





Responsible Recycling Task Force Recommendations to Achieve a Responsible Recycling System

January 10, 2019

Prepared by King County's Responsible Recycling Task Force with assistance from King County Solid Waste Division, Seattle Public Utilities, C+C, and Responsible Recycling Task Force members

Responsible Recycling Task Force

Final Recommendations Transmittal Letter January 10, 2019

Dear SWAC and MSWMAC Members:

The Responsible Recycling Task Force is pleased to submit the attached report: *Recommendations to Achieve a Responsible Recycling System.* This report is the compilation of a 10-month planning process that included representatives from solid waste management companies, the King County Solid Waste Division, Seattle Public Utilities, the cities in King County, and other stakeholders.

Over the course of our meetings the Task Force learned from experts in the recycling industry about:

- The problems associated with exporting our recycling materials for sorting and processing.
- New, unique, and successful recycling programs in other states and countries.
- Cutting edge processing technologies such as chemical recycling.
- The importance of good packaging design and policies to stimulate demand for recyclable materials.

In addition, we explored alternative financing mechanisms to create a sustainable funding source so that recycling programs would not be dependent on the market value of the materials alone.

Prepared with this knowledge, the Task Force engaged in honest, open-minded, and constructive discussions that resulted in recommendations that will ensure the short- and long-term success of the recycling industry. The Task Force agreed unanimously that the region must create a Responsible Recycling system that takes into consideration the environmental and societal impacts of our choices for recycling the materials generated here in King County.

A Responsible Recycling system requires that we take responsibility for the materials we generate throughout their lifecycle and commit to change local and statewide policies in ways that create a framework within which Responsible Recycling can thrive. It requires that we create demand for recycled materials, make investments in local sorting and processing infrastructure, strive to harmonize recycling programs and messaging, and make a commitment to work with new partners, including brand owners, at all stages of the supply chain to help solve the problem.

We are proud of the effort that went into the development of and the resulting recommendations. We
hope that you will agree with them and help us to create a Responsible Recycling system in King County and
beyond.

Regards,

The Responsible Recycling Task Force

(members listed in Appendix A)

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Responsible Recycling Task Force

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Executive Summary

People in our region value recycling because they understand that it is an investment in a sustainable future – but recycling as we know it is under duress.

Issues with contamination, vulnerability of markets for recycled materials, a lack of local infrastructure, and the historic assumption that recycling should pay for itself, have created an urgent dilemma that needs to be addressed. We believe the answer lies in taking a step back to look at the entire system, then making changes to create a Responsible Recycling system for the materials we generate.

Responsible Recycling is a philosophy that ensures we take responsibility for the waste and recyclables we generate so that they are sorted, processed, and if necessary, disposed in a responsible manner. It ensures that our recycled materials do not cause harm here or elsewhere, including other countries. It also motivates producers and consumers to reduce wasteful packaging and products and increase the use of recycled and recyclable materials. Responsible Recycling is not going to be easy. It is not going to be free. It will require significant changes in our recycling systems and infrastructure. However, it is the right thing to do to conserve valuable resources, minimize impacts from global warming, and secure a sustainable future.

Over 10 months of work, the Responsible Recycling Task Force tackled the question of how our region should move forward in solving immediate problems while also mapping a path for long-term solutions. The Task Force recommendations are as follows:

- Establish Responsible Recycling Policies: System level changes are needed to solve this problem. Our
 region should support, create, and advocate for policies that establish a statewide system of responsible
 recycling. A comprehensive statewide stewardship policy approach was prioritized as the most
 important action for achieving responsible recycling success long-term.
- 2. <u>Develop Local Recycling Infrastructure</u>: Domestic infrastructure is lacking and is a necessary part of the solution. *Local recycling infrastructure is a win-win-win for the region by building recycling system resiliency, creating local jobs, and minimizing greenhouse gas emissions.*
- 3. <u>Harmonize Recycling Programs and Messaging</u>: Consumer confusion drives contamination. *All regional curbside programs should use consistent messaging about what is accepted in the curbside recycling container.*

