed to draft Ordinance 856, Section. 2 that adopts the SMP but only add to those provisions that deal with helicopters and Section 5 that amends Title14 a section of the Lake Stevens Municipal Code that also specifically addresses helicopters. We want the prohibition of helicopters. We want the prohibition of helicopters so that they may not utilize overwater	No response needed.

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			structures to conform to that prohibition that was in your November 2010 draft SMP. We want that reimposed and want it restated in Ordinance 856 particularly Title 14.	
AL2	D. Bell	CCPH 5/23/11	Now there have been concerns expressed by others that our request will adversely affect one helicopters use of overwater structure that is not our intent. Our lay understanding of nonconforming use regulations of the City and as explained to us by staff is that a use, land use, helicopter use, established prior to the effective date of the new more restrictive ordinance will not impact that existing use. In other words what is may continue for that residence.	The existing helicopter use is not necessarily grandfathered in. If it is determined by the City to exclude helicopters from the lake, it will depend on the reason for the exclusion, whether the existing helicopter can continue the use.
AL3	D. Bell	CCPH 5/23/11	Helicopters in a residential neighborhood are both very noisy and extremely dangerous. Helicopters are a non-water dependent use.	Helicopters without floats are a non water-dependent use. Helicopters do have a high decibel level (~105 dB) for a short time in one place. Other uses of the lake include personal watercrafts which idle at ~74-85 dB, are at 91-100 dB at 5,000 RPM and 100-105 dB at full throttle. Piloting helicopters requires a federal license and the equipment requires a federal license.
AL4	D. Bell	CCPH 5/23/11	Your draft ordinance states that, the definition in the draft SMP is redundant in that regard as well.	Not sure which definition commenter is referring to, but both “nonconforming development” and “nonwater-oriented uses” are defined in Chapter 6 of the SMP.
AL5	D. Bell	CCPH 5/23/11	Now many if not most existing overwater structures abut or very near adjacent upland shoreline and submerged property lines and in some instances other docks. The placement of helicopter landing pads on docks or other overwater structures may vary but in many instances the helicopter landing area will not be reasonably safe distance from people or adjacent homes.	See Response G1
AL6	D. Bell	CCPH 5/23/11	Just because the helicopter pad is on a structure over a body of water provides no justification for this unwarranted exposure to harm and injury to occupants of contiguous and adjacent properties. This is not only poor shoreline management and land use planning, but more importantly inherently dangerous to public health and safety. Pilot errors and equipment malfunctions do happen.	See Response G2
A17	D. Bell	CCPH 5/23/11	We brought up very early on the initial failure of the Draft SMP to address helicopters. The November, 2010 Draft SMP rightly corrected this oversight by then stating: “Over-water structures used for landing helicopters are not considered water-dependent and are therefore	In the early SMP documents, helicopter use of a dock was not addressed. When it came up from a resident, the Shoreline Citizen Advisory Committee discussed it and proposed language. At the next public open house, residents who are pilots on the lake discussed the proposed language prohibiting helicopters and asked that it be

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			<p>prohibited.”...However, the present Draft SMP merely provides that all over-water structures “...conform to...federal requirements...” and also “Non-water-dependent uses may use a dock for a water-dependent use as long as they do not impede the water-dependent use.” Far worse yet, Draft Ordinance No. 856, sec. 4 expressly authorizes a helicopter to use any exiting dock or pier.</p> <p>Why this radical reversal from the prior and proper treatment of non-water-dependent helicopters...and the outright authorization for non-water-dependent helicopter usage...?</p>	<p>changed. The language currently proposed is the new language written after the public open house and based on public comments. The Planning Commission discussed the issue at the SMP public hearings, but decided not to make any proposed changes. They discussed their preference that the SMP to be silent on helicopters.</p>
AL8	D. Bell	CCPH 5/23/11	<p>FAA role—The FAA’s regulatory authority is not preemptive of the city’s SMP and zoning jurisdiction. To establish a private-use heliport, one has to comply with FAA regulations. The FAA further requires one “must” also “comply with any local law” or “ordinance.” Ordinance No. 856 can be that “any local law” if the City Council has the will to exercise self-determination.</p>	See Response G2
AL9	D. Bell	CCPH 5/23/11	<p>Contact the FAA—The immediate threats we wish our families protected against are not preventable by contacting the FAA after the fact of suffering harm and injury. The FAA’s assertion that because helicopter approaches and departures are over water there are no safety concerns completely ignores the facts present here of close human proximity to the areas of operation.</p>	See Response G1
AL10	D. Bell	CCPH 5/23/11	<p>Helicopters as an accessory use to boat moorage at a dock—An accessory use is a use that is customarily associated with and incidental to the principal use of property or structure. There is absolutely nothing in the nature of a dock-based helicopter pad that even remotely relates to boat moorage at a dock, or even a dock. Helicopters are not water-dependent use. Moreover, an operating, dock-based, non-water-dependent helicopter does in fact hinder and obstruct the water-dependent use of the dock, e.g., boat moorage, fishing and swimming, i.e., “impede(s).</p>	See Response G3
AL11	D. Bell	CCPH 5/23/11	<p>Float planes—Unlike helicopters, float planes are a water-dependent use and share time and space on the lake with other water-dependent uses. Water-dependent uses of all character may have conflict in any limited space. Float planes will be regulated as both watercraft and are</p>	See Response G2

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			as aircraft. The potential for conflict between such water-dependent uses on the lake are no rationale to allow helicopters the unmerited benefit of water-dependent status so they may then conflict with shoreline residential uses.	
AL12	D. Bell	CCPH 5/23/11	Helicopters and private property—If private ownership of property means those helicopters that can no longer use docks may utilize private backyards and driveways for land and takeoff under current city ordinances, then we suggest the City Council undertake subsequent regulatory action forthwith to similarly protect all citizens as we propose it do now for shoreline citizens. Strict regulation is needed, not merely for time-of-day usage, but most critically, the proximity issue.	See Response G4
AL13	D. Bell	CCPH 5/23/11	City staff advises the City Attorney opines a “rational justification” is first required to regulate the aspects of helicopter use we request and distinguish helicopter from float plane treatment. We suggest ample rationale has been provided and exists in-chief by virtue that helicopters are not water-dependent and their over-water structure use proximity to persons and property pose unacceptable public safety risks.	See Response G2
AL14	D. Bell	CCPH 5/23/11	We respectfully request the City Council to not adopt either Draft Ordinance No. 856 or the SMP without the addition of express prohibitions on helicopter use for any purpose on all over-water structures. At the very least, we seek City Council action to revise the last sentence of proposed LSMC sec. 14.44.070(a) to read: “Helicopters are not a water-dependent use, and are prohibited from using over-water structures.”	Council could consider your request.
AM1	Angela Larsh, Urban Concepts LLC	City Council Public Hearing 5/23/11	It is important to recognize that under the current shoreline management program that we have right now that there is a very clear division between how critical area regulations apply and how shoreline regulations apply. So under the current rules, there is a House bill out of the State, House Bill 1653 that specifically limits the implication or the application of critical area regulations to properties within shoreline	Ms. Larsh’s comments are correct on a separation between SMP and Critical Areas Regulations. Therefore, the City decided to place the critical areas regulations for shoreline jurisdiction into the SMP as Appendix B. Therefore, properties in shoreline jurisdiction will need to meet the requirements of the SMP including the critical areas regulations for shoreline jurisdiction within Appendix B and not Title 14 Land Use Code.

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			jurisdictions. Okay, so right now as it stands you either are subject to shorelines or you're subject to critical areas regulations, but not both. Under the amendment process that the State is requiring the City to go through, those things become one. They blend the critical area requirements with the shoreline management master program. And that is a big change and is an important one to understand.	
AM2	A Larsh, Urban Concepts	CCPH 5/23/11	Using the City's current critical areas regulations which will become applicable to shoreline properties once this amendment is accepted. Properties that currently do not comply with that 60 foot setback buffer or whatever you want to call it. The critical area regulations will prohibit you from replacing your structure or any other improvement that does not comply with the 60 foot buffer if it is destroyed by human activity or natural causes. Okay that is your code Section 14.88.330. That is important to understand because last week at Planning Commission I submitted some aerial photographs that were highlighted all the properties in the City, along the lake, that do not comply with the 60 foot setback currently. It is more than 60% of the properties.	As explained in Response AM1, the current CAR in Chapter 14.88 LSMC are being replaced for critical areas within shoreline jurisdiction by Appendix B of the SMP. In addition, Chapter 7, Section G of the SMP clearly states that "if a nonconforming development is damaged to the extent of one hundred percent of the replacement cost of the original development, it may be reconstructed to those configurations existing immediately prior to the time the development was damaged..." Thus, if a house burned down, you could rebuild it on the current foundation. In regards to the 60 foot buffer/setback on the lake, please see Response A20. [NOTE: the SMP does not change existing setback requirements.] In addition, staff knows of at least one parcel that is marked on the map submitted as less than 60 feet that is definitely farther than 60 feet from the lake because a building permit was approved and the house has been built completely outside the 60 foot buffer/setback.
AM3	A Larsh, Urban Concepts	CCPH 5/23/11	The bulkhead language does not allow for existing structures to be replaced and I have a problem with that for several reasons. When you back what we talked about lots of jurisdictions and what they've got going on. Every jurisdiction in the State is being held to same standard, that's the state guidelines. The state is required to treat every jurisdiction equitable and consistently just like any other regulatory body. It was good for Whatcom County or City of Redmond or Sammamish or Bellevue if those people can build docks six feet wide or don't have to be grated and those regulations were found to be in conformance with the State guidelines then Lake Stevens should be held to the same standard. You shouldn't be held to higher standard than any other jurisdiction.	The City of Redmond and Whatcom County were early adopters, and therefore the SMP Guidelines were not in place when they began their SMP process. Also, Ecology has expressed they are trying to be more consistent with their comments. Ecology recently completed the official review of the City of Sammamish's SMP and provided comments in line with the comments provided to Lake Stevens to date, including the size of docks within the first 30 feet. Ecology's comments can be viewed at http://www.ecy.wa.gov/programs/sea/shorelines/smp/mycomments/sammamish.html .
AM4	A Larsh, Urban Concepts	CCPH 5/23/11	Now that being said, Lake Stevens is a special case to some degree, it is an urban lake, is different than say Puget Sound or Lake Washington where you have a marine environment or you are dealing with anadromous fish and those areas structures are held to a much higher	See Response F2

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			standard they already have to get Army Corps permits, you do not need Army Corps permit to build a dock on Lake Stevens, it's not required they don't have jurisdiction. You need permits from Fish and Wildlife. You need permits from the State. So this four foot grated thing comes from Army Corps of Engineers, they don't apply here. So why are we using those rules that don't apply to the development that occurs on the lake.	
AM5	A Larsh, Urban Concepts	CCPH 5/23/11	One more thing helicopters – I do have to say something about helicopters. Rich Meitzner has been using his helicopter and I think he is a responsible citizen he only wants to.	No response necessary
AN1	Tom Matlack, Resident	City Council Public Hearing 5/23/11	It was a very long process. I would have to thank the committee members, Planning Commission, and especially the planning staff and now you guys 'cause it is now in your lap. We all ran into this bewildering area of jurisdictions ...but I think the Planning Commission has heard much of the same testimony and I would like you to please accept the recommendations that were in the staff report tonight.	Mr. Matlack was a member of the Shoreline Citizen Advisory Committee and has therefore been involved in preparation of the SMP from the beginning. No response necessary.
AO1	Ted Boysen, Resident	City Council Public Hearing 5/23/11	I respectfully disagree with Mr. Bell and I agree with the last lady that spoke. Ladies and gentleman we have to be very careful that we don't pit neighbor against neighbor here on Lake Stevens. Lake Stevens is a big lake, is a preferred recreational lake and there is plenty of room on Lake Stevens for fishing boats, for water-ski boats, for wakeboard boats, for sailboats, for float boats, float planes, and for helicopters and many other activities.	No response necessary
AO2	T. Boysen	CCPH 5/23/11	...we have to be careful that we keep our rights here and there is plenty of room for everybody to have fun and to exercise our rights and I love seeing float planes. I love seeing helicopters and I love seeing boats on Lake Stevens.	No response necessary
AP1	Bruce Morton, Resident	City Council Public Hearing	I want to focus on a very specific regulation that's in the proposed SMP that has to do with the boat lift canopies, that's in Chapter 4, Subsection C, Paragraph 30, Subparagraph d and e found on Page 63 of	Fabric is required because boat lift canopies are not intended to be permanent overwater structures. If solid materials are allowed, the boatlift canopy becomes a more permanent structure instead of an accessory use to the boatlift. A solid canopy

