



SPU Solid Waste Advisory Committee (SWAC)

August 2, 2017 Meeting Notes
 Seattle Municipal Tower, 700 Fifth Avenue
 Room 4901
 5:30 pm – 7:30 pm
Chair: Holly Griffith
Vice-Chair: Quinn Apuzzo
Secretary: Emily Newcomer

Committee Members	Present?	SPU Staff	Role
Quinn Apuzzo	Y	Susan Fife-Ferris	Division Director, SPU Solid Waste Planning and Program Management
Anna Dyer	Y	Sally Hulsman	Program Manager, Solid Waste Inspection & Compliance Division
Holly Griffith	Y	Sego Jackson	Solid Waste LOB Policy Liaison
Jamie Lee	N	Natasha Walker	CAC Program Coordinator
Heather Levy	Y	Sheryl Shapiro	CAC Program Manager
Emily Newcomer	Y	Jesse	Intern in Solid Waste Division
Chris Toman	Y		
Colin Groark	N		
James Subocz	Y	Guests	Role
Alan Garvey	Y	McKenna Morrigan	Senior Associate, Cascadia Consulting Group, Inc.
Amelia Fujikawa	Y	Amity Lumper	Co-President, Cascadia Consulting Group, Inc.
Adam Maurer	Y	Heather Trim	Zero Waste Washington

ACTION ITEMS:

- SWAC members were encouraged to share their interest with Sheryl if they wanted support attending the 9/25 Plastics Summit
- SWAC Members were invited to tour the North Transfer Station education center once construction is completed, tentatively slated for late November.

1. Regular Business

SWAC Chair, Holly Griffith called the meeting to order at 5:36 PM

- Members and guests introduced themselves.
- SWAC Members approved the June meeting notes.
- Sheryl indicated emergency exits and bathrooms, and provided a brief safety overview. She reminded attendees to sign-in.

2. Solid Waste LOB Updates

SPU Solid Waste Planning and Program Management Division Director, Susan Fife-Ferris and Solid Waste LOB Liaison, Sejo Jackson, provided a few Solid Waste Line of Business and legislative updates.

- **Multifamily Flyer:** Will be distributed to 181k units on 8/14, providing guidelines on recycling, compost and garbage. Flyers are mostly in English, but will include select text in Chinese, Spanish and Vietnamese. Will be distributed to Duplex and larger units, and may overlap with some folks who get the single-family flyer.
 - o **CAC Member:** Why is this just going to that audience versus single family? I ask because I like it.
 - **Answer:** Single family already received it. This is an attempt to get the same message to multifamily that is provided to the single-family audience.
 - **Answer:** Historically, multifamily units have not been mailed to directly.
 - o **CAC Member:** Why the decision to mail to duplexes and above?
 - **Answer:** I don't know the answer, other than that we're trying to get it to as many possible people. Multifamily is generally defined as 4 units and above, but we wanted to capture a larger audience. Three units and below are often getting single residential service, but that may not always be the case. This is an attempt to be overly cautious and reach everyone.
 - o **CAC Member:** Is the extent of the translation what's happening on the side?
 - **Answer:** Online you can get translated copies. Whether it's translated from this flyer, I don't know if that's true. But I do know you can find a lot of this information translated into other languages

- **Curbside Collection RFP.** Has been released to the public. A pre-proposal conference (optional) was held today, where interested parties could ask questions. Another will be held 8/21. Four vendors attended. There is also an opportunity for interested vendors to ask questions in written form. Final proposals are due on 9/18. Questions about the RFP can be directed to Lisa Hill in contracting.

- **Contract for Organics Processing Services.** We had an RFP at the beginning of the year, where we received one submittal from Cedar Grove Everett. The contract is going to Council Civil Rights, Utilities, Economic Development & Arts Committee on 8/8 to review. Pacific Clean and Lenz Enterprises have the current contracts for managing our organics. Pacific Clean ran into a problem with apple maggots and couldn't process material at their site, so they've had an interim stop gap agreement to handle the material they would have handled. 70% is going to Lenz, and 30% is going to Maple Valley. Hopefully that 30% will start going to the Cedar Grove Everett facility. The contract will go through 2020. There is an option to extend it out further, but SPU may go out for a bigger process before the 2020 end date.

