



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

**April 13, 2016 Meeting Notes**

**Seattle Municipal Tower, 700 Fifth Avenue**

**Room 4901**

**5:30 pm – 7:30 pm**

Committee Members & CAC Staff	Present?	SPU Staff & Guests	Role
<b>WSAC</b>		Ellen Pepin	Communication Consultant
Tom Grant	Y	Gary Christiansen	SPU FOG Program Coordinator
Chelsea Jefferson	N	Madeline Goddard	SPU Drainage and Wastewater Deputy Director
Melissa Levo	Y	Faon O'Connor	Guest
Kelly McCaffrey	Y	Mariela White	Guest
Teresa Stern	Y	Patrick Weber	Guest
Kyle Stetler	Y	Pau Reed	Guest
Rodney Schauf	Y	Joshua Bennett	Guest
		Eset Alemu	Guest
<b>CDWAC</b>		Greg Cooper	Guest
C'Ardis Gardner Gleser	N	Christina Ciampa	Guest
Schylar Hect	N	Michael Williams	Guest
Patrick Jablonski	Y		
Kaifu Lam	Y		
Seth McKinney	Y		
Noel Miller	Y		
Devin O'Reilly	Y		
Gary Olson	Y		
Evan Osborne	Y		
<b>CAC Staff</b>			
Linda Rogers, CAC Program Support	Y		
Julie Burman, WSAC Policy Liaison	Y		
Sheryl Shapiro, CDWAC Liaison and CAC Program Manager	Y		

## Call To Order 5:35 pm

### Action Items:

- ✓ Follow-up on FOG presentation: Gary Christiansen will provide slide showing difference between residential and commercial impacts of FOG.

#### 1. Regular Business

- Committee Members, SPU staff, and guests introduced themselves.
- CDWAC/WSAC March meeting notes  
Not ready for Committee review; waiting for info back from presenters

#### 2. Clips From King 5's News Stories on Water Quality – Julie Burman

- Julie provided background on clips which were created in partnership w/King 5.
- We are interested in Committee's thoughts on these with respect to informing the work of preparing the Annual Drinking Water Quality report.

#### 3. Drinking Water Quality Report Update, Ellen Pepin, SPU Communications

- Background – discussed draft report items including:
  - Report is not yet ready for review; have first draft of outline from our consultants and we are editing
  - 
  - Incorporated items contributed from Committee members from conversation at last meeting
  - We will emphasize the theme of safeguarding our water: how keep it safe and maintain ample supply whenever needed. Some aspects to be included:
    - Start at source – how to safeguard watershed; who has access; how to ensure no human cause for pollution issues
    - What SPU does to treat water
    - How often is it tested
    - SPU is planning ahead, being forward looking to respond to issues, and prevent anticipated problems in first place.
    - Prevent corrosion in pipes
    - Be prepared for climate change; for example; prepare for service in case of natural disasters
    - Planning for future uncertainties including climate change
- Incorporate infographic(s) to assist in clearer understanding of concepts
- In between meetings, Ellen would appreciate Committee volunteers to review Draft Report for additional suggestions.
- Question: Is there any way to raise conservation higher in the message?  
Answer: Yes, perhaps by condensing some of the information and tying in with climate change. We are also thinking of the customers' response to the 2015 drought requests and results. We always include a message from SPU's Resource Conservation Group.

- Question: What about wildfire implications to the water systems?  
Answer: We have been looking primarily at water quality and climate change; we are looking at other potential threats and are preparing for them.
- Member Comment: Each year, there is a different theme/angle. It's OK to have conservation towards end rather than placing it earlier in the report.
- Water quality information may need to be relocated from the usual back page position given the articles in the news on lead
- Suggest emphasis on the high quality of the water and access and availability to all neighborhoods.  
Question: How is our water system being more resilient? Include general infrastructure information?
- Be more precise on cost per gallon
- Question: Is there any well water in the City? Out by SeaTac Airport?  
Answer: They were activated in 2015 drought.
- Ellen would like to get group of people willing to review draft.
  - She will send it about 1 week out, near the end of April and would need response first week of May
  - Will provide link to where can get previous reports.
  - A sign-up sheet was passed around to the group to be contacted by Ellen for further review

