ENVIRONMENTAL SERVICES COMMISSION MEETING

450 - 110th Avenue NE (City Hall)
Conference Room 1E-113
Thursday 6:30PM
April 16, 2015
Regular Meeting

1. Call to Order – Brad Helland, Chair

2. Oral Communications
   Note: Three-minute limit per person, maximum of three persons for each side of topic.
   Additional comments may be heard at Agenda Item 9.

3. Approval of Agenda *
   Page No. Action
   1 X

4. Approval of Minutes *
   • March 19, 2015 Regular Meeting Minutes
   2 – 10 X

5. Reports & Summaries
   • ESC Calendar/Council Calendar *
   • Conservation & Outreach Events & Volunteer Opportunities *
   11 – 14
   15 - 16

6. New Business
   • Solid Waste Contract Performance Audit & Customer Satisfaction Survey Review *
   Susan Pfeiffer, Mgr. Environmental Communications & Outreach
   Stephanie Schwenger, Program Administrator
   • Water System Plan – Policies Introduced *
   Pam Maloney, Manager Water Resources Planning
   Doug Lane, Senior Engineer
   17 - 20
   21 - 37

7. Commission Report

8. Director’s Office Report

9. Continued Oral Communications

10. Adjournment
   * Materials included in packet
   # Materials separate from packet

Wheelchair accessible. American Sign Language (ASL) interpretation available upon request by calling (425) 452-6466 (v) at least 48 hours in advance. Assistance for the hearing-impaired: Dial 711.
COMMISSIONERS PRESENT: Chair Helland, Vice Chair Swenson, Commissioners, Howe, Mach, Pauley and Wang

COMMISSIONERS ABSENT: Commissioners Morin

OTHERS PRESENT: Andrew Lee, Deputy Director; Don McQuilliams, Storm & Surface Water Superintendent- O&M; Tony Murezam, Operations Manager Deputy Director; Martin Chaw, Fiscal Manager – Resource Management & Customer Service; Lucy Liu, Assistant Director – Resource Management & Customer Service

MINUTES TAKER: Laurie Hugdahl

1. CALL TO ORDER – BRAD HELLAND, CHAIR

   Chair Helland called the meeting to order at 6:30 p.m.

2. ORAL COMMUNICATIONS

   None

3. APPROVAL OF AGENDA

   Chair Helland asked to add consideration of some comments regarding the Comprehensive Plan that he submitted to the Planning Commission under New Business.

   Motion made by Vice Chair Swenson, seconded by Commissioner Mach, to approve the agenda as amended. Motion passed unanimously (5-0).

1 Commissioner Pauley arrived at 6:45 p.m.
4. APPROVAL OF MINUTES

- February 19, 2015 Regular Meeting Minutes

Motion made by Commissioner Howe, seconded by Commissioner Mach, to approve the minutes as presented. Motion passed unanimously (5-0).

5. FOLLOW-UP QUESTIONS & ANSWERS

- Cascade Water Alliance projects
  Andrew Lee, Deputy Director - Utilities

Deputy Director Lee reviewed information he had received from Cascade Water Alliance regarding the White River-Lake Tapps project. He explained that the project consists mainly of rehabilitation activities related to very aged infrastructure. He displayed pictures of the timber flume project from the Cascade Water Alliance website (www.cascadewater.org) and explained that the old timber flume has been replaced with a concrete flume. There is regular removal of sediment from the flume. Other current projects include improvements to the conveyance system, the dike, and the power plant.

Commissioner Wang asked if the flume is where the City of Bellevue, would get its supply. Deputy Director Lee replied that the upstream end of the flume is where water could be collected from the White River.

Commissioner Wang asked if the City gets any power from the power plant. Deputy Director Lee said the power plant is not being used for power right now. There have been discussions about potentially bringing it online, but there are no plans at the present time. Significant improvements would be required before the power plant could be used.

6. REPORTS & SUMMARIES

- ESC Calendar/Council Calendar

Deputy Director Lee reviewed some reshuffling of the calendar that had taken place.

- Conservation & Outreach Events & Volunteer Opportunities

- ESC Comment Letter to the Planning Commission re: the Comprehensive Plan Update

Deputy Director Lee explained that a signed version of the letter on page 18 of the packet was sent to the Planning Commission.
7. NEW BUSINESS

• Stormwater Detention Ponds Legacy Loading Project(s)
  Don McQuilliams, Storm & Surface Water Superintendent- O&M

Supt. McQuilliams reviewed staff efforts regarding the legacy loading project and the success and lessons learned since it began in 2012. There were 72 ponds in the study. Interns from the University of Washington School of Engineering were hired to help collect information about the ponds which were in various states of condition. Based on the Ecology Manual, for dry ponds sediment removal is required when accumulated sediment exceeds 10% of the designed pond depth. For wet ponds the Ecology requirements were not so clear, but staff advised that if the sediment accumulations were within six inches of the invert out elevation then the pond should be drained and sediment should be removed.

Supt. McQuilliams explained that Pond A at Phantom Lake was also taken on as a project. Staff planned to clear and dewater it, but ran into some issues with dewatering. Excavation was extremely slow, and twice the material that was estimated was removed due to suspended sediment. The total project cost was $190,242 while original removal costs were estimated at $95,000. The project ended up costing $203/cubic yard of sediment removed. Overall, the neighborhood was happy, and it turned out well.

Commissioner Wang asked about the contaminated water referenced by Supt. McQuilliams, particularly why the water was being discharged to the sewer if the water itself did not contain contaminants. Supt. McQuilliams explained that the water was considered contaminated because the work the City was doing was stirring it up resulting in the sediment to become suspended within the water, mixing the sediment that has oils trapped in it with the water itself. Supt. McQuilliams said that after the pond was finished, water quality studies were done which did not come back with any high levels of contaminants in the pond.

Legacy loading analysis measured pond type, depth, sediment, and proximity to receiving waters. $100/cubic yard was estimated as a starting point. 26 ponds were initially identified (under $25,000). 32 ponds have been completed with 7 more scheduled for summer 2015. Mr. McQuilliams reviewed the results of several ponds as contained in the PowerPoint presentation.
Vice Chair Swenson asked if all of the sediment and brush from other ponds had to be taken offsite to a special landfill as was done with the sediment from Pond A. Supt. McQuilliams replied that it varies from pond to pond depending on its location and what goes into it, but each one is tested. Commissioner Pauley asked about toxicity. Supt. McQuilliams explained that staff uses a 1 to 4 scale for pollutants, but it’s not tested for toxicity. Staff samples sediments after they are removed from the ponds for disposal purposes. Chair Helland said he would be interested in the data from Pond A. Commissioner Wang asked how this relates to the Phantom Lake issues. (Tony Marcum, Operations Manager, explained that the Phantom Lake discussions related to the water quality of the water leaving the ponds.) He commented that water sits in the ponds for quite a long time before it outfalls. What Supt. McQuilliams is referring to is oils that attach to the sediments at the bottom. Those oils leave when the sediment removal is done. Water quality samples would be a different matter.

Commissioner Mach asked for confirmation that all of the material taken for disposal is profiled so it can be processed correctly. He asked about material going to Pacific Topsoil. Supt. McQuilliams explained there is a 1 through 4 scale for measuring the quality. If the analysis comes back a 1 it is considered clean, and Pacific Topsoils will accept it. If it is a 2 it can be used for road grade and that type of material which will not come into contact with humans. If it is a 3 or 4 it is automatically sent off to an approved facility for disposal.

Costs for the three years were reviewed. The average cost for 32 ponds from 2012 to 2014 was $297.22/cubic yard for contract work and $146.74/cubic yard for in-house work. Going forward staff estimates projects will cost $196.58/cubic yard.

