



**City of Lake Oswego/City of Tigard Water Supply Partnership  
Summary of Oversight Committee Meeting #8  
Meeting held June 28, 2010**

Lake Oswego Technical Committee Member Joel Komarek called the meeting of the Lake Oswego/Tigard Water Partnership Oversight Committee to order at 3:00 p.m. on June 28, 2010, in the Oswego Conference Room at the West End Building, 4101 Kruse Way, Lake Oswego.

**Present:**

<b>City of Lake Oswego</b>	<b>Oversight Committee:</b> Councilors Tierney and Johnson <b>Staff:</b> Joel Komarek, Jane Heisler, David Prock, Kari Duncan, Laura Barrie <b>City Council Member:</b> Mary Olson <b>Brown and Caldwell Staff:</b> Jon Holland
<b>City of Tigard</b>	<b>Oversight Committee:</b> Councilors Webb and Buehner <b>Staff:</b> Rob Murchison
<b>Guests</b>	<b>Lake Forest Neighborhood Association:</b> Amy Waterbury; Carolyn Krebs, Co-Chair <b>Lake Oswego Citizen:</b> Brad Moore

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1. CALL TO ORDER/ROLL CALL

Councilor Johnson arrived a little after 3:00.

2. APPROVAL OF MINUTES FROM MEETING #7

Mr. Komarek asked for approval of minutes from the last meeting held on May 3, 2010. Councilor Buehner motioned to approve, Councilor Webb seconded the motion. A voice vote was taken, and the motion passed with Lake Oswego Councilor Tierney and Tigard Councilors Webb and Buehner voting 'aye' (3-0). Minutes from the May 3, 2010, meeting were approved.

3. PUBLIC COMMENT

Mr. Komarek mentioned that this was the opportunity for audience members to talk to the Oversight Committee about items not on the agenda. He recognized a representative from the Parkhill area. Amy Waterbury introduced herself as a recent addition to the Lake Forest Neighborhood Association Board. Ms. Waterbury stated that she lives on Parkhill Street in Lake Oswego and that she was at the meeting to represent some of the concerns of the neighbors that immediately surround the proposed site of the Waluga Reservoir number 2. Some of those concerns include:

- The proposed 40 foot height, the visual impact and the appropriateness of that in a residential neighborhood.

- The overall capacity, again visual impact and if it goes down in height would it have to be wider?
- The seismic concerns, how big an earthquake will this structure be built to withstand? If the worst happens and it does burst because of an earthquake or any other reason what is the plan that is in place?
- Have alternate locations been considered? Is this the best location that has the least impact on Lake Oswego residents?
- If the city does move forward with the new reservoir at this location, the surrounding neighbors would like to be a part of the discussion around preserving existing tree canopies, as well as maximizing setbacks and screening options and minimizing impact during actual construction.

Ms. Waterbury mentioned that she is very new to this process and wants to understand how the decisions about all the points are being made and what is the best way for the neighborhood to provide constructive input along the way?

Ms. Heisler responded that both she and Mr. Komarek had recently met with the Parkhill Neighborhood. Ms. Heisler introduced Carolyn Krebs and stated that the meeting was held at Ms. Waterbury's house. Ms. Heisler provided the Oversight Committee Members with a list of the concerns that were recorded. It was tentatively agreed that the City would come back and meet the neighbors in about a month and talk about those issues.

Mr. Komarek asked if there was anything the Oversight Committee members would like to comment on Councilor Webb responded that the Oversight Committee did take a tour in the Parkhill neighborhood, so there is a visual knowledge of what the concerns are. She mentioned that there are a couple of places on Bull Mountain where there are reservoirs. One of the reservoirs has a park built on top and there is a new one being built which will have a park built around it. Councilor Webb stated that it is her understanding that those reservoirs were placed where they are because the city needed the elevation in order to get the proper water pressure.

Councilor Buehner stated that she is very familiar with the Parkhill neighborhood and she lives with the Bull Mountain reservoirs. She stated that the reservoirs have been very friendly neighbors.

Councilor Tierney mentioned that the issues that Ms. Waterbury highlighted are some of the issues and more that staff, planners and the Oversight Committee are looking into. He appreciated the final comment, that if things are moving forward, the Parkhill neighbors would like to participate. He views that as constructive because in some cases decisions have to be made and all of the reasons behind that decision have to be understood.

Mr. Komarek stated that as Ms. Heisler mentioned there will be an opportunity to provide updated information to the neighborhood association. He asked if it would be helpful to the Oversight Committee members for staff to talk briefly about the process that is being used to determine things like capacity, height and location?

Councilor Buehner mentioned that it would be helpful for her if there could be a picture from the end of Parkhill that gives an idea of what would be seen, if anything, from the site of the new reservoir. Ms. Heisler mentioned that having the picture is exactly what the City is hoping to

present for the next meeting with the surrounding neighborhoods. Councilor Buehner mentioned that it would help give her context.

