



CITY OF KIRKLAND
Department of Public Works
123 Fifth Avenue, Kirkland, WA 98033 425.587.3800
www.kirklandwa.gov

MEMORANDUM

To: Kurt Triplett, City Manager

From: Jenny Gaus, Surface Water Engineering Supervisor
Rob Jammerman, Development Engineering Manager
Kathy Brown, Public Works Director

Date: November 6, 2014

Subject: 2014 SURFACE WATER MASTER PLAN ADOPTION

RECOMMENDATION:

It is recommended that City Council approves the attached Resolution that adopts the 2014 Surface Water Master Plan.

BACKGROUND DISCUSSION:

Appropriate management of surface water in the City of Kirkland achieves multiple goals, all of which improve the quality of life for Kirkland citizens. The Surface Water Master Plan improves safety, reduces risk to public and private property, and enhances our natural environment. Improved safety is achieved by reduced flooding. Properly sizing and maintaining the City's stormwater conveyance system keeps water from ponding on the streets and sidewalks, creating safer conditions for motorists, bicyclists, and pedestrians. Reduced flooding also means a reduction in the risk of damage to property and business operations. The Plan also benefits groundwater management, which can contribute to reduced risk of landslides. Improved water quality and fish passage in the City's waterways, ponds, and lakes provides for enhanced recreation opportunities, including fishing, swimming, and enjoying the beauties of nature in our City. Management of the urban forest insures that Kirkland will remain a green and livable community for many years to come.

Council discussed the Draft Surface Water Master Plan at the September 2nd Study Session and the October 21st Regular Council meeting ([9-2-14 Study Session - SWMP](#) , [October 21st Regular Meeting - SWMP](#)).

A public comment period on the Draft Surface Water Master Plan was held October 8-29. One comment was received. That comment and a response from City staff will be incorporated into Appendix O of the final SWMP, and are attached here (Attachment A).

In response to Council comments and to finalize the document, the following changes were made to the Draft Surface Water Master Plan:

- The paragraph at the beginning of the Background section above was inserted into the Executive Summary and into the Introduction regarding the community benefits of appropriate surface water management including property protection, safety, and enhancement of the natural environment.
- The cover and document footers were altered to note the date of the final plan.
- Characterizations for additional basins were added to Appendix F – Basin Characterization Summaries, and additional species of wildlife were added to the Denny Creek Characterization per public comment.
- Appendix O – Public Comments and Staff Responses were added to the document.

The 2014 Surface Water Master Plan is available on the City website: [2014 Surface Water Master Plan](#)

If the Council has no additional questions or input, staff is recommending that Council passes the Resolution adopting the 2014 Surface Water Master Plan.

Following adoption, implementation of the Surface Water Master Plan will take place through the budget process, the capital improvement program process, and through the work of Surface Water Utility staff. Staff will report to Council annually on implementation progress using the performance measures contained in the 2014 Surface Water Master Plan. The Plan can be amended or updated as needed if new conditions warrant or the performance measures indicate that progress in a particular area of the Plan is not satisfactory.

Attachment A: Public Comment and staff response on the Draft Surface Water Master Plan

Jenny Gaus

From: luigi [REDACTED]
Sent: Thursday, October 30, 2014 9:47 AM
To: Jenny Gaus
Subject: FHNA comments on Draft Kirkland 2014 Surface Water Master Plan

Hi, Jenny:

Sorry for the late submission. Lots of information in the plan with many separate appendices.

This is quite a document. Congratulations for completing the plan and reaching this significant milestone!

Here are my comments:

- It is difficult to understand how the sequence of CIP projects was determined. For example, on page XIX, why schedule CH-02 in 2015 but push out CDE-01 to 2021? Some rationale or rating criteria would help there – e.g., budget-driven? Impact-driven?
- It would be ideal to have a neighborhood pivot or grouping for work on the ground. For example, what are the roads, storm water, CIP, parks, etc. projects planned for my neighborhood next year? What are the projects that are currently underway in a given neighborhood?
- Where are the sampling sites for water quality, macro invertebrates, etc. in sub-basins across the city? What are the sampling intervals? How will results be used to determine additional efforts?
- The Denny Creek sub-basin includes the presence of fish species that you mentioned. Other wetland and riparian species that should be included for Denny Creek: Great blue heron, mallards and other ducks, bald eagles, beaver, deer, Pacific chorus frogs, and belted kingfisher.
- Additional projects that were not mentioned or not prominent in the plan:
 - Re-watering the tributary of Denny Creek immediately south of the Big Finn lacrosse field. Diversion of water from this tributary to the bioswale and drainage for the lacrosse field continues to aggravate flood-prone residences immediately downstream. The de-watered tributary is listed as sensitive wetland on the Kirkland sensitive areas map. Let's discuss details.
 - Completion of maintenance tasks of the bioswale south of the lacrosse field at Big Finn Hill Park.
 - Removal of the concrete bulkhead along the lake shore at OO Denny park.

Thanks,

Lou Berner
Finn Hill Neighborhood Alliance

November 4, 2014

Lou Berner
Finn Hill Neighborhood Alliance
P.O. Box 682
Kirkland, WA 98083

Dear Mr. Berner:

Thank you for taking the time to comment on the Draft Surface Water Master Plan (SWMP) and to discuss these comments on the phone. I appreciate the effort that you and others at the Finn Hill Neighborhood Alliance put into making your interests and needs known during the public involvement process for the SWMP. Below are responses to specific items in your email. A few of your concerns will need further discussion and field visits. Although the Surface Water Master Plan is being finalized as I write this, this is not the last opportunity for input on surface water issues in Kirkland. I will continue to work with you and FHNA to resolve these issues.

- 1. It is difficult to understand how the sequence of CIP projects was determined. For example, on page XIX, why schedule CH-02 in 2015 but push out CDE-01 to 2021? Some rationale or rating criteria would help there – e.g., budget-driven? Impact-driven?*

Chapters 6 and 7 of the SWMP discuss how CIP projects are identified and how they are scheduled for construction. This is a combination of overall priorities (i.e. flooding comes first), interaction with other projects (i.e. it makes sense to rebuild the culvert under Juanita Drive (CDE-01) as part of the Juanita Drive Corridor improvements), ranking according to a set of environmental and feasibility criteria (see Appendix M), the general order in which it makes sense to construct (i.e. do flow control first, then do channel reconstruction of physical habitat features), and assumptions about available funding.

The capital project schedule is recommended in the SWMP, but this is not a construction schedule. The Capital Improvement Program development takes place each year and consists of developing a 6-year construction schedule based on recommendations in the SWMP and on current project needs and opportunities and available funding.

- 2. It would be ideal to have a neighborhood pivot or grouping for work on the ground. For example, what are the roads, storm water, CIP, parks, etc. projects planned for my neighborhood next year? What are the projects that are currently underway in a given neighborhood?*

Kari Page, Neighborhood Services Coordinator, reports that the Neighborhood Hot Sheet that integrated various city and development activities was discontinued about 6 months ago. Production of the Hot Sheet took significant staff time and there are online resources available that show the same information including:

City capital projects on the 2013-2018 Capital Improvement Program are shown on this interactive

map: [http://www.kirklandwa.gov/depart/Public Works/Construction Projects/Capital Improvements.htm](http://www.kirklandwa.gov/depart/Public%20Works/Construction%20Projects/Capital%20Improvements.htm)

Development Projects are displayed on the City's GIS browser, which can be accessed at this link: <http://maps.kirklandwa.gov/SilverlightViewer/Viewer.html?Viewer=KirklandPublic>

Once the projects from the SWMP are incorporated into a 6-year Capital Improvement Program – a process that will begin next year, then they will also be shown on the Capital Improvement Program Map.

3. *Where are the sampling sites for water quality, macro invertebrates, etc. in sub-basins across the city? What are the sampling intervals? How will results be used to determine additional efforts?*

B-IBI sample sites are noted on figure 4-8, and a description of B-IBI results for Kirkland streams is presented in Appendix H. Water quality is currently sampled in Forbes and Juanita Creeks by King County – see this site for further info:

<http://green2.kingcounty.gov/StreamsData/Data.aspx>

In addition we have a volunteer that monitors Forbes Lake as part of the King County Volunteer Lake monitoring program – data and maps can be found here:

<http://green2.kingcounty.gov/SmallLakes/LakePage.aspx?SiteID=61>

Additional monitoring is recommended and is described as programmatic actions CW-17 and CW-21 in Appendix L. The purpose is to provide a baseline for comparison of conditions in the future, and to use in setting goals for water quality and habitat. Sampling intervals would be determined as part of a request that will take place as part of the 2017-2018 budget process.