Lessons learned from these three years:
- Utilizing contractor vs. in-house resources. Staff determines which portions to do in-house and which ones should be contracted.
- Utilizing different types of contractors who can do the job most efficiently.
- Setting up on-call contracts makes it much easier.
- Assign a project manager. It is important to have one person in charge from start to finish.
- Permitting. There are a lot of permits involved. The process has been streamlined over the years.
- Get the word out.
- Dewater early (about a month in advance).
- Testing the material to know where it will be taken for disposal.
Commissioner Pauley asked how large the ponds are. Supt. McQuilliams explained that they are mostly under a quarter-acre.

Vice Chair Swenson asked about the number of ponds the City owns. Supt. McQuiliams replied that there are 72 residential detention ponds. Vice Chair Swenson asked how many private ponds there are. Supt. McQuilliams replied that it is a much bigger number. Those are handled under the private drainage inspection program.

Commissioner Wang expressed concern about the maintenance costs of the ponds. Supt. McQuilliams stated that when the City takes on a plat it is specified who owns and maintains the ponds. If ponds are on private property the property owners have to take care of the maintenance.

- 2014 Year-End Fiscal Reports for Water, Sewer, and Storm & Surface Water Utilities
  

Asst. Director Liu reported that Water, Sewer, and Storm & Surface Water Utilities ended the year in positive financial conditions with ending fund balances above budget levels. As a result of that, one-time transfers to the Renewal & Replacement accounts will be made to provide funding for future capital facility needs as part of the City’s long-term financial strategy.

Fiscal Manager Chow reviewed foundational policies that guide the City’s work. Each utility is treated as a self-supporting enterprise. Staff recognizes the needs of the utilities are long term therefore long-term financial planning is utilized. Thirdly, reserves are put aside to achieve financial stability and ensure rate changes are smooth and gradual.

There are three different types of reserves - Operational, Infrastructure Renewal and Replacement, and Asset Replacement. Operational reserves are designed to address the daily capital needs of the utility; they provide for an operating contingency as well as a contingency for emergencies. Any reserves above target levels are transferred to the Renewal and Replacement (R&R) Fund. R&R reserves are designed to address the future replacement needs of aging infrastructure. Asset Replacement reserves are designed to replace utility vehicles, major software systems, etc.
Mr. Chaw then reviewed highlights for 2014. Over the last three years water sales have gradually increased. This is important because water sales drive revenues for the Water and Sewer utility. For the Water Utility actual revenues were higher than budgeted. The Water Utility ended the year with $16.6 million. $2.4 million will be retained within the operating fund, but will be used for equipment replacement in 2015 and carryforwards to 2015. $5.7 million will be transferred to the R&R account and will be used to replenish that account. The Sewer Utility ended the year with operating revenues sufficient to meet operating expenses. Service revenues were up, reflecting higher water sales. This utility ended with a $9.1 million ending fund balance. $4.7 million will be retained in the fund for financial reserve purposes. $2.4 million will be retained to address equipment replacement as well as carryforward needs in 2015. About $2 million will be transferred to the R&R account consistent with financial policies. The Storm and Surface Water Utility finished the year with $5.4 million ending fund balance. $2.7 million will be used for carryforwards to 2015 and equipment replacement. $1.1 million will be transferred to R&R account. Revenues were pretty much on target with budgeted revenues; expenses were slightly below budgeted expenses. $1.6 million will be retained for operating reserves.

Mr. Chaw concluded that all three utilities ended on a positive note with operating revenues sufficient to meet operating expenses. Fund balances for each utility are in compliance with the City’s financial policies with transfers to the R&R account as per those policies. Reserves will also be used for equipment replacement and carryforwards. Each utility will begin 2015 in strong financial condition. Staff will continue to closely monitor each utility’s 2015-2016 financial performance against the budget. There will be continued focus on operational efficiency; cost containment measures are in place.

Commissioner Wang asked how the costs for the pond maintenance were covered. Deputy Director Lee explained that the costs are already incorporated in the budget process.

8. COMMISSION REPORT

Chair Helland highlighted and discussed relevant parts of a letter he had drafted as an individual and sent to the Planning Commission (in addition to the one that was sent on behalf of the ESC) regarding potential concerns he had about the Comprehensive Plan.

EN-X10 – Why is this limited to transportation and infrastructure projects? Shouldn’t the policy apply more broadly to all construction and maintenance projects? Vice Chair Swenson concurred.
EN-37 - Is it possible to “incentivize” (or add similar language) the use of low impact development (e.g., “utilize and incentivize low impact development techniques”)?

Vice Chair Swenson concurred with this item also. He stated a number of jurisdictions have been incentivizing substantially. In some cases money is being used to subsidize the cost of design of rain gardens. Deputy Director Lee explained that LID is already required for newer redevelopment projects. He discussed Seattle’s Rain Wise program which is not related to development, but incentivizes existing properties to utilize low impact practices.

AN-3: Doesn’t the Utilities Department’s service area include areas that are unlikely to ever be annexed (e.g., Points communities, parts of Issaquah)? If this policy is directed at areas of unincorporated King County, then more specific language is needed. Conversely, if the intent of this policy is covered by UT-7, consider deleting it.

Deputy Director Lee indicated he would look at the language.

UT-X7: Why should LID principles be limited to infrastructure improvement projects? Shouldn’t we apply them to all operations, maintenance, and capital projects?

Deputy Director Lee commented that LID principles are typically applied where you are replacing or adding new impervious area. This would apply to capital projects. Operations and maintenance projects do not generally impact impervious areas.

Solid Waste: I propose an additional policy (or an amendment to an existing policy such as UT-14). I will also be bringing this forward to the ESC at the next mtg. Bellevue should incentivize waste reduction by subsidizing waste containers inversely proportional to their size (i.e., provide the largest subsidy to the smallest solid waste container and shift the costs to the larger sized containers).

Deputy Director Lee wasn’t sure if the Comprehensive Plan was the right place for this kind of language.

UT-39, UT-X8, and UT-X 21: The City should promote undergrounding of electrical distribution and other appropriate utilities by subsidizing a small part of the costs and by working with neighborhoods proactively to establish local improvement districts. While subsidy may appear to benefit a limited number of citizens, a programmatic approach will eventually benefit all areas of Bellevue with overhead utilities. I suggest the Environmental Services Commission, the Planning Commission, and the Transportation Commission work on approaches to maximize value to the community and keep costs to the City reasonable.
Chair Helland recommended taking EN-X10, EN-17, and AN-3 forward to the Planning Commission from the ESC.

EN-X10 (tree canopy) – There was discussion about whether or not this should be required for maintenance projects. Vice Chair Swenson spoke in support of this. Commissioner Mach wondered if non-native vegetation should even be replaced. Commissioner Howe expressed support for replacing tree canopy for maintenance projects. Deputy Director Lee stated that adding requirement to maintenance projects to replace vegetation comes with a new set of challenges and costs. Commissioner Wang did not think it made sense to replenish tree canopy removed for maintenance purposes since there is generally a reason why it is being removed in the first place. Commissioner Pauley discussed issues related to mitigation in related the outflow for Lake Sammamish. Commissioner Howe commented that many people value non-native vegetation and think it should also be replaced. Chair Helland said his comment is about replacing tree canopy in general. Vice Chair Swenson spoke to the importance of considering these situations on a case-by-case basis. Commissioner Wang did not think the loss of tree canopy in a situation where it was not meant to be should be a factor. Chair Helland explained that it is not possible to differentiate whether or not vegetation was intended to be there. His intent is to recommend a policy which is not limited to transportation and infrastructure projects. He thinks the policy should be to minimize the loss of tree canopy in general.

There was significant discussion and differing opinions. Vice Chair Swenson commented that in light of the comments it might be best to address these topics individually. He stated he would like a copy of Chair Helland’s letter. Chair Helland indicated he would send a copy of the letter to all commissioners.