Mr. Komarek stated that the reservoir is being sited adjacent to the existing tank because the tanks need to work in tandem and hydraulically. When the City purchased the property back in the early 1990s for this purpose, the City undertook a reservoir siting study and looked at sites around the community for storage and for sites for potential new storage in zones that were believed would ultimately have a deficit of storage. As a result of that study, the only appropriate site for this particular reservoir was at the property in Waluga Park. There are three different reservoirs in the zone.

1. The Waluga reservoir that the committee members toured.
2. The one on 10<sup>th</sup> and C; it is an old 1925 riveted steel stand type that is still in operation.
3. The one clear on the south side of the lake.

Mr. Komarek mentioned that the sizing of this reservoir contemplates that some of the storage that would have been sited at Waluga is better sited at the south of the lake site. It is in the same zone but there could be some improved storage capacity for operational issues. 1 million gallons of storage has been moved to the site on the south side of the lake rather than being put at Waluga. That will certainly reduce the size or the foot print of the Waluga tank and is one thing that has been done to try to minimize the impact.

Councilor Tierney asked about the 40-foot issue; design can take care of a lot of height issues, but how can a reservoir be designed that would look anything but a big thing? Ms. Waterbury asked if it could be put underground? Mr. Komarek responded that the floor elevations of the two tanks have to match for it to work properly and not create dead storage or storage that cannot be used.

Councilor Buehner asked if the terrain was conducive to raising the ground level around the reservoir to reduce its visibility. Mr. Komarek responded that it is a fairly large site and one of the comments that was made at Ms. Waterbury's house was can the reservoir be pushed further away from the properties abutting the City's property. The answer is yes there are opportunities to do that; however, they are not the same elevation, so now the site has to be built on fill. These areas that are lower in elevation would need fill in order to get the floor back up to the proper elevation. Now the impact area becomes larger because that fill has to have fill slopes associated with it, so it would be a larger impact on the tree canopy and a much bigger site impact. Those are the things that need to be considered when discussing other options.

Councilor Buehner stated that Tigard was able to put fill on one side which made the reservoir totally invisible. She asked if something like that could work at Waluga? Mr. Komarek said there is not that kind of grade difference on this particular site. The last two reservoirs the city built were like Councilor Buehner described; fairly steep hillsides with plenty of flexibility in terms of elevation. The City dug a giant hole and put the reservoir in it and buried it with a park on top; however, this site is not the same.

Councilor Tierney mentioned that the sense of the group is to minimize the impact to the neighbors. Mr. Komarek stated that at this point in the project definition phase these things are important to help the team start the estimating process and conclude the project definition by the end of this calendar year. This is something that cannot be left hanging out there for a couple of

years from now. Councilor Tierney asked if there are other work elements in the project definition that have the same level of sensitivity to the community like the reservoir? Ms. Heisler mentioned that definitely the Water Treatment Plant. Mr. Komarek mentioned pipeline routing will have a short-term impact.

Councilor Tierney asked about Bonita Road. Councilor Buehner asked if it was a county road. Councilor Webb stated that it is a city road. She mentioned that the pump station is in a good location with a pretty good footprint existing to do the expansion.

#### 4. DEBRIEF ON CONSENSUS FINDINGS OF EXPERT PANEL AND CITIZENS SOUNDING BOARD RELATING TO WATER TREATMENT OPTIONS

Mr. Komarek corrected the Agenda, there is not a slide show presentation, but there are handouts. He turned the discussion over to Jon Holland and Kari Duncan, who is the Water Treatment Plant Manager. The handouts are slides that were shown to the Tigard Council Study Session on June 15. The slides give a preview as to discussions from the last water treatment alternatives workshop that was conducted on June 10 and the outcome of that workshop both in terms of the findings of the Expert Panel and the discussion with the Citizen Sounding Board that occurred later that evening.

Mr. Holland stated that there are very few variations from the presentation that was given to the Lake Oswego Council Study Session. He asked Ms. Duncan to talk about the first slide which is about why treatment is necessary. Ms. Duncan stated after hearing from everyone on the panel there is understanding that water from the river needs to be treated to protect public health. There are some constituents in the water that make it so people cannot just scoop a glass into the river and drink it. There are also regulatory parameters that the EPA and the state sets which are reviewed on a periodic basis and those regulations can become more stringent over time. People would also like water that tastes good and so aesthetics of the water are important; and of notable concern is that the Clackamas River has a seasonal taste and odor event that can occur every couple of years due to algae activity in the river. The water can taste earthy and musty. A treatment process that is effective at taking care of the taste and odor is important. That is the time when the Water Treatment Plant receives by far the most customer complaints about the water.

