Meeting Summary

Welcome: Mami Hara, General Manager/CEO of Seattle Public Utilities (SPU), welcomed those in attendance and thanked them for their time. Mami thanked Panel Chair, Noel Miller, for attending the 2-day staff retreat on January 23 – 24, 2020.

Standing Items: Karen Reed, Facilitator, reviewed the updated Roadmap for completing the strategic plan update. She noted a template in the Panel binders that members may want to use to make notes over the next couple of months as they prepare to draft the Panel’s letter commenting on the strategic plan.

Several corrections were made to the draft meeting summary for 1/13/20. The meeting summary for January 13, 2020 was approved as amended.

Natasha Papsoueva, Corporate Performance, provided the Panel with an update on the Action Plans (AP) from the 2015-2020 Strategic Business Plan. A spreadsheet summarizing each Action Plan can be found in the front pocket of the binders. In summary, out of the 32 APs:

- 6 have been completed
- 4 are in the current SBP
- 22 are closed and are now part of SPUs baseline work
Q: Is SPU going to increase the level of service around street sweeping? A: Yes. **We will provide written information about current targets, how the targets have increased over the past few years and what the targets will be going forward.**

Q: What is the difference between performance management and data? A: The main difference between 2015-2020 Action Plans for HR Data and Performance management and Employee Performance Management is that the former was centered around data, systems and technology tools such as software to conduct comprehensive skill assessment and competency inventory, employee performance management, training, succession and workforce planning. The latter called for designing an effective methodology for managing employee performance.

**Community Outreach Update & Discussion:** Vanessa Lund with Cocker Fennessy provided the Panel with an update on the outreach business interviews. Nineteen confidential interviews were conducted by Cocker Fennessy with business representatives.

Participants represented the areas below:
- Business/trade associations
- Business Improvement Associations
- Real estate/development
- Property management
- Nonprofit affordable housing
- Housing agencies
- Rental housing
- Small restaurants
- Mid-sized groceries
- Large chain/food and beverage
- Energy & facility services
- Manufacturing
- Hospitals
- Universities

The high-level key findings are:
- Positive reaction to SBP outreach/engagement
- SPU is viewed as a valued service provider
- Most appreciative of quality drinking water
- Value SPUs longer-term view, but don’t understand it
- Want SPU to focus on sustaining/enhancing service delivery
- Identified potential business/community engagement improvements

Cocker Fennessy found they had to do a lot of educating about who is SPU and what is the SBP. Other feedback provided was that SPU can’t just show up and expect businesses to participate in surveys/feedback sessions. SPU needs to get to know and understand the businesses first. Overall, people were positive and appreciate SPU services, particularly if they knew a contact person at SPU. Newer customers who have yet to make a contact were less satisfied.
Q: How many Business Improvement Associations (BIA) are there? A: We will get back to the Panel with a list of BIAs in Seattle. (NOTE: Panel members were sent an email on 2/11/20 with this information.)

Q: It was mentioned that participants were paranoid about identifying themselves. Why? A: They did not want to compromise relationships they have built with SPU staff.

Q: Were some of the businesses big names that we would know? Was the sample representative of all types of businesses in Seattle? A: Yes, some participants would be recognizable. We interviewed mom and pop businesses as well as fortune 100 companies.

Comment: Businesses have a lot more contact with SPU than the average customer. I bet they talked about rates under cost management. A: Yes, they did, but they weren’t as aggressive as expected. They want predictability of rates.

Vanessa provided an update on the 5 Questions survey of customers. 263 responses have been received, 195 from the community. It would be premature to report findings at this time. We will come back with more information at a later meeting.

Dani Purnell, Corporate Policy and Government Relations Director, reviewed a one-page summary of the 5 Questions survey feedback responses from Community Advisory Committee members. This information was made available this morning (Friday, day of meeting) so the document was not included in the briefing material that was emailed to the Panel in advance. Data for questions 1,2 and 3 includes 15 responders. Questions 4 and 5 had 5 responders. Key findings are below.