Commissioner Mach said he also sent in his own comments. His concerns are that certain topics such as PSE transmission lines are not coming to the ESC for discussion.

Commissioner Wang commented on photos he had sent regarding concerns about the design of the bridge at Coal Creek which block pedestrian views and inadequate drainage at the site.

9. DIRECTOR’S OFFICE REPORT

Deputy Director Lee stated that the City received an APWA award for the Coal Creek Bridge/Culvert Replacement Project. The City will receive the award at the APWA Project of the Year Awards Banquet at the Tacoma Convention & Trade Center on April 2nd at 7PM. The City of Bellevue is hosting the 2015 AWWA in the last week of April. He stated he would be sending out a link for anyone who might be interested in attending.
The Water System Plan and Stormwater System Plan will be discussed over the next few months. Staff went to the City Council at the beginning of March to talk about the Council’s interests with respect to the Water System Plan.

10. CONTINUED ORAL COMMUNICATIONS

11. ADJOURNMENT

Motion made by Commissioner Wang, seconded by Commissioner Howe, to adjourn the meeting at 8:52 p.m. Motion passed unanimously (6-0).

The meeting was adjourned at 8:52 p.m.
# 2015 Environmental Services Commission Calendar

<table>
<thead>
<tr>
<th>April 15</th>
<th>S M T W T F S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
<td>13 14 15 16 17 18 19 20 21 22 23 24 25</td>
</tr>
</tbody>
</table>

**May 21**
Low Impact Development (ID Principles Project (Phyllis Varnes/Catherine Dresss)
Storm System Plan - Aspirational Initiatives (Kit Paulsen/Brian Ward)
Water System Plan - Policies Continued (Pam Maloney/Doug Lane)

**October 15**
c1l Adoption (Pam Maloney/Doug Lane)

<table>
<thead>
<tr>
<th>October 15</th>
<th>S M T W T F S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>8 9 10 11 12 13 14</td>
</tr>
</tbody>
</table>

**May 15**

**June 18**
Storm System Plan - Aspirational Initiatives: Request ESC endorsement (Kit Paulson/Brian Ward)
Water System Plan - System Analysis Approach & Results (Pam Maloney/Doug Lane)

**November 15**

**June 15**

**July 16**
CIP Tour - Scott Taylor
Storm System Plan - Staff hosted Open House & Public Meeting - Will take place prior to ESC Mtg
Water System Plan - Plan Findings & Recommendations (Pam Maloney/Doug Lane)

**December 15**

**July 15**

**August 20**
RECESS

**January 16**

**August 15**

**September 15**

**October 15**
Solid Waste Contract Performance Audit & Customer Satisfaction Survey Results (Susan Fine-Ferris/Stephanie Schweiger)
Water System Task - Request ESC Endorsement of Counc-

**February 16**

**March 16**

Printed by Calendar Creator Plus on 4/7/2015
2015 Pending – ESC:

Status Reports on the following issue will be made when there is significant development:

- Bellevue Diversity Initiative Presentation – (Camren Parker – Parks)
- Asset Management Program annual report (new asset manager)

Katie2015 Calendar/Pending ESC Calendar
Updated 1/6/15
# 2015 Council Calendar

### April

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Consent: Storm &amp; Surface Water System Plan</td>
<td>Interest Statement (Paul/Pam/Doug)</td>
<td>Consent: Ordinance authorizing exec of a Fiscal Yr 2016 WQ Grant Funding Agmt (Paul/Phyllis)</td>
<td>Motion to award AC Watermain Replacement (2015) - Phase 2 Project (Paul/Regan)</td>
<td>Motion to award ECBD Trunkline Imp (Regan/Paul)</td>
</tr>
</tbody>
</table>

### May

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Motion to award construction of Factoria Reservoir Conting Repair (Paul/Regan)</td>
<td>Motion to award construction of Stormwater Trenchless Repair (Paul/Regan)</td>
<td>18</td>
<td>Motion to award contract W. 1k Samson Pkwy Culvert Repair Phase 2 (Paul/Regan)</td>
<td>Motion to award Newport Fish Passage Project (Paul/Regan)</td>
</tr>
</tbody>
</table>

### June

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

### July

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

### August

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

### September

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

### October

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

### November

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

### December

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

### January

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

### February

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

### March

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

Printed by Calendar Creator Plus on 4/2/2015
Key:
Agenda item description – Consent: Waste Reduction & Recycling Grant
Assistant Director’s Name or designated staff that will be available to attend Mayor’s meeting.
Staff Name – material content expert

2015 Pending Council

1st Qtr – NPDES LID Principles Opportunity Analysis & Work Plan – Catherine Drews/Paul Bucich/Phyllis Varner

Katie/2015 Calendar/Pending Council Calendar
Updated 1/15
Utilities’ Communications & Environmental Outreach
Team Events and Volunteer Opportunities

April

1. Waterwise Garden Volunteer Work Party
   Location: Bellevue Botanical Garden
   Date: April 1 & 15, 1 pm to 3 pm
   Staff: Patricia Burgess, x4127, pburgess@bellevuewa.gov
         Karren Gratt, x6166, kgratt@bellevuewa.gov

2. Green Cleaning Workshops
   Location: Lake Hills Library, Bellevue City Hall Council Chambers, Newport Way Library
   Date: April 6, 13 (Bellevue Employees Only) & 23, 7:00 to 8 pm
   Staff: Jennifer Goodhart, x6197, jgoodhart@bellevuewa.gov

3. Peamouth Patrol
   Location: Bellevue City Hall
   Date: April 2, 6:00 pm to 7:30 pm
   Staff: Laurie Devereaux, x5200, ldevereaux@bellevuewa.gov
          Karren Gratt, x6166, kgratt@bellevuewa.gov

4. Phantom Lake Science Fair
   Location: Phantom Lake Elementary School
   Date: April 16, 6:00 pm to 8:00 pm
   Staff: Laurie Devereaux, x5200, ldevereaux@bellevuewa.gov
          Jennifer Goodhart, x6197, jgoodhart@bellevuewa.gov
          Karren Gratt, x6166, kgratt@bellevuewa.gov

5. Bennett Science Fair
   Location: Bennett Elementary School
   Date: April 22, 5:30 pm to 8:00 pm
   Staff: Laurie Devereaux, x5200, ldevereaux@bellevuewa.gov
          Jennifer Goodhart, x6197, jgoodhart@bellevuewa.gov
May

1. Spring Special Recycling Event
   Location: Crossroads Bible Church, 15815 SE 27th St.
   Date: May 2nd, 9 am to 3 pm
   Staff: Stephanie Schwenker, x7103, sscwenger@bellevuewa.gov

2. Green Cleaning Workshops
   Location: Bellevue City Hall Council Chambers
   Date: May 5 7:00 pm – 8:00 pm
   Staff: Jennifer Goodhart, x6197, jgoodhart@bellevuewa.gov

3. Waterwise Garden Volunteer Work Party
   Location: Bellevue Botanical Garden
   Date: May 6th & 20th, 1 pm to 3 pm
   Staff: Patricia Burgess, x4127, pburgess@bellevuewa.gov
   Karen Gratt, x6166, kgratt@bellevuewa.gov

4. Woodridge Science Fair
   Location: Woodridge Elementary School
   Date: May 8, 6:30 pm to 8:00 pm
   Staff: Laurie Devereaux, x6200, ldevereaux@bellevuewa.gov
   Karen Gratt, 6166, kgratt@bellevuewa.gov

June

1. Waterwise Garden Volunteer Work Party
   Location: Bellevue Botanical Garden
   Date: June 3rd & 17th, 1 pm to 3 pm
   Staff: Patricia Burgess, x4127, pburgess@bellevuewa.gov
   Karen Gratt, x6166, kgratt@bellevuewa.gov
MEMORANDUM

Action
X Discussion
__ Information

DATE: April 7, 2015

TO: Environmental Services Commission

FROM: Stephanie Schwenger, Solid Waste Program Administrator

SUBJECT: Upcoming solid waste collection contract annual performance review

Action Required At This Time

The City seeks feedback from the Environmental Services Commission on the proposed solid waste customer surveys and the proposed audit of contract implementation activities.