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		5/23/11	the SMP. Most of the regulations in the SMP have some sort of foundation and science studies based on helping the ecological function of the lake but this particular regulation having to do with boat lift canopies having to be made of fabric material versus solid material. I don't think the fish care whether the shade comes from fabric or a solid roof. So I don't think there is any rational basis for this. ... I would like to submit this as an amendment to strike the first sentence of that Subsection d and the whole sentence of Subsection e which would essentially allow any type of material to be used on boat lift canopies.	would begin to look more like a boat house, which is not allowed by the SMP.
AP2	B. Morton	CCPH 5/23/11	In conversations that I have had on previous public meetings that has been brought up that well that the solid boat lift canopies can be flimsy which is kind of a ridiculous argument because I think that fabric is more flimsy than solid wood or that the design or structure of it may be flimsy.	See Response AP1
AP3	B. Morton	CCPH 5/23/11	Other complaints or thoughts about why this regulation is being proposed is that the construction materials for solid roof can fall into the lake and thereby pollute the lake.	See Response AP1
AP4	B. Morton	CCPH 5/23/11	... I like helicopters on the lake.	No response necessary
AQ1	Gigi Burke, Resident	City Council Public Hearing 5/23/11	...this is going to be a change that takes place that's going to last for the next 20 years that's a long time and it scares me and many other homeowners very much.	The SMP is a long-term document, however, it is to be updated every seven years with the Comprehensive Plan. It can also be updated more often.
AQ2	G. Burke	CCPH 5/23/11	My husband and I, we built the house here on the lake within the last couple of years and we could not have built the house that we built under these regulations. We have a bulkhead and we would like to be able to maintain that bulkhead and there is no way we will be able to do that under these regulations.	See Response T1
AQ3	G. Burke	CCPH 5/23/11	I personally feel that some of the remarks that Ms. Larsh has made about the other lakes around the area in Whatcom, in Redmond have taken the regulations and eased the language to allow things to be handled on a local basis on a more case by case basis and I just really hope as a constituent that you take these things into consideration...	See Response AM3

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AQ4	G. Burke	CCPH 5/23/11	... the hard costs are going to be put back on the homeowners and it is not just rebuilding our docks or maintaining our bulkheads.	The bulkhead and dock are privately owned and maintained and are located within State shoreline jurisdiction and are therefore required to meet shoreline regulations in the SMP in addition to state permitting agency regulations, which mirror the state WAC.
AQ5	G. Burke	CCPH 5/23/11	Well the statement that was made today that scares me the most that I didn't even think of is if my house burnt down I wouldn't be able to rebuild it at all.	See Response AM2
AQ6	G. Burke	CCPH 5/23/11	One last thing and this is just on behalf and Rich and Rhonda unsolicited letters were written in support of having helicopters on Lake Stevens and I just wanted to submit them on their behalf.	No response necessary
AR1	Jennifer Soler, Resident	City Council Public Hearing 5/23/11	I bought a home on the lake we were lucky [<i>unable to transcribe</i>] probably one of the smallest pieces of property on the lake and we are so excited to live the lake life but I am really concerned now because it looks like I am not going to be able to do anything to my piece of property.	Unable to respond as details of property is unknown
AR2	J. Soler	CCPH 5/23/11	So I am really concerned that I can't even build a little gravel level flat for a BBQ and I am concerned that I cannot replace my bulkhead and meet the shoreline management. It is the restrictive language, the "shall" and the "should" that basically mean that I'll have to hire some researchers and do mitigation and pay for all of that just to replace my bulkhead. I don't know, to me that doesn't fall under a reasonable use. When you buy a piece of property and a home, don't you have a reasonable use of that piece of property?	The State regulations do not allow for a "reasonable use" provision directly in shoreline areas, which is allowed under the City's critical areas regulations outside shoreline jurisdiction. The SMP however, includes a Shoreline Variance process where a specific property owner can ask for something that is not specifically allowed by the SMP.
AR3	J. Soler	CCPH 5/23/11	...but I would really encourage you to take a look at the nature of how restrictive the language is and think if it was your small piece of property that you were so excited to live on think how you would feel if it burnt down and that was it and that is all I have to say.	See Response AM2
AS1	Paul Olliges, Resident	City Council Public Hearing 5/23/11	So what you are saying here is some of the regulations you are going to force me to spend a lot of money just to maintain my property.	If you have a dock or property within shoreline jurisdiction, you will be required to meet shoreline regulations in the SMP.

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AS2	P. Olliges	CCPH 5/23/11	I've got a bulkhead. I've got an 8 foot dock that was on the property when I bought it. The dock is in need of repair what you're going to tell me is if I am going to have to come in and modify the dock to 4 feet at the 30 foot section that's a burden on me that no one else is going to pay for except my family.	If your dock is already larger than four feet wide in the first 30 feet, you may keep six feet width in the first 30 feet. It is only new docks that require the four feet width in the first 30 feet.
AS3	P. Olliges	CCPH 5/23/11	I have a structure within the 60 feet of the property that is being used today and it needs to be repaired and you're not going to let me repair it. So please read through and understand the impact that you are putting on the people on the lake.	Maintenance of existing structures is allowed if it is legally existing use/structure. For remodels or enlargements, a property owner can request a Shoreline Variance.
AT1	Jim McCord, Resident	City Council Public Hearing 5/23/11	The comments made by Ms. Larsh and that she submitted to you folks in writing are very important to me and I hope you take a clear look at what they say and how they affect the people that live on the lake. Not everybody's properties conforms to the guidelines. Everybody is a little bit different.	The SMP includes Nonconforming Regulations for properties that were legally constructed or a legal use, but do not conform to new regulations. These are located in Chapter 7, Section G. The Shoreline Variance allows a property owner to request a use or structure due to specific lot requirements.
AT2	J. McCord	CCPH 5/23/11	And one other comments that I have to make I also scuba dive a lot and the concerns about lake coverage docks and such just confuses me. Every time I go scuba diving when the suns out you see more fish hiding underneath the docks and in the shade and that you guys are trying to encourage the fish habitat but yet you are limited the dock structures. If you ever dive that's where the bass are that's where the fry are they are sitting underneath the docks.	According to Fish and Wildlife and the City's consultants, scientific studies show bass and other predatory fish like to hid in the shade under docks where Coho salmon fry (a State Priority Species), Kokanee or other fish cannot see them easily. We are required to manage the lake environment to protect the critical fish habitat.
AU1	Patricia Perry, Resident	City Council Public Hearing 5/23/11	... I recall that this lake would have a reputation of for having more restrictions than is necessary or required by the state or by our government that would make us less desirable for future homeowners to purchase our homes when we go to sell them. That would then lower value of our homes but that would also make us not be able to use our property the way we had hoped we would be able to use, just because there is a possible perception that there might be problems that are not really factual...	See Response AB2
AU2	P. Perry	CCPH 5/23/11	I hope that you all will have time to go over or whoever does these investigations will check thoroughly and make sure that their facts are actually accurate and not just taken as facts and make <i>[not</i>	The City hired The Watershed Company and Makers Architecture which have successfully completed other SMPs. They have followed the SMP Guidelines and well-known scientific review processes to assist the City in the SMP process.

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			<i>transcribable</i>] our properties less useful.	
AV1	Bill Tackitt, Resident	City Council Public Hearing 5/23/11	The State DOE is a state agency that is trying to force local governments to impose standards that place the cost of their improvements on the backs of the private property owners. The State of Washington is in its great wisdom is telling the people of Lake Stevens we know what you people need and you should do it the way we say.	See Response I1
AV2	B. Tackitt	CCPH 5/23/11	Property owners should be allowed to replace, repair and maintain their existing property improvements including docks, floats and bulkheads. Can we as a City government help property owners accomplish this in an environmentally improvement. The answer is yes. We can provide that locally. DOE does not give you a set of demands only suggestions because if they did they spend the rest of their entire budget in the court of law.	See Response I1
AV3	B. Tackitt	CCPH 5/23/11	So they give you a set of suggestions and they try to impose their will on local government and say you must do it their way. We all know that those are negotiated points and then we can negotiate each and every one of them. And there should not be a rule that we feel that they were granted to someone else that we shouldn't be entitled to the same privilege.	See Response I1
AV4	B. Tackitt	CCPH 5/23/11	We need to put this program a through and very precise study. Perhaps we need to bring in more expertise, outside expertise.	The City has been working on the SMP updated for almost two years. A Citizen Advisory Committee was created by the City Council. The State gave the City a small grant to hire consultants who are experienced in writing SMPs. The consultants completed an Inventory and Analysis Report of the shorelines within the Lake Stevens Urban Growth Area, based on existing data and documents and actual reconnaissance of the lake environment, which was reviewed and approved by Ecology. This report set the background conditions for the SMP, which was drafted by consultants and City staff with review by the public at three public open houses. Once the SMP was drafted, the consultants ran a Cumulative Impacts Analysis to determine impacts from the proposed regulations. Next, the consultants completed the No Net Loss report based on the cumulative impacts to determine if the SMP

Lake Stevens 2011 Shoreline Master Program Update - Responsiveness Summary

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#	Person/Group	Where	Issue (from Public Testimony)	City Response
				would ensure No Net Loss of shoreline functions. The City has coordinated with Ecology and Fish and Wildlife to ensure the proposed SMP will meet SMP Guidelines are required by State law. The SMP is in the final step, the Local Adoption Process. As part of this step, staff met with the Planning Commission and City Council to discuss the proposed SMP at six meetings each. In addition, the Planning Commission to date has held two public hearings and made a recommendation to the Council.
AV5	B. Tackitt	CCPH 5/23/11	And now someone is going to tell me that when my house burns down Bill you can't build that house there anymore.	See Response AM2
AW1	Cory Burke, Resident	City Council Public Hearing 5/23/11	The big issues I have if we need to do certain things to the shoreline to make this a more healthy lake for everybody I am for it. I just don't want to pay for it all myself. I'll pay my share which I think I do through taxes. But if new materials on docks is twice as much as what I have existing I don't really think it's my responsibility to pay that burden entirely on my own if it's benefiting the lake for the public.	The dock is privately owned and maintained and is located within shoreline jurisdiction and must therefore meet the regulations within the SMP.
AW2	C. Burke	CCPH 5/23/11	Most of my house is within that 60 foot buffer. The house has been there for 60 years. If something happens to it what I am suppose to do.	See Response AM2
AW3	C. Burke	CCPH 5/23/11	Our dock does not conform now. I am not opposed to making some changes and stuff, but I guess what I am looking for from you guys is a give and take system and what I am hearing the state trying to put on you is you have to do it this way.	The dock is privately owned and maintained and is located within shoreline jurisdiction and must therefore meet the regulations within the SMP.

ATTACHMENTS WILL BE INCLUDED AT A LATER DATE

- A – Letter dated April 8, 2011 to City of Lake Stevens City Council from Urban Concepts, LLC.
- B – Letter dated May 4, 2011 to City of Lake Stevens Planning Commission from Futurewise, People for Puget Sound & Pilchuck Audubon Society
- C – Public Testimony and Submittal by Kristin Kelly, Futurewise/Pilchuck Audubon Society/People for Puget Sound at the May 4, 2011 Planning Commission Public Hearing
- D – Public Testimony by Brad Nyscther, Resident at the May 4, 2011 Planning Commission Public Hearing
- E – Public Testimony and Submittal by Angela Larsh, Urban Concepts LLC for Rich Mietzner at the May 4, 2011 Planning Commission Public Hearing

Lake Stevens 2011 Shoreline Master Program Update - Responsiveness Summary

(Questions have been taken from written and verbal testimony. Entire documents are listed at the bottom and attached to Summary)

