



**Combined Meeting of Water System Advisory Committee (WSAC)  
And Creeks, Drainage, and Wastewater Advisory Committee (CDWAC)**

**May 20, 2015 Meeting Notes**

**Seattle Municipal Tower, 700 Fifth Avenue**

**Room 5965**

**5:30 pm – 7:30 pm**

Committee Members & CAC Staff	Present?	SPU Staff & Guests	Role
<b>WSAC</b>		Mark Jaeger	SPU Interagency Coordination
Tom Grant	Y	Rachel Garrett	SPU Communications
Jessy Hardy	N	Alex Chen	SPU Water Planning & Program Management
Chelsea Jefferson	Y		SPU, Drinking Water Quality
Kelly McCaffrey	Y	Julie Crittenden	SPU, Drainage & Wastewater
Kyle Stetler	Y	Matt MacDonald	Guest
Chris Thompson	N	Mario Bolden	Guest
		Evan Osborne	Guest
<b>CDWAC</b>		Joshua Bennet	Guest
Kendra Aguilar	N	Chelsea	Guest
Jeremy Andrews	N		
Marilyn Baylor	Y		
Suzie Burke	Y		
C’Ardiss Gardner Gleser	Y		
Schylar Hect	N		
Kaifu Lam	N		
Seth McKinney	Y		
Noel Miller	Y		
Devin O’Reilly	Y		
Heidi Fischer, CAC Program Support	Y		
Julie Burman, WSAC Policy Liaison	Y		
Sheryl Shapiro, CDWAC Policy Liaison and CAC Program Manager	Y		

### **Action Items:**

- ✓ Julie Burman, the WSAC Policy Liaison, noted that she would follow up with Noel (Co-Chair of CDWAC) about writing a letter to the Seattle Times in response to their story about Seattle water rates after she had met with SPU communications staff.
- ✓ Committee Members can email Rachel with additional input about outreach for the Ship Canal CSO Project.
- ✓ Committee Members should let Sheryl know if they are interested in participating in the Mayor's Seattle at Work outreach program.
- ✓ Heidi will send a reminder to Committee Member calendars about the combined CDWAC and WSAC meeting on June 10.

### **Regular Business**

- Committee Members, SPU staff, and guests introduced themselves.
- CDWAC/WSAC April meeting notes are approved.

### **Emerging Media – Context from SPU's Perspective, Alex Chen, Water Planning and Program Management**

#### *Water Supply Update*

- A few water system facts:
  - SPU supplies water to 1.3 million people.
  - The average annual demand is 115 million gallons per day.
  - Demand peaks at 200 million gallons per day in the summer.
  - The source of our water is two protected watersheds – the Cedar River and South Fork Tolt.
    - Wells by the airport provide backup supply.
- Despite the recent statewide drought declaration, Seattle's current water supply outlook is good.
  - Alex referred to a powerpoint slide showing a map of the Seattle water system, including the watersheds, the transmission pipelines, the treatment facilities, and the retail and wholesale customer areas.
  - We filled our reservoirs earlier than usual to make up for the lack of snowpack, and will capture additional spring rainfall runoff as well.
  - The projected water supply is adequate to meet instream flow requirements (for fish) while continuing to meet water supply needs for our customers.
  - Customers should employ their normal conservation measures, using water wisely as always, but not using it differently than any other year.
- Alex referred to a powerpoint slide showing reservoir storage throughout the year.
  - We have three periods in our water cycle.
    - October through March is flood management, when we generally have a lot of rain.
    - March through May is when we generally fill our reservoirs for summer.

- May through September is when we draw down our reservoir storage, meeting peak summer water demand.
    - In October, the rain returns, and we're back in flood management season.
  - The blue line depicts the historical average for reservoir storage. We have much more storage than usual at this point in the season because we brought the system to maximum storage early to make up for low snow pack.
  - Combined reservoir storage is 46.0 billion gallons, about 3.4 billion gallons above the long term average.
  - Current hydrologic modeling indicates that even in a very, very dry year (which is only a 2% probability), Seattle will not reach low reservoir conditions. However, if we reach low reservoir conditions we still have over 10 billion gallons in additional storage.
- SPU has worked closely with Tacoma and Everett, and they also project normal water supply for this year.
- The state drought declaration enables the people who are experiencing economic hardship because of the drought to apply for needed emergency funding.

❖ Question: How is water demand now?