Background

The City of Bellevue contracts with Republic Services to provide solid waste collection service to residents and businesses. Service under the new 2014 Comprehensive Garbage, Recyclables, and Organics Collection Contract (2014 Contract) started on June 30, 2014. Under Section 3.1.25 of the 2014 Contract, the City has the option to conduct an annual review of Republic Services's performance that includes, but is not limited to, a customer satisfaction survey and a contract performance audit. For 2015, the City proposes to conduct two customer satisfaction surveys, one of the single-family customers and one of multifamily and commercial customers combined. The City also plans to review Republic Services's performance specifically of the required 2014 Contract implementation activities.

Customer Satisfaction Surveys

The City plans to conduct surveys on customer satisfaction with Republic Services among single-family residential and multifamily/commercial customers using standard market research survey practices. Per the 2014 Contract, a third-party professional market research firm would conduct the surveys via telephone. However, the City is open to exploring other options to conduct the surveys, such as administering all or part of them online. According to the 2014 Contract, the annual market research survey for single-family customers would have a sample size of no less than 400, with an overall margin of error of plus or minus 4.9% at the 95% confidence level. The multifamily/commercial customer survey would have a sample size of no less than 200, with an overall margin of error of plus or minus 6.9% at the 95% confidence level.

The 2014 Contract stipulates the Contractor shall maintain a customer satisfaction rating of 80%, less the relevant margin of error, or higher, for each survey. Thus, the minimum satisfaction score for single-family customers is 75.1% (80%-4.9%=75.1%) and the minimum satisfaction score for multifamily/commercial customers is 73.1% (80%-6.9%=73.1%).
Customer Satisfaction Survey Questions

The City plans to ask single-family and multifamily/commercial customers the following questions, using a scale ranging from "very satisfied" to "very unsatisfied." The City asked most of these questions for several years under the 2004 Contract. These questions cover the most important areas of customer experience related to solid waste collection: overall customer satisfaction, and satisfaction with collection crew, container delivery, response to service misses, and customer service.

1. Overall, how satisfied are you with the service you receive from Republic Services?

I am going to read you a list of handling services. For each, please tell me how satisfied you are. If you have no experience with any particular service, please let me know.

2. How satisfied are you with the collection crew that picks up at your home?

3. How about the response time following a missed collection?

4. How about the response time following a request for a new or replacement cart?

5. How satisfied are you with the telephone courtesy you get from Republic Services?

6. How about the knowledge of the customer service staff on the phone?

7. How satisfied are you with the handling of your phone requests by customer service?

Contract Performance Audit Of Implementation Activities

This year, in lieu of conducting a third-party audit of performance-fee associated requirements in the 2014 Contract, the City plans to conduct an internal audit of the Contractor’s performance meeting implementation requirements, including, but not limited to, the activities described in Section 3.1.23 Transition and Implementation (see Attachment A). The audit would assess which activities went well, which could have gone more smoothly, whether any issues still remain, and lessons learned. Results of such a review would help the City to identify any gaps in the current implementation and to develop, negotiate, and implement a future solid waste contract. At this time, a review of the implementation would provide more value than a standard contract audit.
Summary of 2014 contract implementation requirements

1. The Contractor’s fleet of collection vehicles shall be either new within 180 days of the date of commencement of services and meet or exceed 2014 federal vehicle emissions standards, or meet or exceed 2014 federal vehicle emission standards, and over the term of the Contract have an average model year no older than four (4) years prior to the current year, based on chassis model year.

2. Provide to the City a complete initial inventory of the vehicles and Containers to be used in the performance of this Contract.

3. Develop a draft transition and implementation plan for introducing the new and revised services to the different customer sectors, and detailing a specific timeline as to when different activities and events will occur, including details of how different events impact other events in the timeline and the process to be used to ensure that implementation occurs with no disruption.

4. Provide the City with weekly written progress reports regarding the success of the transition and implementation plan.

5. Add customer service staff to answer phone calls and accommodate all customer questions, service level shifting requests, container requests, and other service inquiries.

6. Directly mail to all single-family residences a new single-family program announcement brochure.

7. Directly mail to all multifamily complex customers a new multifamily program announcement brochure.

8. Directly mail to all commercial customers a new commercial program announcement brochure.

9. Conduct site visits to all multifamily complex customers to determine that multifamily complex customer’s service requirements (if that multifamily complex customer has not responded to the new multifamily program announcement brochure) and provide each multifamily complex customer, if needed, new posters for posting in common areas and new program brochures for distribution to tenants.

10. Insert into commercial customer bills a bill insert, with the first insert providing information announcing the new and continuing services available, and the second insert providing answers to frequently asked questions about the new and continuing commercial customer services.

11. Take service requests from commercial customers regarding their intention to select the City-contracted commercial recycling service or contract for their own private recycling service. Commercial customers requesting the City-contracted commercial recycling service shall receive a site visit to review existing services, determine recycling potential, and assess space constraints for additional containers.

12. Deliver desk-side recycling containers to all commercial customer tenant businesses, as requested by the tenants or their commercial property managers, to a pre-arranged delivery location.
13. Ensure that all commercial customers and their tenants receive a new commercial recycling program packet either by mail or in person as the result of a site visit.

14. Directly mail to all multifamily complex customers a new multifamily program postcard reminding multifamily complex customers of any service changes they may experience under the Contract.

15. Directly mail to all multifamily complex tenants a new multifamily program brochure announcing new and continuing multifamily services.

16. Directly mail to all commercial businesses a new commercial program postcard announcing the new and continuing services available to Commercial Customers under the Contract.

17. Conduct a citywide kick-off event highlighting any new and changing services for all customer sectors.

18. Deliver all new or newly requested containers with proper labels.

19. Contact by telephone or in person all commercial customers that have not responded to any of the new program announcement materials to determine that Commercial Customer's service requirements.

20. The Contractor shall provide a user-friendly Internet website accessible 24 hours a day, seven days a week, containing information specific to the City's collection programs, including at a minimum contact information, collection schedules, day of collection map that is dated as of the last change and always current, material preparation requirements, available services and options, rates and fees, inclement weather service changes, and other relevant service information for its Customers.

21. The Contractor shall have a City-approved program in place to monitor and evaluate the quality of customer service provided by customer service representatives, including a "secret shopper" program, a "listening in" function on customer service representative phone lines, and a customer satisfaction program.

22. The Contractor shall develop a monthly metrics scorecard, which shall provide the reader a quick review of metrics identified, including goals and whether the Contractor is meeting those goals.
DATE: April 6, 2015
TO: Environmental Services Commission
FROM: Doug Lane, P.E. Water & Sewer Systems Senior Engineer
       Pam Maloney, P.E. Engineering Manager for Water Resources Planning
SUBJECTS: Water System Plan Update

Action Required at this Time

Staff will present draft Water System Policies, prepared as part of the Water System Plan update. No formal action by the Commission is required at this time, although we do encourage your questions and input for consideration as we develop the draft Water System Plan.

A table summarizing the proposed policy changes and reasons for the changes is attached to facilitate Commission review.