- 4. <u>Increase Demand for Recycled Materials</u>: The materials we collect for recycling must have end markets. **Our region should create demand for recycled-content products through legislation, procurement ordinances, and working with local companies to buy recycled.**
- 5. <u>Create Clean and Marketable Feedstocks</u>: We cannot allow recycled materials generated in our region to contribute to environmental pollution or endanger human health and safety at home or elsewhere, including other countries. *We need to develop policies that ensure materials are clean and suitable for reprocessing before being exported*.
- 6. <u>Improve Upstream Design</u>: Changes in package design are creating many of the challenges with contamination in our recycling system. *Local government should partner locally and nationally to encourage design-for-recycling and use of recycled materials in products and packaging.*

Action is needed to move forward. The role of this report is to give decision-makers both guidance on the philosophy of Responsible Recycling as well as specific steps that can be taken to adapt our recycling system. We hope the recommendations are useful and ultimately embraced and implemented.

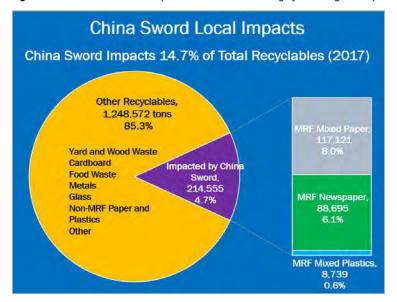
PART I: THE RESPONSIBLE RECYCLING TASK FORCE

In January 2018, China implemented a policy called the "National Sword" that banned the importation of mixed paper (including newspaper), cardboard, and all scrap plastic. They also enacted a stringent 0.5% contaminant limit for other recyclables that essentially eliminated the primary market for these recyclable materials. In March of 2018, aspects of China's National Sword policy were named Blue Sky 2018. Blue Sky refers to the actions taken by China's General Administration of Customs from March through December of 2018 to prevent the illegal import of scrap materials banned by the National Sword policy including the crack down on falsified import documents.¹

As a result of these policies, there is a global oversupply of these materials and commodity prices have fallen dramatically. Of the export markets that still exist, many have adopted similar contamination limits causing an increase in sorting and processing costs to meet these limits on contamination. In addition, there are very limited domestic markets for mixed paper and mixed plastics.

In response, King County's <u>Solid Waste Advisory Committee</u> (<u>SWAC</u>) and <u>Metropolitan Solid Waste Management Advisory Committee</u> (<u>MSWMAC</u>) formed the Responsible Recycling Task Force (RRTF) in April of 2018 to address the changes caused by National Sword and to develop a coordinated approach to improving recycling in the region. The task force consisted of representatives from the King County Solid Waste Division, the City of Seattle, cities in King County, solid waste management companies, and other stakeholders.

Figure 1. China Sword Local Impacts - Combined Tonnage from King County and Seattle²



The following terminology is utilized throughout the report and recommendations:

Sorting: The process of taking mixed recyclable materials and separating them into specific commodities that can be sent to a processor. For the commingled recycling system, sorting takes place at a Materials Recovery Facility (MRF).

Reprocessing: The process after material sorting whereby sorted materials are transformed into a refined state, such as resin-specific plastic flakes or pellets, prior to being remanufactured into a new product.

Domestic: The United States or Canada.

Region: King County, Western Washington, and Washington State.

Short-term: Actions that could be accomplished within 1 year of publication of this report.

Mid-term: Actions that could be accomplished within 2-3 years of start date.

Long-term: Actions that could be accomplished within 4+ years of start date.

¹ Colin Staub, "Chinese customs enforcement ramps up with Blue Sky 2018," https://resource-recycling.com/recycling/2018/03/13/chinese-customs-enforcement-ramps-up-with-blue-sky-2018/, (March 13, 2018).

² This figure includes both King County and the City of Seattle. The estimate is based on Dept. of Ecology "2017 Annual Report – Recycling Facility" for three recycling facilities in King County (Cascade, 3rd and Lander, Recology) and one in Pierce County (JMK) as well as recycling numbers from the City of Seattle's <u>2017 Annual Recycling Rate Report</u>.

Role of Task Force

The role of the Task Force was to learn about the problem, understand polices, programs and activities that are being implemented elsewhere, and identify opportunities for change. The Task Force will provide guidance on next steps that will be brought back to county and city advisory committees and decision makers.

Problem Statement

The Responsible Recycling Task Force developed a problem statement to address the short-term impacts and the long-term impacts of the China National Sword policies on the region's recycling system.

Short Term Problem: China's import restrictions have reduced markets for mixed paper and mixed plastics.