➤ Answer: It's average for this time of year. Water demand for most of the year is stable at around 100 million gallons per day (mgd). In June, July, and August, water demand increases to about 200mgd (because people water their lawns, fill pools, and use sprinklers). Right now it's rising slowly, and is at about 120mgd.

❖ Question: On what was the decision to fill the reservoirs early based?

➤ Answer: It was based on our constant monitoring of rainfall, snowpack, and weather predictions. We made plans early in year based on what we were already seeing and what was forecasted.

❖ Question: The message is clear that our water supply is good, but will this method of refilling the reservoirs early work long term?

➤ Answer: We worked with the Governor's Executive and Legislative Committees and asked us the same question. If we get the return of fall rains every year, we can sustain this pattern over repeated years.

❖ Question: What are the instream flow requirements based on?

➤ Answer: The primary driver is maintaining adequate flows for fish.

❖ Question: Is there anything we need to do this year to prepare for more years like this?

➤ Answer: No. But looking forward, and considering climate change and potential population growth, we expect to need an additional water supply source in approximately 50 years 2060. We are doing another analysis of this situation now and should be able to share it by the end of the year.

- ❖ Question: Do we need to have a plan for the super El Niño weather pattern that is forecasted for next year?
- Answer: The water year resets every fall and winter, essentially starting from ground zero. Predictions continue to show us having more water than we can use during the winter months.
  
- ❖ Question: Could we start banking water earlier if we have a dry spring?
- Answer: Yes, we could do that if needed.
  
- ❖ Question: Is there any concern about too much conservation causing revenues to drop?
- Answer: The message is that we encourage conservation every year. Julie Burman, the WSAC Policy Liaison, added that the distinction is that we always encourage conservation (long term efficiency), but that curtailment (short term actions that may cause hardship for customers) of regular water use might be necessary if water supplies were not normal. Water supply this year is normal, so curtailment is not necessary.
  
- ❖ Question: How much water goes into spillways vs. what's kept in reservoirs?
- Answer: I don't have that information, but we are aware of the need to maintain space for the extra water we get in the fall and winter, to help mitigate flooding.
  
- ❖ Question: In California, the different cities assist each other with water supply. Does Washington have a similar model?
- Answer: We work closely with Tacoma and Everett, but the mountains present a physical barrier that prevents us from coordinating with eastern Washington. Water can't easily be moved around like electricity, which is why William Shatner's recent proposal for us to pipe water to California wouldn't work.

### *Water Rates and Monthly Bills*

- News about how Seattle's water rates compare with other cities has been in the media recently.
  - Circle of Blue does a water rates survey every year, and recently published a comparison that reported Seattle's rates as being one of the highest, at \$310 per month for combined water, sewer, and stormwater.
  - The Seattle Times picked up the story but, using different assumptions, calculated the monthly bill at \$171.48.
  - These calculations both assume that people use the same amount of water, per person, per day.
    - However, the typical SPU usage is about 50 gallons per person per day, which is lower than most utilities, due to conservation programs and plumbing code changes.

- This offsets the need for new water supplies, which is a huge benefit to our ratepayers.
  - Also, rate structures for drinking water and sewer are very different across utilities.
    - Stormwater in particular is treated very differently. Some utilities embed it in sewer rates, some pay for it through other taxes from the city's general fund, and some bill it as a separate utility.
      - In Seattle, it's billed as part of our property taxes.
- Alex referred to a powerpoint chart that depicts typical drinking water consumption and bills for twelve cities across the country.
  - Seattle has one of the lowest household water consumption rates, and a typical water bill that's slightly more than Portland, Columbus, Philadelphia, New York, and Washington DC, and slightly less than Kansas City, San Francisco, Oakland, CA, Birmingham, AL, and a lot less than San Diego.
    - One reason that New York and Portland have lower bills is that they've come into compliance with recent regulations later than Seattle.
  - Based on SPU's average household, we estimate the typical monthly water bill at \$119.04, which breaks down as follows:
    - \$38.93 for water, \$50.91 for sewer, and \$29.20 for drainage
    - Alex checked his own family's bills, and the top two bills were consistent with this average.
    - Alex asked the Committee Members about their SPU water bills.
      - One Member responded that she thought Alex's estimate of the typical SPU water bill was low, and that she and her granddaughter both paid more.
        - Alex noted that water rates per gallon are higher in the summer, and that water and sewer bills come every two months.
      - Alex asked the group for more feedback.
        - One Member responded that Seattle has low per person water consumption, which confuses the average national survey, and that SPU needs to do their best to explain this.
        - Another Member asked whether SPU would be responding to the Seattle Times story.
          - Alex responded that SPU has spoken with the Times about their methodology.
          - One Member said that he would offer support from the Community Advisory Committees in signing on to a letter to the Times.
            - Another Member agreed, and added that it would be illuminating to the Times, pointing out that SPU bills include drainage, and that the