Background

Bellevue’s current Comprehensive Water Plan was adopted by Council in 2008 and approved by Washington Department of Health (DOH) in 2009. An update to the Plan is underway; it is now known as the ‘Water System Plan’. The Plan update was introduced to the ESC in June 2014 as a major work effort which includes:

- Review of water utility operating policies;
- Review of system history, service area and assets;
- Review of water consumption and system planning criteria;
- Revised service area population forecasts;
- Complete re-build and calibration of water system hydraulic model;
- Re-evaluation of system capacity in downtown Bellevue;
- Storage Evaluation;
- Emergency Well Evaluation;
- Updated descriptions of water system asset management and operational practices; and
- Updated programmatic and capital investment recommendations for a 20-year planning horizon.

Since that time much analysis work has been completed. That work will be presented over the next several months to the ESC for discussion and input. The schedule for Commission review is detailed below.
• April 16, 2015      Water System Policies
• May 21, 2015      Water System Policies (continued)
• June 18, 2015      Water System Analysis and Results
• July 16, 2015      Water System Plan Findings and Recommendations
• September 17, 2015 Draft Water System Plan presented
• October 15, 2015   Request ESC recommendation for Council adoption

Discussion

Commission input will be invaluable to ensure the Water System policies guide water system operations appropriately over the next planning period. The attached table presents existing policies (as contained in adopted 2006 Comprehensive Water Plan), identifies issues that were considered with this Plan update that lead to the proposed changes, and presents proposed policy language (shown in underline/strikethrough format). It also contains proposed explanatory discussion text. Staff will discuss each policy with the Commission over the next two meetings.

Policies included in the Water System Plan align with Bellevue’s Comprehensive Plan policies, and are specific to guiding the operation of the water utility. The policies cover several topic areas including Customer Service, Facility Abandonment and Repurposing, Fire Protection, Finances, Service Area, Water Quality, and Regional Policies. Most policies are longstanding with only minor edits proposed for clarity. New policies are proposed for Drinking Water Storage, Green Buildings, and Facility Repurposing. The discussion text that explains the policies (and that will be included in the Plan) has been updated for all policies.

Next Steps

Staff will consider and incorporate your comments regarding draft policies discussed in April and May. The policies will be routed concurrently for review by other city departments for comment. Final policy recommendations will be included in the Draft Water System Plan presented for your review later this year.

Attachments: Water Utility Policies Table (16 pages, 11x17, color)
<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
</table>
| Service Ownership/Responsibility | • Resolve language for unmetered connections, which directly conflicts with Water Code which says we own to the valve.  
• Needs to define that the customer owns the joint at connection, and address that it must be maintained in serviceable condition. Private responsibility to resolve if it leaks or breaks during meter replacement or routine maintenance.  
• Doesn’t address public infrastructure on private property.  
• Use “assemblies” not “devices”  
• Policy should provide guidance about when Utility vs private ownership (e.g. fire lines) is appropriate. | Water System Ownership and Maintenance Service Ownership/Responsibility  

The Utility shall own and maintain the service line to the meter, the meter and setter, and the meter box. The property owner shall own and maintain the service line and other facilities such as pressure reducing valves, pumps, or backflow prevention devices beyond the meter. For unmetered connections (fire sprinklers), City ownership will cease at the connection point to the water main.  

The Utility shall own and maintain all water facilities in public rights-of-way and in easements dedicated to the public and accepted by the utility, up to and including the meter, except to the extent that private ownership is otherwise indicated as a matter of record. For unmetered connections, City ownership ends at the customer side of the valve closest to the main.  

The Utility shall require private ownership of facilities on private property that exclusively benefit the underlying property, or a single adjacent property, or as otherwise indicated.  

Water facilities located on private property are owned by the fee property owner(s), unless otherwise assigned or dedicated by easement to the city, except to the extent that public ownership is indicated as a matter of record. Property owners shall be responsible for the development, maintenance, and repair of all private water facilities, including but not limited to pipes, pressure reducing valves, pumps, and backflow prevention assemblies on the customer side of the meter.  

Discussion Text:  

The Utility uses meters on services to monitor and charge for water consumption. The Utility needs to control the meter to enforce payment and compliance with utility standards. The meter is normally located at the property line and provides a logical separation point between City and private ownership and responsibility. There are isolated existing instances where ownership of the line to the meter is private, under separate arrangement.  

Property owners must maintain private facilities and piping, including the joint at the connection point inside the meter box, in serviceable condition to allow routine maintenance and replacement of the meter. Any breaks or leaks due to condition of private facilities are the property owner’s responsibility. The meter box, but not everything within it (as described in this paragraph) is owned by the Utility.  

New service connections should be through the right-of-way frontage of the property, and not through adjacent property or easements, to the extent feasible. Connections to water mains in private property or easements limit the Utility’s future ability to abandon pipe, and creates the potential for private landowner disputes concerning public assets. |
<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
</table>
| Emergency Preparedness       | • Correct title of "Emergency Management Plan"  
• Use "Public Water System" rather than undefined "Water Utility System". | Emergency Preparedness  
The Utility will prepare and periodically update an Emergency Management Plan as a part of its operations program. The plan will ensure that adequate emergency provisions are in place to provide for an organized response to the most likely kinds of emergencies that may endanger the health and safety of the general public or operation of the Water Utility system. The plan will also address issues related to long term system recovery to ensure the orderly and complete restoration of the water system after an emergency.  

Discussion Text:  
A key Utility responsibility is to respond to the needs of water utility customers and the general public during times of crisis. The continued availability of potable water during a disaster and restoration of service following a disaster is essential.  

The emergency response plan focuses on problems created by major disasters such as an earthquake or a flood. The plan encourages local and regional partnerships to strengthen response capabilities. It is not intended to address minor isolated system interruptions such as those caused by isolated main breaks and power outages; standard operating procedures have been established to address these minor interruptions.  

The emergency response and recovery plan complies with applicable RCW and WAC requirements as well as requirements of the water supply contract between the Utility and the Cascade Water Alliance. Reconstruction of damaged infrastructure should be to current codes and standards, and should be consistent with current Water System Plan Policies, to protect current and future customers, assure consistency with the City’s long range plans, and ensure access to federal funds for reconstruction, where available. |
| Service Pressure and Flow    | • Revise to accurately reflect DOH requirement.  
• Applicable regulations allow for reduced pressure in emergency conditions; saying so is redundant. | Service Pressure and Flow  
The Utility shall provide domestic water to Utility customers in sufficient quantity to meet maximum day demands and at a pressure that meets or exceeds all minimum applicable regulations, except during emergency conditions.  

Discussion Text:  
"The Utility’s goal is to provide minimum system pressure of 30 psi, measured at the service meter under normal conditions, or 20 psi during fire flow and other emergency conditions, in accordance with WAC 246-290-230. Property owners may install private booster pumps to achieve higher pressures, if they choose. Ownership, maintenance, and liability associated with such private booster pumps is the responsibility of the property owner.  

Customer complaints of low water pressure are often caused by corroded internal plumbing which restricts flow volume, rather than system pressure. In such cases, increased system pressure would make very little difference in actual service provided.  