**4. Fats, Oils and Grease Program (FOG) Overview – Gary Christiansen, FOG Manager, SPU DWW Source Control and Pollution Prevention Division ( Also Refer to FOG PowerPoint)**

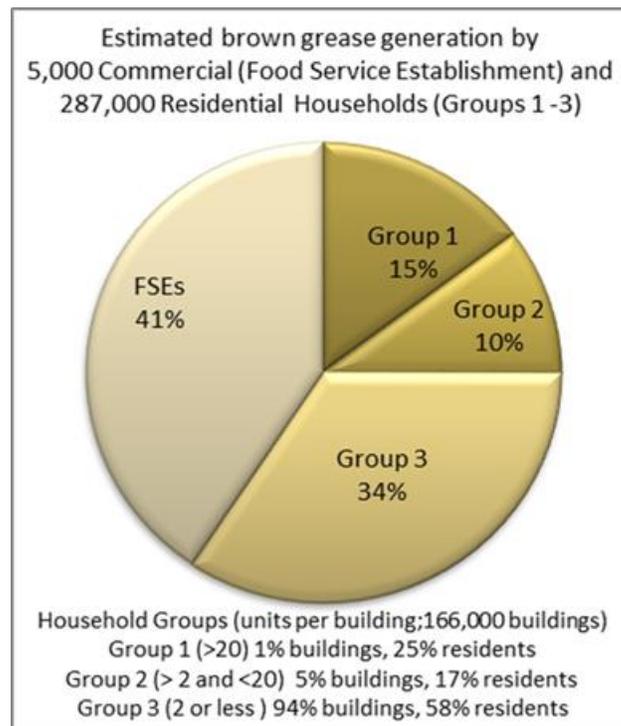
- Preparing to do several program changes; want to start conversation with CDWAC and WSAC
- Gary distributed a variety of materials used in FOG outreach. Handouts given out at this meeting will probably be updated in the future
- If you have seen the door hanger “FOG Alert,” you are likely in an area with blockages.
- The Committees reviewed/discussed Business customer brochure; they are available in multiple languages
- FOG Overview (please also refer to PowerPoint )
  - FOG is from anything cooked or prepared; bacon, milk are prime items for buildup
  - When grease gets into sewer system, it turns into a soapy like substance, blocks pipes, and may cause Sanitary Sewer Overflows (SSOs).
  - SSOs can occur-as backups into homes and businesses
    - Annually, there are 8 x more SSOs per mile in areas with a high concentration of restaurants than the city wide average.
  - Surprisingly, the Primary source of FOG: restaurant floor cleaning
  - Second main source: Pre-washing of dishes and food grinders
  - Another source is poorly implemented best management practices (BMPs). BMPs include things like scraping dishes prior to washing, inserting strainers in all drains, etc.

- Public Perception: FOG not real a problem. This misperception or lack of awareness leads to bad situations above ground and below ground. –It doesn't take a long time for materials to build up in pipes
- Reality:
  - 400-500 miles of lines are cleaned annually
  - 58% of pipes have some FOG impact; 32% have significant impact from FOG
  - With projected growth and increased density, 50-60% increase in FOG to sewer is anticipated over next 15 years
- What is the problem"? Is it that the regulation is there but restaurants aren't doing what is required- or that the regulation is there but it is not clear- difficult to find- not communicated well and/or not enforced adequately or uniformly?
  - The worst misstep one can make in design is to solve the wrong problem. We can design larger pipes, etc. but this will not be helpful in addressing the source of the problem.
- Current expectations? The existing code language is long, difficult to understand, and hard to find.
- Poorly communicated expectation has caused:
  - Enforcement based program – 50-70% inspector time spent on enforcement
  - Need a sentence here to explain pre-treatment
  - Inadequate Plan review – 50% of Food Service Establishments (FSE) (e.g., restaurants, hospitals, school, retirement homes, etc.) have no pretreatment; 60% of FSE with pretreatment have inadequate size or installation;
  - Ineffective maintenance – 70% of FSEs with pretreatment are not maintained to code
- What can we do? SPU is implementing some changes:
  - Changing the relationship of businesses and public from adversary to partner
  - Increase FOG inspector efficiency
  - Reduce DWW LOB budget and employee health risk by solving problems at the source
- Future of FOG
  - Simplified code requirements
  - Improved customer relationship through early outreach/education
  - Update plumbers/design engineers knowledge about code requirements
  - More thorough plan review and construction inspection process
  - Track compliance through routine maintenance reporting vs inspection
  - Expand residential messaging
- Question: What is the impact of clogs on treatment of water?  
 Answer: There is usually no impact because the problem is in the lines to the treatment plant, not at the facility.
  - Biggest benefits of the changes in the FOG program will be that we won't have to clean pipes as often. This will save a significant amount of money; it costs about 100K for the cleaning of one line.