water in Seattle is high quality. The letter could also thank Seattle residents for practicing conservation so effectively. The letter might also note that the average annual rate increase for the next six years is now limited to 4.6%, which is probably lower than the national average.

- ✓ Julie Burman, the WSAC Policy Liaison, noted that she would follow up with Noel (Co-Chair of CDWAC) about writing a letter after she had met with SPU communications staff.

### **Decentralized Green Systems: An Overview and Update on Strategy to Capture Decentralized service Alternatives, Mark Jaeger, SPU Interagency Project Coordination**

- Traditionally, Drinking Water, Storm Water and Wastewater have been collected and moved through large, centralized systems that serve cities and regions.
- In recent years, some agencies have been moving to augment or replace these centralized systems with smaller, decentralized and distributed self-contained models.
  - An example is the Bullitt Center Building in Seattle that uses extremely low-flow, composting toilets, a constructed wetland to treat gray water and infiltrate it nearby, a rain water collection and treatment system as well as a solar array that exceeds the building's energy needs.
  - As part of the Strategic Business Plan, SPU is studying and evaluating how and where these decentralized systems might fit into our overall strategy for delivering utility services now and into the future. SPU is looking at what others have done and are doing as well as doing a bit of its own "out of the box" thinking with our specific local context in mind to identify opportunities that these systems present as well as trying to understand what the cumulative impacts might be.
  - Early decentralized systems were wells, outhouses, and septic systems.
  - Seattle's centralized water system was developed largely in response to the fire of 1889, when there was no water system sufficient to provide enough water to fight the fire.
  - Disease from raw sewage exposure motivated the creation of our wastewater sewer system, and the public's dissatisfaction with polluted lakes led to further improvements to our sewer and water treatment system.
    - In 1960, raw sewage was regularly pumped into Lake Washington, and King County Metro launched a successful campaign to finance and build sewer system improvements that have cleaned the lake and made it safe for swimming.
  - Now, more and more large centralized systems are at or exceeding their capacity.
    - Aging of much of the centralized infrastructure will require significant investment nationwide. Since the public has not been asked to make these

investments recently, we are not used to bearing the expense to realize the benefits.

- Advancements have been made in decentralized system technologies, and there's a growing trend of developers looking at and trying to incorporate decentralized strategies in their projects.
  - The Bullitt Center Building mentioned above has systems that theoretically can function completely disconnected from the centralized system but have little or no back up capability in the event of any system failures except for their connections to SPU's centralized systems.
    - EPA rules prevent them from using their collected and treated rainwater for potable uses (Drinking, cooking, dishwashing, hand washing), so they use it for non-potable purposes (irrigation).
    - They generate all of their own electricity via a solar array and generate more than the buildings needs and are able to sell their excess back into the grid.
- We need to better understand the impacts of decentralized systems, and identify desired outcomes in a number of key areas/lenses like:
  - Health and safety
  - Economics/Costs
  - Regulation
  - Social Equity
  - Environmental Impacts
  - Operation and Maintenance
  - Sustainability
  - Resilience
- We need to try and identify and be aware of potential unintended consequences. We're doing a number of things to help us decide how best to move forward:
  - Research
  - Developing concepts for evaluative methodology
  - Working with stakeholders to develop a shared understanding of the issues
    - We held a larger forum on decentralized systems in March
  - Convening focus group sessions around specific key areas/lenses
  - Creating an analytical methodology
  - And finally, reporting on findings and recommending policies and areas for further research and work
- As we consider how decentralized systems work in Seattle, we also want to consider local contextual factors like climate, topography, population and land use, and existing systems and investments.
  - Seattle has mountain watersheds, and our water requires relatively little treatment. Our gravity fed system of moving water requires relatively little energy.

