September 14, 2011 VLWP 37th Meeting Summary

The thirty seventh meeting of the Vancouver Lake Watershed Partnership was held on Wednesday, September 14, 2011 from 4:00 – 6:00 pm at the Port of Vancouver Administrative Offices.

Attendance:

Member Present	Member Seat
Jacqueline Edwards	Citizen
Nancy Ellifrit	Citizen
Don Jacobs	Citizen
Gary Kokstis	Citizen
Thom McConathy	Citizen
David Page	Citizen
Jane Van Dyke	Citizen
Vernon Veysey	Citizen
Annette Griffy	City of Vancouver (alt. for Brian Carlson)
Jane Kleiner	Vancouver-Clark Parks and Rec. (alt. for Pete Mayer)
Andrew Ness	Port of Vancouver (alt. for Patty Boyden)
Iloba Odum	Washington Dept. of Ecology
Steve Prather	Clark Public Utilities (alt. for Doug Quinn)
Jeff Schnabel	Clark County Dept. of Environmental Svcs (alt. for Kevin Gray)

Other Agency Members Present:	Association:
Rob Guttridge	Clark County
Dorie Sutton	City of Vancouver
Brett Raunig	Washington Department of Ecology

Public in Attendance:

Lehman Holder	Sierra Club
Elizabeth Jordan	Vancouver-Clark Parks and Rec
Cameron Marshall	USGS
Rich Sheibley	USGS

Project Management Team:

Phil Trask	PC Trask & Associates, Inc.
Eileen Stone	PC Trask & Associates, Inc.

Not in Attendance:

Member	Member Seat
Anne Friesz	Washington Department of Fish and Wildlife
Tom Gonzales (replacement)	Clark Public Health
Chris Hathaway	Lower Columbia Estuary Partnership (alt. for Debrah Marriot)
Eric LaBrant	Fruit Valley Neighborhood
Nancy Lopez	WA Dept. of Natural Resources
George Medina	US Army Corps of Engineers
Jim Meyer	Citizen
Bruce Wiseman	Port of Ridgefield

Opening of Meeting/Agenda Review
Phil opened the meeting and welcomed all attendees. He asked if there were any additions to the agenda or general comments. Thom asked that changes to Steering Group meeting dates be announced in a more standardized fashion. The new date was posted on the website but not emailed to all members.

Vancouver Lake Water Balance and Nutrient Budget Project
Rich Sheibley of the US Geological Survey presented an update on the first year of work for the Vancouver Lake Water Balance and Nutrient Budget project. The study, which includes two years of sampling, began last September with the placement of water flow gages. The gages sample flow continually and are telemetered for real time on-line viewing. Water quality sampling began in November 2010. Rich and his team were sampling at the lake this week. The USGS team is in regular communication with WSU researchers.

A project link is up on the Partnership website which goes directly to the USGS National Water Information System (NWIS) site so data can be viewed as it comes available. The final report will be available online once it is complete (2013).

Water Flow and Volume:
During the first year of data collection, Burnt Bridge Creek flow ranged from 6-340 cubic feet per second (cfs). Flushing Channel flow ranged from 0 (when tidegate closed) to 194 cfs. Lake River flow calculations are underway; Lake River has the greatest flow, but it changes twice daily with the tide. Both nutrient concentration and load are important to look at for influence on the lake's water quality. Lake River is potentially more important to Vancouver Lake due to the greater volume than Burnt Bridge Creek.

Calculations are being made to convert water velocity to water discharge for Lake River. The cross sectional area changes at Lake River due to tidal changes, and this area change impacts the flow volume calculation and the bidirectional nature of this flow makes calculations more complicated. Getting the flow determined at this site is a high priority for the upcoming year. The flushing channel flow is attributed to the difference between Vancouver Lake and the Columbia River stage, with flow only entering Vancouver Lake due to the tide gates in the flushing channel.

Besides surface flows, other key inputs to the water balance include the following: precipitation, evaporation, and groundwater flows. There is a precipitation gage located at the flushing channel and the data is available real time over the internet. Evaporation is being estimated through several sensors on a mini weather station located the Sailing Club dock. Evaporation is likely to be important for Vancouver Lake because the lake is so large and shallow. Evaporation is measured by calculating several parameters: air temperature, water temperature on the lake surface, temperature throughout the water profile, relative humidity, wind speed, and wind direction. USGS is working with the Sailing Club to see how to get this data telemetered as this data would be useful to the Sailing Club in real time.

