

Vancouver Lake Watershed Partnership March 16, 2005 Meeting Summary



The fourth meeting of the Vancouver Lake Watershed Partnership was held on Wednesday, March 16, 2005 4:00-6:00pm at the Port of Vancouver Administration Offices.

Partnership members in attendance:

Pete Capell, Brian Carlson, Lisa Renan for Carl Dugger, Nancy Ellifrit, Don Jacobs, David Judd, Gary Kokstis, Thom McConathy, Chris Hathaway for Debra Marriott, Clark Martin, James Meyer, Iloba Odum, Larry Paulson, Randy Phillips, Jane VanDyke, Bruce Wiseman, Vernon Veysey, Victor Ehrlich

Partnership members absent:

Lisa Faubion, Lee McAllister, Doug Quinn

Public Information Committee:

Loretta Callahan, Allison Shultz, Maureen Chan-Heflin, Jeanne Lawson, Amanda Garcia-Snell,

In the audience:

Dvija Michael Bertish, Patty Boyden, Justin Clary, DW Chinelle, Tim Dean, Pat Doncaster, Vinton Erickson, Jacquelin Edwards, Gordon Franklin, Annette Griffy, Lehman Holder, Paul King, Jeroen Kok, Tim Kraft, Donald Malm, Bob Moser, Lenora Oftedahl, Madya Panifilio, Steve Prather, Earl Rowell, Rod Swanson, Ron Wierenga

Committee Business

01/19/05 Meeting Minutes Approved

02/16/05 Meeting Minutes Approved

It was decided that the minutes would continue to provide a very detailed account of the meetings.

Public Comment

Lenora Oftedahl mentioned that the copies of the bibliography that were available at the meeting were not the most current version. The most recent version of the bibliography that she compiled has annotations. It is available on her website.

Don Jacobs mentioned that the Oregonian published an article about the Eagle Scout who conducted the mapping of the Vancouver Lake. Amanda will make this available to members with the minutes.

Presentations

Vancouver Lake and River Watersheds - Salmon Creek & Lakeshore– Ron Wierenga – hand-out attached
Ron discussed the Vancouver Lake and Lake River watersheds, specifically focusing on the characteristics and water quality of Salmon Creek and Lakeshore watershed.

Overview

The Vancouver Lake and Lakeshore watersheds cover a very broad watershed area. The watersheds that drain into Vancouver Lake are Burnt Bridge Creek (BBC), Salmon Creek, Whipple Creek, Flume Creek, Lakeshore and the Vancouver Lake watershed itself. Although BBC, Vancouver Lake and Lakeshore watersheds are the only direct inputs into Vancouver Lake, the other watersheds also affect the lake area. Salmon Creek watershed flows into Lake River and sometimes turns back into the Lake. Whipple and Flume Creek watersheds can do the same when the water is flowing down. The land use of the Vancouver Lake watershed partially developed open space including a lot of agriculture and there are Port of Vancouver facilities on the west side. Nancy asked a question about where Shillapoo Lake is pumped out to during each summer to allow for farming.

Ron then provided a general overview of water quality and recurring pollutants for each watershed in the area based on the Washington Department of Ecology's 303d list. This is illustrated on page two of the power point handout.

Salmon Creek Watershed

The Salmon Creek watershed is about 90 sq. miles. It has a mixed land use, most of the development has occurred in the lower part of the watershed including; low density rural residential and farming, as well as commercial and industry. In the upper watershed area the land use is mostly open forests and industrial timber. The varied land use and topography gives the watershed different properties throughout the area. There is more bedrock in the upper watershed and more sediment material in the lower watershed. The different land use and natural characteristics of the upper and lower watershed affect the waterways within the watershed differently. There are five major tributaries into Salmon Creek they include; Curtin Creek, Mill Creek, Weaver or Woodin Creek, Morgan Creek, Rock Creek, and Upper Salmon Creek. There are also smaller streams and first order tributaries that flow into Salmon Creek as well. Each of these waterways has different water quality.

Ron then showed a map of the storm water infrastructure within the watershed which can give an indication of development as well. The map included storm water pipes and ditches on roads. There are over 300 miles of storm water pipes and ditches in the Salmon Creek watershed. There is also a lot of impervious surface which has more run-off than pervious surfaces. The more developed lower watershed area has up to 50% impervious surface. The upper watershed has closer to 10% impervious surface. There is also an even mix of land use with about 38% pasture and/or fields, 30% developed or recently cleared forest and 30% forested land.

