

# Vancouver Lake Watershed Partnership

## **Steering Group Meeting Summary**

Meeting date: June 18, 2008, 3:30 pm

### **Steering Group Members Present:**

Patty Boyden	Port of Vancouver
Pete Capell	Clark County Dept. of Public Works
Brian Carlson	City of Vancouver Dept. of Public Works

### **Partnership Members Present:**

Thom McConathy	Citizen
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### **Other Agency Members Present:**

Steve Bollens	Washington State University
Katy Brooks	Port of Vancouver
Jim Gladson	Clark County Dept. of Public Works
George Medina	US Army Corps of Engineers
Ron Wierenga	Clark County Dept. of Public Works

### **Project Management Team:**

Phil Trask	PC Trask & Associates, Inc.
Sabrina Litton	PC Trask & Associates, Inc.

### **Agenda/Discussion Topics**

The project manager welcomed everyone and introduced the agenda. He said that due to time constraints, the Corps would be providing a brief update prior to getting into Partnership business.

### **Corps Update**

George Medina presented on behalf of the Corps and gave a quick synopsis of their results to-date. He said that his team has completed 2D modeling of the Lake. They ran the model with different tidegate modifications, including increasing culvert diameter and removing the tidegate completely, and examined the effects on flushing time within the Lake. George was not able to speak to specific details of the model but said that the hydraulic engineer who set up the model would be available at a future presentation.

Corps staff are not available to present at the Partnership meeting in July. George wanted to know when an appropriate date might be to present the data. Pete said that since WSU would be presenting in July, it might make sense to have another Partnership meeting in August to hear from the Corps. The rest of the Steering Group agreed and it was decided that the Corps would present to the Partnership on August 20th. Pete said it might be a good to run a press release. Thom suggested CVTV, and Brian asked that the presentation be as interactive as possible.

George said that due to constraints of the Section 536 program, it was unlikely the Corps would be able to proceed further after this modeling effort. He noted however that they will be leaving the Partnership with good bathymetry data and a 2D model to build upon.

## **Partnership Business**

### **Funding Strategy**

Phil updated the group on several meetings held since the last Steering Group meeting. The project management team met with program managers from the Centennial Clean Water and the Freshwater Algae Grant Programs. They provided good feedback and insight into their programs and both were willing to visit the lake and review draft proposals ahead of time. Phil has also been meeting with Addison

Jacobs from the Port of Vancouver to discuss a legislative strategy. She has come up with three recommendations for the Partnership:

- (1) Update outreach materials.
- (2) Host an event in August for local elected officials. The event would include a presentation, refreshments, and preview of the upcoming legislative request.
- (3) Participate in the Vancouver Legislative days in early September. Bring officials from the City County, and Port together with state legislators to make them more aware of the project and upcoming legislative request.

Phil asked for feedback on these recommendations. Patty and Pete both thought they were good ideas. Brian agreed and asked what the Partnership will be requesting from the legislature. Phil said that last year the Partnership asked for \$200,000. It might be a good idea this year to ask for a larger amount, perhaps \$500,000 - \$800,000. As for the specific project this money will fund, he said that the Technical Group is moving forward on a strategy and could have recommendations for the Partnership a few months from now. Possible projects include a nutrient budget, a sediment study, hydraulic model work, and cyanobacteria studies.

Thom suggested that an agenda item be added to the June 30<sup>th</sup> Technical Group meeting to discuss this. Phil said the Technical Group will be focusing on a technical strategy over several meetings to help identify next studies.

Katy added that she also thought it was a good idea to update the outreach materials and organize the events. She said that invitations would need to go out at least 3-4 weeks in advance so organizing would have to begin soon. The PIO Group will lead these events.

### **WSU Update**

Steve Bollens provided a summary of Vancouver Lake research findings. To open the presentation he provided an overview of basic plankton biology and the different microscopic organisms found in the lake. These include: algae, cyanobacteria, protozoans, zooplankton, and benthic invertebrates. He described the transfer of energy between these organisms and how algae and cyanobacteria draw up nutrients to produce biomass. They are then consumed by protozoans or zooplankton through grazing.

Steve reviewed the past year's research objectives: (1) determine the abundance, distribution and taxonomic composition of cyanobacteria, algae and zooplankton in Vancouver Lake over a full annual cycle, (2) initiate some preliminary investigations of the biotic (e.g., grazers) and abiotic (e.g., temperature, mixing) factors influencing these blooms, and (3) analyze extant data on cyanobacteria blooms in Vancouver Lake for spatial and temporal patterns and trends in abundance.

He told the Steering Group that sampling had occurred quarterly at 8 different stations throughout the lake, and bi-weekly from the sailing dock. Samples were processed by hand under a microscope at WSU.

Results from the quarterly sampling at multiple stations across the lake indicated little spatial variability in phytoplankton and zooplankton abundance. This is helpful result because it indicates that a sample taken from the sailing club dock is a good representation of what is going on in the lake as a whole. This will simplify sampling strategies in the future.

From the more intense sampling regime at the sailing club dock, WSU observed several interesting relationships. Steve showed multiple graphs depicting yearly phytoplankton and zooplankton abundance broken down into different taxa. The take home message from the data was that during the past year, cyanobacteria had an extended summer bloom with extremely high abundance. Protist grazers (e.g. ciliates and dinoflagellates) may be influencing cyanobacteria blooms. Mesozooplankton grazers (cladocerans, copepods, rotifers) may also be influencing cyanobacteria blooms. Without further study, it is impossible to state the specific cause(s) of blooms.

Now that the Partnership has gotten a snapshot of “who” is in the lake over the past year he recommended some next steps for cyanobacteria research. Recommendations for future work include:

- Continue monitoring over a second annual cycle
- Determine rate processes, the growth and death rates of cyanobacteria
- Integrate plankton work into broader food web dynamics.

The Steering Group thanked Steve for presenting today and they look forward to WSU’s presentation at the Partnership meeting on July 16th. The Steering Group will further discuss next steps regarding specific WSU research at the July 2 Steering Group meeting.

**Next Steps/Close**

Phil thanked the group for attending and closed the meeting.

**Next Meetings:**

Full Partnership Meeting – July 16, 2008, 4:00 – 6:00 pm.  
– August 20, 2008, 4:00 – 6:00 pm  
Steering Group Meeting – July 2, 2008, 3:30 – 5:00 pm.

All meetings will be held at the Port of Vancouver Administrative Offices.