Mr. Holland stated that because it is an important decision that affects all the citizens in both communities, the project team wanted the decision to be informed with a lot of expert input and sustainable or able to withstand any scrutiny or second guessing that might come later in the program, we assembled the Expert Panel with drinking water design experts and public health and regulatory expertise as well as Ms. Duncan and some of her crew who have the responsibility of operating and maintaining the facility. There was a series of three workshops with this panel. The steps are outlined on the left side of the slide. The first step is to define screen alternatives. The panel started with 16; those got narrowed to 4 by the end of workshop #2, and by the end of workshop #3, there was a preferred alternative. Some of the factors that were considered by the panel include water quality parameters. Both councils have heard about these in some detail in the past. Water quality parameters were discussed in detail at the workshops. The panel was unanimous in its consensus that the Clackamas was a high-quality source and that the existing plant produces a good finished water quality that meets current regulations. There are some spikes in turbidity as Ms. Duncan mentioned. This typically occurs in the fall and can cause some

taste and odor problems. In addition to algae blooms, *Cryptosporidium* is a concern nationally and is something the water agencies watch very closely; however, it is not identified as a big concern in the Clackamas watershed today especially given the filtration that is performed by the plant. In an unfiltered source like the city of Portland, there is a bit more of a concern at least to regulatory agencies that are driving filtration or UV treatment. There are some constituents of concern. These have been grouped into an organics category. The USGS study identified pesticides and herbicides as one type of organic. There are certainly others; personal care products, pharmaceuticals and so on. The finding with respect to the organics is that they are either not regulated or the concentrations that are in the source water are below regulated levels so they are not a regulatory compliance concern today. One category of water quality, called disinfection byproducts, has to do with what happens when chlorine reacts with organic compounds both manmade and naturally occurring in the source water. Disinfection byproducts are a potential health risk which is why they are regulated so closely by EPA. Today they are below regulations, but the feeling from the panel was that as regulations tighten, the disinfection byproduct rule is probably at the top of the list for those that would get more restrictive. Mr. Holland asked Ms. Duncan if she had anything to add. Ms. Duncan asked if it is known that while organics have not been a health concern yet, they are being looked at by a lot of different agencies.

Ms. Duncan drew attention to a graph on disinfection byproducts. She mentioned that as Mr. Holland stated, the water currently meets the current disinfection byproduct regulations. She drew attention to the blue bar and the green bars on a graph. The blue bar represents current regulatory limits. The green bars represent the current finished water average. The EPA requires that plants report the disinfection byproduct as an average over the year. There might be a seasonally high number but it is regulated on the average number. The health expert on our Expert Panel believed that the blue bar level, the maximum contaminant level, is not going to get lower in the future, it is going to stay the same. However, it is possible that in the future rather than averaging these numbers throughout the year the EPA will want to make sure that every day throughout the year or each time these are sampled, they always are below this maximum contaminant level. There was a peak in one individual sample which occurred in 2008. This was a historical peak. The Lake Oswego Water Treatment Plant will meet this regulation now and we will meet the new revision that is coming up, but future revisions might be a problem. Councilor Tierney asked how often the levels are measured. Ms. Duncan answered quarterly. However, that is in the distribution system. There are 4 sites in the distribution system and they are considered a couple of worst case scenario sites that are monitored.

Councilor Buehner asked as development happens upstream, is that likely to impact these kinds of numbers. Ms. Duncan answered that she is not sure. She does not know if the Expert Panel addressed what development would do; if it would increase the organic load in the river, it might. A couple of Council meetings ago, a study with the USGS was approved within Lake Oswego to study the disinfection byproduct and the organics in the Clackamas River more closely. There is a study being conducted right now that might help answer some of these questions. Councilor Buehner stated that it might be an incentive for taking care of these issues now. Ms. Duncan stated that we are trying to figure out which types of organics are the worst offenders.

Mr. Komarek asked Ms. Duncan to talk about what might have caused those spikes. Ms. Duncan answered that when she saw those spikes she was pretty alarmed because that was the highest she has seen for years and years. She looked back at the water quality data of that time and did not see a significant turbidity event which is when you get storm water and lots of dirt. There was

an organic event, which can be due to leave fall or it could be due to a lot of algae in the river. What was evident at the time is what is called a high chlorine demand, so chlorine would be added into the water and it would be consumed at a higher rate than typical. The only thing it could be called was an organic event. It may have just been that sample was taken at that particular time. There was not anything really unusual happening in the river. It was fall, so there was leave fall which is an event that leads to decaying matter in the river.

Ms. Duncan went on to state that the existing Water Treatment Plant does function well; however, it is possible it will not meet future disinfection byproduct rules. One of the reasons for that is at Lake Oswego's treatment plant, we have to pre-chlorinate. The chlorine is added to the water before it goes to the filters. That is not ideal. In the future treatment plant, we will allow for appropriate chlorine contact time after the filters. When chlorine is added before the filters, it contacts with a lot of the organics that the filters would have removed. That can form byproducts which will be taken care of. Taste and odor is still a challenge. Powdered activated carbon is used which helps to treat the taste and odor events in the late summer. It does not always do a thorough job and sometimes it is not caught in time. There is not a monitor that says taste and odor event. Somebody has to actually taste the water. People have different levels of ability to taste. The plant gets calls from our first customers who are the most sensitive and they tell us that the water does not taste good. One of the problems with the carbon is that it is a reactive treatment. Another problem is we have an older plant. It is a 40-year-old structure. It is time to do some upgrades.

Kristen Johnson arrived.