Clark County has a monitoring project; this was discussed in detail at the last meeting. There are eight sites that are looked at monthly and the data is used to identify trends over time. The focus of the presentation will be on the sample site that is at the lower end of the watershed. This site is identified on the map on page four of the power point handout. The annual hydrograph, also on page four, gives an idea of how much water is coming out of Salmon Creek. Ron reiterated that Salmon Creek is one of the larger watersheds in the area and it is also one of the larger tributaries into Lake River and the Lake. The annual volume, average flow, and range are depicted on the hydrograph. The average flow and range are measured in cubic feet per second. The flow will differ every year depending on the climate. This hydrograph illustrates the flow for the 2004 water year.

He then showed a table, on page five of the power point handout, which summarizes the data that the County had from 2002 to 2004. Although there are other reports that Clark Public Utilities had completed, Ron only included data that the County had collected after they took over the management of this project. The table includes the constituents that are important to look at when addressing the uses of the lake. Each of these constituents was discussed in comparison to state or federal standards. Fecal coliform had a median value of 80 bacteria per 100mL of stream with a range of 2 to 500 bacteria per 100 mL of stream. The state standard is 100 bacteria per 100mL of stream. On average it is generally below the state standard but it does have peaks, as the range indicates, and that is why there is an identified fecal coliform problem in Salmon Creek. In response to this, the WA Department of Ecology has a tmdl in place for the creek. The median value for total phosphorous is .055 milligrams per liter with a range of .034 to .132 milligrams per liter. The EPA has criteria of .1 milligrams per liter to protect downstream aquatic uses and limit algal growth. On average the total phosphorous is below that level although it does range up to slightly above. The water temperature of Salmon Creek is much warmer at the lower level and there is warm water that goes out into Lake River. The maximum value is 75 degrees which is quite bit warmer than the 65 degree standard for that waterway. In terms of inorganic nitrogen, the median value is 1.20 milligrams per liter with a range of .76 to 2.64 milligrams per liter. Fecal coliform, total phosphorous and inorganic nitrogen levels all have a higher concentration during low flow.

Lakeshore Watershed

The Lakeshore watershed is 3.6 sq. miles. It is mostly urban residential land use and made up of smaller tributaries and streams. It is very similar to Cougar and Cold Creek in the BBC watershed. It drains directly into Vancouver Lake. It also has an extensive storm water infrastructure that includes pipes and ditches. It has 30 miles of pipes; many of which connect to smaller streams that come off the hill down into the lake. There are several outfalls that discharge directly into the lake as well. The impervious surfaces are also greater than 50% due to the mostly residential nature of the area.

There is very limited data related to the quantity and quality of the water. There were some studies conducted by the health department in the late 1970s that was used to determine whether or not the area needed to be sewered, which found high fecal coliform levels. That data is now out of date due to the changes in land uses and the fact that many residents are now connected to the sewers. Ron provided a loosely calculated annual runoff volume of 3500 acre feet per year based on the amount of rainfall and impervious surfaces in the area.

Ron then showed a tributary inputs table, similar to the one for Salmon Creek, that he developed using comparable waterways due to lack of data for the Lakeshore watershed. This table is on page seven of the power point handout. The figures are estimates and can be compared to the same state and federal standards mentioned for Salmon Creek.

Other water quality considerations for Salmon Creek and lakeshore tributaries include storm water run-off and ground water quality in the urban areas that may influence nutrient and bacteria concentrations. These are listed on page seven of the power point handout. He reiterated that there is not a solid understanding of the hydrodynamics of the lake. Specifically, where the water is coming from and what are the annual loads/volumes of the inputs into the lake. Ron reiterated that it is necessary to understand the workings of the lake and the lake system before discussing the impact of the quality and the quantity of the water from these specific watersheds. Although the waterways do have some pollution issues, it is not possible to say at this point how much of Salmon Creek water gets into Lake River due to lacking data.