- **"Moving Towards Zero Waste" Workshop:** SPU just got approval to hold a workshop on measurements and material management, tentatively slated for November 2, and held at the UW Horticultural Center. The idea is to bring regional thought leaders, such as those from Oregon's Department of Environmental Quality's sustainability group working on metrics, to host a regional discussion (Seattle, King County, WA Ecology, industry, nearby municipalities). The rental facility holds approximately 120, and about 20 from City of Seattle already want to go, so space will be limited.

- **CAC Member:** Has EPA Region 10 been invited? I did my internship with materials management folks, and I think they would be interested.
 - **Answer:** No one has been invited yet. Our goal is to send out a save-the-date message to those who might be interested. We want this discussion to inform our Solid Waste Comprehensive Plan Update, which is going to be an amendment, not a full revision. Ecology is fully informed and excited about the workshop.
- **Sego:** It would be an awesome opportunity to have SWAC members there and SWAC members will be invited. Would love it if you all came, but it's an all-day event, on a weekday, which might make it harder. The plan is for it to be free, so that registration is not an obstacle. If we serve lunch, we might charge a fee.
- **North Transfer Station Education Center:** Installation is scheduled for late November. Susan said it is going to have interactive activities for little kids, including an mini compacter where kids can push a truck and dump into the compactor. There will also be a transfer station table (small interactive display). Financing is just now being finalized. When it's done, we'll let SWAC members know and we can do a field trip
- **September 25: Plastics Summit, hosted by Zero Waste Washington.** There is a charge, but if you're interested in going as a SWAC member please talk to Sheryl about the potential for support on that. We will forward the information to members.
- Sego shared a newly designed compostable bag with SWAC members. He said that because of change in bag ordinance, Seattle has attracted a lot of attention, including the relatively small compostable bag manufacturer that produced this bag. The company offered Sego and Pat Kaufman an opportunity to provide input on the design, and they incorporated all SPU feedback. They recently tested their bag at a local compost facility and can now provide their bags as compostable in Seattle.
- End of month, Susan is on a panel on producer responsibility at the Resource Recycling Conference in MN.

3. **SWAC Commitment to Public Engagement;** Sheryl Shapiro, CAC Program

Sheryl provided additional clarity on the discussion of SWAC engagement in their communities. Sheryl spoke to the role CAC members can play at neighborhood and community events and meetings, or at SPU hosted events. Sheryl noted that while we have a diverse range of perspectives amongst the Committee, there are gaps to fill and we can always go deeper and broader in our inclusion of perspectives. The hope, Sheryl explained, is to hear about SWAC member experiences as members are engaging with other SPU customers in their own work and in the community. This would serve as one way to “walk the talk” of the “Community” side of the CAC name.

- **CAC Member:** When you say, “if you’ve begun anything,” do you mean going to one of those SPU events you shared?
 - **Answer:** It could include observing at an SPU event. Or going to events in your community, such as a neighborhood council meeting. All of you have connections because I have your applications to prove it. Asking you to bring that in, and go a little deeper.