Ms. Heisler acknowledged that Lake Oswego City Councilor, Mary Olson, was attending the meeting.

Mr. Holland stated that the next graph gave a lot of information. The concept with the dollars increasing to the right coincides with the performance or the quality of the water that is produced at the plant, which increases with greater investment. There are two alternatives that are not shown on the chart. There is the current technology and that is why there is a blank at the left side of the page. The more exotic treatment would be appropriate for source water that is not as high a quality as the Clackamas, and that is what is missing on the right side. Both of those were eliminated fairly early on by the Expert Panel. The decision came down to the two alternatives that are left. The first, in the gray shading, is conventional filtration and the panel felt that it meets current regulations and is likely to meet future regulations including the disinfection byproducts rule. It is improved treatment over the current direct filtration process and this is actually the treatment option that was recommended in the 2007 Carollo Report. Adding ozone to the conventional filtration option was felt by the panel to provide the benefit of enhanced public health protection. In part because of its ability to deal with disinfection byproducts and part because of its ability to remove a portion of some of the organic compounds just by virtue of it being a strong oxidizing compound. Again those compounds are not regulated today and are unlikely to be regulated in the future; but it does provide an extra level of protection. It provides a second disinfection barrier because in addition to ozone being used, chlorine will still be used albeit in smaller amounts, so it can maintain the chlorine residual throughout the distribution system and make sure that the water is safe at the far ends of the system. It also provides that additional benefit of being the second barrier.

Mr. Holland mentioned that the cost that was then estimated for Lake Oswego customers is shown in the range of \$3.00 to \$6.00 per month. That is per residential account. Tigard is very similar. Also, the costs are presented in capital costs in the range of \$10 to \$20 million with an additional \$300,000 per year of operation and maintenance (O&M) costs. When those capital costs and the ongoing O&M costs are combined there is a net present value which is the third line shown in the yellow box and equals \$13 to \$23 million. The Expert Panel was asked, "Given this cost difference, what is your recommendation?" There was some thought that perhaps they would not be willing to make a call on that. But as they were polled one by one they were willing to make a recommendation. This is shown on the next slide where they considered everything that had been discussed; costs, risks, benefits, the performance of conventional treatment and the question really was not whether ozone should be added but when. They did feel for sure that it was the way to go at some point. What we asked them to do was make a recommendation as to when. Right down the list, they recommended now rather than later.

Mr. Holland stated that the last slide is basically the summary of their statement as to why that should be. Some of those were just touched on, for instance, the additional disinfection barrier. One that was not mentioned is that it does provide a proactive rather than a reactive approach to taste and odor. In fact, one of the panelists noted that once you are used to drinking water treated with ozone, it is difficult to go back because it tastes so good. Instead of waiting until there is a problem, there is a treatment for it year round. There was some concern that after the size of the investment that the communities would make, if taste and odor complaints start coming in, that might not look so good. People might ask "what did we get for our money"? It surpasses current regulations, reduces chlorine use as was discussed, can attack some of the organic compounds again that are emerging concerns though not necessarily regulated at present. It is not an innovative or risky technology; it has a long track record certainly throughout the US and for probably 10 to 20 years longer than its US history, in Europe.

Mr. Holland asked Ms. Duncan to explain the flexibility to handle source water quality changes. Ms. Duncan mentioned she believed what was being discussed was like Councilor Buehner mentioned, if there was more urbanization along the Clackamas water shed and the river quality were to deteriorate, ozone is a very robust treatment process that would help us to continue to produce very high-quality water. It is possible that we could increase the dose of the ozone beyond what we would do at the beginning to handle any change in water quality. She thinks the other source water quality change that was indicated was the taste and odor change that occurs seasonally.

Councilor Johnson asked about the \$3.00 to \$6.00 dollar costs per month; is that for in perpetuity or is that to cover the capital for 20 years and then after that it will go down? Mr. Holland stated that the increase is for the life of the bonds, which were figured at 20 years.

Councilor Buehner stated that one of the things that was important to her, because in a former life she was a chemist, was the fact that we could reduce the chlorine; because so many of the byproducts are related to chlorine reacting with other things. Whatever those things are, they can create some problems. Ozone's just going to break down to oxygen or combine with hydrogen and become water, so it is going to have less severe breakdown problems. That was a real decider for her when looking at this process.

Councilor Johnson asked if she has a Brita filter or a water filter at home, how does that compare to the ozone, is ozone going to be even better? Ms. Duncan answered that a Brita filter is activated carbon, which is the current treatment for the taste and odor process. The ozone treatment would enhance that process.