- F – Public Testimony by Rich Mietzner, Resident at the May 4, 2011 Planning Commission Public Hearing; Ecology comments on docks and Army Corps of Engineers Permit #3
- G – Public Testimony and Submittal by Douglas Bell, Resident at the May 4, 2011 Planning Commission Public Hearing
- H – Public Testimony by Bill Barnet, Resident at the May 4, 2011 Planning Commission Public Hearing
- I – Public Testimony by Rose Granda, Resident at the May 4, 2011 Planning Commission Public Hearing
- J – Public Testimony by Fred Schmitz, Resident at the May 4, 2011 Planning Commission Public Hearing
- K – Public Testimony by Cory Burke, Resident at the May 4, 2011 Planning Commission Public Hearing
- L – Public Testimony and Submittal by Rosanne Cowles, Resident at the May 4, 2011 Planning Commission Public Hearing
- M – Public Testimony by Tom Matlack, Resident at the May 4, 2011 Planning Commission Public Hearing
- N – Public Testimony by Gigi Burke, Resident at the May 4, 2011 Planning Commission Public Hearing
- O – Public Testimony by Darrell Moore, Resident at the May 4, 2011 Planning Commission Public Hearing
- P – Public Testimony by Rich Mietzner, Resident at the May 4, 2011 Planning Commission Public Hearing
- Q – Public Testimony by D. Molenkamp, Resident at the May 4, 2011 Planning Commission Public Hearing
- R – Public Testimony by Douglas Bell, Resident at the May 18, 2011 Planning Commission Public Hearing
- S – Public Testimony by Angela Larsh, Urban Concepts LLC, Resident at the May 18, 2011 Planning Commission Public Hearing
- T – Public Testimony by Gigi Burke, Resident at the May 18, 2011 Planning Commission Public Hearing
- U – Public Testimony by Tom Matlack, Resident at the May 18, 2011 Planning Commission Public Hearing
- V – Written Testimony from Snohomish County Public Works submitted at the May 18, 2011 Planning Commission Public Hearing
- W – Written Testimony from Ted & Linda Boysen submitted at the May 18, 2011 Planning Commission Public Hearing
- X – Written Testimony from James W & Judith Gottschalk submitted at the May 18, 2011 Planning Commission Public Hearing
- Y – Written Testimony from Gigi and Cory Burke, Resident submitted at the May 23, 2011 City Council Public Hearing
- Z – Written Testimony from Jeremy Clites, Resident submitted at the May 23, 2011 City Council Public Hearing
- AA – Written Testimony from Robert M. Wade submitted at the May 23, 2011 City Council Public Hearing
- AB – Written Testimony from Ray Granda & Family, Residents submitted at the May 23, 2011 City Council Public Hearing
- AC – Written Testimony from The Lee Family, Residents submitted at the May 23, 2011 City Council Public Hearing
- AD – Written Testimony from Leif Holmes, Resident submitted at the May 23, 2011 City Council Public Hearing
- AE – Written Testimony from Earl & Amanda Rotherick, Residents submitted at the May 23, 2011 City Council Public Hearing
- AF – Written Testimony from Michael White, Pacific West Financial Group submitted at the May 23, 2011 City Council Public Hearing
- AG – Written Testimony from Kathy Nysether, Resident submitted at the May 23, 2011 City Council Public Hearing
- AH – Written Testimony from The Lee Family, Residents submitted at the May 23, 2011 City Council Public Hearing

Lake Stevens 2011 Shoreline Master Program Update - Responsiveness Summary

(Questions have been taken from written and verbal testimony. Entire documents are listed at the bottom and attached to Summary)

AI – Written Testimony from Jon & JoAnn Youngquist, Residents submitted at the May 23, 2011 City Council Public Hearing

AJ – Written Testimony from Bill Tsoukalas, Boys & Girls Club submitted at the May 23, 2011 City Council Public Hearing

AK – Written Testimony from Angela Evans, Residents submitted at the May 23, 2011 City Council Public Hearing

AL – Verbal Testimony and Submittal from Douglas Bell, Resident submitted at the May 23, 2011 City Council Public Hearing

AM – Verbal Testimony from Angela Larsh, Urban Concepts LLC submitted at the May 23, 2011 City Council Public Hearing

AN – Verbal Testimony from Tom Matlack, Resident submitted at the May 23, 2011 City Council Public Hearing

AO – Verbal Testimony from Ted Boysen, Resident submitted at the May 23, 2011 City Council Public Hearing

AP – Verbal Testimony from Bruce Morton, Resident submitted at the May 23, 2011 City Council Public Hearing

AQ – Verbal Testimony and Submittals from Gigi Burke, Resident submitted at the May 23, 2011 City Council Public Hearing

AR – Verbal Testimony from Jennifer Soler, Resident submitted at the May 23, 2011 City Council Public Hearing

AS – Verbal Testimony from Paul Olliges submitted at the May 23, 2011 City Council Public Hearing

AT – Verbal Testimony from **Tim McCord** submitted at the May 23, 2011 City Council Public Hearing

AU – Verbal Testimony from Patricia Perry submitted at the May 23, 2011 City Council Public Hearing

AV – Verbal Testimony from Bill Tackitt, Resident submitted at the May 23, 2011 City Council Public Hearing

AW – Verbal Testimony from Cory Burke, Resident submitted at the May 23, 2011 City Council Public Hearing

**BEST AVAILABLE SCIENCE
REVIEW AND CRITICAL AREA
EVALUATIONS/
CHARACTERIZATIONS**

**City of Lake Stevens
Critical Areas Update**

Prepared for
City of Lake Stevens

March 2008
Prepared by

URS

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I. INTRODUCTION

I.1 Background

The Washington State Growth Management Act (GMA) requires that cities and counties review and, if necessary, revise their development regulations every 5 years. The Washington Administrative Code (WAC) 365-195-900 requires that cities and counties include the “best available science” when developing policies and regulations to protect critical areas, and give “special consideration” for conservation of anadromous fish. The Washington State Office of Community Development (OCD), under the authority of the GMA, developed procedural criteria for adopting and revising comprehensive plans and developmental regulations. These criteria include new regulations regarding Best Available Science (BAS) (WAC 365-195-900 through 925). The regulations address the following topics:

- Defining BAS
- Recommendations as to where local governments can obtain BAS
- Criteria for demonstrating that BAS has been included in the development of critical areas policies and regulations
- What to do in the absence of sufficient scientific information
- Meaning of “special consideration” for the protection of anadromous fish, and criteria for demonstrating that special consideration has been given

The City of Lake Stevens is now revising its critical areas regulations in accordance with the GMA requirements. Many of the proposed revisions are specifically developed to minimize the potential impacts of development on salmonid habitat, with special emphasis on Endangered Species Act (ESA)-listed species. URS has conducted a BAS review of the Lake Stevens critical areas regulations related to wetlands, streams, and fish and wildlife habitat and has provided an evaluation/characterization of each. Field visits were conducted in November and December 2006 to verify existing conditions within the City (including recent Northlake Annexation area).

I.2 Organization of This Report

The objectives for this BAS review include two tasks:

1. Provide a general characterization of stream and other surface waters and wetlands and their functions and values, including streams supporting anadromous species within the city limits (does not include Urban Growth Area). Overall wetland and fish and wildlife habitat evaluations, as applicable, are incorporated into the characterization.

2. Compile the BAS for those elements (this was also completed for versions of the code in March 2006 and January 2007).

II. Evaluation and Characterization

This section provides a general evaluation and characterization of streams and other surface waters, including streams supporting anadromous species within the city limits, and wetlands and their functions and values based on the inventory information available at the City of Lake Stevens, State databases, site specific and regional reports, and very limited reconnaissance. The features are organized and discussed in terms of the current classifications used in best available science documents. Overall wetland and fish and wildlife habitat evaluations, as applicable, are incorporated into the characterization.

II.1 Streams and Other Surface Waters

Type S waters include lakes and streams inventoried as “shorelines of the state.” Stevens/Catherine Creek downstream from the confluence of the Lake Stevens Outlet Channel (also called Stevens Creek) and Catherine Creek is the only stream reach within the City of Lake Stevens designated as Type S water (WAC 173-18-350). Lake Stevens, designated as a lake of statewide significance, is the only other Type S water within the City of Lake Stevens (WAC 173-20-650). City Critical Areas Maps are included in Appendix A. One field visit was conducted in 2005 and another was conducted on November 22, 2006 to further verify and update the earlier information.

II.1.1 Existing Stream Habitat and Species Characterization

For the purposes of this report, the outlet of Lake Stevens (Type F anadromous stream) downstream to the confluence with Catherine Creek at Hartford Drive will be referred to as Stevens Creek and the portion of the Creek from the confluence of the outlet reach of Stevens Creek and Catherine Creek downstream from Hartford Road (Type S anadromous stream) will be referred to as Stevens/Catherine Creeks. Catherine Creek (Type F anadromous stream) refers to the main channel upstream from the confluence of Stevens Creek (outlet reach of Stevens Creek) immediately above Hartford Drive. An unnamed intermittent tributary (Type F anadromous stream) that enters the City of Lake Stevens at Highway 92, drains connected perennial wetlands and ponds within the city and enters Catherine Creek on the left (east) bank immediately upstream of Catherine Drive. Springbrook Creek (Type F) draining off a hillside to the west of Grade Road enters Catherine Creek on the right (west) bank at approximately halfway between 32nd Place and 36th Street. Less than 100 feet upstream of its confluence with Catherine Creek, Springbrook Creek flows through an impassable culvert. Anadromous fish only have access to the portion of Springbrook Creek below the culvert, with resident coastal cutthroat trout occurring upstream of the culvert. A drainage ditch in an old agricultural field north of Hartford Drive enters Catherine Creek on the right (west) bank just upstream of Hartford Drive. A tributary (Type F stream) flows north from its source, the outlet of a small pond located southeast of the corner of 16th Street and 127th Avenue, crosses 18th Street and flows through a ditch along the east side of 125th Avenue to 20th Street, and enters the outlet portion of Stevens Creek on the right (southeast) bank a short distance downstream from the intersection of Grade Road and Hartford Drive (across from the Fire Station). An ephemeral

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tributary (Type Ns) of the previous stream, draining a ravine east of 123rd Avenue, is shown on the Critical Areas Map to enter the south end of the pond located southeast of the corner of 16th Street and 127th Avenue, however there does not appear to any surface channel feeding the pond and any flow into the pond is likely sheet flow. This ephemeral tributary also appears to have an alternate channel, flowing northwest, in a ravine that ends in the vicinity of Bond Field. The channel of the ephemeral tributary appears to have historically traversed south from the end of the ravine and entering the stream that flows from the pond southeast of the corner of 16th Street and 127th Avenue about a hundred feet north of 16th Street. A field visit was made on November 22, 2006 (See Appendix B, BAS Field Visit), during a period of heavy rainfall, and only small pools were observed, with no flow present. Another ephemeral tributary (Type F stream) flows a short distance from a spring source through Catherine Creek Park and enters Stevens/Catherine Creek on the right (west) bank, just downstream from 20th Street. This stream is very small and only provides fish rearing habitat in the lower 150 feet of stream downstream from a park trail. Kokanee Creek (also called Mitchell Creek), a Type F non-anadromous stream, flows off a hillside into the north end of Lake Stevens from a completely urbanized drainage basin. The lower portion of Kokanee Creek that is utilized by spawning kokanee salmon flows alongside the east side of Mitchell Road.

Two Type F anadromous streams, Stevens and Lundeen Creeks, enter the City of Lake Stevens at Highway 92 and flow south to Lake Stevens, where they enter the lake at its northwest corner. Stevens Creek is the portion of Stevens Creek, upstream of Lake Stevens, but Stevens and Lundeen Creeks are roughly comparable in size and are the largest tributaries of Lake Stevens.

Stevens Creek is west of Lundeen Creek and flows south between Lake Drive and 99th Avenue NE. Most of the riparian corridor within the city is still intact, except the reach that flows through a concrete lined channel between Vernon Road and the lake. Vernon Road and Lundeen Parkway appear to parallel each other where they cross Stevens and Lundeen Creeks. This section of road will be referred to as "Vernon Road" in this report. Residential housing consists of houses constructed in close proximity to Lake Drive and 99th Avenue NE. Residential yard generally do not intrude into the riparian corridor of the stream. There are culverts where Stevens Creek is crossed by Highway 92, 31st Place NE, and Vernon Road. **The outfall of the culvert under Vernon Road is a partial barrier to spawning salmonids entering the stream from Lake Stevens. The culvert at North of 31st Place NE also is a partial barrier to fish passage. Despite partial blockages at these culverts, coho and kokanee salmon have been observed by Snohomish County staff as far upstream as Highway 92 (Snohomish County 2001).** A perennial tributary (Type F), crosses Highway 92 approximately 200 feet east of Lake Drive and flows southeast, entering Stevens Creek on the right bank, about 500 feet upstream of 31st Place NE. The riparian corridor of this stream is intact, but two artificial ponds constructed a short distance below Highway 92 and halfway between the highway and the tributary's confluence with Stevens Creek are complete barriers to anadromous coho salmon and lake-run kokanee salmon and coastal cutthroat trout. Only resident fish occur upstream of the weir at the first pond.