4. *The Denny Creek sub-basin includes the presence of fish species that you mentioned. Other wetland and riparian species that should be included for Denny Creek: Great blue heron, mallards and other ducks, bald eagles, beaver, deer, Pacific chorus frogs and other amphibians, and belted kingfisher.*

We will note these species in the Denny Creek Basin Characterization in Appendix F.

5. Additional projects that were not mentioned or not prominent in the plan:

- *Re-watering the tributary of Denny Creek immediately south of the Big Finn lacrosse field. Diversion of water from this tributary to the bioswale and drainage for the lacrosse field continues to aggravate flood-prone residences immediately downstream. The de-watered tributary is listed as sensitive wetland on the Kirkland sensitive areas map. Let's discuss details.*

This situation developed prior to annexation by Kirkland, and has to do with construction of play fields in Big Finn Hill Park that took place in approximately the 1990s. It appears that water was diverted from one tributary of Denny Creek into another during construction of the fields, and a downstream homeowner feels that this contributes to drainage problems on his property. This is essentially a dispute between property owners – a matter in which the City does not have authority to intervene. A representative of the Finn Hill Neighborhood Alliance contacted King County Parks about this matter during the recent reconstruction of one of the fields, but King County did not pursue the matter.

- *Completion of maintenance tasks of the bioswale south of the lacrosse field at Big Finn Hill Park.*

We will coordinate with you and with King County Parks to resolve this issue. A list of required maintenance actions was presented to King County Parks as part of the redevelopment of the playfield in Big Finn Hill Park, and maintenance of storm drainage facilities is required per City Code.

- *Removal of the concrete bulkhead along the lake shore at OO Denny park.* Projects that are being constructed by entities other than the City and/or that already have funding and are underway were not included in the SWMP, as the purpose of the SWMP is to lay out plans and priorities for the future. You mentioned in our conversation that King County had done some permitting and design work on the project – I will research this matter and try to pass on contact information for the King County staff that are or have been working on this project.

Again, thank you for taking the time to provide comments on the Surface Water Master Plan. Should you wish to discuss these comments or other surface water issues, please contact me at (425) 587-3850 or jgaus@kirklandwa.gov.

Sincerely
Public Works Department

Jenny Gaus, Surface Water Engineering Supervisor

RESOLUTION R-5082

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KIRKLAND
ADOPTING THE 2014 SURFACE WATER MASTER PLAN.

WHEREAS, appropriate management of surface water in the City of Kirkland achieves multiple goals, all of which improve the quality of life for Kirkland residents; and

WHEREAS, the goals of the Surface Water Utility include flood reduction, water quality improvement, infrastructure maintenance, and fish habitat protection, which collectively are intended to improve safety, reduce risk to public and private property, and enhance our natural environment; and

WHEREAS, the most recent Surface Water Master Plan was adopted in 2005, and the projects and programs in that plan have been implemented; and

WHEREAS, the City annexed the Finn Hill, Juanita and Kingsgate neighborhoods in 2011, resulting in new stormwater systems and streams coming under City management; and

WHEREAS, the City intends to meet obligations for water quality improvement under the National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Separate Storm Sewer Permit; and

WHEREAS, the City intends to meet obligations for water quality improvement and fish habitat improvement under the Water Resource Inventory Area (WRIA) 8 Lake Washington/Cedar/Sammamish Watershed, Chinook Salmon Conservation Plan and the Federal Endangered Species Act; and

WHEREAS, the 2014 Surface Water Master Plan recommends programs and projects for the next ten years of Surface Water Utility Operation in accordance with the goals noted above.

NOW, THEREFORE, be it resolved by the City Council of the City of Kirkland as follows:

Section 1. The 2014 Surface Water Master Plan is adopted.

Passed by majority vote of the Kirkland City Council in open meeting this ____ day of _____, 2014.

Signed in authentication thereof this ____ day of _____, 2014.

MAYOR

Attest:

City Clerk