Groundwater seepage has been estimated at two sites: the Sailing Club and the southeast shore of the lake. Groundwater has been detected entering from the lake bed. Slightly more groundwater is entering at the Sailing Club than at the southeast site based on preliminary observations. USGS will take groundwater

measurements quarterly and at additional locations. The seepage meters are now used manually, but Rich is looking at the possibility of having meters that run continually.

Water Quality Sampling:
Due to the logistics of equipment placement, water quality sampling takes place at slightly different locations than the gage locations. The sampling sites for water quality are: Flushing Channel, Lake River at Felida Moorage, Salmon Creek, Burnt Bridge Creek under the railroad tracks, in Vancouver Lake between the island and the lakeshore ("Site 1"), and the Sailing Club dock. Water quality data will be examined in conjunction with flow data to understand the concentration of nutrients entering the lake from various sources. It is important to see data over multiple years and under a wide range in flows.

A graph showing phosphorus, ammonium, and nitrate sampling indicates that phosphorus and ammonium are relatively low. Nitrate has been the highest of these three nutrients through sampling so far. A nutrient summary slide shows the classic behavior of winter storms: winter rains cause a flush of nutrients from the surrounding area and then in the summer, with decreased flow and higher biological activity, nutrient levels are lower.

Thom asked about storm drains that flow into the lake. Rich was not familiar with their locations; Thom will get information to Rich regarding where they enter the lake.

Thom mentioned the 1980's study of septic systems and asked about the potential of nutrients from septic systems entering the lake. Rich answered that the nutrient input is dependent on how close/connected such systems are to the lake.

USGS considered the potential to look at nutrient sources beyond the three tributaries and is conducting sampling at Salmon Creek. This information will inform the Partnership later if the Partnership wants to look more closely at a source of nutrients to Lake River. Similarly for other areas, once an external nutrient source is known, specific source(s) could be narrowed down if it is deemed important. For example, stable isotopes could be used to look at if a nutrient source is human or environmental. The cost of such an analysis is dependent on how it is approached.

Groundwater has the highest nutrient concentration to date: nitrate: 3.6 mg/L; phosphorus: 0.12 mg/L. It should be noted however that there was a clay layer between the lake bottom and the sample location. The clay may prevent or retard this groundwater from entering the lake.

In August groundwater sampling was conducted in Lake River. On the lake side of the Felida boat launch ground water can been seen seeping out from the shore. Samples were taken and the water was identified as groundwater and not surface water because the groundwater is colder and has higher conductivity.

Gary asked if the Sailing Club's well could have value as a sample. Rich stated it may, depending on if the well's water source is connected to the lake.

Pore water (water in the spaces between soil particles) was sampled at two locations. The sample from the northeast side of the lake (Site 1) showed nitrate. There was very little phosphorus except at 7 cm below the surface. Ammonium and nitrogen concentrations changed along the sample profile, but did not show an immediate break like phosphorus.

USGS will continue sampling and look to collect more data on high flow events and groundwater. Further investigation of pore water will also be conducted.

Rich noted that USGS collected 30 cm sediment cores at four locations. They hope to look at historical phosphorus and nitrogen levels, pending finding funding for the analysis of these cores. This sampling was not part of the original proposal, but may be of interest in understanding nutrient levels in the lake. The coring locations were near Lake River, near Burnt Bridge Creek, by the Flushing Channel, and Site 1.

With the end of the presentation, Phil thanked Rich for updating the Partnership on the research efforts.

Parks Trail Expansion
Elizabeth Jordan of Vancouver-Clark Parks and Recreation presented an update on the Parks Department trail expansion.

Parks is currently working on the permit requirements to expand and improve a 1.7 mile section of pedestrian trail that goes from Vancouver Lake Park to Lake River.

Parks is relocating the trail slightly so that it is out of the wetland buffer, is ADA accessible, and would be available for use year round.

During the permit process, archeological information indicated a high likelihood of historical use in the area, so the plan is to minimize ground disturbance. Parks is pursuing a Memorandum of Understanding (MOU) between the City and County. Once the MOU and site plan review process are complete, then the State Environmental Policy Act (SEPA) process begins. Project managers are hoping all reviews are complete in time for a spring volunteer effort to construct the trail. The permitting process is slow, but the tree surveying and archeological information (both of which are completed) are major considerations to ensure that trail construction is approached correctly.

