

WILLOWMOOR FLOODPLAIN RESTORATION PROJECT

STAKEHOLDER ADVISORY COMMITTEE



King County



Meeting #3: November 13, 2013

--Meeting Report--

SAC Members Present:

Paul Fendt, Member At-Large
 Hanna Floss (for Anne Corley), Sammamish Rowing Association
 Jonathan Frodge, Save Lake Sammamish
 Michael Hobbs, Friends of Marymoor Park
 Greg Helland, Friends of Marymoor Park
 Christa Heller, Washington Department of Fish & Wildlife
 Heather Kahn, Washington Department of Ecology
 Jim Mackey, Member At-Large
 Dwight K. Martin, Sammamish Home Owners
 Peter Marshall, Eastside Audubon
 Nancy Meyers, Member At-Large
 Martin Nizlek, Washington Sensible Shorelines Association
 Gilbert Pauley, Member At-Large
 Jon Spangler, City of Redmond
 Joe Thumma, JB Instant Lawn
 Brian Ward (for Paul Bucich), City of Bellevue
 Bill Way, Member At-Large
 Susan Wilkins, Member At-Large
 Jason Wilkinson, WRIA 8 Salmon Recovery Council

Project Team Staff and Consultants

Kate Akyuz, King County
 Craig Garric, King County
 Merri Martz, TetraTech
 John Bethel, King County
 Hans Berge, King County
 Gino Lucchetti, King County
 Kyle Comanor, King County
 Anne Lipe, King County

Margaret Norton-Arnold, Committee Facilitator
 Fala Frazier, Committee Administrator

Observers

Rory Crispin, Citizen – Lake shore property owner
 Steve Bleifuhs, King County
 Christine Jensen, King County
 Dave Garland, Washington Department of Ecology (Back-up Representative)
 Scott Sheffield, Washington Sensible Shorelines Association (Back-up Representative)

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Introduction

The purpose of this meeting was to discuss existing habitat and water quality conditions in the Willowmoor project area and to gather committee comments on the draft design objectives related to potential habitat improvements associated with the project.

Existing Habitat and Water Quality Conditions

Merri Martz, an environmental consultant from TetraTech, provided members with a presentation of existing habitat and water quality conditions in the project study area. The presentation covered fish and wildlife species that use the project area and their habitat requirements. In addition, Merri noted generally degraded habitat conditions within the project area and highlighted poor water quality, particularly high summer water temperatures as a problem for Chinook and other salmon species. Merri then introduced some of the habitat restoration opportunities that could be pursued through the Willowmoor project. A number of King County technical experts were also on hand to answer questions and provide additional information. SAC members were provided with a copy of Merri's presentation. Tetra Tech's PowerPoint presentation will be available on the SAC OneHub website as will a detailed written report documenting the topics covered in the presentation.

Members asked questions and engaged in discussion:

Q: In the project area, what are the total acres that are considered to be wetlands, and what percentage of those are high-value wetlands?

A: Fifty-three acres of wetlands are currently delineated, and are divided into five wetland classes. Three of these are class 2 wetlands and are immediately adjacent to the river. Two others are class 4 and the fifth one is class 5. Most of the wetlands are degraded due to agricultural land use conversion and are currently dominated by invasive plant communities.

Q: What construction constraints are in the area because of wetlands?

A: They are regulated, and buffers are required to protect them; anywhere from 25-150 feet. A very good multi-purpose project at this site could be a win-win; we want to improve the wetlands in order to improve habitat conditions in the area and that can go a long way towards getting permits approved.

Q: Is there an opportunity to reconnect some of the habitat corridors in this area?

A: Yes, we are looking into that, especially between the Transition Zone and the wetland areas. King County has a land use classification system for wildlife corridors which does not include the Transition Zone and we are not currently looking at expanding the project boundaries beyond the project study area. However, the river itself is a type of corridor, particularly for fish and migratory birds, so anything we do to improve connectivity between the river and the lake and the river and adjacent wetlands will benefit the movement of wildlife.

Q: I've heard that, in the past, Kokanee salmon were considered "trash fish" and were killed on purpose. Is this true?

A: Yes, in the past they were killed because it was believed that sockeye and Kokanee were carriers of a virus that harmed commercial fish. Kokanee were killed to protect the Chinook salmon in the river. The Chinook have proven to be resistant to the virus, so this culling is no longer practiced.