The China National Sword policy has resulted in the immediate closure of a significant market for these recyclable materials. Roughly 214,555 tons of mixed paper and mixed plastics generated in King County and Seattle annually was sent to China and now needs to be processed elsewhere. Alternative export and domestic markets for mixed paper and mixed plastics are extremely limited.

- Some haulers/MRFs are asking for surcharges to pay for additional sorting/processing costs.
- Some haulers/MRFs are asking for waivers to landfill recyclable materials that have been damaged
 or are unable to be recycled. Temporarily landfilling recyclables uses landfill capacity and may erode
 the public trust in recycling.
- Recycling saves landfill space which delays the transition to more costly disposal options. If mixed
 paper and mixed plastics generated in King County (outside of Seattle) were to be disposed instead
 of being recycled for an extended period of time (5 years), this would consume a half year of
 capacity at Cedar Hills Landfill.
- Waste reduction and recycling are priorities over disposal in the waste management hierarchy in both Washington State statute (RCW 70.95.010) and King County Code (10.14.020 and 10.14.050).
 King County identifies waste reduction and recycling as the highest priority of solid waste management options and has established a goal to achieve zero waste of resources by 2030.

Long-term Problem: Recycling in King County suffers from three major issues:

- 1. <u>Contamination</u>. At local MRFs around 10-20% of the tonnage processed are "residuals" that are not recycled. This does not include the contamination that ends up in bales. China's National Sword policy restricts contamination in bales to 0.5%.
 - Materials entering recycling facilities are increasingly contaminated for a variety of reasons, including commingling the materials in one container, new packaging types, and confusion by customers about what materials go into the recycling container.
 - Some materials being collected as part of the approved recyclables list have no markets, contaminate other valuable recyclable material, and/or create problems in the processing system (e.g., plastic bags, poly-coated paper, cartons, and aseptic packaging).

- 2. Market vulnerability. China was the single largest consumer of recyclable materials generated in North America³. One-third of all scrap material collected in the U.S. was shipped overseas, with the large majority of this material going to China. In 2016, the U.S. exported \$5.6 billion in scrap commodities to China.⁴
 - China has banned import of mixed paper and mixed bales of #3-7 plastics, cutting off the key market for these materials.
 - Some "program" materials are sorted only to "mixed materials," leading to mixed bales that are not market-ready.
 - There are limited domestic markets for mixed paper and mixed bales of #3-7 plastics meaning that, in many cases, these materials do not have anywhere to go domestically and must be exported.
 - Alternate export markets for mixed paper and plastic bales raise social and environmental justice
 concerns about what is actually happening to materials, including the contaminants and nonrecyclable material.
 - Local material recovery facilities have limited or no capacity for further sorting some mixed materials, such as #3-7 plastics, and are primarily focused on cleaning up their paper bales to achieve a more marketable product.
- 3. <u>Recycling is not free</u>. In many cases, billing for waste collection services is bundled under one charge, giving the public the perception that they are only paying for garbage collection and that recycling is a free service.
 - Revenue from the sale of recyclables typically does not offset the costs of collecting, sorting, and processing the recyclable materials. Similar to landfilling, recycling requires funding to collect, transport, and process the materials.
 - There are domestic facilities that will provide secondary sorting to clean up materials so they are acceptable for sale to markets, but there is a cost associated with secondary sorting, which exceeds the cost to export to Southeast Asia.

Task Force Goals

The Task Force members agreed to the following goals:

- **Short-term Goal:** To help identify near-, mid-, and long-term actions in response to reduction in export markets for mixed recyclable materials due to China's National Sword policies.
- **Long-term Goal:** To help establish commitment across the region to responsible recycling and domestic sorting/processing of curbside recyclables.

³ "China's National Sword Policy." Washington Refuse and Recycling Association presentation. SWANA Evergreen Chapter Technical Session, February, 23, 2018.

⁴ "Putting a Price on Recycling: Potential Effects of the Scrap Import Ban on Customer Rates." FCS presentation. SWANA Evergreen Chapter Technical Session, February, 23, 2018.

PART 2: THE RESPONSIBLE RECYCLING SYSTEM

The Task Force used a "Responsible Recycling" framework, described below, as the context for developing the recommendations in this report. The framework includes seven elements or practices that help define, support, and lead to a commingled curbside recycling system that produces recyclable materials that are clean and suitable for remanufacture and do not contribute to environmental pollution or endanger human health and safety.