Mr. Holland asked Ms. Heisler to comment on the Citizen Sounding Board. Ms. Heisler passed around the survey that was given to the Citizen Sounding Board at their last meeting. This was a citizen group: 4 members from each community who followed along with the Expert Panel and commented on various aspects of the process and the treatment decision. Regarding treatment, the members seemed very happy with the fact that it would solve existing issues and improve treatment, and that it would help the water taste better. They felt that the panel did a good job in explaining why those top two choices were the most cost-effective options for the partnership. They also commented on sustainability; they were all over the map on that one. Some did not think it was very important and some thought it was very, very important. Regarding the neighborhood they really wanted to keep the focus on maintaining good relationships near those facilities and really saw that more input from neighbors was needed in terms of development. In terms of affordability, they really thought this was the best way to insure safe and consistent water: whereas the activated carbon is a reaction to taste and odor, the ozone would be proactive. They definitely recognized that more information on costs was needed. Those costs are being developed this fall and will come to the Councils in the fall and winter. In terms of the process, they were asked on a scale of 1 to 7 whether their participation had been meaningful. The average was 6.1. Ms. Heisler thinks they got something out of it. Most of them want to continue to keep involved even if it is just receiving e-mails about the project and the process. Some of the Citizen Sounding Board mentioned that they would like to be at the open house. Mr. Komarek asked if any did attend the open house? Ms. Heisler stated that they did not make it. They wanted to come, but they did not show up. They also mentioned that they want to be at the Joint City Councils meeting, so hopefully some of them will make it there.

Councilor Buehner mentioned that she was double booked for the open house and apologized for not making it.

Councilor Tierney asked what is bad about ozone? Mr. Holland mentioned cost and energy consumption. Ms. Duncan stated that there is also a liquid oxygen tank, so the ozone is produced by oxygen and then electricity is added. That liquid oxygen tank would be stored at the Water Treatment Plant. There is a hazard associated with that. Mr. Komarek stated that Bill Persich, the water treatment expert from Brown and Caldwell, stated that it is unusual that public owners actually own and maintain those tanks, they are generally leased from the companies that manufacture them, so they are responsible for the ownership and maintenance over the life of the contactor and the tanks. Councilor Buehner mentioned that every hospital has to have a tank so it is not a huge concern. Ms. Heisler mentioned how they are right outside the hospital wall in a cyclone fenced area. Councilor Buehner stated they are much more visible to John Q. Public than one would be at the Water Treatment Plant.

Councilor Tierney asked what happens to the physical site if we add ozone? Ms. Duncan stated an ozone contact chamber would be necessary. That chamber takes up quite a bit of space. Imagine the basins that are currently at the treatment plant, maybe the size of one or two of those. One thought was to put it in that space. Councilor Tierney asked what magnitude the building would be increased, was it 10%? Mr. Holland mentioned it was about 15%.

Councilor Tierney asked if the cost was part of the \$200 million number or is it \$20 to \$30 million over that. Mr. Holland said the delta is between conventional treatment versus conventional treatment with ozone. It is \$10 to \$20 million capital costs more for ozone added on. Councilor Tierney asked if it would be added into the budget? Mr. Holland said yes, but it is unknown where we are yet with respect to all the other elements, which will be worked on this summer.

Councilor Tierney mentioned a follow-up question: in this proven technology, are there any health issues associated with using ozone for the workers, the public or the water consumers. Ms. Duncan stated there is a known disinfection byproduct if the source water has bromides. The Clackamas does not, so that is not a concern.

Councilor Tierney stated that unlike Councilor Buehner -- having failed chemistry -- is there potential that bromide can show up in the Clackamas. Ms. Duncan stated she did not think so. Mr. Komarek stated he had not heard of it. Councilor Buehner stated there are not bromides in this area. She had to work with them and they had to be brought in from other parts of the country. Councilor Tierney asked what was done with them when she was finished. Councilor Buehner stated they had to go to a special waste facility.

Ms. Duncan stated that in terms of worker safety around ozone, it is an inhalation hazard. There will be some training requirements for staff that will be near the ozone contact chamber or that will work by the ozone generators in case a pipe were to burst. They will have to use caution if for some reason there were to be a release. The fortunate thing about ozone is that it breaks down immediately so it is not going to go out into the neighborhood.

Councilor Johnson asked about the additional \$300,000 per year in O&M - is that from operating or leasing the tank and does it take into account additional people and energy costs. Mr. Holland stated it would be for sure electricity. Probably number two behind the electricity would be the cost of the liquid oxygen. Number 3 would be taking care of the additional equipment and monitors. Councilor Johnson asked if we needed extra people for operations. Ms. Duncan stated there would be additional time, but that it did not come out to be a full-time employee. She does not know exactly what the number of hours was that was estimated. Councilor Buehner mentioned she thought it was about 10 hours a month. Ms. Duncan stated that from conversations she has had with other treatment plants about ozone, it is not a substantial amount of time. So 10 hours a month maybe right or a little bit of time each week sounds like it would be reasonable. Mr. Komarek added to Ms. Duncan's response, that we are looking at potentially doubling the size of the plant so there has been discussion about staffing. In doubling the size of the plant, it is expected additional staff will be necessary. There is a lot more equipment than there was before. There will be the conventional treatment process and then the ozone and potentially some other mechanical equipment that might be added. That will all be part of the cost estimates and the assumptions that will be made to develop those costs when the project team comes back to Councils in September. Councilor Johnson asked if it was a part of the \$300,000. Ms. Duncan stated that some of the \$300,000 was additional labor. Mr. Komarek is not sure, he thought it was mostly electricity and the cost of the equipment. Mr. Holland stated that those are probably the two biggest, the electricity, the oxygen, the maintenance of the equipment in terms of parts and then maintenance of the equipment in terms of labor.