- **CAC Member:** I'm in a Program that my wife is involved with, teaching kids art in the park. Toddlers on up to 8-10 years old are using recycled materials to make art. When we interact with folks, we ask them what they normally do with these materials at home. When I engage like that, I feel that I'm doing that because of my role here.
 - **Answer:** While you're there, be hearing what they're curious about, what they know and don't know about SPU/services, and then bring that information back to SWAC. It will be a bit informal.
- **CAC Member:** So, when we go to an event, is the expectation that we come back and specifically talk about that experience or is the idea that it brings a different perspective for us?
 - **Answer:** I think it's useful to expand your perspective, but maybe we make a short period of time on the agenda to speak to those experiences specifically. And that feedback is passed up to SPU management as well. So yes, it's enriching your own perspective, but it would be good to know where we're going / what communities we're visiting to keep track of that, and to see where SPU is present and see where we don't go very often.
 - **SWAC officer:** I know we've had packed meetings, which don't allow folks to share those experiences so I promise to try to leave more time for around the table.
- **CAC Member:** Years back we talked about doing this, and the conversation at that time was really about outreach on behalf of SPU. So, I've had a bit of a confusion on this. So just to clarify, we are not speaking for the City, correct?
 - **Answer:** Correct, but It is your choice whether you share that you're on SWAC. If they want to know more about a specific topic, we have a webpage that has past SWAC notes. If there's someone who has questions or wants to get more engaged, there's an opportunity to go there with them.
- **CAC Member:** In the beginning, there was confusion around terminology and some attachments we may have had to the definition of "outreach". We arrived at the following definition: being more cognizant of our SWAC membership and the SWAC lens when you're out and about in your life. Just like you represent your employer, community, school, family. Sharing what sticks with you and what may be of interest to your fellow SWAC members. If you're out there in the world with your SWAC hat on, there's probably something to share. Be a trash nerd in your life. And we'll make room in the agenda.
 - **Answer:** As well as taking advantage of opportunities to partner with SPU.
- **CAC Member:** The sense I'm getting is that the preferred way is to share these experiences at the SWAC table, but given we don't always have time for around the table, in terms of mechanism for sharing this information, is there other ways we could do this?
 - **Answer:** I appreciate that you asked that. You could send that observation to Seago and me. I would like to compile those experiences, and note differences in observations geographically.

4. Cascadia Consulting Group: Seattle Waste & Recycling Trends, Metrics, and Goals; McKenna Murrigan, and Amity Lumper, Cascadia Consulting Group, Inc.

Sego Jackson provided some context for the presentation, explaining that this was part of the multi-part series on goals and conversations that SWAC has in their 2017 workplan. This presentation, he explained, is essentially kicking that series off. He said an iteration of this presentation was shared with SPU's Solid Waste LOB at the end of April, and that it was built on and tailored for SWAC. Sego said there is a growing regional, national and international dialogue on these topics, across both public and private sectors, because there are such dramatic changes happening in terms of what's coming into our waste stream (changes in materials, quality and marketability of these materials). He said SPU is very interested in dialoguing with SWAC on these topics.

Amity Lumper and McKenna Morrigan's presentation highlighted trends in Seattle's waste stream over the past two decades and their implications for the City's waste diversion progress and goals. **The primary takeaway from their presentation was that shifting and expanding beyond the City of Seattle current weight-based recycling goals can help the City better align programs and strategies with the environmental, economic, and social goals they are ultimately trying to achieve.**

Highlights of the presentation include:

- Ways we have traditionally measured recycling success
- Waste characterization studies: The City of Seattle is uniquely positioned to uncover insights because we have a rich dataset and can mine from it. This data has been used to shape policy and programs and investments.
- Reviewed recent diversion stats, noting that the climb from 40% to 58% diversion is significant, but is not on the pathway to meet stated goal of 70%. Issues affecting trend line include (most notably): changes in waste stream and growth in population, in multi-family.
- They provided an initial exploration of single-family residential recycling analysis / trends, reviewing trends between 2000-2015. They focused on single family (i.e. one narrative) for the sake of clarity in this presentation. They noted that multifamily has a similar trends as single family, though diversion rates are substantially lower.
- Reviewed specific drivers of Recycling Volume Changes:
 - o Mixed Paper number, tonnage-wise, has stayed the same. But that includes cardboard and when you break it out via the composition study, cardboard has increased substantially.
 - o Light weighting of packaging
 - When measuring your recycling success by weight, this has an impact.
 - Also, effects economics of recycling; when MRF is getting paid by the ton, these things have a dramatic effect.
 - o Light weighting 2.0: Packaging materials shifting (from recyclable to non-recyclable with our current recycling infrastructure and market conditions).
 - Flexible pouches: Most rapid trajectories of growth in the history of packaging. Benefits from a carbon footprint standpoint: Reduces size of transport. Some packages are introduced to reduce food waste (from a life cycle standpoint have positive benefits).