There is data available from the County quantity and quality of Whipple Creek and Salmon Creek. The City of Vancouver also has an extensive database on the quantity and quality of BBC. There are also the pre and post restoration data sets like the Cooper report. Quality and appropriateness of the data is an issue, raising the question of whether or not the existing data is representative of current conditions. Ron gave a few examples of this including the change in population and land use in the BBC watershed from the time of the report compared to present day. Another example is the change in numbers of houses on septic vs. sewer in the Health Department studies conducted in the Lakeshore area. Two of the moorages in Lake River at the time of the studies were discharging sewage directly into the lake, this does not happen anymore. Although there is a lot of information in those reports, it needs to be looked at to identify what information is useful and applicable. It is necessary to get a better understanding of where the pollutants are coming from and where the data gaps are. This includes the amount of water that is flowing through the flushing channel. Although it is known how much water can flow through the channel, it is not known how much water actually does flow through the channel.

This concluded Ron's presentation and a question and answer period followed.

Thom made suggestions concerning beneficial remote sensing that might help to identify the worst polluting drainages of the 27 drainages that are on the east side of the Lakeshore area. He also mentioned that Chicken Creek was identified as one of the biggest single pollutant contributors in the Cooper report. At the time of the study it had values that were over 2100. It was also identified, at that time, that the amount of water coming from Salmon Creek was a lot greater than originally thought.

Nancy inquired about the time span of the Chicken Creek estimates considering that most of the area is developed now.

Ron clarified that the Health Department data is from different months in 1977. He also mentioned that as a watershed is developed, the types and amounts of pollutants change. Given that the Chicken Creek area is mostly built-out and static it is easier to estimate what the problems are.

Vernon asked about the current impact that Salmon Creek has on Vancouver Lake. Specifically, does that water actually come back through the mouth of Salmon Creek into Vancouver Lake? If it does, what time of year does this happen? Is it something that there should be significant concerns about? Are there other concerns that are more important? Do we need more studies and data to know for sure?

Ron clarified that although they know that water from Salmon Creek does flow into Vancouver Lake, it is unknown exactly how much water from Salmon Creek gets into Vancouver Lake.

Vernon's second question was regarding Chicken Creek and how much it actually contributes and how important this is to know.

Ron mentioned that they have not monitored Chicken Creek and that there is not enough data to answer the question of how much water flows into the lake. This is significant only if there are high levels of pollutants like fecal coliform and pathogens. This may not affect the lake in general or exacerbate the algae problems but there may be localized recreational issues.

Jeanne clarified Ron's answer by stating that there could be preliminary checking to determine how bad the creek might be and the quantity of flow to determine whether it would be of greater concern or not.

Ron reiterated that they know it is not going to contribute a huge percentage of overall water that gets into the lake. However, they would like to answer questions about whether or not it is a big water quality problem, which may increase its priority.

Thom asked a question about the impact of sediment loading into salmon creek, specifically the sediment cells that were put into the lake during the channeling project and whether or not this is a considerable problem.

Bruce asked Thom if he thought that most of this sediment was coming from Salmon Creek back into the lake.

Thom explained that he could not say where each of the sediment particles is coming from. However, he suggested that its contribution appeared to be significant.

Vernon reiterated that what is important to note is that there is not enough data to know for sure.

Brian asked Ron to briefly cover the six power point slides that he skipped pertaining to the hydrology of Vancouver Lake.

Ron mentioned that this part of the presentation was his interpretation and attempts to distill all of the information that was in the Cooper report and the post restoration information. He covered the overall hydrology of Vancouver Lake which is covered on page eight and nine of the power point handout. He also showed a diagram from the 1971 WSU study that showed hydrology data prior to the flushing channel. This included flows from BBC, Salmon Creek, Lakeshore, Lake River, groundwater, precipitation, and the flushing channel. This information is on pages nine through eleven of the power point hand-out.

Nancy asked about the potential significance of lawn watering in the developed areas in relation to pollutants.

Ron clarified that residential use is definitely an important factor. There are all kinds of herbicides and pesticides found in urban streams. Residential lawn treatment is addressed in the County's education program.

A question was raised about data concerning contributions from the Fruit Valley neighborhood and the SE corner of the watershed.

Ron clarified that to he is not aware of any data regarding that specific area. He also mentioned that some of the earlier reports addressed dairies and livestock operations as well as farming but he is not familiar as to what degree that has changed in comparison to current conditions.