- A centralized system is necessary for some things, like having water to fight fires, and we need to take advantage of the assets that we already have.
  - In cities, where people live in close proximity, we need to be aware that disease can spread quickly, and have counter measures in place. In rural areas where the population is more spread out, the same measures might not be as necessary.
  - In Seattle, our water issues usually have to do with stormwater and flooding that can cause property damage, sewage backups and landslides(as in the Oso landslide. In the future this could change as the population grows and demand for potable water for potable purposes increases.
  - In considering policies for decentralized systems, we hope to employ whole system thinking, which allows us to see how all of the parts involved interact, rather than how they act separately. We want to balance all of the pieces for overall system optimization.
  - In employing whole systems thinking, we want to view the possibilities through different lenses, including:
    - Regulatory
    - Public health
    - Environmental protection
    - Social equity
    - Sustainability and resiliency
    - Management and operations
    - Economics
- ❖ One Member suggested adding the lens of the user.
- Mark responded that he is hoping to hear from the Committee Members, especially to get their perspective as rate payers.
- Noel, the CDWAC Co-Chair, noted the time and suggested the meeting needed to move on to the next agenda item.
  - Sheryl, the Program Manager, explained that the Decentralized Systems Action Plan and the notes from the March forum are both in each Member’s meeting packet. She suggested that Members read these and let her know in what areas they are interested or have questions, and she would inquire about future participation by members in particular focus groups. She will also set up time in upcoming CAC meetings for discussion.
  - Julie, the WSAC Policy Liaison, added that a field trip to one of these decentralized systems is also an option.

**Ship Canal CSO Project – Guiding Community Outreach, Part 2, Rachel Garrett, SPU Communications**

- SPU presented its Plan to Protect Seattle’s Waterways to the City Council last month. The Council and Mayor approved the Plan, and recommended it to the U.S. Environmental Protection Agency (EPA) and the Washington State Department of Ecology for official approval.

- The Plan’s largest project will be the Ship Canal Water Quality Project, a Combined Sewer Overflow (CSO) project.
  - It combines four separate projects into one project shared with King County.
  - It will be a 2.7 mile underground tunnel between Ballard and Wallingford, and will have more than 15 million gallons of storage capacity.
  - It will prevent an average of 130 sewer overflows each year (more than 50 million gallons on average).
  - Construction will likely begin in 2018.
  - The total project cost will be about \$375 million (a 2015 cost estimate, which does not take into account escalated costs).
- This project has been approved and SPU is beginning a significant public outreach effort. We want to get the word out about why this project is needed: it will prevent more than 50 million gallons of raw sewage and polluted runoff from overflowing into the Ship Canal, Salmon Bay, and Lake Union each year.
- Rachel is here to get more feedback from the Committees on a draft project fact sheet and community survey. She also suggested the Committee Members review the project website at home, and email her any input.
- ❖ Question: Is the funding for this project coming from standard rates, and what is the projected cost?
  - Answer: The cost of this project is included in SPU’s regular rates, and like all planned capital projects, is included in the 4.6% average annual rate increase laid out in SPU’s Strategic Business Plan. SPU is partnering with King County on this project, and SPU will pay 65% of the cost, with King County paying 35%. The cost is estimated at \$375 million in 2015 dollars, and \$420 million in 2025 dollars (when the project will be completed).
- ❖ Comment: The public should be aware that this project is not inexpensive, is included in their rates, and brings significant benefits.
- ❖ Comment: It would be nice to include the path to the treatment plant on the fact sheet’s map, so that it doesn’t appear that the water is remaining stored.
  - Answer: Yes, we’ve had some confusion about that.
- ❖ Comment: Maybe show the pump station on the map.
- ❖ Comment: Maybe just show the street location for the outfalls, rather than including SPU’s numbers for the outfalls.
- ❖ Comment: Provide more detail about the project’s benefits. Give examples about why less pollution in the Ship Canal is good – good for fish, for swimming in the lake, and good for the future. Maybe also express the benefits in a dollar amount.