Steve asked if this was phase one of the trails plan. Elizabeth said yes, that future phases will look to loop to nearby Shillapoo as well as to Salmon Creek. Steve also asked about expanding to Ridgefield, which is in the long term plan. Elizabeth answered that although this is in the long term plan, a study of how the trail would be expanded to Ridgefield is not yet funded. Similarly, there is talk with the Washington Department of Transportation of possibly using part of Reiger Highway as a trail over the long term, but that is not a near term project.

Jacqueline mentioned that there is concern of illegal shot gun use at Reiger Highway. People are concerned for their individual safety. Elizabeth acknowledged the concern, and noted that the Washington Department of Transportation is working on the issue. One possibility is to close off part of the highway and make it a pedestrian-only area. There is a legal hunting area near the area, but the concern is the illegal shooting. Individuals should report any illegal activities to the police non-emergency line. Even if the police cannot respond to the area at the time a report is made, a documented record of concern can help the police to increase their efforts. For any parks project, public safety is a major concern.

With the end of the discussion, Phil thanked Elizabeth for her presentation to the Partnership.

Funding Strategy
Eileen presented an overview of the funding strategy document that was circulated the previous week. The strategy explores options that could help fund efforts to reach the Partnership's vision. The strategy identifies ways to help secure resources for diagnostic and feasibility stages and explores organizational changes to enhance funding opportunities. The document outlines various funding opportunities and organizational considerations. The approach for the Partnership for future funding is multifaceted: to balance the need for diagnostic phase funding with the challenges of getting it; to target outreach and advocacy efforts; to explore organizational changes; and to obtain grant funding for early action projects. The group was invited to provide feedback and comments to Eileen during the meeting or afterwards. This document is close to finalization.

Phil presented the draft table of funding considerations. The table was developed to initiate discussion about the costs of various options. Options vary from a large action or no action and a range of choices in between. The table is not intended to be final but to start conversation about which actions make sense from various aspects of lake health and lake uses and funding sources that make sense for such actions. It is not meant to constrain options but to characterize actions and be a meaningful intersection between the algal control techniques and funding strategy. We will revisit the table at the December Partnership meeting.

Thom proposed that there be more narration to explain the meaning of the very brief comments in the table. Phil agreed that there will be some further description of what was a quick characterization so far.

Project Manager Update
Phil reported that the project management team kayaked the northeast side of the lake looking at potential restoration projects for the lake. The team is considering different types of projects for Vancouver Lake that can be conducted during the current research phase and into the future. The litter pick up this Saturday with the Vancouver Lake Cleanup is an easy starting project as litter cleanup is clearly beneficial to the lake. The next project stage would be to do plantings such as willows, and then wetland planting.

Eileen gave a brief overview of the September 17th cleanup event. The event is in partnership with the Vancouver Watersheds Council and SOLV. Approximately 500 volunteers are expected for the event. Project areas were expanded beyond Vancouver Lake Park and include blackberry removal along with litter pickup. VLWP is providing food for the volunteers on site through local vendor Foodie Blues.

Jeff described the plan to work with the Sherriff's Office on their patrol boat and with the Sailing Club to remove trash/hazards from the lake on Saturday during the larger event. For natural items such at tree trunks, Jeff procured buoys that he will attach at a later date to warn boaters of the potential hazard.

Phil mentioned that the Army Corps continues to have interest in this stretch of the Columbia River with a potential role for Vancouver Lake.

Technical Update
Jeff gave an update on the Technical Group. The group met on August 24th to discuss the scheduled update to the Algal Control Techniques report. After much discussion, the group recommended holding off on an update to the report until we have more data from the USGS study. This will also give the project management team more time to look for early actions and funding considerations.

General Partnership Announcements
Gary stated that he believes good progress is being made at the lake. The USGS work is bringing in much needed data. The September 17th event both addresses trash at the lake and increases public awareness of the lake. The Partnership has been making progress in other areas of outreach as well. We knew that improving the lake would be a long term project and it seems we are halfway there.

Several members agreed with Gary's assessment. David commented that the increased public awareness of Vancouver Lake will help when looking for funding for future projects. Jacqueline mentioned that she believes we are really going to see movement forward for the lake next year. It is important that we are making the

public aware of what is happening at the lake. Andrew commented that research timelines are often long term. The 1980's project at the lake took 14 years. Phil mentioned that Capitol Lake had a similar timeline.

Close of Meeting
With no further announcements, Phil thanked everyone for coming and brought the meeting to a close.

Next meetings:
Steering Group: To be determined
Partnership: Wednesday, December 21, 2010; 4-6pm

All meetings are at the Port of Vancouver offices.