

CITY OF BELLEVUE  
BELLEVUE PLANNING COMMISSION  
STUDY SESSION MINUTES

October 14, 2009  
6:30 p.m.

Bellevue City Hall  
City Council Conference Room 1E-113

COMMISSIONERS PRESENT: Chair Sheffels, Commissioners Ferris, Hamlin, Lai, Mathews, Robertson, Orrico

COMMISSIONERS ABSENT: None

STAFF PRESENT: Paul Inghram, Department of Planning and Community Development; Michael Paine, Heidi Bedwell, David Pyle, Development Services Department; Denny Vidmar, Kit Paulsen, Phyllis Varner, of Utilities

GUEST SPEAKERS: None

RECORDING SECRETARY: Gerry Lindsay

1. CALL TO ORDER

The meeting was called to order at 6:34 p.m. by Chair Sheffels who presided.

2. ROLL CALL

Upon the call of the roll, all Commissioners were present with the exception of Commissioner Robertson who arrived at 6:37 p.m.

3. PUBLIC COMMENT

Mr. Richard Harris, 10822 NE 18<sup>th</sup> Street, said the recent notice regarding Tent City looked like a building permit when it was posted. He said someone had to bring to his attention the subject of the notice. The notice does not spell out Tent City but rather refers to "temporary encampment for members of TC-4." The design of the notice looks like a building permit and could be understood to be a permit for a church building project, which many in the neighborhood thought. Putting a tent city encampment in a residential community is not the right thing to do and will not help those who are members of the tent city. To really solve the problem, the members of the church should open their homes and guest bedrooms to the homeless. Moving Tent City will not provide stability for its members. The members of Tent City should work for the communities in which they are housed by picking up litter and the like along the roadways and in the parks. The requirements of the permit have been met and the local residents have no say in the matter at all.

Comprehensive Planning Manager Paul Inghram said the Tent City permit is handled administratively and is issued after public notice. The Commission will not have the issue on its plate for review and action.

Land Use Director Carol Helland said the Tent City provisions were adopted several years ago by the City Council pursuant to a consent decree following litigation between the city and some of the Tent City sponsor organizations. The decree interprets the Land Use Code and contains some very specific noticing provisions. The city is required to provide notice to residents within 600 feet of the church boundary, and that was accomplished by direct mail. Signs are also required to

be posted, and information is included in the city's weekly permit bulletin. She agreed that spelling out "Tent City" would have been more informative and will be done in future notices. The Council was briefed regarding Tent City on September 21 and that information is available on the Council's website.

4. APPROVAL OF AGENDA

The agenda as submitted was approved by consensus.

5. COMMUNICATIONS FROM CITY COUNCIL, COMMUNITY COUNCILS, BOARDS AND COMMISSIONS – None

6. COMMITTEE REPORTS

7. STAFF REPORTS

Mr. Inghram reported that a public notice and staff report recommendations have been issued for two Comprehensive Plan amendments for the 2009 work program. They include a proposal to amend the Capital Facilities Element to be consistent with the adopted CIP, and a proposal to amend figure TR-2 to show the updated transportation demand forecast. A public hearing on the city-initiated amendments has been scheduled for October 28.

8. STUDY SESSION

A. Shoreline Master Program Update – Technical Presentation

Mr. Inghram informed the Commissioners that the technical presentation on the Shoreline Master Program would be videotaped and made available to the public.

Senior Planner David Pyle provided the audience with cards on which they could write down any questions they might have regarding the presentation on surface and stormwater, noting that following the presentation the cards would be collected and read aloud. At the meeting on October 28 there will be a technical presentation from the National Oceanic and Atmospheric Administration.

Utilities Department Director Denny Vidmar said his department is responsible for all drinking water, wastewater, storm and surface water, solid waste, and street maintenance. He said his first foray into stormwater management was in 1973 while working for the consulting firm that developed the first drainage master plan for the city of Bellevue.

Mr. Vidmar said shoreline management deals with the first 200 feet of the shorelines. Stormwater management relates to all of the land area in the city. The mission is to control flooding, protect stormwater quality, and preserve and enhance fish and riparian wildlife habitat. Stormwater quality has some influence on large lake water quality, but there are other contributing factors, including sewage overflows, septic systems that are not functioning properly, goose droppings, direct discharges into lakes from shoreline uses, historic uses, intrinsic lake physical and chemical makeup, and activities in other jurisdictions.