Q: I'm surprised to see that you have bacteria listed in some areas; I thought this was one of the areas where King County was meeting the standards for bacterial control.

A: There are a couple of spots along the Sammamish that are listed with high levels of bacteria including the Transition Zone and an area adjacent to agricultural lands downstream. It does not happen every year, and we

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don't know the exact source of the bacteria. The County is working on refining fecal coliform analyses methods to refine our understanding of bacterial sources.

Q: Water temperature is noted as 77 degrees in August. That seems really hot – is that considered normal and properly functioning?

A: That's normal for the surface condition of Lake Sammamish, but it's not properly functioning for salmon. They do well in 50-57 degree water. It takes juvenile Chinook about 3-4 days to migrate through this area, and fortunately the majority of them migrate in March-April when the water temperatures aren't quite that high. Fall-run Chinook do migrate during this critically high temperature period, so overall, yes, the high temperatures in the lake and river are of concern when we are talking about fish, and salmon in particular.

Q: So far you haven't mentioned navigability as being constrained on the river, and that is an important goal we should be trying to achieve.

A: There may be some opportunity to enhance small boat recreation or portage through the project area in the current project scope. A structural improvement such as a locks or major modification of the weir is currently out of scope for the project. That type of adjustment or goal would need to be addressed with the Flood Control District as the project is currently funded only to address the three main project goals.

Q: We need to look at the opportunity to get rid of noxious weeds. They are blocking passage for boats, and they have to be blocking fish, as well, correct?

A: The aquatic weed, Brazilian elodea, we've been concerned about is downstream of the Transition Zone and outside the project study area, so we haven't been as focused on that for habitat. We will have a report on that at our next meeting.

Q: Is a 150-foot width achievable for a buffer?

A: That is the City of Redmond's required buffer for the Sammamish River, so the project design team will strive to meet that performance standard. In some areas, depending on the final channel design, 150 feet may not be feasible, in such cases buffer averaging or mitigation may be necessary to achieve the standard.

Q: You've mentioned a target of 18 pools per mile in order to improve habitat, but is that a goal that is even possible in the Sammamish River? It seems that we should be developing goals that are actually workable.

A: The project area is in a degraded condition and the idea that we will be able to entirely restore natural processes is not realistic. What we've presented today are the NOAA goals for Properly Functioning Conditions and a few others performance standards based on Best Available Science. These performance standards set a high bar and in many cases are unachievable at this site. They do, however, provide a starting point for the conversation among designers in terms of what it would be desirable to achieve. The design team will work within the land use and environmental limitations of this site to develop a project that can meet a realistic set of design criteria with the goal of maximizing improvements to habitat conditions.

Q: I'm concerned about the backwater effects that could occur if there is increased flow from Bear Creek, and also in relation to these proposed habitat improvements. The project design needs to take this into consideration, so we aren't causing a reduction in outflow from the lake.

A: The next phase of work for NHC will be to develop a set of design flows that will include Bear Creek inflows and any potential backwater effect. The design team will develop project alternatives and run those through a hydraulic model at all the proposed design flows. Any problematic issues related to Bear Creek inflow will be identified in the alternatives analysis process.

Q: Will one of our project objectives be to decrease sediment in the project area?

A: There has been some discussion of including an effort to stabilize the dog water access areas as a design objective. Modifying delivery of sediment from drainages in the landscape surrounding the project area is

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beyond the scope of this project. The City of Redmond has several projects on the books to address these issues.

Committee Discussion on Project Design Objectives

The stakeholder advisory committee engaged in discussion related to draft project design objectives. A few sample objectives had been offered by the King County project team at the October 23rd meeting of the group to seed the discussion. Committee members had submitted written comments on these sample ideas, and had suggested their own design objectives and performance criteria. The project team then built on those ideas to create a draft set of design objectives and performance criteria, which were presented and discussed with the group.

There was a question about recreation, specifically in relation to boat navigability along the river. Jim Mackey was concerned that recreation did not appear to be addressed by the three project goals. Kate responded that Mr. Mackey's request, depending on the extent of what he means by "navigability", may be out of scope with the project goals, which were established in the 2006 King County Flood Hazard Management Plan. The project budget was approved by the King County Flood Control District Board of Supervisors with those goals in mind based on the recommendation of the Flood Control District Advisory Board and the Cedar-Sammamish Basin Technical Committee. Please see the following link for an understanding of District governance: <http://www.kingcounty.gov/environment/waterandland/flooding/flood-control-zone-district/governance.aspx>. Modification of the project goals would be a substantial undertaking with an associated budget process. Although there could be some recreational benefits as a result of the project, recreation is currently of lower priority than the established goals of habitat, flood control, and a reduction in maintenance costs. Marymoor Park has a master plan, and recreational goals such as modifications to provide a boat launch within Marymoor Park, may be better pursued through that forum.