Councilor Tierney asked about costs, and the fact that Mr. Holland was somewhat surprised that the Expert Panel moved to this because of the price tag. The citizen survey stated that price was more important than quality. That really surprised him. If it is decided to go with this, we have to recognize that we will need to overcome some issues and concerns and opinions in the community that might not be “thank you for making water quality good”. Councilor Webb mentioned that taste and odor was way up high on the citizen survey. Councilor Buehner stated that ozone’s really good for that. Ms. Heisler said it is a little aesthetics, a little that yes it does a better job with some of these organics that are not regulated, but they are on people’s minds because they are being talked about more. Mr. Holland stated that he was anticipating that the panel would say they are engineers and regulators and this is public policy realm and we do not want to wade into that. He thought that was where they would go, but he thinks they are in their position as leaders in the drinking water industry, so they were looking down the road and saying this is going to be a 20- to 40-year facility and they just would not go without ozone. If it were a 2-year facility maybe that would not be the case, but for 40 years it is.

Councilor Webb asked if the Willamette plant had ozone? Councilor Buehner answered yes. Mr. Komarek added that his recollection from the Expert Panel was if there was thought about a facility that has a 40-year life span, ozone would never be cheaper than it is now.

Councilor Tierney asked why Carollo did not recommend it. Mr. Komarek stated that he thought it was in the report, it was conventional, membranes, and active flow. Ms Duncan stated that Carollo did not really focus in on some of these advanced treatment processes. Mr. Komarek stated that he knows it was identified in an earlier study that Carollo had done for Lake Oswego back in 1997, a facilities plan. They had shown a layout of the site with ozone. Mr. Holland stated that he thinks of the panelists, the Carollo representative who was the advisor to the joint water supply study, probably felt the most like Mr. Holland had anticipated -- the least willing to wade into the public policy. If it is not regulated today and we do not think it is going to be regulated tomorrow why should we try to outguess EPA, was his perspective. He bought into the ozone recommendation in large part because of the taste and odor consistency. Mr. Komarek mentioned the reduction in use of chlorine; it eliminates the need to pre-chlorinate and that affects disinfection byproducts, which is regulated.

Councilor Tierney asked if the EPA or anyone else started to look at some of the things that are currently not regulated, such as pharmaceuticals or others, does ozone help with those? Ms. Duncan stated that she has looked at a number of studies in detail and all of these endocrine disrupting compounds, there is a huge long list of them and they are at very tiny levels. She has looked at treatment studies comparing different treatment techniques with how well they treat for this. There is no one thing that gets rid of everything, but when ozone is looked at, she was surprised at how much it takes out. The majority of these things can be reduced to non-detectable levels. It is a very robust treatment. She thinks the way the Expert Panel described it it does a lot for one additional process.

5. DEBRIEF ON LO-TIGARD WATER PARTNERSHIP OPEN HOUSE (WHAT ADDITIONAL INFORMATION WILL OVC NEED TO FULLY INFORM A FUTURE TREATMENT OPTIONS RECOMMENDATION TO THEIR RESPECTIVE COUNCILS?)

No discussion.

6. SCHEDULE FOR ADOPTION OF SUPPLY FACILITIES CAPITAL IMPROVEMENT PROGRAM (SFCIP)

Mr. Komarek mentioned that the discussion lead into a piece of the agenda which is looking ahead. He asked Ms. Barrie to hand out a schedule. He stated that it was just put together that morning. The intent was to provide the Oversight Committee with a preview of some milestones coming up through the end of the calendar year. There has been a little bit of talk about the cost estimate. He wanted to focus attention on the September dates and then ultimately the December dates when the Councils of Tigard and Lake Oswego will be asked to adopt a Supply Facilities Capital Improvement Plan. That is an element of the intergovernmental agreement. It is one of the items that the Councils must approve and it really sets the stage for the next phase of the program, which is to begin going out into the design community and soliciting proposals from design firms to start designing. Between now and December, the project team wants to get the Oversight Committee comfortable with being able to go to their respective Councils to make a recommendation. He asked what the Oversight Committee needs from the project team to feel comfortable going forward at the appropriate time to Councils and making a recommendation whether it be for the treatment process or anything else?