Lundeen Creek flows south between 101st Avenue NE and Callow Road. Most of the riparian corridor within the city is still intact, With the exception of a reach that flows through a roadside ditch along side 101st Avenue, most of the riparian corridor within the city is still intact. The

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reach flowing through the roadside ditch is scheduled to be rerouted to its original channel in the future to minimize flooding and improve fish habitat. Residential housing consists of houses constructed in close proximity to Catlow Road, and 101st Avenue NE. Residential yard generally do not intrude into the riparian corridor of the stream. There are culverts where Lundeen Creek is crossed by Highway 92, 30th Place NE, and Vernon Road. None of these culverts are barriers to fish passage and coho and kokanee salmon have been observed by Snohomish County staff as far upstream as Highway 92 (Snohomish County 2001). A perennial tributary (Type F), enters Lundeen Creek on the left bank about 150 feet upstream of Vernon Road. This tributary has several small tributaries and flows off a plateau south of Highway 92, east of Callow Road, west of 109th Avenue NE, and north of Oak Road. The tributary flows off the plateau through a ravine along the southeast side of Oak Road, crossing Callow Road at the downstream end of the ravine. Most of the riparian corridor of this tributary within the city is still intact. The culvert at Callow Road is a complete barrier to fish passage, with anadromous coho salmon and lake-run kokanee salmon and coastal cutthroat trout occurring below the culvert and only resident fish present upstream of the culvert.

Information about the existing environmental conditions of the Lake Stevens/Catherine Creek watershed and the distribution of fish species within the watershed discussed below were obtained from available site specific environmental reports (R2 2000, DID8 1999, Cornwall 1995, Harling 2002, Jagt 2004, J&S 1994, Marczin, 1999, Mueller 1997, Pfeifer 1978, Berge and Higgins 2003).

The upper portion of Catherine Creek within the city limits flows through the Lake Stevens Woods and Williams Woods Residential Developments. Most of the riparian buffer along Catherine Creek and its tributaries consists of native shrubs and medium sized trees or forested wetlands, with small to medium sized western redcedar (*Thuja plicata*), red alder (*Alnus rubra*), black cottonwood (*Populus balsamifera*), western hemlock (*Tsuga heterophylla*), and Douglas-fir (*Pseudotsuga menziesii*) the dominant tree species. There is a dense understory of shrubs, including salmonberry (*Rubus spectabilis*), hardhack (*Spiraea douglasii*), cascara (*Rhamnus purshiana*), red elderberry (*Sambucus racemosa*), Pacific ninebark (*Physocarpus capitatus*), and willows (*Salix* spp.). Ground cover includes skunk cabbage (*Lysichiton americanum*), sword fern (*Polystichum munitum*), reed canary grass, cattails (*Typha latifolia*), creeping buttercup (*Ranunculus repens*), and small-fruited bulrush (*Scirpus microcarpus*) dominating the understory of the forested community. Between the urbanized upper reaches of Catherine Creek within the city limits and Hartford Drive, lower Catherine Creek is channelized and flows through an agricultural field, with the riparian vegetation dominated by reed canary grass (*Phalaris arundinacea*). Catherine Creek supports spawning populations of coastal cutthroat trout (*Oncorhynchus clarki clarki*) and coho salmon (*O. kisutch*), federally listed as a candidate species under the Endangered Species Act (ESA) and may also support a few chum salmon (*O. keta*). Most of the salmonids occurring in the mainstem of Catherine Creek are young-of-the-year (YOY) with almost no older rearing salmonids present. Yearling coho have been documented in a small side channel and the connected wetlands of the unnamed tributary of Catherine Creek. Coho salmon spawners have been observed in the unnamed tributary as far upstream as 36th Street. In addition to salmonids, two species of sculpins (*Cottus* sp.) and three-

spine stickleback (*Gasterosteus aculeatus*) have been documented during surveys of the stream. Only coho YOY and yearlings have been documented in the unnamed tributary of Catherine Creek. Springbrook Creek contains YOY coho salmon and coastal cutthroat trout. The drainage ditch draining from an old agricultural field into Catherine Creek does not contain fish.

Coho salmon, kokanee, and coastal cutthroat trout have been documented to occur in Lundeen and Stevens Creeks throughout the reach of the streams within the City of Lake Stevens (Snohomish County 2001, Haring 2002). Tributaries of Stevens and Lundeen Creeks contain the above species below barriers to anadromous fish passage and resident coastal cutthroat trout above the barriers (Haring 2002). Most of the riparian buffer along Stevens and Lundeen Creek and their tributaries is similar to that of Catherine Creek, consisting of native shrubs and medium sized trees or forested wetlands.

Only kokanee salmon (*O. nerka*) have been documented in Kokanee Creek, but coastal cutthroat trout were observed during a site visit by a URS biologist on November 22, 2006. The entire drainage of Kokanee Creek is occupied by residential development, and the stream flows primarily through areas of mown lawns or along Mitchell Road, with only a fragmented riparian zone of low growing shrubs and small trees. Kokanee Creek has two forks, with kokanee salmon spawners observed as far upstream as 20th Street on the west fork and 19th Street on the east fork. The kokanee present in Lake Stevens tributaries were likely transplanted in 1912 or 1913 from the Lake Washington tributary of Bear Creek (a tributary of the Sammamish River) or late spawning Lake Sammamish kokanee from a Lake Sammamish tributary stream; however, no genetic analysis has been done between Lake Stevens kokanee, Bear Creek Kokanee, and late spawning Lake Sammamish kokanee. If the original source stock of Lake Stevens kokanee was Bear Creek, they may represent the last surviving stock of Lake Washington kokanee. It has also been suggested that kokanee are native to Lake Stevens, but this has not been verified through genetic analysis.

The outlet reach of Stevens Creek has been documented during electrofishing surveys to contain coho salmon YOY, sculpins, pumpkinseed sunfish (*Lepomis gibbosus*), and western brook lamprey (*Lampetra richardsoni*). The Type F tributary of Stevens Creek that flows out of a pond southeast of the corner of 16th Street and 127th Avenue has a relatively intact forested riparian zone similar to that of upper Catherine Creek and Stevens/Catherine Creek downstream from 20th Street. The streambanks in the downtown area of the City of Lake Stevens are armored with riprap, with only grass and low-growing vegetation between Hartford Drive and the bank of the stream. The bank opposite of Hartford Drive contains occasional small willows and is dominated by a shrub community dominated by invasive, non-native plants such as Himalayan blackberry (*Rubus procerus*) and purple loosestrife (*Lythrum salicaria*). The pond that feeds this tributary receives occasional plants of sports fish and salmonids, including coho salmon, have been observed in the stream.

Stevens/Catherine Creek is likely to contain the same species as documented in Stevens Creek above the confluence of Catherine Creek, with pumpkinseed gradually disappearing in the downstream reaches. In addition, YOY coastal cutthroat trout are likely present in pool habitat and yearling coastal cutthroat trout and coho salmon are probably present during the winter and

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spring, and three-spine stickleback are probably present. Mountain whitefish (*Prosopium williamsoni*) have been documented to occur in Lake Stevens and in the Little Pilchuck River and probably occasionally occur in Stevens and Stevens/Catherine Creeks. In addition, spawning steelhead trout (*O. mykiss*) and chum salmon that have migrated through Stevens/Catherine Creek and the outlet reach of Stevens Creek have been observed in Lake Stevens and may occasionally enter Catherine Creek. The riparian community of Stevens/Catherine Creek is similar to that of the upper reaches of Catherine Creek within the city limits, however many of the trees (particularly in the vicinity of Catherine Creek Park) are feet high or higher with trunks 20 to 30 inches in diameter at breast height. The Type F ephemeral tributary of Stevens/Catherine Creek that flows through Catherine Creek Park does not contain fish, but may provide winter refuge habitat for coho salmon and coastal cutthroat trout. This tributary flows through a relatively intact forested riparian zone of mature conifer forest in Catherine Park.

The stream flowing through a ravine above Bond Field was the only Type Ns Stream observed during site visits by a URS biologist. Because of the low gradient of streams within the City of Lake Stevens, most stream channels are accessible to anadromous fish or contain resident fish above barriers. Other Type Np (perennial non-fish) or Ns (intermittent or ephemeral non-fish) stream reaches were not identified, but they may exist within the City of Lake Stevens, in the upper reaches of the left bank tributary of Lundeen Creek upstream of Oak Road if there are reaches above natural fish passage barriers with no fish present. Type Ns stream reaches were not identified, but they may exist within the City of Lake Stevens in the upper reaches of the ephemeral tributaries of Lundeen, Stevens, and Stevens/Catherine Creek if natural fish passage barriers are present.

II.1.2 Stream Channel Characteristics

Lundeen Creek, Stevens Creek (within the boundaries of the City of Lake Stevens), and Catherine Creek flow through a region with very little topographic relief. The gradient of the channel is low (generally 1% or less) and most of the stream channel is incised 10 to 15 feet. There are a few steeper gradient reaches of Kokanee and Springbrook Creeks, but the only stream channel flowing through a ravine is the portion of the Lundeen Creek left bank tributary that flows along side Oak Creek Road. In most reaches, there is no floodway and, with the exception of unchannelized portions of Lundeen Creek, Stevens Creek above Lake Stevens, Stevens/Catherine Creek below 20th Street NE, and a reach of Catherine Creek about 2,200 feet in length above Hartford Drive, the streams are confined to a narrow incised channel of 8 to 18 feet in width (3 to 8 feet for upper Stevens Creek and Lundeen Creek above Lake Stevens). In most reaches the stream banks are stable and composed of sand and gravel. With the exception of reaches of the Stevens and Catherine Creeks in the vicinity of Hartford Drive where sand and silt dominates, the substrate of Stevens and Catherine Creeks is composed of gravel. Kokanee Creek flows from a hillside into Lake Stevens, with the portion of the creek most heavily utilized by spawning kokanee salmon a straight channel running alongside the road. The channel has been modified from a 4% gradient to a 2% gradient channel through the use of a log-weir/step-pool design. The banks of the Lake Stevens outlet portion of Stevens Creek along Hartford Road

and above the confluence of Catherine Creek and Kokanee Creek along Mitchell Road have been riprapped to maintain the structural integrity of the roadway and stabilize the streambank, with no room available to maintain a riparian buffer or trees between the road and the stream channel.

II.1.3 Riparian Buffer Functions

Stream riparian buffers are intended to maintain riparian and stream functions such as erosion control; removal of fine sediment and pollutants from runoff; large woody debris recruitment; stream water temperature moderation; maintenance of benthic macroinvertebrates (primarily aquatic insects and crustaceans) habitat; salmonid instream habitat; and riparian/aquatic wildlife communities; maintain microclimate for riparian wildlife, maintain stream channel structure, and maintain connectivity between fish and wildlife habitat areas by providing corridors for the movement of fish and wildlife. With the exception of large woody debris (LWD) recruitment and the protection of riparian wildlife habitat and riparian microclimate, a review of best available science indicates that riparian buffers of about 99 feet are adequate to achieve approximately 80% of these functions (URS 2000, 2001). The review indicated that riparian buffers of about 131 feet are adequate to achieve 80% of LWD recruitment function. Murphy and Koski (1989) estimated that nearly all LWD is derived from within 99 feet of streams and 95% within 65 feet of the stream bank. McDade *et al.* (1990) estimated that 85% of LWD originates within 99 feet of stream banks and 50% within 33 feet. Riparian wildlife habitat and microclimate functions can require buffers as great as 656 feet to achieve about 80% functionality, but these requirements are highly variable and depend upon wildlife species and edge effects (predation from feral animals and forest edge species on riparian and forest wildlife, lower soil and air humidity, modification of riparian plant communities by invasive plant species). Buffer widths for LWD recruitment are usually based on a general average tree height of about 130 feet for mature conifer forests in the northwest, making the assumption that trees that fall further than 130 feet from a stream channel are unlikely to be delivered into the stream.

The City of Lake Stevens buffers for Type S and Type F streams are intended to maintain riparian functions necessary to protect instream habitat for fish. Type S streams are always perennial and generally contain salmonids in western Washington. In many cases, Type S streams contain anadromous or federally listed salmonids. None of the Type S streams within the City of Lake Stevens contain listed salmonids, but steelhead trout (proposed for listing as threatened) are present in all Type S streams within the City of Lake Stevens. Type F streams either contain fish or provide seasonal habitat for fish. Perennial Type F streams in the City of Lake Stevens contain salmonids and frequently contain anadromous salmonids. Steelhead trout (proposed for listing as threatened), have been documented to enter Lake Stevens and likely spawn in Stevens and Lundeen Creeks. These streams require riparian buffers adequate to protect the full range of riparian functions necessary to maintain instream and riparian habitat necessary for the survival of salmonid fishes. City of Lake Stevens buffers for Type S and Type F streams are consistent with BAS.

Type Np (perennial) and Type Ns (intermittent) streams are non-fish bearing under WDNR stream typing, but can provide habitat for aquatic wildlife, such as macroinvertebrates and amphibians. Type Np and Ns streams can contain non-salmonid fish under City of Lake Stevens

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stream type classifications. Riparian buffers on Type Np and Type Ns streams are primarily designed to maintain water quality in both non-fish bearing streams and the fish-bearing streams that they flow into. Non-fish bearing Type Np and Type Ns streams can also provide nutrients and LWD to downstream reaches, which contain fish and support macroinvertebrates, which contribute to fish-bearing streams through downstream drift. City of Lake Stevens buffers for Type Np and Ns streams are at the low end of the range to be consistent with BAS for streams containing fish and at the high end of the range to be consistent with BAS for non-fish streams.