In natural settings, rainwater falls from the sky and percolates slowly into the ground with very little surface runoff. In urbanized areas with a lot of impervious surfaces, water runs off very quickly. If uncontrolled, the amount and speed with which the runoff occurs is increased. As water from rainfall runs over roofs and streets it picks up and carries pollutants such as fertilizers, soap, oil, metals, pet wastes and so on. The runoff flows directly into Bellevue's lakes, streams and wetlands. Most people do not realize that surface water is not treated in a

wastewater treatment plant. In Bellevue the waste water system is completely separate from the stormwater system. Pollution from diffuse sources is very difficult to tackle. It is sometimes feasible to treat it, but is often easier and more economical to control at the source.

In 1956, Bellevue's Kelsey Creek Basin had less than 26 percent hard surfaces; by 2001 the percentage of hard surfaces had increased to 42 percent. The result has been the creation of a stormwater quantity issue. Activities on the land have created stormwater quality issues.

Stormwater systems are not closed like water and sewer systems are. Some stormwater is routed through pipes, and some runs in open channels. Taken together, the overall system is a complicated complex of public and private elements. Runoff can flow from a private property through a private system to a public system and from there through additional private and public systems many times before it reaches a lake, stream or wetland.

Mr. Vidmar said drainage law is a specialty unto itself. Everyone has a right to develop their properties within certain constraints, and government has no obligation to step in and resolve private disputes related to stormwater runoff. As a property owner, government has the same rights and responsibilities as private property owners. Everyone has a role to play with regard to stormwater management. The general public is responsible for managing surface water on individual properties and for preventing the discharge of pollutants into surface water. Developers are responsible for controlling erosion and water quality while they are developing properties, and they are required to construct facilities that directly mitigate for their developments. The codes and standards they must uphold do change over time. In some residential and short plat developments, the facilities they build to mitigate storm and surface water runoff may become public facilities and therefore the responsibility of the city to operate and maintain.

The city plays a number of roles relative to stormwater management. The Council acts to set policy and broad direction. The Environmental Services Commission is advisory to the Council on issues of planning, financing and policy, and has oversight over the Utility Department's budget and rates. In the coming year, the Environmental Services Commission will be reviewing the Storm and Surface Sater Comprehensive Plan update.

Several city departments have responsibilities that involve surface water. The Department of Utilities has an obvious role. The Department of Development Services has oversight over clearing and grading activities, critical area review and enforcement, Land Use Code and SEPA. Parks and Community Services is involved through its ownership of huge tracts of land and wetlands throughout the city. The Department of Transportation maintains existing streets and creates new stormwater facilities when constructing new streets. The Storm and Surface Water Utility maintains the volume control and water quality facilities after they are constructed. Street maintenance is a function that is housed in the Department of Utilities and that makes it easy to coordinate surface water and street issues.

King County and adjacent cities are responsible for land use and environmental protection. It is not uncommon for surface water to flow from an adjacent jurisdiction into another jurisdiction. The state has a number of agencies involved in stormwater management, including the Department of Ecology which is charged with issuing National Pollutant Discharge Elimination System (NPDES) permits. Bellevue is one of more than 100 municipalities in the state who are required under the federal Clean Water Act to receive a NPDES permit, which establishes a consistent platform from which all jurisdictions must work in protecting water quality and reducing the discharge of pollutants to the maximum extent practicable. Most of Bellevue's long-established programs and practices are consistent with the NPDES permit. The federal government has some involvement in stormwater management as well, under the Clean Water Act.

The city was incorporated in 1953, and in 1965 state law allowed for the establishment of stormwater utilities. The Streams Committee was formed in Bellevue in 1970 to study the preservation of open streams and was composed of concerned citizens; former Mayor Nan Campbell was one of that committee's very active members. In 1972 the city first began the practice of issuing clearing and grading permits, and in 1974 the Storm and Surface Water Utility was formed, only the second one in the nation.

In forming the Storm and Surface Water Utility, the Council grappled with the issue of how to charge citizens. In order to assure fairness, all properties in the city were assessed on the same basis independent of their specific locations related to streams, lakes or other water bodies.

In the 1980s the Storm and Surface Water Utility began building capital improvements identified in the drainage master plan. In the mid-1980s more than 50 public meetings were held to discuss natural determinants, which was the predecessor to critical areas. The Council adopted natural determinants policies in 1984 which addressed steep slopes, wetlands, riparian corridors, and flood plains, and in 1987 the regulations for natural determinants were passed. At that time, no other jurisdiction in the nation had similar policies and regulations.

During the decade of the 1990s the city transitioned into a pattern of more regional cooperation given that stormwater issues do not respect boundaries. The 1999 Endangered Species Act listing of salmon triggered additional actions. The NPDES permit requires a refocusing on water quality issues and regional cooperation among jurisdictions.

Bellevue was visionary early on in protecting drainage corridors and stormwater management. The drivers and missions have over time become broader and more sophisticated. Through it all, advances in stormwater management have been driven and supported by the citizens of Bellevue. In the most recent budget survey, which is conducted every two years, ninety percent of the respondents agreed that careful and balanced stewardship of the natural environment and natural resources will result in a long-term increase in the quality of life in Bellevue.