Where modification of utility-owned pipes would significantly improve flow, such as replacement of service lines that serve more than one home, the Utility should make such modification." |
<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service Reliability</strong></td>
<td>• Clarify that “100 percent operational redundancy” doesn’t mean water 100% of the time, but rather that flow can be provided from multiple directions</td>
<td><strong>Service Reliability</strong>&lt;br&gt;The Utility shall invest resources as necessary to construct, maintain and renew water system infrastructure and equipment such that Utility customers are provided consistent, reliable service, except during maintenance activities. Wherever practicable, the distribution system shall have 100 percent operational redundancy. Connections between adjacent water distribution or supply systems should be encouraged to improve reliability and reduce vulnerability to loss of water service.</td>
</tr>
<tr>
<td></td>
<td>• Discussion should address allowable number of homes on dead end line. The term ‘customer’ should be defined as account, or home.</td>
<td><strong>Discussion Text:</strong>&lt;br&gt;The Utility shall provide sufficient maintenance and use appropriate operation practices to keep the water system infrastructure in good working order. Where operation and maintenance procedures are not sufficient or cost effective, capital projects shall be scheduled and funded to replace or rehabilitate infrastructure facilities. Wherever possible, the Utility shall anticipate system interruptions and the system shall be designed and operated to minimize the impact of such interruptions to customers. For that reason:&lt;br&gt;• No more than 250 equivalent residential units (ERUs) should be supplied water from a single source.</td>
</tr>
<tr>
<td>2006 Water System Plan Policy</td>
<td>Reason for Proposed Changes</td>
<td>Proposed Policy Language and Discussion</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------</td>
<td>----------------------------------------</td>
</tr>
</tbody>
</table>
| !!!New!!! Drinking Water Storage for Emergency Supply Outages | • DOH recommends two days, but allows for only one day of standby storage if community expectations are amenable to this. Bellevue community expectations are unknown. • Council & community likely do not know current criteria. • Without consulting public (via policy statement), the City is exposed to potential criticism (1) when proposing to add or reduce storage, and/or (2) if water runs out in emergency. ESC & Council agreement on criteria makes it credible (not an engineering decision). | **Drinking Water Storage for Emergency Supply Outages**

The Utility shall construct and operate water storage facilities sufficient to keep a minimum volume of one average day's water usage in reserve, for use in case of water supply disruption. This storage shall be in addition to the volume of storage used for daily operations and fire flow.

**Discussion Text:**

The Washington State Department of Health (DOH) requires water storage for operational, equalizing, fire and standby purposes. The minimum DOH requirement for standby volume is generally based on a formula of two days of average water usage minus a volume credit where there are multiple water sources. If community expectations are amenable to one average day of service instead of two days, DOH allows for a minimum of one day.

Bellevue’s long standing practice has been to maintain at least one day of standby storage, to temporarily serve customers in the event of a local or regional water supply emergency.

Construction, maintenance and operation of water storage reservoirs are a significant cost to Utility rate payers. In addition, excessive storage can negatively impact water quality. Bellevue’s water is supplied from two independent sources: the Toll and Cedar River watersheds. In addition, there is significant regional system storage nearby (SPU's Eastside Reservoir). Finally, Bellevue has legacy water rights that allow for development of independent emergency well supply.

Considering the cost and negative water quality considerations of additional storage and multiple water supply sources to mitigate risk, one day of average water usage is an appropriate standby storage volume for the Utility’s service area.

| !!!New!!! Green Buildings | • Comp Plan Policies and Environmental Stewardship Initiative encourage "green" building projects like the Bullitt Center. However, current utility codes, policies and/or rate structures may inadvertently penalize or prevent construction of similar zero-use buildings. • The Utility should anticipate the policy and technical issues that could arise from such developments, and discuss required changes to policy, codes and standards to protect the Utility's interests and provide guidance to developers prior to the next Water System Plan update. | **Green Buildings**

The Utility should anticipate, investigate and prepare for the construction or use of buildings with zero net water usage. The Utility supports sustainable development consistent with existing policies, public safety and ratepayer equity.

**Discussion Text:**

Innovative green building technologies are likely to be proposed for development in Bellevue in the next planning period. The Utility should anticipate policy and technical issues that may be associated with such development such as:

• Reduced water consumption;
• Building Code and regulatory changes;
• On-site water reclamation and the need for backflow prevention; and
• Appropriate service charges for public system asset management including replacement, fire protection, and other benefits received.

Where appropriate, Utility codes and standards should be updated in anticipation of and preparation for such development.
### Facility Abandonment Policies

<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Abandonment</td>
<td>• Discussion should mention requiring appropriate abandonment techniques for system integrity, as required by engineering standards</td>
<td>Facility Abandonment&lt;br&gt;When the Utility abandons a facility, it shall be done in a safe and environmentally sound manner, consistent with all applicable federal, state, and local regulations at the time of abandonment.&lt;br&gt;&lt;br&gt;<strong>Discussion Text:</strong>&lt;br&gt;Occasionally, the Utility no longer needs some element of the water system infrastructure, such as a pipe, a pump station, or a reservoir. When a facility is abandoned in-place, detailed as-built records should be maintained in utility records. Facility abandonment should be done in the manner directed by the Engineering Standards. In the case of abandoned asbestos cement (AC) pipe, standard practice and currently accepted environmental policy dictates that the City should leave the pipe in-place. Asbestos fibers in AC pipe are not released or harmful unless the pipe is broken or disturbed (e.g. during excavation and removal). In that case, the pipe must be dealt with as a hazardous material, and special precautions must be taken to prevent fiber inhalation. For this reason, it is preferable to limit disturbance of this material and leave AC pipe in place in the right-of-way. However, when AC pipe is abandoned in an easement on private property, where it is unlikely the City would be aware of future pipe disturbance, it should be removed by the Utility unless dictated by specific circumstances.</td>
</tr>
</tbody>
</table>

| Facility Repurposing          | • Need for a policy that addresses when it’s appropriate to make pipes or other facilities available for other use (telecom, etc.) | Facility Repurposing<br>If an abandoned utility facility would be appropriate for another use, it may be repurposed provided all costs and future liability are borne by the beneficiary of the facility, and provided opportunities for revenue or cost sharing are pursued as appropriate.<br><br>**Discussion Text:**<br>Occasionally, the Utility no longer needs some element of the water system infrastructure, such as a pipe, a pump station, or a reservoir. Whenever such facilities are abandoned, surplus of the facility should be considered, as well as opportunity to generate revenue from repurposed facilities. Utility liability associated with use of the facility should be considered and minimized. |

### Fire Protection Policies
<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fire System Responsibility</strong></td>
<td>• Policy needs to differentiate public vs. private infrastructure.</td>
<td><strong>Fire System Responsibility</strong> The Utility is responsible to provide and maintain the public water system infrastructure to deliver water for fire protection to currently served residents and businesses. <strong>Discussion Text:</strong> The water system infrastructure, including water mains, storage, hydrants, pump stations, and related facilities, shall be designed to meet all applicable codes at the time of construction, including the capability to store, convey, and deliver water for fire protection. The Utility is responsible to maintain, repair or replace mains, lines, hydrants, and valves as necessary to keep said facilities in good working order. Where fire protection is provided, benefited properties should pay for that benefit, even if they don't use the public water system for their drinking water supply.</td>
</tr>
<tr>
<td><strong>Fire Flow Requirements For New Construction</strong></td>
<td>• Discussion should make it clear that if off-site improvements are required, the developer is responsible to make them.</td>
<td><strong>Fire Flow Requirements For New Construction</strong> The applicant or developer of a new development or redevelopment is responsible to provide the minimum fire flow requirement established by the Fire Marshal for that development. <strong>Discussion Text:</strong> It is the developer’s responsibility to install all facilities needed to serve their development to applicable development standards, and to meet the required fire flow established by the Fire Marshal for the developer’s proposed project. If necessary to meet these requirements, the developer shall make off-site water system improvements. If off-site improvements result in benefit to a broader geographic area, the Utility may contribute an equitable share of the improvement costs provided sufficient financial resources are available (for example, if an improvement increases fire flow to the Utility’s minimum standard fire flow of 1,000 gpm or greater in an area that had less that 1,000 gpm available prior to the improvement).</td>
</tr>
<tr>
<td>2006 Water System Plan Policy</td>
<td>Reason for Proposed Changes</td>
<td>Proposed Policy Language and Discussion</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------</td>
<td>------------------------------------------</td>
</tr>
</tbody>
</table>
| Fire Flow Requirements For Existing Construction | none | **Fire Flow Requirements For Existing Construction**  
The minimum fire flow available to existing facilities shall be the fire flow requirements at the time of construction.  