Drainage ditches are constructed vegetated swales and ditches that were never a natural stream channel, whose primary purpose is to convey stormwater from urban areas and agricultural fields to stream channels. Drainage ditches are man-made channels, rather than “ditched” natural stream channels that have been straightened and dredged into a uniform channel.

The 99-foot riparian buffers consistent with BAS literature are general requirements and may not contribute significantly more to the protection of riparian functions near fish-bearing streams in the City of Lake Stevens buffers. This is due to the nature of available habitat within urban areas and the stream morphology and surrounding terrain of streams within the city boundary.

Moderation of Stream Water Temperature

Shading provided by riparian canopy cover is the major factor that minimizes heating of stream water by absorption of solar radiation. Canopy shade is provided by shrubs and trees growing within 65 feet of stream banks, and vegetation greater than 65 feet from stream banks does not significantly affect stream temperatures (URS 2000, 2001). Studies indicate that buffer strips only need to be wide enough to include trees contributing to canopy cover. A 33 foot wide strip is adequate for shade. Since blockage of direct insolation by foliage is of primary importance, buffers of narrow streams may be less than 33 feet and dense shrubs can provide riparian shade for smaller streams (Barton *et al.* 1985).

Catherine Creek above the confluence with Stevens Creek derives most of its summer flow from cold groundwater. Summer flows are no more than a few gallons/minute and little pool habitat exists for fish. As a result, this reach of the stream primarily serves as a spawning stream for coastal cutthroat trout and coho salmon, with almost all juvenile fish migrating downstream to suitable summer habitat in the Little Pilchuck River during the spring. Current summer stream temperatures of Catherine Creek within the city limits are moderated by inflow of cool groundwater, and temperatures do not exceed 61°F (well within the tolerance range of native coho salmon, coastal cutthroat trout and other native fishes). With the exception of a channelized reach of about 2,500 feet flowing through a field just upstream from Hartford Drive, canopy closure of Catherine Creek ranges from 25% to 50%, and a 65 foot buffer is adequate to maintain the existing summer water temperature regime. Salmonid populations in Catherine Creek within the city limits are primarily limited by a lack of streamflow and pool habitat. An abundance of loose gravel and some available side channel and connected wetland habitat provides spawning habitat for coho and cutthroat trout, but little or no summer rearing habitat, forcing juvenile fish to migrate downstream to Stevens/Catherine Creek by spring.

Summer water temperatures in Stevens Creek and Stevens/Catherine Creek below Hartford road are controlled by the warm surface water outflow from Lake Stevens. Almost all of the summer stream flow of 2 to 3 cubic feet per second (cfs) comes from the outflow of the lake. Water temperature at the surface of Lake Stevens and in the outlet (Stevens Creek) can reach 78°F, exceeding the thermal tolerances of coho salmon and cutthroat trout. Although riparian canopy cover has been documented to prevent or minimize stream temperature increases due to solar radiation, it does not provide a cooling effect (Boyd and Sturdevant 1996). Any cooling that is likely to occur would be from groundwater entering the stream channel, which contributes only a small portion of the flow in Stevens/Catherine Creek and Stevens Creek during the summer months (Moore 2001, Boyd and Sturdevant 1996). Coho salmon and cutthroat trout young of the year (YOY) present in these streams in spring migrate downstream to the Little Pilchuck River during the summer when water temperatures exceed their thermal tolerances, regardless of available rearing habitat. As a result, shade from riparian canopy is not a significant limiting factor for Stevens and Stevens/Catherine Creek.

Kokanee Creek is primarily utilized by kokanee salmon which spawn during late fall and early winter freshets and migrate downstream to Lake Stevens soon after emerging from the gravel in the early spring. Summer flows in Kokanee Creek consist of subsurface interflow that averages 0.004 cfs and as a result is not utilized by fish during the summer months, minimizing the need for the shade function of riparian cover. In addition, the stream channel of the stream is less than 3 feet in width and surrounded by a dense shrub layer that provides an effective canopy during the summer months.

Riparian buffers of 65 feet for fish bearing streams and Np streams that drain into fish bearing streams are adequate to maintain stream temperatures, and riparian buffers will not prevent high stream temperatures in Stevens or Stevens/Catherine Creeks because of the influence of surface water input from Lake Stevens. Ns streams do not convey surface water during the summer months, so shade does not contribute to temperature moderation in these streams. In Catherine Creek, a lack of summer habitat, rather than summer stream temperatures is the limiting factor for salmonids.

Recruitment of LWD

Forested portions of stream channels in urban areas contain mostly deciduous trees much less than 100 feet tall. Larger mature trees tend to develop windshake and unsound limbs and are usually removed from urban areas as safety hazards. Large woody debris (LWD) in stream channels in urban areas often presents a severe hazard to bridges and other infrastructure during flood flows and must often be removed from stream channels. Due to streams flowing through narrow incised channels with few or no floodways and with no slopes present outside of the incised channels, there is no opportunity for LWD to roll into stream channels. Trees outside of a 50 foot buffer are unlikely to reach stream channels and if the upper portions of trees do fall into the stream channel, they do not include the trunk or root wad (the most valuable LWD). Areas with open vegetation in agricultural and residential areas contain few or no trees within 100 feet. Deeply incised stream channels and narrow floodways allow for very little lateral channel migration. Bank cutting, which is the delivery agent for LWD 31% (Lienkaemper and

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Swanson 1987) of the time is rare. Windthrow is the primary delivery agent for LWD within urban areas such as within the city limits, and due to asymmetry of the rooting environment in proximity to a stream channel and the tilt of trees growing into the open canopy space above a channel, LWD delivery usually occurs in close proximity to stream banks. Stream channels of moderate gradient streams with steep sideslopes in western Washington and Oregon derive 11% of LWD from within 3 feet of stream channels, 50% from within 33 feet, 70% from within 65 feet and 85% within 99 feet of the stream channel (McDade *et al.* 1990). In the case of the narrowly incised stream channels and flat sideslopes of streams within the City of Lake Stevens, almost all LWD recruitment occurs within a few feet of the incised stream channel. Riparian buffers of 50 feet for fish bearing streams and 25 feet for non-fish bearing streams are adequate to maintain LWD recruitment.

Maintenance of Channel Structure

The influence of LWD on pool formation changes with channel slope. Analysis of pool forming mechanisms indicates that low gradient channels, such as those of streams within the city limits, are less sensitive to LWD abundance because pools are formed by mechanisms other than LWD when LWD abundance is low (Beechie and Sibley 1997). Stream banks within the City Limits, with few exceptions are stable, despite the fact that stream banks are primarily composed of poorly consolidated sand and gravel. It appears that the existing riparian vegetation is sufficient to stabilize stream banks. As described above, there is little potential for recruitment of LWD from beyond a short distance from stream banks within the city limits. Riparian buffers of 50 feet for fish-bearing streams and 25 feet for non-fish bearing streams are adequate to maintain existing channel structure.

Removal of Fine Sediment and Pollutants

Stream banks within the city limits are mostly stable, and contribute little fine sediment to stream channels. There is no indication that flooding has affected areas beyond 50 feet from stream channels and beyond 25 feet from smaller intermittent streams. In addition, urbanized lands have only modest sediment yields, particularly where steep slopes do not exist to contribute to a high landslide rate and efficient sediment delivery to stream channels. Most of the existing fine sediments in Stevens and Stevens/Catherine Creeks are delivered from the banks of the outlet channel of Stevens Creek or directly from stormwater runoff through storm drainage systems. Future developments will require stormwater treatment and detention that allows fine sediments to settle out of suspension before delivery to the stream channels. Stormwater detention systems should also prevent or minimize additional increases in peak flows from stormwater runoff. Treatment of stormwater runoff from roads and impervious surfaces and directing stormwater runoff through bioswales will minimize direct runoff of pollutants. Riparian buffers of 50 feet for fish-bearing streams and 25 feet for non-fish bearing streams are adequate to maintain or reduce current levels of fine sediment or pollutant delivery to stream channels. An exception may occur in the smaller and higher gradient streams draining off Walker Hill (Kokanee and Springbrook Creeks), where narrow incised channels carry large stormwater flows through channels with poorly stabilized stream banks and narrow riparian areas. However, most of this area has already been developed and any new developments will have to meet the new buffer

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width standards and other means of mitigation can be used to minimize erosion, such as creating lower gradient sideslopes and wider floodways for the stream channels.

Maintenance of Benthic Macroinvertebrate Habitat

As stated above, LWD recruitment will not be affected by riparian stream buffers of 50 feet for fish-bearing streams and 25 feet for non-fish bearing streams. These buffers should also be adequate to maintain or reduce current levels of fine sediment delivery to stream channels, and stream temperatures will not be affected. Much of the organic material utilized by primary producers (aquatic organisms that feed on algae and detritus) comes from leaf fall. Most of this leaf fall comes from shrubs and trees growing within close proximity to streambanks, with little contribution from trees further than 20 to 50 feet from banks. Riparian buffers of 50 feet for fish-bearing streams and 25 feet for non-fish bearing streams are adequate to maintain existing benthic macroinvertebrate habitat.

Maintenance of Aquatic Salmonid Habitat

As stated above, the proposed stream riparian buffers are adequate to maintain existing channel complexity and substrates. Available cover from existing LWD and riparian vegetation will not decrease, and forage from existing aquatic macroinvertebrate and terrestrial macroinvertebrate communities will not be reduced. The presence or absence of riparian canopy does not seem to be of any practical importance in terms of the amount of preferred food available to salmonids. Riparian buffers of 50 feet for fish-bearing streams and 25 feet for non-fish bearing streams are adequate to maintain existing salmonid habitat. Proposed buffers are wider than required to maintain existing salmonid habitat and will allow for habitat recovery above the current baseline.

Maintenance of Riparian Microclimate

Buffers of 328 to 656 feet are required to maintain forest interior microclimates for forest interior plant and wildlife species (Bolton and Shellberg 2001). Forest edge effects include lower atmospheric humidity, higher summer temperatures and lower winter temperatures, and lower soil moistures than interiors. This can affect the success of plant species utilized as forage by forest interior species. Burrowing animals that are easily desiccated in arid environments, such as salamanders and western toads, depend upon high moisture soils and high atmospheric humidity. However, current conditions within the city limits do not provide any habitats that provide these microclimate conditions, and no adjacent areas with those conditions could be linked to habitat areas within the City. The proposed riparian buffers will maintain existing habitat conditions for the affected forest interior species.

Maintenance of Habitat Connectivity and Wildlife Habitat

Stream riparian buffers provide a linear strip of forest and shrub habitat that serves as a travel corridor for some mammals, amphibians, and birds. However, many of these corridors do not connect to patches of forest habitats. In addition, corridors can increase mortality rates of migratory forest interior species by subjecting them to increased levels of predation from forest

edge species. Studies of forested stream buffers suggest that buffers need to be between 328 and 656 feet wide in order to limit negative population effects to forest interior birds, such as nest predation due to the proximity of forest edge species (Bolton and Shellberg 2001). This assumes that forest birds will use riparian buffers and that bird use is correlated to buffer width, neither of which has been shown. A study of the effects of riparian areas around small streams indicated no discernible effect of bird diversity by the riparian stand. Riparian habitat along small streams is usually insufficient to support large animals, such as deer. Recent studies have shown that small mammal population numbers are not adversely affected by current riparian buffer sizes, at least in the short term. The species diversity of birds does not differ significantly between stream buffers of 46, 122, and 230 feet in width (Kinley and Newhouse 1997). For riparian corridors to successfully maintain forest interior species, they must connect to habitat patches of 30 to 80 acres in size, with 100-acre patches to maintain large mammals. Since forested habitat patches of 30 to 100 acres in size do not exist in the vicinity of the City of Lake Stevens for riparian buffers to connect, it is unlikely that riparian buffers/corridors will maintain populations of large mammals or forest interior species of small mammals and birds. Proposed riparian buffer widths are adequate to maintain the existing diversity of wildlife within the City of Lake Stevens boundaries. The existing wildlife community will continue to be dominated by forest edge and riparian species, with few of the forest interior associated species, such as insectivorous, cavity-nesting birds, northern flying squirrels (*Glaucomys sabrinus*) or Douglas Squirrels (*Tamiasciurus douglasii*). Omnivorous and fruit-eating birds, such as European starling (*Sturnus vulgaris*), American robin (*Turdus migratorius*), house sparrows (*Passer domesticus*), and raccoons (*Procyon lotor*) will dominate. The aggressive introduced cavity nesting birds (house sparrows and European starlings), will exclude native cavity nesting birds.