Mr. Vidmar said the Storm and Surface Water Utility has several specific missions: flood control, protection of water quality, and restoration of habitat. Bellevue was one of the first communities to embrace the preservation of open streams as a policy. Early studies indicated it was less expensive to use open streams than pipes, except in the central business district. Stream and habitat preservation has been city policy since the 1980s.

The physical elements of the storm and surface water system, both the natural system elements and the constructed elements, are in both public and private ownership. For the system elements that are public, the utility either owns the land, has easements, or they exist in rights-of-way. Bellevue is divided into 26 separate drainage basins, the majority of which are wholly contained within the city. The city maintains 64 miles of open streams and 800 acres of protected wetlands. Fully one-third of the land within the city is located in the greater Kelsey Creek drainage basin which drains to Mercer Slough.

Regardless of who owns the land, under state law the waters are collectively owned by the public and cannot be owned by any one individual or group. The waters of the state include lakes, rivers, streams, creeks, sloughs, marine waters, wetlands and groundwater. The Department of Ecology is charged with managing waters of the state. The shorelines and lakebeds underlying waters of the state can be owned by private parties, public agencies and/or governments.

Constructed runoff facilities include pipes, ditches and water quality or quantity facilities. Some is publically owned and some is privately owned. There are eleven regional public flow control facilities in place; the newest at Lakemont. The facilities were primarily constructed to address

runoff control for properties that were developed prior to 1974 when detention requirements went into effect. The Lakemont facility was required to be built as a condition of permitting the Lakemont development, and provides both flow and water quality control. A number of water quality facilities are located underground in the form of vaults. The vaults contain filter canisters that can be tailored to the targeted pollutants.

Mr. Vidmar said the Storm and Surface Water Utility has six specific tools for managing stormwater in the city. The Utility acquires property when it is consistent with its mission. The Utility reviews both public and private projects for adherence to the regulations. Capital projects are undertaken for a variety of reasons ranging from flood control to water quality improvement; the project list in the CIP is updated every two years in conjunction with significant public review. Erosion control actions most often deal with inherited facilities. Infrastructure renewal and replacement addresses aging and inadequate facilities. Stream stabilization and habitat enhancement is done to mimic natural conditions and control erosion. The operation and maintenance program focuses on prevention and includes a lot of system inspection and cleaning.

Emergency response is a major part of the Utility's work program. A lot of time is spent mitigating for emergencies through the capital program and preparing for possible disasters. Beyond that, time is spent responding during large storms. A large portion of the emergency responses have to do with fallen leaves that can clog drains and cause flooding.

The department has for many years had a vigorous public education/outreach program. The primary focus is on the message that nothing but rain should be going down the storm drains. While that will continue to be the primary focus for years to come, the NPDES permit requires the city to back up its educational approach with escalating enforcement and fines. The Utility recognizes that an enforceable ban on pollutant discharges will require major cultural and behavioral changes that will take many years to accomplish. The education/outreach target groups are homeowners, commercial businesses, and community and charitable groups, as well as schools. The city has inspected each commercial private system every two years since 1984 and requires cleaning and repairs as appropriate. The illicit discharge detection and elimination program traces pollution events back to their sources where the problem can be dealt with.

Mr. Vidmar said new development regulations will go into effect beginning in January 2010. They will address stormwater facilities and clearing and grading. The department will continue to address escalating NPDES permit requirements, and will be ramping up the system renewal and replacement program. During 2010 the Utility will also be working on updating the Storm and Surface Water element of the Comprehensive Plan.

Commissioner Robertson asked what the requirements are for stormwater control for new streets as they are constructed and for existing streets as they are upgraded. Mr. Vidmar said the requirements for public improvements are the same as for private improvements. Under the NPDES requirements, any new development must mimic forested pre-development conditions. Usually there are detention systems which control the rate of runoff by holding the water and metering it out slowly. Water quality facilities are also required for new development, including roads, which helps clean up runoff before it flows into the lakes and streams.

Commissioner Robertson asked what programmatic steps are being taken to improve fish or riparian wildlife habitat. Watershed planning manager Kit Paulsen said there are a number of programs included in the CIP. One program focuses on fish passage improvement; it was developed following a 1999 survey of all culverts in the city done to determine whether or not fish can get through them. Staff have been systematically working through the list to restore fish passage through the culverts, beginning with the streams that have the most upstream habitat and the most fish utilizing those habitats. The stream channel modification program is geared at instream and riparian habitat, removing non-native invasive plants and restoring native

vegetative buffers along the streams. The program also is aimed at improving the physical habitat of the streams. A variety of individual projects have been designed to solve specific problems.