- Question: Are there engineering controls that can control overflows or flow rates?
- Answer: We look at flow rates, pipe design, and coagulants. Businesses use coagulants to clean grease traps, but then this material gets into the system and causes problems. SPU will use some degreasers to keep materials moving, but there is limited usage and effectiveness. Proper sizing of lines and making sure the line has good slope to keep materials moving can help; we try to prevent the need for that to avoid disruption and costs.
- Question: What is the extent of impact on residential and commercial? What about garbage disposals in houses?

Answer:

- Action item: Gary will provide slide showing difference between residential and commercial impacts of FOG
- See graph below provided by Gary after the presentation



- In the residential realm, it is advised to use composting for small quantities e.g. paper towel used for wiping out pan, trash for slightly larger quantities e.g. grease produced from cooking bacon, and recycle for larger quantities of used cooking oil rather than pouring the materials down the drain or through garbage disposals. Some perspective on this: at home, we typically generate 1 tsp grease /meal/day; add this up 660,000 people, 3 meals/day = 2600 gal grease/day

- Question: What is a solids interceptor?  
Answer: This is a tank which allows separation to occur. Solid interceptors capture solids before they go to the grease interceptor where oil floats to the surface and separates; if food is solid, this disrupts the flow.
- Question: What outreach is being done for existing restaurants?  
Answer: We are prioritizing inspecting those connected to lines with significant problems with a focus to educate.
- Question: How well are our outreach contractors, such as the green business Program through Cascadia, being informed?  
Answer: Many shadow our inspectors to get first-hand information. In the future we would like to have inspectors shadow the consultant outreach. Outreach also includes pro-active approach by giving away free spill kits.
- Member Recommendation: When the residential information is updated, include the picture of a clogged pipe which is very graphic. Incorporate this into literature: show clogged vs free running pipe.
- Member request: Action item: When the new materials drafts are ready, would like Gary to come back and share for Committees' feedback.
- Question: Can FOG be recycled? What is the demand for waste oil and grease?  
Answer: Cooking oil this is a material commodity and can be captured and resold; brown grease is the problem. For used cooking oil there is curbside recycling for residents. There is a limited market for grease from traps as the BTU is low, not much to make fuel. It can be used in lipstick and pet food.
- Question: What about the impact of food trucks?  
Answer: These are also inspected through King County Public Health Department which issues lists the businesses, and issues permits; required to have a commissary (central discharge facility) to discharge wastewater
- Question: Is there any ongoing communication with environmental inspections?  
Answer: Yes, and this is relatively new.
- Question: For large campuses, such as UW and Microsoft, does the City go out to these sites and inspect?  
Answer: Yes, usually to a facilities manager/staff as they are responsible; they like us coming to them and they like our outreach materials as grease has significant impacts on them too. They use our information to educate their tenants.
- Question: Is this considered a CSO project, and how FOG might impact project in Ballard and Fremont?  
Answer: Madeline indicated it is not an impact on current combined sewer facilities.
- Question: How will SPU use inspectors' time for inspections if the City is reducing need for them? Answer: We can only inspect so many sites; this will allow us to inspect more as we transition our strategy from mitigation to prevention.