**Question 1 – Satisfaction with Services (5 highly satisfied; 1 highly dissatisfied)**

a. Drinking Water = 12 rated 5; 2 rated 4 = **avg 4.85**
b. Garbage = 5 rated 5; 5 rated 4; 5 rated 3 = **avg 4.0**
c. Sewer = 2 rated 5; 6 rated 4; 6 rated 3; 1 rated 2 = **avg 3.6**
d. Drainage = 6 rated 4; 6 rated 3; 3 rated 2 = **avg 3.2**

**Question 2 – Overall Cost and Value of Service (5 highly satisfied; 1 highly dissatisfied)**

3 rated 5; 6 rated 4; 4 rated 3; 2 rated 2 = **avg 3.6**

**Question 3 – Areas for Improvement in the next 5 years (up to 3 votes)**

a. Customer service and community engagement = **4 votes**
b. Communications and information sharing = **2 votes**
c. Rate affordability (cost of utility services) = **9 votes**
d. Aging infrastructure (pipes, pump stations, facilities, etc.) = **10 votes**
e. Service equity (fairness in how service is provided) = **11 votes**
f. Water conservation and rainwater capture = **3 votes**
g. Water quality (drinking water and surface water) = **1 vote**
h. Waste, plastics and toxics reduction = 7 votes
i. Other (please specify) = restoration of creeks/waterways missing

Completion of 1/13/20 “5 Question Discussion” by Panel: In order to get through the rest of the agenda, this topic will be covered at another meeting.

Report Out – Shaping the Future of SPU: Panel Chair Noel Miller was invited to attend a 2-day workshop along with about 100 SPU staff on January 23 and 24. The purpose of the workshop was for SPU staff to review and update the current mission/vision/values statements and plan for the future of the Utility. Noel reported that the workshop provided an opportunity for the SPU management team to interact with each other, as many members are relatively new to the organization. The time spent was valuable to establish the direction for SPU and to get buy-in from the participants for the 6-year and longer-range perspectives. Dani Purnell told the Panel SPU is looking to develop a 10-year and a 25-year vision. This will be presented to at a later meeting. At the 2-day workshop, attendees discussed the following issues:

- Mission – What are we doing, why and who is it for?
- Values – looked at what is driving our decision making. SPU wants to make sure we are living those values and use them in decision making.
- Culture – SPU is building work culture and building our leadership and evaluating our future challenges.

Cocker Fennessy is putting together the information gathered. **We will bring back SWOC discussion insights to the Panel in March.**

Andrew Lee, Deputy Director for Drainage and Wastewater Line of Business, gave a brief description of a concept discussed at the 2-day retreat: “VUCA” (Volatility, Uncertainty, Complexity, Ambiguity). These elements present the environmental and social context in which organizations are beginning to experience accelerating problems and changes. The term was originally used by the Army post-cold war when many issues (such as who is the enemy) were confusing. SPU’s Shaping the Future session discussed ways to successfully contend with a VUCA world by developing vision, understanding, clarity and agility.

**VUCA**

- Volatility --> Vision
- Uncertainty -->Understanding
- Complexity --> Clarity
- Ambiguity -->Agility

Climate Change Initiatives: SPU staff from across all SPU Lines of Business presented to the Panel on climate change. Ann Grodnik-Nagle, Climate Policy Advisor, introduced the topic and the team. James Rufo-Hill, Climate Science Advisor, began the presentation. Climate change is a community priority, a customer priority and an employee priority. Globally and locally, climate change is a social justice issue and a community priority affecting all SPU lines of business. 2019 was a strange year – surprise snow in February, a warm-dry spring and not a single 90-degree day during the summer. Because the temperatures didn’t drop that much at night, it was a much warmer year than normal, even without extreme heat. Because of climate
change, SPU is operating differently. We are filling reservoirs earlier, cleaning inlets and pipes well before storms, collaborating with researchers and peers and changing metrics.

Ann Grodnik-Nagle discussed climate mitigation versus adaptation. Mitigation is reducing greenhouse gases in an attempt to minimize changes to the climate. Solid Waste, Fleets and Facilities are areas of SPU that focus on mitigation. Adaptation is making adjustments to systems based on actual or expected climate change. Adaptation involves technical and cultural changes and policy and political adaptations. Water Supply Operations, Watershed Management and Drainage and Wastewater are SPU areas on the mitigation side. Ann spoke to the work of Project Drawdown, a nonprofit organization and coalition of scholars, scientists, entrepreneurs, and advocates from across the globe that is mapping, measuring, modeling, and communicating about a collective array of solutions to global warming, with the goal of reaching “drawdown.” Drawdown is the point in time when the concentration of greenhouse gases in the atmosphere begins to decline on a year-to-year basis. Project Drawdown has put together a list of the top 80 potential solutions to climate change. Fourteen of these solutions fall with SPUs lines of business. Surveys of SPU customers show that 79% believe climate change is happening, and that while it is a top concern of business customers, they have no knowledge of SPUs efforts in this area.