Developing a Responsible Recycling System is a commitment to ensuring that the recyclable materials we collect, transport, and process do not cause harm to the environment and human health, or create social inequities in our country or other countries that might have less stringent regulations than the U.S. for safeguarding human health and the environment.

Implementing a Responsible Recycling System will require significant changes and investments in our recycling collection systems and our sorting, processing, and remanufacturing industries. These changes are imperative to building a sustainable, resilient, efficient, and effective recycling system at work for our region.

The Responsible Recycling System

- Quality vs. Quantity: Prioritize the collection of materials in the curbside recycling system that have value and documented markets and can be sorted effectively at the MRF over those materials that have marginal value, limited or no markets, or that damage and/or contaminate other valuable commodities and cannot be sorted at the MRF. Recyclable materials that are not able to be collected in a curbside program and/or sorted at the MRF should be collected through other mechanisms such as depots or retail collection sites.
- 2. Regional Policy Alignment: Recycling systems benefit from regional coordination and policy alignment around the collection and processing of materials. Such alignment will optimize sorting and processing, reduce contamination, and lead to maximized marketability of materials. An example of regional coordination would be to work with the plastics industry to establish a program where residents and businesses could bring their plastic bags and film to drop off locations and establish a process to collect and recycle the film into a new viable product.
- 3. <u>Harmonized Messaging</u>: Use consistent messaging across the region or state to reduce confusion by the public around the priority materials that should be recycled and the key materials that should not be recycled in the curbside recycling system, which will ultimately reduce contamination. In addition, practicing consistent messaging and communication will help make clear the importance of responsible recycling to elected officials and policy makers.
- **4. Domestic Sorting and Processing:** Prioritize the Domestic (in the United States or Canada) sorting and processing of recycled materials. If no Domestic sorting or processing services exist, require that materials be sent to countries with documented health, safety, and environmental standards that are comparable to those in the U.S. and Canada. Benefits of Domestic sorting and processing include:
 - **a.** Guarantee of appropriate worker health, safety, and environmental standards.
 - **b.** Control over the chain of custody and documentation of real recycling.
 - **c.** Benefits to the local economy, including job growth and industry resiliency.

- 5. Create Demand for Recycled Feedstock: Create demand for products made with recycled materials in order to strengthen markets for recyclable materials. Legislation can require that certain products and/or packaging contain a percentage of recycled feedstock or other means to create demand for recycled commodities. Another approach is to require government agencies (and others) to increase procurement of products made with recycled materials.
- 6. Responsible Recycling Requires Additional Investment: The full environmental benefits of recycling are not achieved until new products are made with recycled feedstocks. The management of waste, including recycling, has always had a cost. Replacing virgin feedstocks in manufacturing with recycled materials will require additional investments and funding to support effective collection, processing, and remanufacture.
- 7. Measure Real Recycling: Recycling should be measured by tracking the amount of recycled materials that are actually used as feedstock to make new products rather than measuring the amount of materials that are collected in a recycling container. This will discourage the practice of accepting materials in the recycle program to get credit for recycling them, even if there are no viable end markets for these materials and they end up being disposed.

PART 3: RECOMMENDATIONS AND ACTION ITEMS

Goals to improve King County's recycling systems, Recommendations for how to accomplish those goals, and Action Items were developed and prioritized by the Responsible Recycling Task Force at the monthly Task Force meetings. The Recommendations are displayed in order of priority in summary format in Table 1. Following the table, a work program to implement the priority recommendations/action items is described.

Table 1. Goals, Recommendations, and Action Items

Goal 1: Establish Responsible Recycling Policies				
Recommendation: Our region should support, create, and advocate for policies that establish a statewide system of responsible recycling.				
Action Items	Implementing Parties	Timeframe	RR Framework relevance	
1A. Develop a comprehensive, statewide stewardship policy approach that helps achieve a funded, robust, and harmonized curbside recycling system throughout Washington State.	KC SWD/ KC Cities/ Seattle	Start in 2019	 Regional Policy Alignment Responsible Recycling Requires Additional Investment Harmonized Messaging 	
1B. Support legislation that promotes the use of innovative technologies and/or processes to help develop and build local recycling infrastructure and market development.	KC SWD/ KC Cities/ Seattle	Start in 2019	Domestic Processing Infrastructure	
1C. Support and refine Plastics Packaging Stewardship legislation in the 2019 legislative session.	KC SWD/ KC Cities/ Seattle	Start in 2019	 Responsible Recycling Requires Additional Investment Regional Policy Alignment 	

Goal 1: Establish Responsible Recycling Policies

Recommendation: Our region should support, create, and advocate for policies that establish a statewide system of responsible recycling.