- Question: Is SPU is limited to hitting hot spots and surrounding areas? Are people with significant impacts getting the message?
- Answer: With our current staffing we are able to meet the current demand for addressing hotspot areas. Businesses receive an inspection (and enforcement if needed) and educational materials, residents are provided with information in the form of door hangers such as were provided earlier in the evening.
- Guest comment: Our roadside raingardens and permeable pavement, these facilities are trying to more slowly disburse stormwater. On these areas, SSOs would be disastrous to their functionality. Substances flowing through these areas may prevent water from doing what it needs to do to prevent CSOs. There is an interesting intersection of the work and goals of these two programs.

## 5. Recap of Highlights of March 30<sup>th</sup> All CAC Meeting – Sheryl Shapiro, CAC Program Manager and CDWAC Liaison

Sheryl briefly described the meeting and what was presented and discussed and asked for comments from members who had attended.

- Member: The meeting was very useful; touched on many areas; know what is going on. It was is good for new person to become familiar with the big picture, know what is going on, and to meet professionals in different areas. The Orientation Notebook that was distributed to members has very valuable information.
- Sheryl alerted the group that notebooks are available for those that were unable to attend.
- Member: It was good to hear from others in the small group discussions why they were there and what wanted to get out of serving on the Advisory Committees and their interests. A member submitted a suggestion on the blank notecards distributed to members for questions and comments: Add to an upcoming agenda follow-up to the topic of Asset Management: how utility makes decisions, give specific examples of what programs and projects go through in our LOBs (lines of business).
- Member: Had not realized Ray Hoffman, SPU Director had started as an Advisory Committee member.
- Sheryl announced that Michael Davis, Director of Environmental Justice and Service Equity Division (EJSE) who presented a short overview of Race and Social Justice and Equity work and the launching of a new project to embed RSJ in each SPU Branch. Stay tuned for more information. Michael will be returning to the May for the all CAC meeting.

## 6. Around the Table

- Schyler is absent tonight as she completes her studying for her professional engineering exam
- Sheryl announced that Kaifu had completed his first CDWAC term; not joining us for 2<sup>nd</sup> term. She offered thanks and kudos.
  - Noel, as immediate past chair, offered appreciation, especially for his questions.
  - Kaifu expressed thanks and said he had learned a lot; he will be back periodically to check in with the group and **would like to stay on the e-mail list**

- Noel: announcement on the American Society of Civil Engineers-sponsored talk this Thursday at Seattle University at noon on the Flint water crisis; may be some info that can be sent it out.
- Gary Olson: announced event coming up in cooperation with SPU on June 11<sup>th</sup> at Meadowbrook Pond. Agencies and community grassroots groups will talk about projects in the Thornton Creek area implemented by SPU and with community support. Thornton Creek Alliance will spearhead the event.
- Devin: Duwamish Alive this weekend: an opportunity to work on restoration sites along the river. Go to Green Seattle Partnership website for more information.
- Kelly: King County Waterworks Grants Program and Grant ranking Committee is looking for members for a 3 year commitment. The funding money comes from water treatment fees in King County. Looking for people that are experienced; can provide more information if interested; commitment is 2 meetings twice a year.
- Teresa Stern: Living Futures Conference – International Living Futures Institute at Westin Hotel– May 11-13, 2016. **Sheryl asked for a link to share with the group.**
- Green Infrastructure Partnership (GRIP) meeting next week discussing toxins in raingardens.
- Sheryl: Town Hall ticket available Green Affordable Housing Lunch and Learn in Town Hall free tickets available
- Next month Indigenous Foods and Ecological Knowledge Symposium at UW, May 13,14; tickets at Brown Paper Tickets
- Julie: It's the time of year to have a sigh of relief or an "oh no." Precipitation is a bit above average so far this year; snow pack slightly below average; probably won't have to worry about a drought this year.
- Sheryl: Current CAC workplans for all Committees are posted on the CAC website

**7:15 meeting adjourned.**