II.2 Wetlands

II.2.1 Wetland Buffer Evaluation

Buffers, in the context of wetland protection, are vegetated upland areas immediately adjacent to the wetland. Most buffer regulations focus almost exclusively on how wide buffers should be. Many literature searches have been published summarizing the effectiveness of various buffer widths (e.g., Castelle et al., 1992; Castelle and Johnson, 2000; Desbonnet et al., 1994; FEMAT, 1993). Following is a brief summary of some of that literature, which included studies conducted in agricultural, silvicultural, and urban riparian settings throughout the United States and Canada. The literature was reviewed to evaluate the relationships between buffer width and effectiveness mainly in terms of the following functions:

- Sediment removal and erosion control
- Dissolved pollutant removal
- Large woody debris (LWD) recruitment

- Water temperature moderation
- Wildlife habitat and corridors

Sediment and pollutant trapping functions are sometimes known as “sink” functions, as they remove unwanted elements from the environment (Castelle and Johnson, 2000). The functions that provide essential elements to the environment are sometimes known as “source” functions (Castelle and Johnson, 2000). For example, trees growing in buffers can provide large woody debris to wetlands; LWD can be an important wildlife habitat component. Literature summarized here addresses both sink and source functions. Not that most studies of sink functions occurred in agricultural areas while most source function studies occurred in silvicultural settings. Few studies have been conducted in highly urbanized areas. Therefore, care must be taken in applying research conducted under one set of conditions to another.

The literature shows that the buffer widths needed to be effective for these functions varied considerably; thus, the literature is not definitive in identifying an ideal buffer width for each function studied. However, certain trends are apparent. For sink functions, significant protection can be achieved with buffers ranging from 25 to 100 feet in width. A similar range of buffer widths was also shown to be effective for source functions, although for some specific wildlife species, effective buffer widths can range up to several hundreds of feet.

Not surprisingly, under a given set of conditions, wider buffers offer greater amounts of protection. However, the relationship between buffer width and effectiveness is logarithmic, so that incremental increases in buffer width provide a decreasing amount of extra protection. This logarithmic relationship can best be explained mathematically by considering the filtering functions of buffers. Each buffer has a certain capacity for removing material passing through it. Further, filtered material can be thought of as being retained within the buffer. The relationship between R_p , the amount of material retained by a buffer, and t , the rate of material transmittal (called the transmissivity) through a unit buffer of width w , can be explained by the following equation (Wellet et al., 1998):

$$R_p = (1-tw)$$

Therefore, low t values indicated buffers that inherently allow little material to pass through, or transmit material slowly; as a result, these buffers retain a high amount of material. The “material” retained that is denoted by R_p may be virtually any substance: sediment, chemicals in surface or groundwater, light, noise, domestic animals, etc. As an example, consider shining a laser pointer through a sheet of white paper; most of the light is transmitted through the paper because white paper has a high t value, or high transmissivity. It may require a dozen or more sheets of white paper to completely filter out the light. Now consider shining the same light through a piece of black paper of the same thickness as the white; little if any light penetrates the paper because the transmissivity of the black paper is low, that is, it has a low t value. In this example, the white paper represents a poor-quality buffer and black paper represents a high-quality buffer. The thickness of the poor-quality buffer had to be many times that of the high-

quality buffer in order to achieve the same level of performance. Unfortunately, the importance of buffer quality has gotten little attention by most agencies; even the Department of Ecology's 1990 Model Wetlands Protection Ordinance focuses only on wetland rating and the "intensity" of the adjacent land use in establishing buffer requirements.

However, the Washington Department of Ecology published a two volume set of documents called Wetlands in Washington State. Volume 1 of this set is entitled "A Synthesis of Science" and has a discussion on wetland buffers. As stated above, effectiveness of wetland buffer width depends on what functions they are protecting. For example, the literature on effectiveness of buffer widths suggest buffers between 25 and 75 feet for wetlands with minimal wildlife habitat functions and adjacent low-intensity land uses; and 150-300 feet for wetland with high habitat functions. Effective buffer widths for protecting water quality ranged from 25 to 50 feet for 60% removal of pollutants, to 150-200 feet for 80% removal of pollutants.

II.2.2 Wetlands Characterization

This characterization of wetlands in the City of Lake Stevens is based on a combination of review of various wetland reports on file at the City, a field visit in 2005 and a second one in December 2006, and on a review of wetland inventory information assembled by the City (City of Lake Stevens 2007). It is also based on the information in several publications of the Washington State Department of Ecology. The Washington State Wetland Rating System for Western Washington – Revised (Ecology 2004) provided the basis for the ratings used and also provided a basis for understanding and characterizing various wetland functions. Further guidance was taken from "Wetland Mitigation in Washington State, Parts 1 and 2" (Ecology et al 2006), which are joint publications of the Department of Ecology, the U.S. Army Corps of Engineers, and the U.S. Environmental Protection Agency, Region 10.

The City of Lake Stevens is highly urbanized and does not contain large tracts of connected wetland area. The majority of wetlands within the City boundaries have been identified on the eastern edge of the City limits and along Lundeen and Stevens Creeks in the northwestern portion of the City. Many of these wetlands have been identified as part of the construction permit process during the last 15 years. The western portion of the City, north of the lake, has the largest concentration of development and very few wetland areas. The central portion of the City also is located on a slope, which does not typically favor wetland conditions.

Lake Stevens contains palustrine forested (PFO), scrub-shrub (PSS), and emergent (PEM) wetlands. There are not many lacustrine (lake fringe) wetlands in City, as most of the lakeshore is armored. A large number of the wetlands appear to be forested and surrounded by residential developments. Forested wetlands in Lake Stevens are typically dominated by western redcedar (*Thuja plicata*), red alder (*Alnus rubra*), and/or black cottonwood (*Populus balsamifera*). Common dominant species in scrub-shrub wetlands include salmonberry (*Rubus spectabilis*), hardhack (*Spiraea douglasii*), and willows (*Salix* spp.). Common dominant species in emergent wetlands include reed canarygrass (*Phalaris arundinacea*), cattails (*Typha latifolia*), creeping buttercup (*Ranunculus repens*), and small-fruited bulrush (*Scirpus microcarpus*).

Some of the wetlands in Lake Stevens are associated with the major drainages: Stevens, Stevens/Catherine, Catherine and Lundeen Creeks. These wetlands can be narrow bands on either side of the stream channel like those adjacent to Stevens Creek or broader floodplain areas along some stretches of Catherine or Stevens/Catherine Creek. These wetlands often have a large component of non-native and/or noxious weeds including purple loosestrife (*Lythrum salicaria*), reed canarygrass, and Bohemian knotweed (*Polygonum bohemicum*).

Currently there are two Category I wetlands identified within the City of Lake Stevens (City of Lake Stevens 2007). Category II and III wetlands are the most common wetland classifications, with only a few Category IV wetlands currently identified.

II.3 Threatened and Endangered Species

Bull trout (federally listed as threatened under the ESA) occur as a reproducing population in the Skykomish River subbasin of the Snohomish River basin. This subpopulation of Puget Sound bull trout is considered healthy by the Washington Department of Fish and Wildlife (WDFW). The Stevens/Catherine Creek basin drains into the Little Pilchuck River, which is a tributary of the Pilchuck River (a subbasin of the lower Snohomish River basin. Although bull trout reproduction does not occur in the Pilchuck River subbasin, the Pilchuck River is considered core overwintering, foraging, and refuge critical habitat for bull trout by the US Fish and Wildlife Service. Although foraging bull trout may occasionally enter Stevens/Catherine Creek during the fall months, they have not been documented in the Stevens/Catherine Creek subbasin and the subbasin is not considered critical habitat for bull trout.

The nearest known occurrence of Chinook salmon (federally listed as threatened under the ESA) is the Pilchuck River. The Pilchuck River is both spawning and rearing habitat for Snohomish fall-run Chinook salmon, which is considered depressed by the WDFW. Although Chinook salmon do not occur in the Stevens/Catherine Creek subbasin, all anadromous reaches of the Snohomish River system were originally designated as critical habitat for Chinook salmon under the ESA. This designation has been removed by NOAA fisheries during a recent 2 year review, but may eventually be proposed again at the end of the review period. A designation of anadromous reaches of the subbasin as critical habitat for Chinook salmon may require adjustments of riparian buffers, depending upon criteria yet to be determined by NOAA fisheries. At a minimum, it should be expected that buffers should protect water quality for downstream reaches in the watershed that contain populations of Chinook salmon. ESA critical habitat buffers are a separate issue from protective standards mandated by the Growth Management Act.

Puget Sound steelhead trout (federally proposed for listing as threatened under the ESA) that have migrated through Stevens/Catherine Creek and the outlet reach of Stevens Creek have been observed in Lake Stevens (likely spawning in either the portion of upper Stevens Creek that drains into Lake Stevens or in nearby Lundeen Creek) and may occasionally enter Catherine Creek.

Puget Sound-Strait of Georgia coho salmon (a federal ESU species of concern under the ESA) currently spawn in all accessible streams within the Stevens/Catherine Creek basin. These coho salmon are part of the Snohomish River stock and the run is considered depressed by the WDFW.

The closest bald eagle (*Haliaeetus leucocephalus*), no longer federally listed as threatened under the ESA, nesting territories are on the north shore of Lake Stevens about 2 miles from the streams within the city limits. The two pair of resident bald eagles forage in Lake Stevens and the Snohomish River estuary. Bald eagles are observed in winter in low numbers and occasional over flights may occur in the vicinity of stream channels, but no known roosts are present. Streams within the city limits are too small for easy access to foraging bald eagles and do not contain large concentrations of spawning chum salmon or waterfowl concentration, which are the preferred forage. Bald eagles in the Lake Stevens vicinity perch along the north shore and forage on populations of fish and waterfowl in the lake. Spawning kokanee in Kokanee Creek are generally unavailable due to the urban nature of the creek basin and the small size of the stream. Bald eagles have been delisted by the US Fish and Wildlife Service.

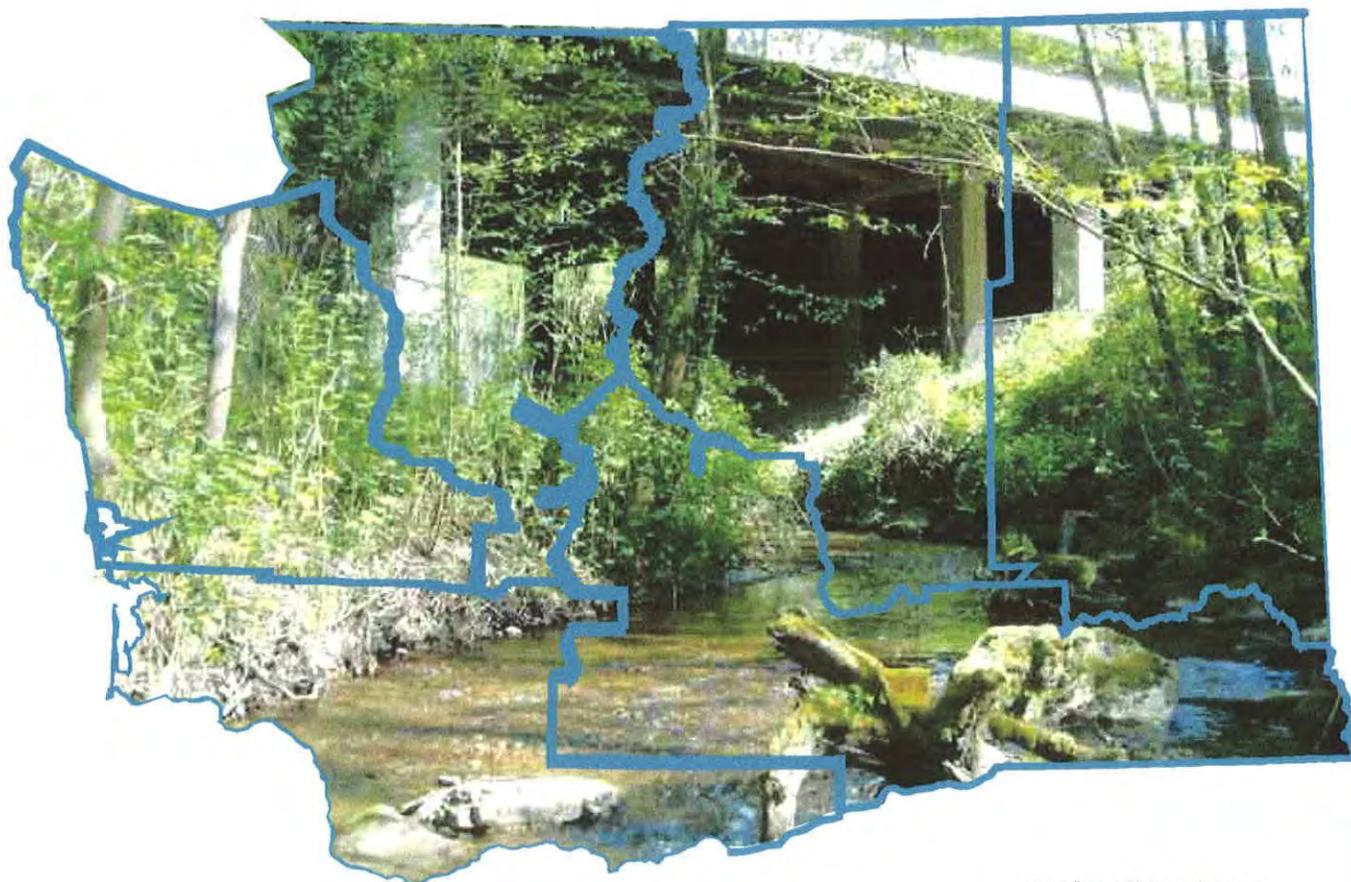


**Washington State
Department of Fish and Wildlife**

WSDOT FISH PASSAGE INVENTORY

Progress Performance Report

June 2008



**Submitted by:
Eva Wilder
and
Mike Barber**



**Washington State
Department of Transportation**

Catherine Creek Before Construction



Figure 3. Catherine Creek - Project location: SR 92 at milepost 1.93, northeast of Lake Stevens.