Jeanne asked Ron to provide his perspective on what the most urgent questions that need to be answered are.

Ron agreed that some of the 1971 WSU study estimated that Salmon Creek ran at about 100 cubic feet per second, which is lower than the current estimated values. He also mentioned that, although he does not think that the pollution problem in Chicken Creek is as bad as it was, it is important to consider the concentration and the load of the pollutants due to the limited amount of water that comes out of the watershed.

Ron clarified that understanding where the water is coming from is the key. Where and how much water is coming from the tributaries is the first thing we need to know. Once this is known then we can start looking at the conditions of the watersheds themselves; especially the reversible conditions. We know that the water quality in the lake is still degraded but in order to tackle this problem we need to know where the water is coming from.

Clark asked if the water levels with the tide changes are equivalent to what is happening in the Columbia.

Ron's understanding is that it is similar it just lags behind.

Clark wanted to know if it reached the same level and if it ever caught up with the Columbia due to the restrictions.

James mentioned that the tidal swing in the lake is not as great as in the Columbia and not on in the same time frame.

Nancy clarified that the Columbia levels affect Lake River.

Ron concluded that this information is available in some of the older reports.

Thom mentioned that the Cooper report indicates that the dam influences are more significant than the tidal influences.

Lisa Renan clarified that Shillapoo, at overflow times, is drained into a wetland in the Lake River area. There is an agricultural drainage ditch that connects directly to Lake River.

Chris asked for clarification about the three miles of Lake River that flows into Vancouver Lake, he wanted to know if this happened only during certain conditions or throughout the hydrology year.

Ron clarified that this is during different times of the year. The reports indicate that this occurs typically at the low levels, when tidal fluctuations were reversing the flow rather than larger volumes of water coming in. During the low water time, mid-July to August is when this is typically occurring. It is his understanding that at wetter times of the year when there are higher flows; the water can come all the way up.

Lisa also wanted to clarify that the part of the Shillapoo refuge and northern wetland that she mentioned previously is also ditched and drains out in two different areas. Mostly it is not connected to Lake River and mostly the wetland drains south into ditches.

Community Perspectives of Lake Area – Dvija Michael Bertish

Dvija discussed an overview of some of the community concerns regarding BBC and the Vancouver Lake area. Dvija is a member of the Rosemere Neighborhood Association which spent the last few years conducting research and archiving historical information on documents that are available working to understand water quality issues. Most of the documents collected were provided to the Stream Net bibliography compiled by Lenora Oftedahl. He suggested that members look at these documents as he feels they are important in understanding what has happened in the past. These documents are available on the internet through Lenora's website.

He presented a snapshot that contained information that community members who are watching this story unfold would find important. This included

- Cost to citizens
- Where are we now?
- Category 5 water
- Flushing channel
- Sediment cells
- 208 plan

Cost to Citizens

Dealing with the BBC and Vancouver Lake problem has cost the citizens a lot of money. It was a very contentious subject and has been documented by the media. From 1981 – 1995 11 million dollars was generated by the BBC utility and the majority of these funds were collected from property owners in the Burnt Bridge Creek Basin. These funds were collected based on the idea that property owned in the area contributed to whatever was getting into the lake; the farms in the area were assessed on their properties. When the Vancouver lake rehabilitation program began (1978-1983), Burn Bridge Creek was tied to that project which collected another 17 million dollars of tax money. Many millions more were spent on basin-wide improvement plans that were implemented as a result of this project. Considering that the tax-payers invested in these projects as a community it is important to look at these documents and pull this information forward. There is data in the 208 plans and the Vancouver Lake Rehabilitation Plan that is tantamount to the events that are occurring currently as Dvija feels that the current situation is very similar to the past (i.e. failed water quality and problems with contamination).

Where Are We Now?