Katie Kennedy, Waste Diversion Lead for Solid Waste (SW) Line of Business presented what SW is doing to reduce greenhouse gas (GHG) emissions. SW falls on the mitigation side of climate change work. Waste represents 2% of GHG emissions. The greatest opportunity for GHG reduction for Solid Waste is reduction in materials management and building HVAC and lighting. SW is focusing on waste prevention—buying less and reusing materials, not just recycling. Areas of current work include:

- reducing food waste
- working with restaurants to use more durables
- banning plastic bags in favor of reusable bags
- reducing plastic packaging
- recycling of building salvage

Francine Johnson, SPU Green Fleet Program Advisor, talked about additional ways SPU is working to reduce GHG emissions. The city has a goal to reduce GHG emissions from its vehicle fleets by 50% by 2025. SPU has responded by electrifying 68 of our vehicles (10% of our fleet). In support of the SBP Green Fleet Action Plan, SPU has installed 59 charging stations across 6 facilities, implemented operational changes such as fleet right-sizing and an anti-idling policy, and using new pilot programs to test emerging technology.

On the facilities side, the City established an energy benchmarking program in 2016 to track the energy from larger buildings. In addition, there is an initiative for building tune-ups to track energy performance information and help inform building improvement decisions. SPU is currently tracking nine facilities and has completed a tune-up at the Operations Control Center. In January 2020, the Mayor issued the Green New Deal executive order, which states that all new or majorly renovated buildings will be electrified and all others will have an electrification strategy in place by 2021. SPU is in the process of developing an electrification strategy for planned and existing buildings.
Amy LaBarge, Watershed Management Division Director with Water Line of Business (LOB), discussed how the watershed is adapting to climate change. The watershed is experiencing longer, drier seasons, which increases the potential for wildfires. It is also experiencing more extreme rainfall events, which impact aquatic systems and the roads. A climate change analysis on watershed vulnerability has been completed. Recommended adaptation strategies include increasing tree species diversity and improve stream crossings. A wildfire risk assessment is underway to assess water quality impacts of wildfires in the watershed and to develop post-fire response strategies.

Paul Faulds, Water Resource Manager in the Water LOB, continued the presentation. Climate change intersects everything SPU does in the Water LOB. The watersheds will soon be dominated by rain rather than snow melt. Summers with longer droughts will increase customers demand for water. Water supply issues are not only for people, but for fish as well.

The Water LOB is doing their third round of climate change planning since 2000. Previous analysis used a small number of global climate models to generate scenarios. There was uncertainty in some of the results. Currently the Water LOB is using more climate models in the latest analysis. SPU found this did not improve precision. Planning efforts are focusing on key drivers, such as lower snowpack and more precipitation in our watersheds that is falling as rain.

Further action plans to respond to these challenges include:
- Completing adaptation planning with strategies and options to improve resiliency.
- Prioritizing lower cost options that are easier to implement and resolve constraints now.
- Identifying triggers that might move SPU towards more costly water supply alternatives.
  (Severity and frequency of summer and/or snowpack droughts and frequency of large flood events)

Annalise McDaniel, Drainage and Wastewater (DWW) Planner, discussed climate change impacts on the DWW LOB. Climate change impacts on SPU drainage systems include:
- More intense and more frequent storms. This impacts our community and our crews.
- Past not predicting the future.
- Changing shoreline due to the impacts of King tides.

DWW is focusing efforts in three general categories:
- Technical solutions to climate change. The Ship Canal Water Quality Improvement Project is an example of where climate change assumptions have been incorporated into the project design. After additional modeling analysis was completed that accounted for future changes in precipitation, the diameter of the tunnel was increased.
- Political and policy efforts. This includes working with regulators.
- Cultural approaches. This doesn’t get talked about often but it has the most potential. These are long term efforts. An example is accepting water in ways we haven’t done.
before such as incorporating floodable spaces into how we manage stormwater from large events.