- Walked through two “then and now” examples (2000 to 2015), discussing the “ripple effect” from an environmental footprint perspective that drive some of these material changes.
 - Looked at 2015 material-specific capture rates (all curbside-collected). >80% capture rate is getting 90% of people placing 90% of materials in the correct collection container. This shows that Seattle is doing a really good job at recycling primary commodities (see slide). However, there is lots of progress to be made with organics.
 - Looked at Total Waste generated per household (see slide)
 - o Landfill waste is on the decline (43%) but this does not include items such as electronics recycled and textiles donated; if they were included, we might see that total waste generated per household has stayed the same.
 - o Organics material generated by households has increased.
 - Lifecycle Impact of Food Waste Reduction
 - o Source Reduction & Use – largest reduction in metric ton of CO2 (note the waste management hierarchy)
 - o Ironically, by wasting more food and being dedicated to composting it, we have increased the City’s waste diversion rate.
 - Shared a business case, where the revised goal (moving from waste diversion to reduction in generation) had a larger environmental impact. They also looked at per capita generation rate to normalize for growth. Included a breakdown of waste stream.
- **CAC Member:** How are you measuring volume on your example products in your presentation?
 - o **Answer:** It’s a density factor conversion. We are taking recycling composition data, which breaks the recycling stream out to a detailed level. EPA publishes density factor conversions. For this presentation, the density factors are constant (applying the same conversion rate in 2000 to 2015). If we used updated density factors (2000 versus 2015), the results would be more dramatic. Just keeping density factors constant and reflecting changing materials stream is how we calculated changing volume.
 - **CAC Member:** These are all examples of light weighting materials that are still recyclable. A lot of lightweight is moving recyclable materials to non-recyclable.
 - **CAC Member:** Am I reading it correctly that recycling aluminum cans has the greatest MTCO2e numbers?
 - o **Answer:** Yes, because producing virgin aluminum is so energy intensive, that the benefit you get for putting aluminum back into the stream is quite high. In actuality, the source reduction is going to be higher, but in the interest of using standardized, publicly available GHG emission factors, that’s how the math works out on that one.
 - **Staff comment:** (regarding cardboard and flexible packaging). If only half the population knew you could recycle the heavier tide box in 2005, and that recycling participation rate doubled but with light weighted materials – the diversion rate / pounds per household metric is not going to show that improvement.
 - **CAC Member:** Extremely interesting presentation, loved it, excited to re-do all my presentations at work. One thing I didn’t see focused on: presumably light weighting is not just targeted at

recyclable products but also waste products. If diversion rate was the same and the tonnage was the same, how does that impact the denominator?