Councilor Buehner mentioned that she would use a construction analogy, when a building project's going through its preparation, here is a 40% engineering plan, a 60%, 80%, 100%. If you were to take that analogy in terms of creating a budget, where do you think you would be by September. Are you at a 40% 'guestimate', 60% or 80%? Mr. Komarek mentioned there was a meeting on that subject just last Friday. Mr. Holland said the cost estimate that is being provided is what is called in the cost estimating vernacular a Class 3 estimate. There are about 5 different categories depending on exactly the issue Councilor Buehner mentioned, what stage of the project you are in; the earlier in the project, the wider the range plus and minus around that estimate. Of course we also want those estimates to come down over time and not bring unpleasant surprises. A Class 3 estimate has got a range of -20% to +30%. The project team is doing what it can to make this Class 3 estimate despite the fact that the project will not be at the corresponding level of completion of design. Typically it would be done at about a 30% design stage. However, instead of having 30% plans and specs to hand to our estimators, because we do a lot of design and cost estimating work, we are focusing in on what the key elements are that they need. If the estimators do not need the detailed 150 sheets of plans, what are the bits of information that they are looking for that will really drive their estimate and focus in on providing those? We are at project definition and separate design firms next year will do the actual design. Councilor Buehner said the follow-up question would be if you are at this stage now, when do you think you would be ready to give an updated estimate, 6 months, a year from now? She would like a time line so she can tell her Council when there will be a better number. Mr. Holland stated that it might be a question for Councils; how often would they like updates? He thinks it would make sense to be annually at a minimum. It might be twice a year, but probably not more often than that.

Mr. Komarek stated that the team's goal is to update the costs that were presented in the Carollo report, and those are in 2006 dollars. It is now 2010 and the project team wants to be able to present to the Councils updated cost information from those numbers. It is based upon what is known now from this project definition phase that we have been in for the last several months. It will be a refinement of those numbers; it will not be the number. It will be a range, but it will be based upon more information than what we had then.

Councilor Buehner asked if the next estimate would be a Class 4 or does it go to Class 2? Mr. Holland stated it would probably be an updated Class 3 based on the elapsed time in the analysis and evaluations and decisions that will have been made since the last Class 3. Councilor Buehner stated that it was helpful to have some parameters. Mr. Holland said we have to be a lot further into design to do a Class 4. A Class 5 is probably 100% bid documents.

Mr. Komarek asked if there were any other thoughts about what the Councilors would like to have from the Technical Committee and staff to help inform decisions to Councils. Councilor Tierney mentioned that process-wise it should correlate to the project description that you are working on. It is information, as much detail as is available that we can understand and digest. Then opportunities like the Oversight Committee meetings to get together and talk it over to get some understanding. It gives us an opportunity to talk about it.

Councilor Buehner mentioned that she hopes to be able to get the updated data far enough in advance that she would have a chance to digest it before the next Oversight Committee meeting. Then she can ask relatively intelligent questions.

Mr. Komarek mentioned that he has identified on the schedule the team's latest discussions of a September 17 date for an updated project cost estimate. Based on that date, when should the next Oversight Committee meeting be held? This is June, so our quarterly time frame will fall in September for another meeting. Mr. Holland mentioned that September 17 has been adjusted. That was a milestone in a draft version of a schedule, he doesn't want to have Lake Oswego Study Session on the 14, and say "nope you cannot have those numbers for 3 more days," the project team will accelerate the estimating so it is ready for the Lake Oswego Study Session.

Councilor Buehner asked if there will be another Oversight Committee meeting before there is a study session with each Council? Mr. Komarek stated that typically we would. Ms. Barrie mentioned maybe the second Monday in September would work. The first Monday is Labor Day.

Councilor Tierney asked about the treatment facility option, is that part of the capital budget? Mr. Komarek answered that it was.

Ms. Duncan mentioned that the 2<sup>nd</sup> Monday of September will be the 13<sup>th</sup>, because Labor Day is a little later this year. Mr. Holland said maybe the end of August would be better. Actually Brown and Caldwell is scheduled for September 2<sup>nd</sup> for the preview of the cost estimate. Would it be possible to do it the week of the 6<sup>th</sup>? Councilor Buehner asked for the meeting to be sooner rather than later. Ms. Barrie asked if anyone had constraints for another day of the week. Councilor Buehner asked if Wednesday the 8<sup>th</sup> would work? Mr. Komarek thought it could work. Ms. Barrie mentioned that the September meeting will be in Tigard.

## 7. COMMUNICATIONS UPDATE

Ms. Heisler mentioned that she wanted to draw attention to the memo that is in the report. She gave her apologies, it was written in time for the June 14<sup>th</sup> meeting, and she did not really change anything. What she tried to do was cover all the things that have been done by the communication team, leading up to a treatment decision. We will continue to push information out there in the various outlets. One question for the Oversight Committee is to think about what they think might help the public to understand things better or will there be additional opportunities that we need to provide beyond the study sessions and the hearings that will be conducted.

Councilor Buehner mentioned another video. Ms. Heisler mentioned that a video with TVCTV was just completed. It was shown at the open house. It is about the partnership and the treatment decision. She mentioned it is not finalized, but it is 90% to 95% complete. That will soon be out there in the public. She will see if she can get everyone a copy. Councilor Buehner asked for it to be sent to Kathy Mollusky. Ms. Barrie asked if it was okay to send as it is now. Ms. Heisler said yes.