**Discussion Text:**  
Existing structures are not required to upgrade the water system infrastructure to meet current fire flow and development standards unless redevelopment of the structure or property triggers such upgrades. Similarly, the Utility is not obligated to upgrade available fire flow to meet current code requirements. However, when analyzing the need for water system improvements, improved fire flow should be considered when weighing the project's merits. |
| Fire Flow Improvement Program | **Revise to “continue” rather than “implement”, since this has been going on for decades.**  
**Fire Marshall asked to see language in support of fire sprinklers in the discussion** | **Fire Flow Improvement Program**  
The Utility shall continue to make system improvements, when and where appropriate and when funding is available, implement a program with the objective of providing a minimum standard-fire flow of 1,000 gallons per minute gpm throughout the distribution system.  

**Discussion Text:**  
The Utility has systematically improved infrastructure capacities toward providing a minimum level of fire flow protection to all customers within the service area. The program should continue to make improvements such as replacing undersized water mains to provide at least 1,000 gpm (while meeting system performance criteria for pressure and velocity), installing new hydrants to provide maximum hydrant spacing of 500 ft, and replacing all two port hydrants with three port hydrants throughout the system. System improvements should generally be prioritized and scheduled according to the severity of deficiencies, although opportunities to make improvements in conjunction with other construction should be considered for economic efficiency. Because larger pipelines increase water age in the system, additional investments to monitor and/or improve water quality may also be necessary as part of this program.  

Customers who have at least 1,000 gpm fire flow available, but require additional fire flow to support proposed new development or redevelopment, are required to make the necessary on- or off-site system improvements. Alternatively, developers may make on-site design choices, such as fire suppression systems, that reduce the fire flow requirement per the Fire Code. |
## Financial Policies

<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterworks Utility Financial Policies</td>
<td>• None. Financial policies are managed separate from the Water System Plan and are incorporated by reference</td>
<td>Waterworks Utility Financial Policies (No change)</td>
</tr>
</tbody>
</table>
## Service Area Policies

<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
</table>
| **Satellite/Remote Systems**  | "Anticipated" suggests there could be a scenario where the city would allow a satellite system. | **Satellite/Remote Systems**  
Satellite/Remote Systems are not allowed anticipated within Bellevue’s service area. Requests for water service will be accommodated only through direct connection to Bellevue’s water system.  
**Discussion Text:**  
Bellevue has in place all the major facilities (pump stations, storage reservoirs, etc.) and water mains required to make water available throughout its service area via short water main extensions. The Utility will work with property owners to facilitate developer- or city-installed construction of water main extensions as needed to provide service. Therefore, the creation of remote water systems is unnecessary and there is no identified need for Bellevue to become a satellite management agency.  
This policy does not preclude the Utility from evaluating and entering interlocal agreements if more efficient and effective service can be provided via connection to an adjacent utility’s system. |
| **Service Extension** | Clarify in the discussion that preference is for developer to pay the cost of extensions before city participation.  
"Sphere of influence" has been replaced with "Potential Annexation Area". | **Service Extension**  
Extension of the water system service extension will be considered, provided the area to be served is within the City’s existing retail water service area and the extension of service is consistent with adopted annexation policies. Service extension by the City may be considered under such conditions only if the City’s costs are recovered and sufficient financial resource is available.  
**Discussion Text:**  
It is most efficient and economical for the City to provide services to city residents. Therefore, the water service area coincides with the Potential Annexation Area within the Urban Growth Boundary defined in Bellevue’s Comprehensive Plan. The policy is consistent with the Utilities Element of the City’s Comprehensive Plan.  
Property owners are responsible for extending water service to their property, and to the extent of the property to accommodate subsequent development at one or more locations, as deemed necessary by the Utility. The developer is responsible for the cost of extensions both on and off-site, and may recover some costs from other benefitted properties, to the extent allowed by law.  
Occasionally, the Utility may require a developer to install a larger water main than is needed to meet its fire flow requirement. This is done to assure that the fire flow requirements of nearby future development can be met without having to up-size an existing water main. When oversizing is required, the utility will reimburse the developer for the incremental cost increase of the larger pipe, and may recover the cost of oversizing from future development.  
The City may extend the system to assure orderly system development, in which case, benefited property owners would be responsible for an equitable share of extension costs. |
<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
</table>
| Requests for Assumption by Water Districts or Private Water Systems | • None | **Requests for Assumption by Water Districts or Private Water Systems**
Bellevue may assume the operation of a water district or private water system at their request if the following conditions are met and subject to the approval of the Bellevue City Council:
1. The district or private system is adjacent to or within Bellevue’s water service area.
2. The district’s or private system’s facilities meet Bellevue’s performance criteria and engineering standards, or a plan is in place to assure they will be brought up to Bellevue’s standards without adversely impacting Bellevue’s existing customers financially or with regard to level of service.
3. The assumption of the district or private system is permitted by State law.

**Discussion Text:**

*King County Water District #1 approached Bellevue requesting eventual assumption, and an agreement in conformance with this policy was reached in 2004.*

*Two other small districts could potentially request assumption by Bellevue: King County Water District #22 (Beaux Arts) is outside of Bellevue City limits but relies on Bellevue for emergency water supply. The service area of King County Water District #117 (Hilltop Community) was recently annexed into the City of Bellevue. Bellevue has not been approached by the owners of either of these districts to request assumption.*

A limited number of small, private water systems utilizing well water within Bellevue’s service area. None of these systems have indicated an interest in assumption by the City.

| Bellevue Initiated Assumption of Water Districts | • None. | **Bellevue Initiated Assumption of Water Districts**
Bellevue will seek to assume the operation of a water district when the City Council determines that the assumption is in the best interest of the City and the assumption is consistent with the City’s Comprehensive Plan, and will do so as permitted by state law.

**Discussion Text:**

*It is Bellevue’s policy, as stated in the City’s Comprehensive Plan, to own and operate all public utility systems within the City limits unless circumstances otherwise dictate. Assumption of water districts within Bellevue City limits at the direction of the City Council are in conformance with this policy.*
<table>
<thead>
<tr>
<th>Water Utility Policies</th>
<th>Utilities Department Recommendations</th>
<th>4/6/2015</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Sales Outside Bellevue's Service Area</td>
<td>• Update terminology regarding &quot;ultimate future service area&quot; for consistency with City Comprehensive Plan</td>
<td>Water Sales Outside Bellevue's Service Area</td>
</tr>
<tr>
<td>New requests for the sale of water outside of the Utility's ultimate future service area will be considered only under the following circumstances: 1. The requestor must first obtain a water supply agreement with the agency responsible for supplying Bellevue's water. 2. The provision of water should not compromise Bellevue's design and performance standards for existing water customers. 3. The sale of water should not result in any adverse financial impact to existing Bellevue water customers.</td>
<td>New requests for the sale of water outside of the Utility's ultimate future service area will be considered only under the following circumstances: 1. The requestor must first obtain a water supply agreement with the agency responsible for supplying Bellevue's water. 2. The provision of water should not compromise design and performance standards for existing water customers. 3. The sale of water should not result in any adverse financial impact to Bellevue's existing water customers.</td>
<td></td>
</tr>
</tbody>
</table>

Discussion Text:

Bellevue's water system has been planned and designed to accommodate the current and anticipated needs of customers within Bellevue's water service area and existing wholesale customers in accordance with the wholesale water service agreements. Any additional area that requests water supply from Bellevue must address issues relating to limited water supply and adverse impacts on Bellevue's water system and customer service levels. Water service within another jurisdiction's service area would be per interlocal agreement.
## Water Quality Policies