Although Ron discussed water quality information in terms of 303d listings in various water bodies, Dvija wanted to expound upon this. He referred to a study area that is termed WRIA28 through the Department of Ecology. It includes the Columbia River, BBC, Salmon Creek, Vancouver Lake, and other tributaries that flow within this WRIA. All of the waterways listed above are characterized as category five, which is the most heavily polluted. However, this classification is given to hundreds and hundreds of water bodies throughout the state. Due to this, the Department of Ecology has been mandated to develop TMDL plans to clean up all the 303(d) listed waterways within the next eight-ten years. The Department of Ecology has admitted that it may not be able to accomplish this task on time. Department of Ecology staff has also stated that local jurisdictions should not wait for DOE to complete all the TMDL's, because they cannot do it all alone. These specific water bodies have failed to meet water quality standards and it is a requirement that a Total Maximum Daily Load (TMDL) study must be conducted to determine how to create a clean-up plan for the water. One of the tasks that VLWP can accomplish is to sponsor a TMDL study for BBC and Vancouver Lake Watersheds and help to develop a clean up plan.

Category 5 Water

Category five water means that the Department of Ecology has collected data indicating water quality standards have been violated for one or more pollutants. Pollution in Category 5 waters has caused the loss of use of those waters for swimming, fishing and other recreational activities resulting from failed water quality standards. For many years, BBC has category 5 classifications for fecal coliform, dissolved oxygen and other category five classifications in this WRIA are; the Columbia River for fecal coliform and temperature; Salmon Creek for dissolved oxygen, pH, and temperature; Vancouver Lake for fecal coliform, PCBs and total phosphorus. There is also a statewide warning for mercury in large mouth bass, which people fish for in Vancouver Lake and along Frenchman's Bar. BBC and Vancouver Lake, which are tied together through history, are in dire need of the TMDL process. Although it may get that in the next few years, Dvija feels that we can not wait for the Department of Ecology to save the citizens from this problem. He mentioned that there is a need for inter-jurisdictional cooperation to develop a way to alleviate these stresses. At the very minimum, a recommendation could come forth from the VLWP to state their support of a TMDL for these two water bodies. There are already TMDLs in place in the Columbia River for dioxin and dissolved gas, and in Salmon Creek for fecal coliform. These have been underway for the past several years.

Flushing Channel

Fecal coliform bacteria indicate the presence of exposure to human and animal waste. The flushing channel was initially designed to be actively managed, the gates were meant to be opened and closed depending on seasonal influences, water quality issues, fisheries issues. What has happened is that the gates are now left permanently open. This raises the question as to whether or not the water quality that is coming up the Columbia River entering into the flushing channel is at a water quality level that is better than what is in Vancouver Lake or are there times when the water that flows up the Columbia River and into the flushing channel is worse. He gave an example of a situation that occurred last April in the Frenchman's Bar area related to human waste washing up on the beach. It was one of the worst sewage spills on record for this area including condoms, feminine hygiene products, syringes and raw globules of sewage. He understood from conversations with the DOE spill responders at that time that they did not know where the spill was originating. One theory was that the sewage spill originated from a Combined Sewer Overflow (CSO) from a Portland Wastewater Treatment Facility. The DEQ was not able to determine a CSO, but wind and weather conditions indicated that such a CSO event was possible, which would mean that sewage from Portland was ending up in Vancouver Lake. There are at least 100 of these CSO events every year, any time it rains at least 1/10th of an inch. This results in raw sewage being dumped into the Willamette and Columbia Rivers. Bio Hazard warnings are issued in Portland, but no such warnings are issued for Vancouver Lake or Frenchman's Bar. Dvija questioned whether or not anyone had checked the flushing channel or monitored the water in there as a result of this raw sewage spill. The DOE spill responders indicated that they had not checked those areas. There were other suspicions about where the sewage was coming from but it was never determined. Aside from this, the status of the flushing channel and Vancouver Lake were not determined in relation to this event. During these times, health advisories are distributed in Portland to warn citizens about the water. Dvija questions why the flushing channel gates are not closed at these times. Once something goes into Vancouver Lake it is very difficult to get out due to the siltation in the northern end. He feels that in not actively managing the flushing channel the severity of the problems increases.