Ms. Heisler mentioned that she included some of the pieces that have been out in the news release and some of the newspaper articles. She passed around some photos from the open house. Unfortunately, only about 25 people were there. It was the first really nice day and everyone probably wanted to be outside. There were a couple of policy makers. Somebody from the IWB and a Tigard City Councilor, Mr. Henderson, was there. There were good showings from the key facilities, around the treatment plant with the Robinwood neighbors, and also the Waluga Reservoir. It was a great opportunity to have some informal conversations with those folks and to talk to them about some of their issues. Generally she thought it was a complimentary crowd. They appreciated all the information and there was also a handful of consultants that were looking for work.

Ms. Heisler had Ms. Barrie pass out the outreach calendar that shows what has been happening through June such as taking the two Councils on the tour of the water facilities on June 16. There was a meeting with Parkhill. The Tigard Council Study Session was held. The Lake Oswego Study Session was held. There was a visit with the Robinwood neighborhood earlier in the month, and we actually held an internal communications meeting to map out the next six months. Some of the main things that came out of that meeting are that we wanted to really start in earnest getting the facility neighbors involved in things and outlining an approach to addressing their issues. There is a need to get a handle on the rates. She thinks that is something everybody's interested in and as you can see from Mr. Komarek's schedule, the fall is really when that can all start coming together. The communications team wants to continue to inform and educate rate payers about those coming rate increases. On the flip side of this, is the month of July. There will be an open house for the Robinwood neighborhood at the Water Treatment Plant on Saturday, July 24. A tentative meeting is scheduled for July 29 for the second meeting of the reservoir neighbors. Ms. Waterbury and Ms. Heisler will finalize that soon.

Mr. Komarek asked the Oversight Committee as we are looking ahead to the July 12 joint Council meeting, could you give us a sense of what would make that meeting more informative or more of value to you? Is there anything? Councilor Webb asked for handouts. Tigard has a high screen so she would like handouts so people can actually see what is being talked about. Councilor Buehner mentioned that particularly if there is a PowerPoint presentation it is easier with handouts. Ms.

Heisler mentioned being able to take notes. Councilor Buehner said she thought it was a great presentation to the Tigard Council. Councilor Webb did not think there were a lot of questions, Tigard Councilors are trusting the two Councilors on the Oversight Committee to get the information. Mr. Komarek asked the Lake Oswego Councilors if there was anything they would like? Councilor Tierney said nothing out of the ordinary.

Mr. Komarek asked that if they think of anything to please let us know. Mr. Komarek mentioned that Mr. Koellermeier is looking for the presentation. It was promised at noon, but it is not quite done yet.

Mr. Komarek asked Ms. Heisler if there was more from the communication front. Ms. Heisler asked if everybody has gotten the latest Water Savvy which covers the partnership costs and savings of different alternatives. Councilor Buehner asked for it to be e-mailed. Ms. Heisler asked Mr. Murchison to share them with the Tigard staff. Ms. Barrie stated she would e-mail it to the Tigard Councilors. Councilor Buehner asked if she would receive the e-mail, the answer was yes.

Mr. Komarek asked the Tigard Councilors about a date on the calendar in the milestone schedule. There is an item called Tigard Water Cost of Service Analysis, which is your water rate study that is being undertaken. What should that date be? Councilor Buehner said the business meeting in December is around the 14<sup>th</sup>, Mr. Komarek stated that he needed to bump that date back to December. Councilor Webb stated there was a workshop in November and then the business meeting in December. Ms. Heisler mentioned the two cities were on a similar schedule. Mr. Holland mentioned that he thought Mr. Koellermeier thought it was earlier. Mr. Komarek thought he had heard the same, maybe that was for the preliminary findings. Mr. Murchison mentioned preliminary findings being in late September. Councilor Buehner mentioned that the Council would be receiving some kind of report in that September time frame. Mr. Komarek asked if that was the report of technical analysis. Mr. Murchison said yes it was how to set the SDCs.

#### 8. FUTURE AGENDA ITEMS/NEXT MEETING DATE

Mr. Komarek stated that we already talked about the next meeting being on September 8, 2010. Ms. Barrie will send out meeting announcements along with meeting minutes from today's meeting. Is there anything else that the Oversight Committee or Technical Committee staff would like to talk about before we adjourn.

Councilor Webb wanted to compliment Ms. Heisler on the amount of information that is being sent. Sometimes Ms. Webb thinks it's overload, but on the communications things, it is easy to read and easy to understand. Ms. Heisler said she was welcome and that it was a group effort. Councilor Webb mentioned getting the Water Savvy's instead of a report or something in the minutes is great. Ms. Heisler mentioned there were more coming. We will probably have one on conservation in the not too distant future and probably a focus on individual facilities as well. We want people to understand all the different factors that have to be considered in making a decision about alignment or a type of facility.

Councilor Buehner mentioned that for Lake Oswego customers, making sure that they understand where the pump station is, so they understand why it has to go from Point A to Point B. She mentioned gravity is necessary. Councilor Webb mentioned there also has to be a pump. Councilor Buehner agreed but said it has to be in the right spot so gravity can do its job.

9. ADJOURN

Councilor Webb moved for adjournment.

Attachments: None

Approved:           September 8, 2010