- ❖ Comment: These neighborhoods will appreciate that SPU is building one facility, which is more efficient than the previously considered four big retention sites.
- ❖ Comment: Maybe include how many times the outfall emptied into the Ship Canal in the past and contrast it to what that number will be after the project is completed.
- ❖ Comment: Give the public an idea of what you will be monitoring, and how you will define success for the project.
- ❖ Comment: Maybe include on the website an underwater video clip of a CSO emptying.
- Answer: We are working on a video to tell the CSO story visually that will likely include footage of an underwater CSO outfall
- ❖ Comment: We owe the people in the project's area more street sweeping, which removes particulates. The whole idea is to stop pollution from going into the Ship Canal, and this is a good incentive to bring street sweeping closer to the water in the industrial areas, and not just on arterials.
- Rachel then gave an update on the stakeholder interviews.
  - The Committees provided some valuable input to the interview plan last month, and the interviews are now moving forward.
  - The stakeholder interviews are our first step, which will be followed with a large community survey, and then more targeted outreach in the specific project area. People will be able to find more information on our website, with more details as we move closer to the design phase.
  - Rachel asked the Committees to take closer look at the list of key stakeholders and let her know if they see an organization and/or people who should be added to the list.
  - She also asked the Committees to review the stakeholder engagement and communications activities list and let her know if they had suggestions for additional outreach strategies. SPU doesn't want to miss anyone, and we don't want to use a one-size-fits-all approach. We want to meet people where they are, and use creative and efficient ways of engaging them.
- ❖ Comment: I've seen some of the interviewees at various community meetings over the past month, and they have all spoken about this project.
- ❖ Comment: Identifying the demographics of each stakeholder organization would be helpful in identifying outreach gaps.
- ❖ Comment: It would also be helpful in identifying areas of overlap.

- Answer: We have focused on people and organizations located in the project area, but also want to hear from people who move through the area, and those who use the space for recreation. We do want to be mindful of overlap.
- ❖ Question: Are Seattle parks involved?
- Answer: Yes, but we are engaging internal stakeholders differently. The project will not impact Gasworks Park. We are also engaging local tribes.
- ❖ Question: Will you be publishing a summary of the stakeholder interview findings?
- Answer: Yes, in some form, likely on the project website.
- Sheryl, the Program Manager, encouraged Committee Members to take more time to look over the outreach documents outside of the meeting.
  - ✓ Committee Members can email Rachel with additional input.

### Presenter Feedback Forms

- The Committees took a few minutes to fill out written feedback forms for Mark and Rachel.

### Around the Table

- Sheryl, the Program Manager, made a few announcements:
  - Next week, officers from each of the three Community Advisory Committees are meeting with Seattle City Councilmember Sally Bagshaw, who chairs the Seattle Public Utilities and Neighborhoods Committee (SPUN). They will have an hour with her, and in the first 30 minutes each chairperson will present highlights of the Committee's work and interests, and the last half will be questions and conversation.
    - If Committee Members have topics they would like highlighted in the meeting, they should contact Sheryl or their Chairs.
  - SPU's Utility Systems Management (USM) Branch Deputy Director, Nancy Ahern, is retiring this Thursday. She has been a champion for the CACs and will be missed! Her departure also marks SPU's move to an organization more aligned around our lines of business (LOB). Rick Scott is the Deputy Director for the Water LOB, the new Deputy Director for the Drainage and Wastewater LOB has recently been hired and will be starting later in June. Her name is Madeline Fong Goddard, and she has 30 years of experience.
  - Many CACs have been interested in outreach, and the Solid Waste Advisory Committee (SWAC) has been working to formalize some ongoing outreach practices, including attending various community meetings, listening, and answering questions. A number of outreach opportunities are coming up this summer, and Sheryl will be sending out a list soon.
  - The Mayor is starting the Seattle at Work program, which will include walking tours and neighborhood events that will happen at libraries or community centers. Department

Directors have been asked to attend, and we could suggest that CACs possibly join in the walking tours, especially for their neighborhood.

✓ Committee Members should let Sheryl know if they are interested.

- One Member reported that she had seen an otter in the lake, close to shore, in Leschi recently, something she had never seen before.
- A guest reported that he had seen lots of sea urchins at the Olympic Sculpture Park beach, which is a good sign. Diversity is continuing to increase at the beach there.
- Another guest reported that a newer test for surface waters was developed in Portland and suggested that it was a good test for water quality over a particular time span, looking at dissolved organic carbon and pesticides.
  - The Program Manager noted that earlier studies indicated that a lot of the pollution found in waterways can be traced to products used at home and on golf courses.
- Another Member noted that there are lots of public geology talks this summer, including one on June 21 about the Duwamish Hill.
- Another Member noted that the Fremont Fair is on June 21 (the Summer Solstice).
- The Program Manager reported that next month we are again planning a combined meeting of WSAC and CDWAC, this time on CDWAC's regular meeting day, June 10.

✓ We will send a reminder to your calendars.

Meeting adjourned, 7:33pm.