Commissioner Robertson asked what practices on the horizon can be expected in Bellevue in the coming years. Mr. Vidmar said low-impact development or natural drainage practices are making their way into the mainstream. The practices encourage runoff percolation into the soil through the use of rain gardens, vegetative rooftops, pervious pavement and the like by treating the water close to its source. Of course, those treatments are designed to handle the runoff from the smaller storms, and large treatment facilities will still be needed for the larger runoff events.

Asked by Commissioner Robertson what the city is doing to control runoff soaking into hillsides, saturating the soils and triggering mudslides into waterways, Mr. Vidmar said it is necessary to rely on the geotechnical engineers when they are working with particular sites. He added that natural drainage practices cannot be used on all properties, especially where there are steep slopes where infiltration can cause flooding down below.

Commissioner Robertson asked how the city backtracks pollution discharges to determine the source, and if it is known where most of the contamination is coming from. Phyllis Varner, water quality supervisor and NPDES coordinator, said the best approach is to prevent pollutants from entering storm systems in the first place. That can be done through education and private drainage inspection programs. When there is an illicit discharge into the stream, staff responds by following the path through the storm drainage system back to the source. The discharge can result from construction, from existing commercial businesses, or from homeowners. The act of driving a vehicle down the road creates an incidental discharge that will be picked up by the stormwater system.

Ms. Paulsen said it used to be fairly common for people to rinse out paintbrushes in their yards where the water would run down the storm drain. As a result of education, that practice has largely been halted. Illicit discharges are often temporary, which makes tracking them more difficult. The city relies on staff observances in the field and on the public calling in with reports.

Commissioner Robertson asked how many of the city's roads have systems in place that filter the stormwater runoff. Mr. Vidmar said any road constructed after 1974 has detention, and water quality systems were put in place beginning in the mid-1980s.

Commissioner Robertson noted that the quality of the water in the city's lakes and streams has been steadily improving and she asked how much of that can be attributed to good stormwater practices. Mr. Vidmar said the improvements can be traced to some degree on the requirements placed on new developments. The open drainage system has also contributed to improving water quality. The fact that Bellevue's population is well educated and quite savvy on environmental issues has also been a contributing factor.

Commissioner Robertson said during her travels along the lakeshores lately she has noticed some properties with pipes draining directly into the water, and other properties with French drains that allow the runoff to better percolate into the soil. She asked what the current requirements are for storm drains on properties that border lakes and streams and what the best practice is. Mr. Vidmar said the best approach is to allow stormwater to percolate into the ground. Ms. Varner said lakeshore properties that have a direct discharge are not required to provide detention for their impervious surfaces, though they are required to provide water quality treatment.

Commissioner Ferris pointed out that the goal for the shorelines under the Shoreline Master Program is no net loss of ecological function within 200 feet of lakes and rivers. Those areas are

affected to a large degree by the treatment of stormwater, or lack thereof, on the surrounding upland properties and developments. He asked where the Commission should be looking to effect the greatest positive impact on ecological function for the areas covered by the Shoreline Master Program. Mr. Vidmar said simply pouring money into stormwater management will not completely solve the problems.

Ms. Paulsen said there is no quick and easy answer to that question. If there were one, the city would have gone in that direction a long time ago. Development occurs over a long period of time, so improvements will occur over a long period of time as well. At the landscape level, the percentage of greenscape is vitally important; it affects how the streams flow, the type and flow of pollutants into waterways, and habitat. At the backyard level, much is determined by the scale of the site and what is happening on the adjacent properties. Bugs the fish feed on need vegetation hanging over streams and logs in the water. The fish in lakeshores and streams need much the same thing.

Commissioner Ferris observed that the level of Lake Washington was lowered some 16 feet in 1910, so the natural shoreline that otherwise existed is no longer there. In 1916 the Sammamish Slough was straightened, and that changed the way the slough and Lake Sammamish perform. The Army Corps of Engineers continues to manage the water level in Lake Washington, keeping it at its highest level during the summer months, which is just the opposite of what would occur naturally. The upshot is that while the lakes are natural bodies of water, their shorelines and the way they are being managed is not natural. He suggested that restoring the shorelines to their natural state simply will not be strictly possible. Ms. Paulsen said she had participated since 1998 with a regional program for salmon recovery, and one of the issues that had to be dealt with was the fact that the Lake Sammamish, Lake Washington, Cedar River and Sammamish River watershed is the most heavily modified in the Puget Sound region. The Corps of Engineers can only permit the water level in Lake Washington to adjust by two feet to avoid damaging floating bridges and sewer pipes. The salmon recovery plan does not even contemplate changing things back to the way they were; it is simply too late. What is getting the focus are the processes and characteristics that will provide the greatest amount of the habitats needed in order for the fish to survive.