<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
</table>
| **Water Quality Responsibility** | • “All WQ standards” is broad and unlimited: Use “applicable” standards.  
• Discussion should explain that water quality obligation is to the point of use, except when not under the control of Utility. | **Water Quality Responsibility**  
In accordance with the Supply Agreement, the Utility will rely on the agency supplying Bellevue’s water (Cascade Water Alliance) to provide water that meets applicable all water quality standards as identified in the supply agreement. The Utility will take action necessary to ensure that all water quality standards are met to the point of delivery to the customer (typically the meter).  
**Discussion Text:**  
Bellevue’s supply agreement with Cascade Water Alliance requires that water delivered to the City of Bellevue meet all state and federal water quality standards. Water samples collected from throughout the system are tested for compliance.  
Water is a perishable product. Water quality can fall below accepted standards before reaching the customer if microbial regrowth occurs, excessive levels of disinfection by-products (DBP’s) form, or outside contaminants are introduced into the water system. The Utility will take the necessary steps to ensure that water reaching the point of delivery meets or exceeds all water quality standards. To accomplish this, the Utility will maintain programs to prevent microbial regrowth, excessive DBP formation, and contamination of the water system.  
Maintaining water quality to the actual point of use is the responsibility of the Utility, except when due to conditions outside of the Utility’s control, such as private system conditions that contribute to water quality degradation in the customer’s system. |
| **Cross Connection Control** | • Get rid of “promulgated.” | **Cross Connection Control**  
The City shall administer a cross connection control program that protects the City’s public water supply and users of the public water supply from backflow contamination, in accordance with federal, state, and local requirements law and rules promulgated by DOH.  
**Discussion Text:**  
The Washington State Department of Health (DOH) requires that public water utilities implement a cross connection control program to prevent water system contamination due to backflow. Bellevue’s cross connection control program requires installation of approved backflow prevention assemblies on, or disconnection of, identified cross connections. The program identifies potential cross connections through both the City’s plan and permit review process, and site inspections of high risk properties. The program also requires testing of all backflow prevention assemblies within the water system at the time of installation and annually thereafter. The City will continue to implement all aspects of this program, and to amend the program as industry standards change. |
## Regional Policies

<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Supply Source</strong></td>
<td>• Current wording suggests a hierarchy and may limit options related to groundwater rights and use. Use “partner with” rather than “rely on”</td>
<td><strong>Water Supply Source</strong>&lt;br&gt;The Utility will continue to partner with regional providers/water suppliers for water supply. The Utility will work cooperatively with suppliers, including the Cascade Water Alliance, other purveyors, and other water supply agencies to assure a safe, reliable water supply at the lowest environmental and economic cost. <strong>Discussion Text:</strong>&lt;br&gt;Originally, water supply in Bellevue was provided by local wells. In the 1970’s, Bellevue began purchasing water from the City of Seattle to better meet water supply needs. Bellevue continued to purchase water directly from Seattle until 2004, when Cascade Water Alliance was formed. Bellevue now purchases Seattle water indirectly through a contract with Cascade Water Alliance.&lt;br&gt;The current agreement provides Bellevue and other Cascade Water Alliance members with a greater role in determining future water supply decisions. The water supply system is a regional resource that must be managed for the benefit of all current and potential new users.</td>
</tr>
</tbody>
</table>
| **Conservation**              | • Policy suggests a more direct role in promoting conservation than is our current practice.  
• “Discussion” language is out-of-date/obsolete and conflicts with Cascade messaging. | **Conservation Efficient Water Use**<br>The Utility will partner with regional suppliers to actively promote voluntary conservation and the wise and efficient use of water. The Utility will implement a conservation program consistent with the requirements of the Washington State Department of Health water use efficiency requirements, and intended to achieve will cooperate with the conservation goals established cooperatively with regional water suppliers.  
**Discussion Text:**<br>WAC 246-290-810 requires water utilities to establish water use efficiency programs. Water use efficiency benefits the Utility’s ratepayers by potentially reducing future capital needs and by preserving water supplies for future economic growth. The efficient and wise use of water extends and makes the best use of existing water supplies before developing new sources.  
It is cost-efficient and effective to work cooperatively with the regional water supplier to develop common goals that meet DOH water use efficiency requirements. The Utility will support programs that help Bellevue achieve those goals. |
<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
</table>
| Reclaimed Water Use | - Current policy talks about Cascade, which doesn’t supply reclaimed water.  
- Be consistent with City’s Comprehensive Plan policies, which generally encourage emerging technologies. |  
**Reclaimed Water Use**  
Bellevue will consider supporting the use of regional supplier’s study of reclaimed water where there is a demand for it, and where it provides an appropriate and cost effective alternative to Bellevue’s potable water supply. Use opportunities will work with the Cascade Water Alliance and/or the regional supplier and others to identify potential reclaimed water demand.  
**Discussion Text:**  
Cascade Water Alliance evaluated the potential sources and users of reclaimed water as part of its Transmission and Supply Plan. This evaluation identified King County’s Brightwater Treatment Plant and South Treatment Plant as potential suppliers, and several large irrigation systems as potential customers. The cost of reclaimed water distribution piping was identified as the primary obstacle to reclaimed water use. Bellevue will continue to consider regional efforts to develop reclaimed water supplies, where appropriate.  
Emerging technologies such as on-site water recycling and zero discharge facilities are not precluded or discouraged by this policy. Such facilities operating independently from Bellevue’s water and/or sewer systems may be subject to the jurisdiction of plumbing codes, King County Public Health Department, and/or the Washington State Department of Health. |
| Water Shortage Response | - Identify that water shortage response is part of broader Emergency Response plan.  
- Add language about response being consistent with other regional purveyors in the discussion |  
**Water Shortage Response**  
The Utility will maintain, prepare and update a local response plan for the case of a water supply shortage caused by a drought or supply interruption as part of its Emergency Management Plan for emergency preparedness. The Plan will be consistent with other regional purveyor’s planned response, and with response plans or contractual agreements. The Plan’s objectives will include ensuring that, to the extent possible, Utility will take action as necessary to ensure that the essential needs of its customers are met, and that available supplies are equitably distributed to all affected customers within a customer class, as well as other purveyors on the supply system.  
**Discussion Text:**  
Bellevue’s supply agreement with the Cascade Water Alliance includes provisions for users of the regional water supply system to respond to water shortages caused by unforeseen events in a manner that ensures water is available for essential uses. Cascade and SPU work cooperatively to develop a water shortage response plan that coordinates regional response among Cascade members.  
Emergencies can occur that disrupt service to localized areas of Bellevue’s service area. For such events, the Utility will notify the City Manager of the emergency and provide a recommended plan of action. The City Manager is empowered to take the necessary steps to ensure, to the extent possible, that essential uses are met. |
<table>
<thead>
<tr>
<th>2006 Water System Plan Policy</th>
<th>Reason for Proposed Changes</th>
<th>Proposed Policy Language and Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New</strong> Water Rights for Supply Redundancy</td>
<td>Policies, Codes and existing water system plan do not mention the City's extensive water rights. Policy should acknowledge the City's water rights and propose optimizing their use, consistent with existing regional supply agreements.</td>
<td><strong>Water Rights</strong>&lt;br&gt; The Utility should optimize use of existing water rights when it is in the best interest of rate payers and consistent with existing water supply agreements. Water rights should be used to provide resiliency in the event of a water supply emergency. <strong>Discussion Text:</strong>&lt;br&gt;The Utility holds water rights that were issued to King County Water Districts No. 68, No. 97, and other former districts that are now part of the Utility. These assets should be used if shown to be beneficial to Utility rate payers. The Utility should evaluate the potential costs, risks and benefits associated with the use of existing water rights to provide an independent, continuous water supply during a catastrophic event. Such use might reduce the volume of emergency water storage. These water rights and associated infrastructure should be developed, maintained, and incorporated into emergency planning, if appropriate and cost effective.</td>
</tr>
</tbody>
</table>