

**CITY OF BELLEVUE
ENVIRONMENTAL SERVICES COMMISSION
MEETING MINUTES**

Thursday
September 7, 2017
6:30 p.m.

Conference Room 1E-113
Bellevue City Hall
Bellevue, Washington

COMMISSIONERS PRESENT: Sanjay Kumar (Vice Chair), Anne Howe, Vanja Knezevic, Aaron Morin, Lisa Schreiner, Gregg Takamura,

COMMISSIONERS ABSENT: Diann Strom (Chair)

OTHERS PRESENT: Andrew Lee, Deputy Director; Doug Lane, P.E., Senior Engineer

MINUTES TAKER: Laurie Hugdahl

1. CALL TO ORDER:

The meeting was called to order by Vice Chair Kumar at 6:30 p.m.

2. APPROVAL OF AGENDA

Motion made by Commissioner Morin, seconded by Commissioner Takamura, to approve the agenda as presented. Motion passed unanimously (6-0).

3. ORAL COMMUNICATIONS

4. APPROVAL OF MINUTES

July 6, 2017 Regular Meeting Minutes

Motion made by Howe, seconded by Commissioner Knezevic, approve the minutes as presented. Motion passed unanimously (6-0).

5. REPORTS AND SUMMARIES

Deputy Director Lee reviewed these items.

- ESC Calendar/Council Calendar

Deputy Director Lee distributed and discussed a revised ESC calendar.

Commissioner Howe asked why the City was rejecting bids for the storm pond refit. Deputy Director Lee indicated he would look into it and follow up.

- Conservation & Outreach Events & Volunteer Opportunities

6. NEW BUSINESS

- Water System Plan Implementation
Presenter: Doug Lane, P.E. – Senior Engineer

Deputy Director Lee stated that the ESC would be having an update on each of the system plans this year including the Water System Plan, the Wastewater System Plan, and the Storm and Surface Water Plan. This is the first one.

Doug Lane made a PowerPoint presentation regarding the implementation of the Water System Plan. He explained that the purpose of the Plan was to collect an inventory of assets, document policies, evaluate the system, provide a basis for capital improvements, fulfill legal requirements, and demonstrate conformance with the Growth Management Act for water system planning. The Non-CIP recommendations include engineering evaluations (chlorine residuals, backup power, seismic vulnerabilities, and emergency wells/water rights); implementation of AMI, and expanding the Asset Management Program. The CIP recommendations include adding inlet capacity; adding access to storage; replacing West Lake Sammamish Parkway water main; fire flow and pressure improvements; and continuing ongoing rehabilitation programs. Deputy Director Lee discussed a study the City had done a couple years ago with sound waves to determine the condition of the pipes.

Commissioner Morin referred to adding inlet capacity and asked if the City would be adding valves and inlet points or finding more water that could be available for growth. Mr. Lane indicated that it refers to the capacity to pull water from the regional pipes via valves and inlet connections. The water supply issue is the responsibility of Cascade Water Alliance. Commissioner Morin asked how far away the City could draw water from. Mr. Lane explained that is a topic the Water Supply Board is currently looking at as far as regional interties. There is some limited ability to move water from Alderwood Water District and the northern end of Seattle. At one time there was discussion with Tacoma about bringing water from Tacoma through Issaquah and tying Bellevue in with Issaquah. Deputy Director Lee commented that there are three major systems (Everett, Seattle, and Tacoma). Between those three there are some ways to move water, but it is very marginal. Large interties between the systems have not been constructed. This is continually under evaluation.

Mr. Lane then reviewed the demand projections. The 2015-2016 total demands were stable compared to 2010-2014, despite growth. The data confirms that new buildings use less water. Regarding low chlorine evaluations, the City conducted an evaluation of Cougar Mountain and tested operational adjustments. The Horizon View area may need a similar solution.

Another recommendation of the Water System Plan was to review the City's backup power supplies. He explained that there is a lack of redundancy to the Somerset and Cougar Mountain areas in the event of an extended power outage. A generator was added at Horizon View 1 Pump Station. A future generator will be added at Parkside Pump Station.

Commissioner Howe asked how many portable generators the City has. Mr. Lane replied that there are two or three, but one of them belongs to the Parks Department, and Utilities leases it. In an emergency event the two departments will share the generators. Who gets to use the generator depends on where the need is.

The Seismic Vulnerability Assessment will look at what could happen in an earthquake and what can or should the City do to prepare. The City has done early scoping work, developed a draft Scope of Work, and has a Request for Qualifications out right now. The hope is to have a team in place at the beginning of next year. The scope includes establishing level of service goals (restoration time, etc.), simulating seismic performance and customer impacts, and recommending improvements to meet goals. The City is participating with the Central Puget Sound Water Supply Forum to look at the risks to the water supply.