Answering a question asked by Commissioner Lai, Ms. Varner said the NPDES permit has requirements regarding surface water, ground water and sediments. Each jurisdiction is required to reduce pollutants discharged from stormwater systems to the maximum extent practicable. Some monitoring is required, and more will be required under the next permit. Any water quality sampling that shows a violation of the state standards must be investigated and addressed.

Ms. Varner explained that the NPDES permit is issued under the federal Clean Water Act. The Environmental Protection Agency has delegated permit authority to the state environmental agencies, which in Washington is the Department of Ecology. The current permit became effective in February 2007 and is due to be reissued in February 2012. The permits are required for all municipalities with populations exceeding 10,000. Stormwater runoff not only picks up the pollutants that are the result of human activity, it picks up atmospheric deposition on rooftops, which accounts for fully 30 percent of all stormwater pollution.

Answering a question asked by Commissioner Hamlin, Ms. Varner said Bellevue does not presently have any continuous monitoring in place except for flow, though in the past the city has participated in several significant water quality monitoring studies.

Commissioner Mathews asked about combined storm and sewer systems such as Seattle has. Mr. Vidmar said at one time federal policy encouraged the practice and it took many years to recognize the error. Cities with combined systems are spending millions to separate them. Bellevue was fortunately developed after knowledge about the advantage of keeping the systems

separate was widely recognized.

Chair Sheffels read into the record questions submitted in writing by the audience, beginning with a request for specifics regarding the issues existing in the Bellevue system, and followed by a question asking whether changes to the Shoreline Master Program will affect the Department of Utilities. Mr. Vidmar said there some unique issues related to public/private facilities. He said it takes a partnership between the various interests to resolve issues as they arise.

Ms. Paulsen said as changes are made to the Shoreline Master Program, Utilities will be required to meet the same requirements as everyone else in seeking project permits. Many of the programs for habitat restoration and the like must already obtain a shoreline permit.

Chair Sheffels read a question asking what the percentages are of the various contaminants in stormwater runoff, and which comes from dwellings versus other sources such as motor vehicles and streets. Ms. Paulsen said the roadways are a very large source of all pollutants. Construction and commercial development are top contributors as well. Residential developments generally have more pervious surfaces and less non-pervious surfaces, so pollutant loading tends to be less in residential areas. Cumulatively, however, residential developments are major contributors as their land mass is greater.

The next question acknowledges that most of Bellevue is already built out and asked how much of a different future low-impact development will actually have on the environment. Ms. Varner said as properties redevelopment new water quality treatment requirements can be implemented. They include natural drainage practices, green roofs, pervious pavements, amended soils, and rainwater harvesting. Each incremental step in that direction will help over time.

Chair Sheffels asked if Utilities has published materials readily available that would help the public better control their individual environments and contribute fewer pollutants. Mr. Vidmar said the department has a number of educational materials, all of which is available on the website. In the near future an organization called Puget Sound Starts Here will be running spots on television aimed at what the general public can do.

Answering a question asked by Commissioner Robertson, Mr. Vidmar explained that as of October 9 the collection of rainwater in barrels for use in gardens and the like was approved by the Department of Ecology. As a result, residents no longer need a water right to collect rainwater.

Commissioner Robertson asked if state roadways have water quality filters. Mr. Vidmar said the state is required to control runoff volume and water quality. WSDOT has its own NPDES permit because the department is recognized as a major contributor.

Another question from the audience asked why it would be alright to put dirt on a shoreline to facilitate the planting of vegetation if dirt makes phosphorous levels rise and storm drains are designed to keep dirt and sediments out of the lakes. Mr. Pyle explained that "dirt" is not a scientific term. Dirt can consist of sandy or gravelly loam. When water hits dirt it tends to destabilize its structure. Certain elements within the dirt tend to rise to the top of the water column, while other elements sink to the bottom. In talking about shoreline restoration that involves gravel augmentation in combination with shoreline plantings, the focus is not on dirt per se but an engineered type of soils. Mr. Paine said soils are necessary to sustain vegetation, but it takes a proper mulch to keep the soils from mobilizing. Some of the plantings will be in floodplains and it could be that some manner of stabilization will be necessary to keep the higher water from removing material. The concern regarding the mobilization of soils with phosphorous particles attached has been that they often come in in very large allotments as part of a construction project.

The next question read by Chair Sheffels asked what part of a Shoreline Master Program covers storm and surface water runoff, what the key rules are, and how they will change when the Shoreline Master Program is updated. Mr. Paine said the state guidelines for shorelines require standards that cannot be mutually exclusive. The city will not be seeking any stricter standards than would otherwise be required.