Sediment Cells

When the flushing channel program was developed, 11 sediment cells were implemented. They are about the size of a football field. The cells were supposed to be cleaned out and a schedule was determined for maintenance dredging. The Dames and Moore report suggests that the sediment cell that is located at the mouth of the flushing channel should be maintenance dredged every three to five years. Some Port of Vancouver documents identify the schedule as every five to seven years but this schedule has not been followed. Siltation has caused the lake to fill in again after all this time. Due to the lack of maintenance dredging of the lake, the lake has returned to a shallow state, which causes an increase in temperature 208 Plan

Dvija read this quote aloud

Clean Water Act Owner's Manual, by the River Network
Basin-wide water quality plans (Section 208)

"Section 208 of the Clean Water Act called for basin-wide water quality plans. Developed in the early to mid 70s, these detailed plans provide information that is still useful...Some 208 plans have been updated regularly, and continue to be the basis of state water quality agencies' planning and action today. Those that have not been updated still contain much pertinent information, allowing for comparisons between past projections and today's realities. The idea of watershed planning gained widespread support in the 1990's, but was hardly new. In 1972, section 208 of the Clean Water Act called for the formation of basin-wide water quality management plans. EPA relied on information in these plans when it decided where to award grants for construction of new or improved sewage treatment facilities. Most 208 plans were detailed assessments of watershed resources, conditions, and trends. Many have been amended and updates in the years since and used by the states as the basis not only for sewage treatment planning but for general water quality and quantity management."

In 1978 when this Vancouver Lake Rehabilitation Plan was established, the Environmental Protection Agency, Department of Ecology, City of Vancouver, Clark County and the Port of Vancouver entered in the rehabilitation project under the section 208 plan of the clean water act. At this time each agency had assigned duties for cleanup. There were three parts to the 208 plan that were considered to be equally as important. The first was to dredge the bottom of the lake, the second was to design and build the flushing channel and the third was to address pollution sources coming from BBC. The EPA's final Environmental Impact Statement (EIS) IS that accompanied this rehabilitation plan was full of information that says that the water quality of BBC was, at that time, one of the primary contributing sources of pollution into Vancouver Lake. Although there have been discussions concerning how much influence BBC has on Vancouver Lake, Dvija suggests that 30 years of data show that pollutant levels are still consistently high. The EIS also mentions that the sources of phosphorus and nitrogen in Vancouver Lake are from the BBC drainage basin and phosphorus contained in the Columbia River water which seasonally enters the lake. Nitrogen and phosphorus values recorded for BBC give an indication of the significance of the drainage basin in supplying nutrients to Vancouver Lake. Those levels were found to be four times greater than the natural background levels and are characteristic of watersheds influenced by agricultural activities and heavy urbanization. The 208 plan specifies that "governmental agencies must take decisive action now to better manage waters that drain into the creek," and "the major pollution causes in Burnt Bridge Creek are septic tank seepage, urban runoff and construction clearing and grading." The main thrust of the 208 plan for the BBC basin was storm water and erosion control as well as septic tank abatement and conversion. These main three components were supposed to have occurred over time to help alleviate the main sources of pollution entering the lake via BBC.

In response to a question that was raised at the last meeting concerning bacterial counts -- Dvija relayed information from the EIS which mentions that 10-40% of the fecal coliform in the lake indicated the presence of waste from animals and humans. In 1999 the City conducted the BBC microbial source tracking study which states that the most frequently identified source of e coli in BBC is of human origin. As it flows eastward from the headwaters, e coli from humans increases from 4.4% of the e coli in the creek's flow to up to 20% downstream. This is identified as coming from septic tanks, using genetic fingerprinting. The e coli bacteria are cumulative and flow into Vancouver Lake. Other pathogens resulting from raw sewage are viruses and protozoa. The water is not being tested for these additional pathogens.

All of this is important to water stewards because there is an element of this that is being overlooked. The USGS 1990 survey indicates that Clark County is a sole source aquifer, and 90% of the drinking water in this area comes from groundwater. That means that the surface water has absolute continuity with the groundwater and the water table undulates up and down depending on rainfall. Due to the lack of control over pollutants that are getting into the ground water, the municipal water supply requires more treatment (chlorination). When looking at the big picture it is important to remember, aside from storm water, septic tank and pollutant problems, that the un-recharged drinking water that comes from the ground has to be super-treated because all of the components of urban pollution. Dvija quoted the following: "We're basically injecting our storm-water pollutants right into the water that we need on a daily basis," said Scott Collier, one of six members of the advisory committee on steering the project (\$6.6 million water treatment project at Blandford water station and Water Works Park)."

This concluded Dvija's presentation.