- **Answer:** The issue is that residents have gotten more effective at recycling material; don't have too much recyclables in the waste stream. Some of the notable items left in waste stream not covered by curbside programs are diapers, debris, cat litter. There is an economic incentive to drive down proportional cost of packaging; companies want to get their products distributed as efficiently and quickly as possible. But there are things that have not and do not change, at least at the same way and same rate as consumer products.
- **CAC Member:** On soap detergents, they say "not yet recyclable," so that's where the momentum is going. What's the problem where they can't recycle it yet?
 - **Answer:** Our recycling processing infrastructure and technology was designed to separate 2D from 3D, and light from heavy. All of Materials Recovery Facility (MRF) processing technology in operations globally is built on that fundamental differentiation. But, for example plastic pouches don't fit that dichotomy. They end up in paper bales. Currently, we don't have an easy way to integrate into MRF yet, because of their two-dimensionality, but there's work being done on it. Packaging producers want to see those in the recycling stream. There's technical feasibility studies, but is it economically viable? How much extra cost does it add to the City?
 - **CAC Member:** What if I roll it up and put in a milk jug?
 - **Sego:** They are not made of the same material as the milk jug so this would create a problem. These are multi-material plastics and there's some work being done by DOW Packaging, called "Recycle Ready" (single resin flexible pouches that won't have the problem of having 4-5 resins in one package) but they will still have the problem of sorting out at the MRFs. There's research on how to get existing technology that is available to function with these materials. Currently, testing was done at two MRFs in Canada, where they run the MRF's conveyor belt at half speed and tweak the optical sorter to make it work, so that they could say the technology exists. But that technology is not typical at U.S. MRFs nor is that the way MRFs function (at slower speeds)
- **CAC Member:** I just noticed a new product in stores: A Monster Energy Drink, previously an aluminum can, now in a clear plastic bottle with a can top. Half metal, half plastic. And cold coffee drinks with rotating, closing tops. These are non-recyclable, hybrid products. How do you report back to a manufacturer on these?
 - **Sego:** Those types of packaging are referred to by some as "Monstrous Hybrids" and the term has nothing to do with that particular brand or that particular package. It refers to multi-material packaging that is not recyclable because it combines completely different materials. I am part of a group, the PAC NEXT Packaging Innovation Gateway, to which manufacturers can bring packages and get feedback on how it will perform through the recycling system. It is comprised mostly of Canadian entities, and Canadian MRFs. Because you have producer responsibility in parts of Canada, there's direct financial feedback for the "monstrous hybrid" manufacturers up there. There is a

relatively new group, The Recycling Partnership, which is helping develop recycling best practices across communities and communicates back to the manufacturers who help provide their funding. Also, the Sustainable Packaging Coalition – ASTRX project has been trying to bring together packaging and recycling folks to have a forum for that feedback loop.

- **CAC Member:** I had always assumed that if there was a triangle printed on it, it was recyclable. That's the symbol that people look for.
 - **Answer:** You and everyone else. There's a lot of work to do around that. That symbol was originally meant to identify the type of plastic resin used in the package, not whether or not it was recyclable. It has been a big source of confusion.
- **CAC Member:** My understanding is that being able to sell these materials on the backend is very important. Have you seen drastic changes in the value of materials? And the creeping contamination rate, how does that change?
 - Amity and McKenna shared an extra slide: *Value of Recovered Recyclables*.
 - **Answer:** Yes, there is a market value for recoverable materials. Market prices fluctuate from day-to-day, and wild swings can have dramatic effects on programs. Cardboard markets are propping up the rest of the streams. Online shopping and direct delivery to the home has been the driver in the increase in cardboard. The move by e-commerce from cardboard to flexible packaging, from an environmental footprint standpoint, could be better if you reduce the number of trucks delivering packages. But as that changes, it will wreak havoc on the recycling stream because cardboard is currently the cornerstone of recycling economics.
 - **Answer:** Seattle has a 10% contamination rate – which is pretty good when compared to other U.S. cities. However, this is only measuring contamination in materials collected at the curb, and doesn't reflect the cost of the effect of contamination on the MRF system. Given the changing mix of materials and cost of contamination, an increase in contamination is a huge drag in the system, which is why addressing it is important.

5. Around the Table

- **Heather Trim, guest attendee and Director of Zero Waste Washington,** reminded SWAC members of the Plastics Summit on 9/25. She encouraged SWAC members to attend, noting that the City of Seattle is a sponsor.
- **SWAC officers** noted that they were considering adding a “Ask Segó & Susan” section to the agenda, where SWAC members could engage directly in topics of interest to them.
- **Segó** took a moment to acknowledge the vast expertise on committees, saying Committee Members would likely enjoy getting to know one another better, and asking each other questions.
- **A committee member shared:** Amazon hosted a “Bring your child to work day”, where over 3k kids participated in a science fair. This included a “Race to recycle event,” with help from SPU's Socorro Medina. Kids raced each other to recycle items the fastest and more accurately. The main takeaway was how well kids could recycle. Some of them better than their parents.

Amazon is also hosting a “Bring your parents to work day” and may have an opportunity for employees to race their parents in the same game.

Adjourned 7:30PM