The next public comment related to the shoreline homeowners on Lake Sammamish and pointed out that the rules being proposed dictate specific plantings, including large trees and native plantings. The person wanted to know what data exists to support that such vegetative treatments improves water quality better than the forms of landscaping that are commonly seen along the shores of Lake Sammamish. Mr. Paine said there is much more than water quality involved in a habitat restoration effort. There is the nutrient cycle and a series of other habitat interactions. The more trees there are anywhere in the city, particularly conifers that intercept rainwater, the better for the stormwater systems. Nothing proposed, however, mandates the planting of big trees along the shorelines.

The next question asked how much impact the landscaping treatment within 25 feet of the shoreline has on water quality when compared to the effects of the runoff that is occurring due to extensive developments above the lakes, particularly Lake Sammamish. Mr. Paine said there are specific habitat requirements and processes that occur at the site level irrespective of what is happening at the watershed level. Ms. Paulsen agreed but added that the impacts are more direct on the water's edge where there are no intervening drainage or catchment systems to capture pollution and meter the runoff into the lake.

The next question from the audience sought to know how the city intends to notify shoreline property owners prior to implementing new rules, codes or regulations that would limit or affect the way property is used. Mr. Paine said the legislative process that is under way involves the efforts of the Planning Commission which will ultimately make recommendations on regulations to the City Council. Before the recommendations are finalized, the Commission will conduct a public hearing, which must be noticed in accord with the law. The process has included ongoing notifications to shoreline property owners via cards, letters and email. A website and a blog have also been set up to keep everyone informed as the process proceeds. In the end, the City Council will make the final decisions, and their meetings will also be publicly noticed.

Chair Sheffels added that the public has some responsibility as well to keep up with the process.

#### B. Shoreline Master Program Update – Public Comments

Mr. Dallas Evans, 2254 West Lake Sammamish Parkway SE, provided the Commissioners with copies of an outline of the issues being reviewed by the Bellevue Alliance for Sensible Shorelines, and some of his research findings. With regard to best available science, he said the report done by The Watershed Company generated nothing but more questions. There was no scientific evidence to prove anything. There is no scientific evidence that applies to lakes, so everything in the report is speculative. Absent evidence of damage being done, there should be no regulations imposed. The hallmark of scientific approach is the generation of hypothesis based on observation and testing through methodological collection and the analysis of data. If there is no current scientific data, the focus should be on seeking it. The Watershed Company, hired by the city to serve as a consultant, stands to gain by requiring homeowners to undertake hydrological studies in order to retain bulkheads; they have a clear conflict of interest. The Commissioners were encouraged to read the article by Dave Howton that was highlighted in the handout. The fact is that 70 percent of what flows into Lake Sammamish comes from Issaquah Creek. Tibbetts Creek contributes only six percent, and Pine Creek only three percent. Taken together, almost 80 percent of the inflow comes from sources outside the control of Bellevue.

Mr. Dwight Martin, 5101 East Lake Sammamish Parkway NE, suggested that the question of how the current shoreline plan affects the stormwater department was not adequately answered during the presentation, probably because there is not much of a connection between the two. Water collected by stormwater systems flows downhill and ends up in the lakes. Those who are closest to the lakes should not be penalized from the standpoint of impervious surface restrictions. The polluted water is not coming from the shoreline areas. He said his review of three different shoreline plans revealed that each has policies and goals, definitions, and regulations. The citizens would benefit from having the Commission finish its work on policies and put them out there for review before sending them to the Council. The work on regulations should then be done and put out for thorough public review before seeking Council approval. The topic of no net loss should include proposals to improve the stormwater system. Development can result in environmental improvements. New or redeveloped docks should include the use of approved materials and incorporate more transparent decking. The green shorelines book produced by a Seattle city planner is a wonderful document; it points out that bulkheads are not all evil and indicates how they can be modified to be more environmentally friendly. Nearshore vegetation is a very good thing but should be balanced with use considerations.

Mr. Inghram clarified that as the draft policies and regulations are developed by the Commission, they will be made available to the public for review. He stressed that there will be a public hearing on them before they are sent forward in a recommendation to the City Council.