Figure 4. A 2.4 m wide concrete box equipped with wooden baffles. This fishway was identified as a fish passage barrier due to insufficient water depth and excessive water surface drops created by the baffles.

After Construction



Figure 5. WSDOT replaced the wooden baffles with steel baffles equipped with low flow notches. Additionally, three concrete weirs with low-flow notches were installed downstream of the culvert. The new fishway provides a better access to almost 7.3 km of habitat to coho salmon and steelhead, resident and sea-run cutthroat trout.

Evaluation of Stand-Alone I-4 Retrofit Projects, Before and After Barrier Removal

The goal of the evaluation program is to accomplish the following:

- Determine fish utilization upstream and downstream of sites prior to and one year after project construction.
- Evaluate new fish passage projects for design, durability, and efficiency for one year following construction.
- Provide long-term effectiveness monitoring of selected sites to evaluate various design options and the changes in fish utilization over an extended period of time.

WDFW evaluates I-4 stand alone fish passage barrier correction projects to ensure they are functioning properly. All projects completed by WSDOT are evaluated for one year following construction. During this period, any design deficiencies are noted and corrected whenever possible.

Adult spawner surveys are a direct way to determine species presence or absence above and below a newly completed fish passage project or to evaluate a pre-project barrier. Three such surveys are conducted per year for each project. The surveys are conducted 500 meters below and above the project, or to the confluence with a larger body of water downstream, or to a natural barrier upstream. The survey may be relocated according to where fish are likely to spawn if there is no spawning habitat within 500 m upstream or downstream of the fish passage project.

If resources allow, adult surveys may be conducted in subsequent years if salmonids are not detected upstream of the fish passage project in the first year after construction.

On a select number of sites, representing various fish passage design options, adult spawner surveys and fish passage structure assessments will occur over an extended period. This will provide insight into the long-term adult utilization patterns and the durability and efficiency of various design options.

Twenty seven adult coho salmon were observed upstream of the 2007 Catherine Creek fish passage project at SR 92 during a spawner survey in November 2007 and one adult coho salmon in January 2008. No fish were observed upstream of the Swamp Creek fishways at I-405 and I-5 locations during this year surveys. A pair of adult coho was observed upstream of the Snyder Canyon fishway on SR 142 that was retrofitted in 2006.

Appendix G for each WSDOT region shows the results of spawner surveys conducted for dedicated funding projects that will be built in the near future and for projects built in 2006 and 2007 as well as for long-term monitoring project sites.

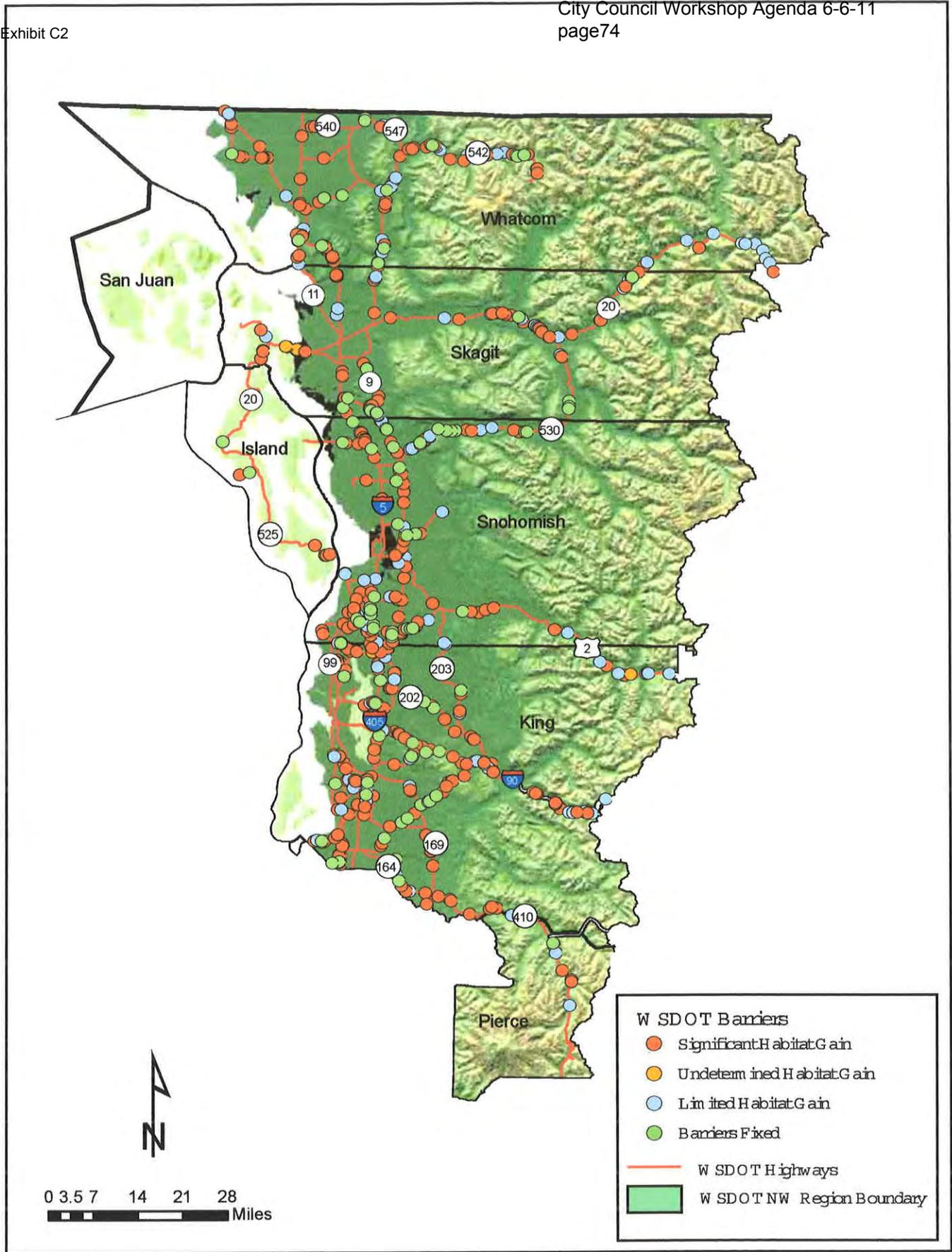


Figure 40 .Northwest Region Fish Passage Barriers, February 2008 .

Exhibit C2

Appendix IE. Dedicated Project Evaluations - Adult Spawner Surveys.

Stield	Road	MP	Stream	WRIA	River Mile	Project Year	Eval Level	Eval Status	Survey Date	Target Species	Survey Location	Project Timing	Survey Length (mi)	Live Count	Dead Count	Total Count	Redd Count
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	20-Nov-00	Coho	Downstream	Pre-project	1	3	10	13	9
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	31-Oct-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	31-Oct-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	07-Nov-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	07-Nov-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	18-Nov-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	18-Nov-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	25-Nov-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	25-Nov-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	02-Dec-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	02-Dec-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	10-Dec-02	Coho	Upstream	Pre-project	0.4	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	10-Dec-02	Coho	Downstream	Pre-project	1.2	0	0	0	0
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	17-Dec-02	Coho	Downstream	Pre-project	1.2	71	3	74	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	17-Dec-02	Coho	Upstream	Pre-project	0.4	17	0	17	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	24-Dec-02	Coho	Upstream	Pre-project	0.4	23	4	27	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	24-Dec-02	Coho	Downstream	Pre-project	1.2	171	7	178	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	30-Dec-02	Coho	Upstream	Pre-project	0.4	17	13	30	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	30-Dec-02	Coho	Downstream	Pre-project	1.2	72	101	173	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	04-Jan-03	Coho	Downstream	Pre-project	1.2	5	58	63	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	04-Jan-03	Coho	Upstream	Pre-project	0.1	0	4	4	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	04-Jan-03	Coho	Downstream	Post-project	0.3	2	1	3	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	11-Nov-07	Coho	Upstream	Post-project	0.3	27	0	27	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	11-Nov-07	Coho	Upstream	Post-project	0.31	0	0	0	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	26-Nov-07	Coho	Downstream	Post-project	0.31	0	0	0	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	26-Nov-07	Coho	Upstream	Post-project	0.31	0	1	1	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	15-Jan-08	Coho	Downstream	Post-project	0.31	0	0	0	
07.0148	1.30 SR 92	1.93	Catherine Cr	07.0148	1.01	2007	1	Incomplete	15-Jan-08	Coho	Downstream	Post-project	0.31	0	0	0	
08.0059	7.00 I-405	29.75	Swamp Cr	08.0059	6.64	2007	1	Incomplete	18-Dec-00	Coho	Downstream	Pre-project	2.56	0	7	7	18
08.0059	7.00 I-405	29.75	Swamp Cr	08.0059	6.64	2007	1	Incomplete	18-Dec-00	Coho	Upstream	Pre-project	0.65	1	0	1	10

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Inventory Element	Shoreline Assessment Unit					
	Lake Stevens		Wetland Complexes – Stevens Creek and Stitch Lake	Catherine Creek		Little Pilchuck Creek
	Residential – City Limits	Residential – UGA		City Limits	UGA	
	Hemlock Forest - <1%	Freshwater Emergent Marsh - <1%	<ul style="list-style-type: none"> Pasture/Hay - <1% Harvested forest-grass regeneration - <1% 			
Aquatic Vegetation	<ul style="list-style-type: none"> Eurasian Watermilfoil - 42 acres Thin-leaf pondweed/Grassy pondweed - 38 acres Common elodea/Thin-leaf pondweed/Grassy pondweed/Naiad - 27 acres Thin-leaf pondweed/Grassy pondweed/Brittlewort - 18 acres 	<ul style="list-style-type: none"> Thin-leaf pondweed/Grassy pondweed - 15 acres Common elodea/Thin-leaf pondweed/Grassy pondweed/Naiad - 6 acres Eurasian Watermilfoil - 4 acres 	NA	NA	NA	NA
Overwater Cover	430,072 SF (9.9 acres) 14 SF/linear foot of shoreline	100,170 SF (2.3 acres) 13 SF/linear foot of shoreline	NA	NA	NA	NA
Shoreline Armoring	<ul style="list-style-type: none"> Bulkhead - 62% Revetment - 20% Not Armored - 17% Fill - 1% Boat Ramp - 0.3% 	<ul style="list-style-type: none"> Bulkhead - 47% Not Armored - 29% Revetment - 22% Fill - 1% 	NA	NA	NA	NA
Public Access	<ul style="list-style-type: none"> Wyatt Park Lundeen County Park Swirn Beach North Cove Park 	<ul style="list-style-type: none"> Sunset Park 	<ul style="list-style-type: none"> No formal physical access, visual access from private properties and roadways 	<ul style="list-style-type: none"> Lake Stevens School District Property (Catherine Creek Park) 	<ul style="list-style-type: none"> No formal physical access, visual access from roadway 	<ul style="list-style-type: none"> Centennial Trail
Critical Areas	<ul style="list-style-type: none"> Floodplain - 18% Priority Habitats: bald eagle buffer - 26% Priority Species - coho salmon Slope slopes - 11 % Wetlands - 23% 	<ul style="list-style-type: none"> Floodplain - 30% Priority Habitats: wetlands - 9% Priority Species - coho salmon Wetlands - 35% 	<ul style="list-style-type: none"> Priority Habitats: bald eagle buffer - 3%, wetlands - 54% Priority Species - coho salmon, great blue heron colony Wetlands - 100% 	<ul style="list-style-type: none"> Floodplains - 38 % Priority Habitats: wetlands - 29%, riparian zones -17% Priority Species - coho salmon, bull trout, steelhead, resident coast cutthroat Wetlands - 3% 	<ul style="list-style-type: none"> Floodplains - 57 % Priority Habitats: riparian zones - 64% Priority Species - coho salmon, bull trout, steelhead, resident coast cutthroat Wetlands - 5% 	<ul style="list-style-type: none"> Floodplains - 46 % Priority Habitats: riparian zones - 52% Priority Species - coho salmon, bull trout, steelhead, resident coast cutthroat Wetlands - 8%
Impaired Waters (303d/305b)	<ul style="list-style-type: none"> Invasive exotic species Total phosphorus 	<ul style="list-style-type: none"> Invasive exotic species Total phosphorus 	None	None	<ul style="list-style-type: none"> Fecal coliform pH Temperature 	<ul style="list-style-type: none"> Bioassessment Dissolved oxygen Fecal coliform pH