In reviewing the draft design objectives, committee members had two comments that applied to many or all of the draft objectives:

- Some of the objectives are really proposed solutions. Another column should be added to the chart to indicate how the potential solutions relate to the objectives.
- Care should be taken to use verbs that are not too definitive, since you cannot guarantee the outcomes. "Pursue," for example, is a better verb than "ensure." "Minimize" or "reduce" should be used in place of "never."

Other Comments from the Committee on the Goals and Objectives included:

Goal 2

Replace "other species" with "fish and wildlife." We are talking about more than fish with this project.

Objective 1

It does not seem achievable to lower the water temperature to 16 degrees C.

Q: Are we trying to improve spawning, rearing, or migration habitat?

A: This is primarily a migration area. This is not a salmon spawning area. First, there is not the substrate, or gravels, that salmon need for spawning. Second, water movement (velocity) through this area is too fast. Factors other than water temperature influence spawning habitat.

Objective 3

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Q: It seems absurd to take a pipe from Lake Sammamish into the Transition Zone in order to get colder water in the area.

A: TetraTech is looking at three-to-four options for cold water sourcing. They are analyzing the cost and benefits of all of these.

Q: Is there something immoral about fish dying? Wouldn't it be beneficial to allow natural selection to produce a later salmon run that would avoid the highest water temperatures? What are we trying to save here?

A: We can't work to solve lake elevation issues without enhancing the environment at the same time. Both of those goals have to be accomplished together.

Objective 4

More shade (willows, for example) could impede the navigability on the river.

Q: Have you done studies related to the benefits of shade?

A: Yes, several studies have been performed on this. Shade reduces additional increases in temperature due to solar radiation, but it does not directly lower water temperatures.

Objective 5

You might want to consider shear stress as a performance criteria.

We need more information on the relationship between meandering and cooler water temperatures. What are the effects of meandering on water temperatures?

Objective 7

You need to use Oregon Ash or oaks for vegetation; willows are complete blocks.

Riparian vegetation needs to come out of the middle of the channel and off to the side.

By definition, this is a transition zone. The bottom and the top of it have different characteristics. You can't apply something at one end and have the effects be the same at the other end.

Objective 14

This is a good one; it's important to keep this.

Objective 15

Other adjectives to add to this are: sustainable, durable, and resilient.

Objective 16

The existing O&M manual for the weir and transition zone already includes a number of specific criteria.

The maintenance has to be sustainable.

This objective should be associated with goal #3.

Care should be taken not to enhance habitat for predators.

Public Comment

- In addition to the mean high temperature, you should include the mean low temperature. Remember that fish migrate at night. The County's website needs to be improved; include the presentations on there and include the time of this committee meeting. The existing O & M manual already includes a lot of criteria; those should also be posted on the website. There's a natural temperature to the lake, and fish have been migrating through there at that temperature. King County maintenance in the Transition Zone seems to have dropped off after twenty years. The Q&A sheet says that it can't be determined which animal is producing fecal coliform, but there are tests to do that. It also states that the Willowmoor project will not address fecal coliform, but I think it should.

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- Thanks to the committee members for their questions and thanks to Hans for the information he provided today. It would be useful to put information such as the Kokanee virus, etc. on the website. As Hans said, this is not the spot we want to use to create spawning habitat. If we don't create spawning habitat it would be good to have the rationale for that clearly explained. It will be important to understand how we are spending money. Are we spending money for habitat that, in the end, won't do that much for fish?

Next Meeting and Next Steps

The King County team will continue to work on the project design objectives and will produce a second, revised document in the near future. A project website is also being established for the committee and will be up and running very soon.

NHC will soon complete its Phase One report and has started on more detailed Phase Two work. When that work is completed, the County will have the information needed to develop draft design objectives for hydraulics and hydrology. Those will be reviewed with the SAC at the next meeting. That meeting has been scheduled for February 12, 2014, but another meeting in later January or later in February will likely be necessary.