Ms. Anita Skoog-Neil, 9302 SE Shoreland Drive, noted that at the July 8 Commission meeting Commissioner Ferris asked assistant city attorney Kate Berens if the critical areas ordinance could be reopened for modification; the answer given was yes but no changes are expected. At the September 23 Commission meeting Land Use Director Carol Helland said there is no budget to reopen the 2006 critical areas ordinance. It is confusing as to whether the process is being dictated by science or budget. The staff memo for the September 23 meeting states that the importance of science in supporting an updated Shoreline Master Program cannot be underestimated, and says policymakers must act under scientific uncertainty and with the understanding that ecological health could deteriorate if the response is insufficiently protective. The document goes on to state that Commission members must act as risk managers weighing the potential of further loss of ecological function against the intrusion on private property rights. That statement is confusing as to whether the issue is one of science or political persuasion. The With regard to the Anacortes case, which was upheld by the Court of Appeals, it appears that senior staff are telling the Commission to ignore the law, specifically the recently upheld Anacortes decision. If one accepts the validity of the Anacortes decision, staff must reexamine its mandate that shorelines are critical areas. The efforts of staff relative to environmental designations, known as zone changes, might need to be reexamined. A July 14 staff memo acknowledges the city has imperfect information but a sufficient amount to support some action, including regulatory action. However, the memo also states that in residential areas in the absence of critical areas the guidelines do not spell out that one must use buffers, setbacks or special vegetation management areas to ensure no net loss of ecological function, but buffers and management areas simply happen to be an effective means to that end and are the most commonly accepted regulatory practice. On July 22, planner Heidi Bedwell said that according to the guidelines, there does not have to be a buffer, and a buffer has no set size. It boils down to having no proof, an unwillingness to explore the truth, no direction to spend money to prove what is true, and a decision to simply do what others have done. By not properly managing stormwater runoff and sediment build-up in Meydenbauer Bay, the city is in essence creating a wetland in the foot of the bay. The city has an obligation to the residents along the bay and the city in general for allowing the environment to degrade. On May 27 Environmental Planning Manager Michael Paine said because the city must treat all residents equally, the city will not be able to establish regulations in the shoreline that effectively will give more license to shoreline

owners than would be the case elsewhere in the city. The recent discharge of 36,000 gallons of raw sewage into the base of Meydenbauer Bay certainly must make one think that special requirements would be applicable as the city manages stormwater and other unexpected runoff into its shorelines. It is all confusing. There are over 100,000 residents in Bellevue, only 850 of which reside on the shorelines of Lake Washington and Lake Sammamish, yet the small minority seem to hold the key to the health of the lakes and the salmon. If true, that would be a staggering honor and responsibility. Whether or not that is true is the question.

Ms. Diane Tebelius, 2650 West Lake Sammamish Parkway SE, noted that the Commission is being asked to impose vigorous land use requirements on waterfront homeowners. The fact is most of the Shoreline Master Program will focus on restrictions on land presently owned by those who live on bodies of water within the jurisdiction of Bellevue. The King County government website has information about Lake Sammamish that says the basin is a long uniform trough with steeply sloping sides and a maximum depth of 105 feet. Average precipitation is 90 centimeters, with 70 percent of it falling between October and March. Land use changes in the watershed alter the quantity, quality and timing of rainfall runoff. As the forests have been cleared and impervious surfaces have been increased throughout the watershed, the water storage capacity of the soils has decreased and the rate of the runoff has increased. The changes increase the high wet weather flows and reduces the summer low flows. The increased wet weather flows cause additional erosion and instability in the stream channels, and increases the flow of sediment into the lake. Decreased dry weather flows in the same streams reduces the amount and quality of in-stream habitat, not lake habitat. Lake Sammamish experiences the cumulative impact of all the land use changes in the watershed and alterations to the affluent streams. Besides the silt that is flowing into the streams and into Lake Sammamish, there is water runoff from I-90 and other roadways that brings oil, mud and other debris into the lake. There is also runoff from developments above the lake. The Commission should seek to know if there has been any analysis conducted to determine the contribution from various drainage points into the lake; whether any analysis has been conducted to determine the contributions from other sources, such as silt and oil, that affect the quality of the bodies of water; what monitoring is being done relative to the runoff into the lake; and has monitoring, if any, been included in the studies that are before the Commission. She said runoff that flows onto and floods part of her property cannot legally be connected to the sewer system, according to city staff. She said she acted instead to create a French drain to deal with the water. Waterfront property owners are not the problem; they all care deeply about the waterfront environment. The Commission is in a position to bring a sense of fairness to the entire process.

#### C. Shoreline Master Program Update – Commission Discussion

Commissioner Ferris noted that following the last Commission meeting staff provided him with a copy of the shoreline analysis report in answer to some of his questions. He said the document utilizes some very subjective science. It has no quantitative data regarding turbidity, bio-oxygen demand or fish counts. The document talks about contributions to ecological functions rated on a scale of one to five, but no empirical measurements. If the Commission is supposed to make its decisions based on science, the analysis report does not provide an informative baseline. He added that his question about the ecological contribution of the shoreline relative to the upland streams was not sufficiently answered. There are opportunities for the city to improve the ecological functions of the shorelines, but the Commission has not yet been given the information it needs on which to build solid recommendations. No specific causal link between the conclusions suggested for improvements and the resulting improvements to ecological function has been brought forward. More persuasive and empirical information is needed.