Ann Grodnik-Nagle then discussed partnerships. SPU is not doing this work alone. We are working with partners from other governments, philanthropic organizations, UW and technical colleges and the private sector. Last June, 40 Grantmakers toured SPU drainage and wastewater infrastructure as well as projects in Park, the Department of Neighborhoods, the Office of Planning and Community Development and the Office of Sustainability and Environment.

Q: It was mentioned that there are larger logs upstream of dams that can cause problems. Why are the logs larger upstream? A: We are not actively harvesting timber so we now have much larger trees.

Q: Do you have any planned burns in the watershed? A: No

Q: Have you looked at hospitals and their waste? Where does hospital waste stream go? A: I don’t think we are working specifically in this area right now, but the UW does have some good studies on this issue. (NOTE: Panel was provided additional information on this subject in an email sent 2/3/20.)

Q: How much does it cost to do electrification of all facilities? Will this fall into the category of an unfunded mandate? I’m wondering if this will be a productive exercise. A: We don’t know yet how much it will cost.

Water Line of Business – Service, Issues and Options: Alex Chen, Division Director for Water Planning and Program Management, presented. Alex began with an overview of several areas that have previously come before the Panel.

Q: What are the extra resources (year-end operating cash) due to? A: Hot, dry summer and legal revenues/settlements. Deferred projects also factor in.

Alex reviewed three Action Plans from the 2018-2023.

Action Plan #2: Fund Opportunity Infrastructure Work that Supports Transportation Projects
This Action Plan (AP) and funding will continue for the 2021-2026 Strategic Business Plan (SBP). SPU anticipates that opportunity projects will continue to occur in the next 6 years. Those projects that were delayed by SDOT in 2017 (Madison Bus Rapid Transit and East Marginal Way Heavy Haul Corridor) are anticipated to occur in the next 3 – 6 years. CIP funding associated with these projects will still be needed.

Action Plan #3: Expand Maintenance of the Water Distribution System
This AP and funding will continue for the 2021-2026 SBP. SPU’s goal is to hire the 4 FTEs in 2020, with their major focus on reducing the maintenance backlog through 2020-2023 and track their efforts over time to better understand the staffing needs over a longer term.
**Action Plan #4: Expand Water Modeling**

This AP will be closed out. The staff person has been hired; the work is part of the baseline.

Alex discussed three new proposed strategic priorities for the Water LOB in 2021-2026.

1. **Asset Management/Aging Infrastructure**
   
   This priority examines the Water LOB’s current and future approach to sustainable long-term asset management. The key question for the Panel to consider is “are assets being managed in a long-term, sustainable way?” This initiative involves new funding, and that will be quantified at a later date. Alex presented a graph showing the total CIP needs for Water LOB for the next 20 years and reviewed charts summarizing the approximate state of all asset classes for which the Water LOB is responsible.

   *Discrete assets* are generally in good condition, but with 3 challenged items:
   
   - Cascades Dam is a water quality/seismic driven capital project that will be vetted in the near future.
   - Facilities (building) asset management is being discussed separately with the Panel.
   - Steel water tanks and standpipes have fallen behind on their re-coating schedule, so additional re-coating work is anticipated in the next 6 years.

   For *Distributed Assets*, areas of concern include:
   
   - **Distribution pipes** are shown as an example of how asset management approaches are applied to asset classes that cannot be inspected easily, so their condition is not well known.
   - **Water utilidors** are underground tunnels carrying water pipes. They still need to be cataloged and an asset management plan written about them.
   - **Water meters** have a testing and calibration program that is currently being monitored and evaluated for improvements, such as better targeted efforts with available staff resources.
   - **Water valves and hydrants** are described separately, as an SBP Action Plan (deferred maintenance).