The wells study has some overlap with the seismic evaluation. The Council has agreed that the City should look at water rights so a Water Rights Master Plan (WRMP) will be proposed by staff. Current work includes meeting with critical customers, assessing needs and opportunities, evaluating well costs and requirements, and developing the WRMP for ESC/Council adoption. Future work includes additional emergency-only water rights application and a siting study if the WRMP recommends new wells.

Commissioner Takamura asked Commissioner Howe what drove the development of the well in Mercer Island. Commissioner Howe replied that it was in preparation for emergencies. She noted that it is ground water, not potable water, and only for an emergency situation.

Deputy Director Lee pointed out that Tacoma recently did an elaborate seismic resiliency study a couple years ago. Their water source is miles away, so one of their top recommendations was to make sure that their own in-town wells are improved so that they are readily available in case of a seismic

event. Pipelines are likely to be broken in a seismic event, but in-town wells are right there. Bellevue is in a similar situation.

Consultant evaluation of the City's Asset Management Program was conducted. A new "road map" was developed. Strategic Asset Management Plans are being created for 31 types of assets in order to move from a reactive approach to a proactive approach for replacement of items such as check valves, air vacuum and air release valves, and telemetry equipment.

Inlet capacity was evaluated to accommodate growth. The analysis confirms additional capacity is needed to serve Downtown and Bel-Red. An alternatives evaluation is being conducted right now, and the consultant team is considering either NE 8th or NE 20th just west of 140th Avenue for a new inlet station. The City wants to have it online by 2020.

The Water System Plan reiterated that there was a previously identified storage deficit. The project to improve transmission capacity to address the storage deficit in the west operating area is underway. The sites for the pipeline have been identified with the biggest one being on NE 8th. This East-West Transmission project will make excess storage available in 2018. The Clyde Hill project has been completed and will provide access to dead storage. The Water System Plan identified that after 2030 the City may need to add some additional storage. The Eastgate re-zone may accelerate the timetable for more storage.

Regarding fire flow, the City has had an ongoing program for decades to improve fire flow. The biggest deficit was in the Sammamish/270 pressure zone along the edge of Lake Sammamish. A PRV (Pressure Reducing Valve) station was installed which will allow pressure increase after the watermain along West Lake Sammamish Parkway is replaced. This addresses the largest fire flow deficiency in the system. The City is evaluating alternatives to address fire flow deficiencies in Newport Hills which is the second largest deficiency.

The Water System Plan also addressed low pressure issues. Per city policy pressure should be greater than 30 psi. The new PRV with operational changes addresses the largest issue which is in the Issaquah South Cove area. The public main at 170th Avenue would still be below 30 psi. The City is evaluating other options now to provide the standard of service to all locations.

Mr. Lane summarized the 2016 CIP Progress. 4.2 miles of main were replaced; Horizon View 1 Reservoir was replaced; Horizon View Pump Station was replaced; Horizon View 3 Pump Station was rehabilitated; Richards Road Inlet Station was replaced; Issaquah South Cove meter station

was installed; and 3 PRV stations were replaced.

Mr. Lane then presented the 2017-2020 Look Ahead. The City plans to continue replacing five miles of water main per year. The West Lake Sammamish water main replacement may happen next year; the City is coordinating with the Transportation Department which is doing work in that area. Other upcoming projects include: the Horizon View 2 Reservoir & Pump Station; Pikes Peak Reservoir and Pump Station; Cherry Crest Pump Station; and Enatai Inlet Station.

Commissioner Takamura asked if a map of the water system is available online. Mr. Lane replied that it is contained in the Water System Plan which is available online.

The Commission thanked Mr. Lane for the presentation.

7. COMMISSION REPORT

None

8. DIRECTOR'S OFFICE REPORT

Deputy Director Lee reported that the City received nine different AMI proposals. Seven were for the core AMI system, and two were for the customer portal side. The City shortlisted down to three vendors and brought them in for interviews and demonstrations. The City has asked one vendor to provide a Best and Final Offer. He discussed highlights of the preferred vendor.

As far as the water supply, the reservoir levels still look good, but dropped. Water usage is still below what was used in 2016. Everyone is hoping for some rain.

9. CONTINUED ORAL COMMUNICATIONS

None

10. ADJOURNMENT

Motion made by Vice Chair Kumar, seconded by Commissioner Knezevic, to adjourn the meeting at 8:04 p.m. Motion passed unanimously (6-0).

The meeting was adjourned at 8:04 p.m.