Community Perspective – Thom McConathy

Thom wanted to present three separate situations gestalt

The first situation occurred in 1979. The League of Women Voters were able to prevail on the businessmen to use a bus, from the Inn at the Quay, and it's driver (Thom) to drive them (the League and more than 70 people) around Clark County to look at the possibility of the BBC utility. This group included the mayor, mothers, and school children who were going into the community to try to educate people. This was a goal that was beyond a few jurisdictions, it was held as a goal by the entire community. At this time Thom saw a lot of stakeholder participation that is not represented by government on the VLWP.

The second gestalt is about the Habitat Consortium and John McKibben, a Clark County commissioner. This was a very tense group including people farmers, from the Port of Vancouver, industry, “tree huggers”, birders and all of these people come to majority report, Although it takes two and half years and a lot of compromise from all parties involved, they were able to come to a majority report. Everybody came into the room with diverse visions and were able to come together with a collective vision that was stronger than the group intended to carry forward. However, once the report was published, and members walked away from the table, everyone returned to pursuing their own agendas and there was no institution to carry forward. Due to all of the conflicting visions it was necessary to have some institution carry the final vision forward. This was not done.

The third gestalt is the BBC Creek Drainage Utility. No one speaks for it today because it is no longer a viable group. It was a model and a hope. It was the first of only two drainage utilities formed in the state of Washington. Due to its novelty, mistakes were made and people were disenfranchised by this process. This was experienced at the BBC utility annual report meetings where just a few general public would attend and they were upset about the fee that they were paying. Frustration with the process was also the reason for limited attendance by water quality advocates. Since that time watershed groups have evolved, and now they are a lot more advanced.

Three conclusions can be drawn from these situations:

- A lot of people care about Vancouver Lake and the Vancouver Lake. This was one of the top areas identified by the open space commission process. This area was valued in 98th percentile, higher than any other open space identified by Vancouver.
- Jurisdictions and stakeholders have, in the past, shared their visions, compromised to achieve a plan, and have seen their plans unravel once the reports are published and the group has left the table. “Time wounds all heels”.
- Need to build modern watershed council that has clear, publicly arrived at goals that enfranchise the community. We need to embrace modern business management methodologies where we gather information to formulate a plan that is clearly measurable. The measurable goals are monitored and we come back and continue to revise and rework the plan over time. Once started it is never over, just publishing a plan is not enough and we shouldn’t walk away from that.

This concluded Thom’s presentation and Jeanne opened the floor for member’s questions and comments.

Lisa commented about the flushing channel. Although it is not perfect, the Port is actively managing it and they regularly dredge it. Although there are pros and cons to having the tide gates open or shut, the Port does not make that decision. The ESA regulations mandate that fish passage be held there and the decision is made by NOAA fisheries and the WA Department of Fish and Wildlife.

Jeanne reiterated that NOAA mandates that the gates be open for fish passage.

Lisa clarified that there are listed Chinook, steelhead, and proposed Coho are in the system year round so it is not logical to only open the gates during migration. Movement is happening year round so the gates must remain open.

Iloba asked Dvija for clarification about whether or not the 208 plan called for dredging of BBC.

Dvija stated that the plan did not call for dredging of BBC but rather to address the pollutant sources of the Creek that end up in Vancouver Lake.

Don asked for clarification about anadromous fish that go through the flushing channel. He also wanted to know if it is physically possible for Willamette River water to cross the Columbia River current and flow into the flushing channel.

Brian also suggested that this was a possibility, based on wind and other conditions. He suggested that potential impacts of the Willamette on the lake should be addressed. He mentioned that during the raw sewage spill that Dvija referred to, folks did go up and down the flushing channel looking for the spill impacts. He also expressed appreciation for Thom's presentation saying that it echoes his own feelings about the outcome of the group.

Thom also mentioned that one of the larger combined sewer overflow outfalls, from eastside sewage treatment plants, is near the airport. Where it enters the river it could clearly go down the shoreline of Vancouver.

Nancy raised a question about the Vancouver Lake lowlands and who is pumping what and where. There is a lot of restoration happening in that area and that information should be available, such as how much is going to Whipple, Lake River and others.

Vern asked about the maintenance program. If the maintenance program had been carried out, the cells had been cleaned and the gates had been managed what would be the case today? Is the solution to pollution still dilution? Is the pollution in the system being diluted out? He also mentioned that he would like to see a copy of the maintenance plan.