   Alex presented a graph showing SPU’s data for indirect indicators of watermain condition, watermain failure rates and water system leakage rates. SPU remains better than the benchmark in both categories. In terms of replacement rate, Alex showed a graph which projects watermain replacement rates for the next 150+ years, making assumptions about remaining useful life of different types of pipe materials. The graph also shows the waterpipe replacement rate forecast is around 2 miles per year currently, ramping up to 15 miles per year about 100 years from now. From an asset management standpoint, the best practice is to plan for pipe replacement now, using best information, and combine short-term replacement plans with trends of watermain failure and leakage data, to adjust long-term replacement plans as time goes by. The current plan is to ramp up from the current goal of 1 mile/year to 2 miles per year in the next 6 years. The 6-year combined CIP forecast already includes our best strategic thinking about which assets should be replaced in the next 6 years. In the next 3 years, we will continue to monitor asset condition and criticality, and will make adjustments in the next 6-year CIP. At this point, we are anticipating that the current projection will stay as is.
Q: Do the pipes have geographic issues? A: Yes.

Q: Regarding sea-level rise, are we spending money replacing pipes if we aren’t going to be able to live in certain areas any longer? A: There is relatively little drinking water infrastructure in the area of forecasted sea level rise. The same is true for Drainage and Wastewater infrastructure.

Q: Is the bubble 100 years out (Replacement & Renewal Strategy – Long Term graph) desirable? A: No, you want it to be flatter to keep costs down.

Q: Repairing failures is more expensive than proactively managing. Is there a goal of how much to do? A: We have a goal of ramping up proactive water pipe replacement/rehabilitation, from current 1 mile/year to 2 miles/year, within the 6-year window. Our goal may be adjusted based on the data we’re seeing as we continue to look at watermain failure rates and system leakage data.

Karen asked for the Panel’s overall thoughts on this new priority. Everyone gave a thumbs up, with one person giving it a so-so.

2. **Seismic Resilience Planning**
   This priority area focuses on the Water LOBs implementation of a recently completed seismic study. The study made prioritized recommendations over the next 50 years, broken into short-term and long-term measures. In the next six years, short-term recommendations will be completed: Enhance emergency preparedness and response planning; Develop/implement isolation and control strategies. Long-term recommendations (next 50+ years) for capital upgrades will be initiated, with focus on the highest-priority items:
   - Upgrade vulnerable critical facilities and transmission pipeline
   - Installing earthquake resistant pipe

   Capital planning recommendations are between $15 - $20 million per year for the next 50+ years. SPU anticipates spending over the next 6 years to be $58.6 million. The 6-year CIP projections represent planning-level estimates that will be refined heavily after a detailed options analysis is completed for each project.

   Comment: It’s not a commitment to do this in 50 years. The question is, is it sensible for the next 5 – 10 years.

   Q: What has been the response from the wholesale group? A: Generally good.

   Karen asked for Panel to give thumbs up or down. Panel all gave a thumbs up.

3. **Climate Change.**
   This priority area focuses on the Water LOBs analysis of potential impacts associated with climate change. The two impacted areas include: water supply and watersheds. In the next six years, studies will be completed that assess potential impacts of climate change on water supply and on watersheds, as well as recommendations for potential adaptation strategies.
The Water LOB has studied climate change impacts on water supply for almost 20 years. Potential impacts of climate change on water supply include:

- Lower snowpack in the winter and spring, making refill of reservoirs for the summer more difficult.
- Hotter and drier summers, meaning that reservoir drawdown in the summer would be longer and faster.
- Wetter winters, meaning that flood management and reservoir refill could be more challenging.

The Water LOB is in the middle of a third round of climate change analysis, using additional global climate models and computer processing tools. This analysis will be complete in the next 1-2 years. Early indications are that use of multiple models may entail a wider spread of future potential impacts. The analysis will include what options SPU has for adapting to climate change impacts, as well as the cost and the value for each option.

A mitigating factor in this analysis is that at the current time, water consumption is around 130 million gallons per day (MGD). They system can currently provide 172 MGD. This gap between available supply and the lower amount of demand is attributed to people using less water per person due to conservation efforts.

SPU has completed a watershed vulnerability study and recommended adaptation strategies to increase resilience in forests and streams and road crossings. A wildfire risk assessment is currently being conducted. At this point, the focus is on using existing staff and O&M resources to conduct these studies. SPU is not anticipating that these studies will result in significant CIP recommendations in the next 3 to 6 years.

Comment: It’s dramatic how needs (water use) decreased with interventions. I’m curious as to if usage can be further decreased by educating new customer who have not heard about conservation.

Karen asked for the thumbs up or down from the Panel. All Panel members gave a thumbs up.

The next meeting will be Friday, February 14. Meeting was adjourned a few minutes after 4 pm.