Mr. Inghram suggested that some of the questions were answered in the presentation by Utilities staff, including the need for management of systemwide attributes. There are also on-site attributes that need to be managed, however. The overall ecological functions of the system

result from the combination of systemwide functions and individual site functions. There are quantitative measurements that can be made, but other things are very difficult or would be very expensive to measure, such as how much vegetation of certain types are within a set distance of the shorelines. The inventory therefore must consist of a combination of the quantitative data that has been recorded over the years by different agencies studying the lake, as well as visual observations about the quality of the environment.

Mr. Paine said the primary intended purpose of the inventory document relates to the environment designation process. It is only a rough characterization of the functions on the shoreline to be used to break the shoreline into manageable pieces for the purpose of assigning an environment designation. The document clearly points out that where there are no bulkheads or residential development, specifically where there are public parks, there are higher levels of ecologic function. An enormous amount of science was used to develop the regulations that are in effect currently, including reviews of peer-reviewed studies and literature. The city does not have the resources that would be required to conduct scientific studies on its own, so it must rely on real scientists and the results of the detailed studies they conducted over long periods of time.

Commissioner Orrico said the science outlined in the presentation by Utilities staff was very helpful. It was detailed and specific as it relates to stormwater runoff. If there is scientific data available to support the broad statements made in the inventory, the Commission should have access to it. Mr. Paine said there is a detailed GIS accounting of functions along the shoreline in the inventory report. Scientific methodology was used to make judgments about the various levels of function. It comes down to simple things: if a shoreline is bulkheaded and there is no vegetation along the shoreline, there will be a lower level of function. That is a basic ecological fact that has been pointed out by countless studies in the past. The methodologies are applied to make generalized statements about the character of an environment.

Commissioner Ferris said the report concerning the hyporheic category includes sediment, storage and maintenance of base flows and states that neither sediment, composition, storage nor base flows are particularly important in Lake Washington. However, for armored shorelines the category was given a low to moderating rating, and the non-armored shorelines were given a higher rating even though it is not important regardless because the lake is controlled by the Army Corps of Engineers and the lake will store the same amount of lake regardless of what the shoreline looks like. He said there needs to be a better link between the recommendations and the science. Mr. Paine said the question is what would be done differently given that all of the residential shoreline has been put into the shoreline residential category. Given that position, the hyporheic zone does not have an impact one way or the other. With respect to the issues that are really going to matter, such as whether or not a bulkhead interferes with function, or whether vegetation is needed on the shoreline, there is an enormous amount of literature available for review; much of it will be discussed in upcoming presentations to the Commission.

Mr. Paine stressed the need for the Commission to think about the issues in terms of policy. He suggested that the Commission will never be able to collectively come to the place of having complete confidence in the recommendations being scientifically true in every case; that will not be possible. He challenged the Commissioners, however to find a place where there is either residential or commercial development where the conditions are decided better than they would be under natural conditions.

Commissioner Robertson pointed out that the public has claimed the science on critical areas and habitat restoration is all based on streams and that there is nothing out there regarding lakes. She said if there are studies regarding lakes the Commission should see them. She added that as each topic is discussed the Commission packets should include links to the pertinent papers. Mr. Paine reminded the Commissioners that during the work on the critical areas ordinance each agenda memo ran to many pages because staff summarized in great detail the science on each

subject discussed. He said that approach could be taken again if directed by the Commission, along with links to the underlying papers.

Commissioner Robertson said it would also be helpful to include in the packets regulations from other jurisdictions, especially those that share jurisdiction with the lakes in Bellevue. Mr. Paine said staff has already committed to doing that during the regulatory discussion.

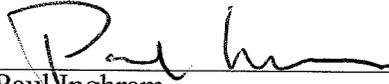
Commissioner Orrico reminded the staff that at least half the Commission members were not on the Commission when the critical areas work was being done. Accordingly, it would be very helpful to updates regarding it and to have the background information readily available. Mr. Paine said the information will be brought forward at the appropriate time when the Commission moves into discussing specific regulations. Commissioner Orrico suggested it would be more helpful for the Commissioners to have all of the information in hand up front.

8. OTHER BUSINESS – None
9. PUBLIC COMMENT – None
10. NEXT PLANNING COMMISSION MEETING

The next Planning Commission meeting was scheduled for October 28, 2009.

11. ADJOURN

Chair Sheffels adjourned the meeting at 9:26 p.m.

  
\_\_\_\_\_  
Paul Inghram  
Staff to the Planning Commission

12/9/2009  
Date

  
\_\_\_\_\_  
Pat Sheffels  
Chair of the Planning Commission

12/9/2009  
Date