Lenora mentioned that those things are available on her bibliography and website.

Thom clarified that the maintenance schedule and processes are described in the Dames and Moore operational manual and the Port manual.

Vernon clarified that he would like to know whether or not we would be in better or worse shape today if the maintenance had occurred. If maintenance is the issue then it will start to be defined through that.

Dvija added that the maintenance plans are mentioned in the Port's 1984 Maintenance and Operations Handbook which is on Lenora's website in addition to the Dames and Moore report. The 208 plan which is separate from these reports is also on the website and it refers back to elements of the Dames and Moore report and the Port's operations handbook.

It was clarified that there will be link soon to Lenora's website on the VLWP Website.

Clark wanted to know if there is tidal influenced flushing that could be taking place if there was no sediment at both ends of Lake River.

Don wanted to know when the rules about closing the channel gate changed.

Lisa and Larry clarified that the rules changed in the late 1990s. Once there are listed species identified then a new set of rules apply based on the endangered species act which differs from the rules that apply to resident fish. Impeded passage to critical habitat is no longer allowed and this applies to closed tide gates.

Vernon commented that this was illogical to him because there was not a passage there prior to the creation of the flushing channel.

Lisa clarified that court decisions mandate that any manmade waterway which has a natural waterway flowing into it is subject to regulations regardless of whether or not the waterway is man made or natural.

Chris clarified that no one knows how much water from the Columbia is making it into the lake. He is not sure how we can address the water quality connection between the Columbia River and the Lake.

Jeanne reiterated that the group needs to know how much we do and do not know.

Gary mentioned that that water level in the Columbia River is lower than the lake about half of the time. This helped to understand why the river level is where it is and how it is influenced by the Corps of Engineers. What

Lisa also wanted to mention that the presence of carp in the lake may be having an impact on the sediment levels as well as other problems.

Nancy mentioned that she remembered there being a lot of carp in the lake from the reports that she conducted in the 1970s.

Public Comment

Jacqueline Edwards expressed concerns about water levels for residents for Felida Moorage.

Dick Chandley commented that it does not seem possible based on the stronger current of the Columbia, for Willamette water to make it into the flushing channel. He mentions that there used to be a waterway through Rufner pond and now it is built out and there is no way for the water to go through. He also mentioned that he can watch the tidal changes in the lake from his house.

Vinton Erickson mentioned that it seems that the flushing channel should have been put into a different area, but it wasn't and it is not working. He feels that a lot of money has been wasted. He wanted to know if Vancouver Lake is considered to be a failure.

Patrick Doncaster commented that he thinks it is very important to address the pollution issue. He is concerned about the Vancouver municipal drinking water. He thinks it needs to be cleaned up and the pollution needs to be stopped. He also commented about the channel gates. Operating the gates properly should have a cleaning affect on the lake. He feels that this would be a healthier environment for fish rather than not shutting the gates. It does not make sense how closing the gates sometimes would impede the movement of fish. Additionally he mentioned that although the main flow of the Willamette may stay separate from the flushing channel, this does not account for pollutants on the top of the water that are driven by wind that could end up in the flushing channel.

Patty Boyden wanted to clarify that the flushing channel has not been recently dredged. When the issues of toxic algae and lake closures came up last year the Port obtained the necessary permits. However once they looked at the cost and benefits of dredging they found that the limiting factor was the culverts at the end of the flushing channel, not the channel itself. Dredging would not have much benefit for the cost so they decided to wait and raise this question with the VLWP.

Jeanne clarified that we need to determine if dredging the channel should happen.

Bob Moser commented that when the channel deepening process was beginning the sponsoring group brought in specialists to talk about the impacts of the project. They concluded that there would be a negligible impact on the salmon. However, they stressed that an adaptive management program be put in place so that the impacts that they said would be minimal would actually be minimal. He feels that the VLWP need to be followed up so that the work completed is not lost.

Larry mentioned, as a member of the active management team, that the process is ongoing.

Next Meeting

The next meeting will be held Aril 20th, 2005 from 4:00pm to 6:30pm. Location will be confirmed and sent out via email meeting notice. The focus of the next meeting will be to finish the watershed focusing specifically on Lake River, the Columbia River and habitat in Vancouver Lake.