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Shoreline Management Act, and the State Hydraulic Code. Other relevant federal laws include the National Environmental Policy Act, Anadromous Fish Conservation Act, Clean Air Act, and the Migratory Bird Treaty Act. State laws which address shoreline issues include the Growth Management Act, State Environmental Policy Act, tribal agreements and case law, Watershed Planning Act, Water Resources Act, Salmon Recovery Act, and the Water Quality Protection Act. A variety of agencies (e.g., U.S. Army Corps of Engineers, National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Ecology, Washington Department of Fish and Wildlife) are involved in implementing these regulations, but review by these agencies of shoreline development in most cases would be triggered by in- or over-water work, discharges of fill or pollutants into the water, or substantial land clearing. Depending on the nature of the proposed development, state and federal regulations can play an important role in the design and implementation of a shoreline project, ensuring that impacts to shoreline functions and values are avoided, minimized, and/or mitigated. With the comprehensive SMP update, the City will strive to ensure that Lake Stevens' SMP regulations are consistent with other State and Federal requirements and explore ways to streamline the shoreline permitting process. A summary of some of the key regulations and agency responsibilities follows.

Section 404: Section 404 of the federal Clean Water Act provides the Corps, under the oversight of the U.S. Environmental Protection Agency, with authority to regulate “discharge of dredged or fill material into waters of the United States, including wetlands” (http://www.epa.gov/owow/wetlands/pdf/reg_authority_pr.pdf). The extent of the Corps' authority and the definition of fill have been the subject of considerable legal activity. As applicable to the City of Lake Stevens' shoreline jurisdiction, however, it generally means that the Corps must review and approve most activities in streams, wetlands, and lakes. These activities may include lake or wetland fills, stream and wetland restoration, and culvert installation or replacement, among others. Similar to SEPA requirements, the Corps is interested in avoidance, minimization, restoration, and compensation of impacts.

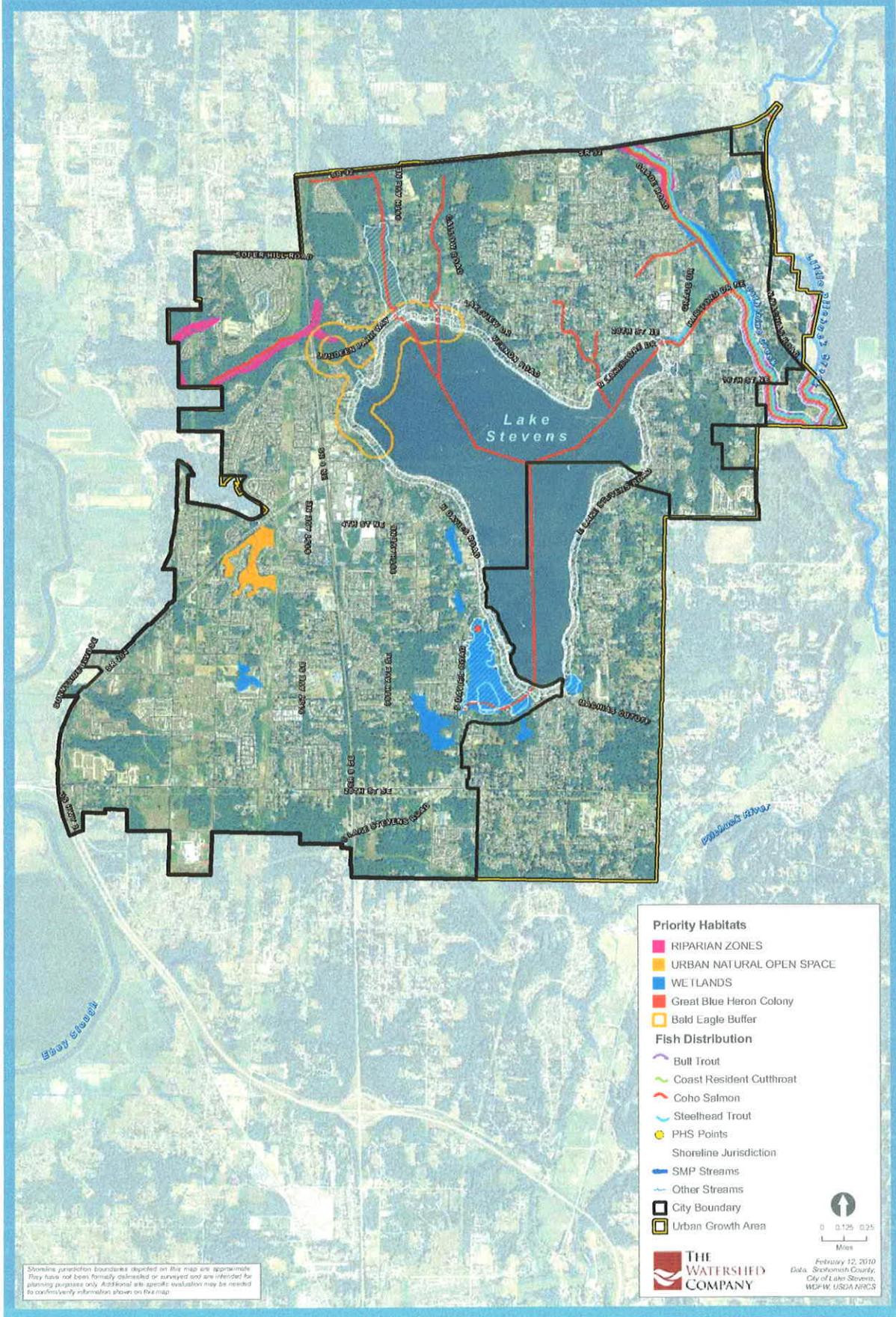
Federal Endangered Species Act (ESA): Section 9 of the ESA prohibits “take” of listed species. Take has been defined in Section 3 as: “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” The take prohibitions of the ESA apply to everyone, so any action of the City that results in a take of listed fish or wildlife would be a violation of the ESA and exposes the City to risk of lawsuit. Per Section 7 of the ESA, activities with potential to affect federally listed or proposed species and that either require federal approval, receive federal funding, or occur on federal land must be reviewed by the National Marine Fisheries Service (NOAA Fisheries) and/or U.S. Fish and Wildlife Service (USFWS) via a process called “consultation.” Currently, only the shoreline streams have known presence of ESA-listed species (bull trout and steelhead). However, coho, found in Lake Stevens and the shoreline streams, may eventually be listed.



Figure 11. WDFW Priority Habitats & Species

City of Lake Stevens Shoreline Master Program

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Natural Environment

In support of the Grade Road PBD Master Plan, Grette Associates delineated environmentally sensitive areas within the PBD, summarized likely impacts to these areas resulting from development of the preferred vision, and presented a conceptual mitigation package appropriate to offset potential development impacts. These findings are summarized below; full reports are included as Appendices D and E.

Environmentally Sensitive Areas

Grette documented seven wetlands, all of varying sizes and degrees of function on the Grade Road PBD.² As is illustrated in the table below, the largest wetland sited is approximately 454,700 square feet and the smallest is approximately 660 square feet. Other than Wetland G (see Figure 16), all are considered degraded, as they lack vegetation and connectivity to other wetlands.

WETLAND SUMMARY AT THE GRADE ROAD PBD SITE.

<i>Wetland Name</i>	<i>Size¹</i>	<i>Category</i>	<i>City Jurisdiction</i>	<i>Buffer Width (Ft)</i>
A	663 sq. ft.	III	No	-
B	33,063 sq. ft.	III	Yes	50
C/D	61,400 sq. ft.	III	Yes	50
E	15,146 sq. ft.	IV	No	-
F	22,874 sq. ft.	III	Yes	50
G	454,700 sq. ft.	III	Yes	50
H	6,283 sq. ft.	III	Yes	50

¹ The sizes of Wetlands B, G and H are approximate as these wetlands were not surveyed by a land surveyor. The sizes of Wetlands A, C/D and F are taken from Talasaea, 2004.

In addition to the wetlands, one stream course was delineated as were several artificial ditches. The stream, Catherine Creek, flows south through the site, and is generally straight and 6-8 feet deep. It flows into Little Pilchuk River. Although no fish were observed during the field study, Catherine Creek supports populations of coho salmon, bull and steelhead trout, as well as a resident population of cutthroat trout. An inquiry to the Washington Department of Fish and Wildlife (WDFW) found that no priority terrestrial species exist within one mile of the site.

The open portions of the site are bisected by several small artificially-created drainage ditches, as well as the Leavitt Ditch, which conveys treated stormwater from a detention facility adjacent to the north property line.

² Five of the wetlands were previously delineated as part of the Sensitive Areas Report and Mitigation Plan, Grade Road Development (prepared for G & M Investments by Talasaea Consultants, Inc. 2004). Grette identified these wetlands and confirmed their boundaries.

According to Title 14 of the LSMC Land Use Code, Section 14.88.800, Wetland G is classified as a Category III wetland. As the proposed land use intensity of the preferred alternative of the Grade Road Master Plan is high, Wetland G is subject to a 50-foot buffer.

Wetland H: Wetland H is located east of Wetland B and west of Wetland C/D, and is approximately 6,283 square feet in size (Figure 3). The wetland is located in a shallow swale immediately north of the Leavitt Ditch. Wetland H is dominated by mowed reed canary grass, bentgrass, creeping buttercup and common rush. Soils observed within Wetland H were primarily black and very dark brown silt loam and dark reddish brown muck. Currently, hydrologic support for Wetland H appears to be provided by direct precipitation and from a seasonally high groundwater table.

Wetland H is dominated by mowed grasses and forbs and does not provide vegetative structure diversity. Additionally, the wetland is mowed regularly by the homeowner, further reducing the quality of wildlife habitat it provides. The wetland also provides minimal water storage capacity as it is located in a shallow depression. Therefore, it does not have the potential to provide quality flood storage, groundwater recharge or sediment removal functions.

According to Title 14 of the LSMC Land Use Code, Section 14.88.800, Wetland H is classified as a Category III wetland. As the proposed land use intensity of the preferred alternative of the Grade Road Master Plan is high, Wetland H is subject to a 50-foot buffer.

5.2 Catherine Creek

Catherine Creek enters the property from the north and flows in a southeasterly direction near the east boundary of the PBD (Figure 3). The stream exits the property to the south through two large culverts beneath Hartford Drive. The north portion of the stream flows through a forested canopy consisting primarily of Pacific willow and young black cottonwood, providing dense canopy closure. The channel in this portion of the site is relatively wide and shallow, containing several riffle/glide complexes. The bankfull width of this stream reach is approximately 20-30 feet, with a wetted width at the time of the survey of 6-10 feet. Woody debris is present, although it consists mainly of raked branches and other smaller debris.

The stream exits this forested area and is ditched the remainder of its length to Hartford Drive (Figure 3). Riparian vegetation along the channel is limited to dense reed canary grass, with several thickets of Himalayan blackberry along the channel to the south. The bankfull width in this portion of the site is approximately 10-15 feet, and the wetted width at the time of the survey was approximately 2-3 feet. No large wood debris or other channel structures were observed along this reach.

According to Title 14 of the LSMC Land Use Code, Section 14.88.700, Catherine Creek is classified as a Type 3 water requiring a 50-foot stream buffer from the top of the bank.

Catherine Creek supports populations of coho salmon (*Oncorhynchus kisutch*) and bull (*Salvelinus confluentus*) and steelhead (*O. mykiss mykiss*) trout, as well as a resident population of cutthroat trout (*O. clarki*) (WDFW 2006). According to the Lake Stevens/Catherine Creek