Action Items	Implementing Parties	Timeframe	RR Framework relevance
1D. Advocate for Responsible Recycling policies by requesting that elected officials adopt a Responsible Recycling System in their jurisdictions.	KC SWD/ KC Cities/ Seattle	Start in 2019	• All
1E. Develop a feasible model for beverage container stewardship in Washington similar to the Oregon Beverage Recycling Cooperative model.	KC SWD/ KC Cities/ Seattle	Start in 2020	 Responsible Recycling Requires Additional Investment Domestic Processing and Markets

Goal 2: Develop Local Recycling Infrastructure

Recommendation: Our region should support the development of our local recycling infrastructure to build resiliency, create local jobs, minimize greenhouse gases from transportation and production, and increase the ability to document and measure real recycling.

Action Items	Implementing Parties	Timeframe	RR Framework relevance
2A. Conduct pilot projects to encourage the development of a domestic recycling infrastructure.	KC SWD/ KC Cities/ Seattle/ Haulers	Start in 2019	Domestic Processing and Markets
2B. Advocate for the expansion of the Wrap Recycling Action Program (WRAP) ⁵ to establish an effective statewide program to capture plastic bags/film.	KC SWD/ Seattle/ Communication Consortium	Start in 2019	 Quality vs. Quantity Regional Policy Alignment
2C. Ensure resources to assist with development of markets for paper, plastic, and compost.	KC SWD/ Seattle	Start in 2019	 Responsible Recycling Requires Additional Investment

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⁵ The Wrap Recycling Action Program (WRAP) is a national program that works with governments, retailers, and MRFs to help communities keep plastic film out of their MRFs and increase the amount of plastic film collected for recycling at drop-off locations. https://www.plasticfilmrecycling.org/recycling-bags-and-wraps/wrap-consumer-content/

Goal 3: Harmonize Recycling Programs and Messaging

Recommendation: All regional curbside programs should use consistent messaging about what is accepted and not accepted in the curbside recycling container.

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Action Items	Implementing Parties	Timeframe	RR Framework relevance	
3A. Develop a process and criteria for adding/removing materials in the curbside recycling programs with criteria that is consistent with the responsible recycling framework.	KC SWD/ Seattle/ KC Cities	Start in 2019	 Quality vs. Quantity Responsible Recycling Requires Additional Investment 	
3B. Continue the Communication Consortium to create unified messaging about curbside recycling to King County residents.	KC SWD/ Seattle/ KC Cities/ Haulers	Start in 2019	Harmonized MessagingQuality vs. Quantity	
3C. Develop a system to coordinate with the City of Seattle on recycling programs and policies.	KC SWD/ Seattle	Start in 2019	Regional Policy Alignment	

Goal 4: Increase Demand for Recycled Materials

Recommendation: Our region should create demand for products made with recycled commodities.			
Action Items	Implementing Parties	Timeframe	RR Framework relevance
4A. Establish recycled-content legislation that requires that certain products be made with a certain amount of recycled material.	KC SWD/ KC Cities/ WA State	Start in 2020	Create Demand for Recycled Feedstock
4B. Establish or update procurement ordinances that require the purchase of products made with post-consumer recycled materials and train staff to implement the ordinances.	KC SWD/ Seattle/ KC Cities	Start in 2020	Create Demand for Recycled Feedstock
4C. Work with the Association of Plastic Recycler's Demand Champions ⁶ program to encourage King County companies to procure items made with recycled plastics such as pallets, garbage cans, and other "work in process" items.	KC SWD/ Seattle/ KC Cities	Start in 2020	Create Demand for Recycled Feedstock
4D. Explore other procurement opportunities similar to Demand Champions, for buying products made with recycled materials such as office paper, cardboard, shipping containers, etc.	KC SWD/ Seattle/ KC Cities	Start in 2020	Create Demand for Recycled Feedstock

⁶ The APR Demand Champions consist of companies that are committed to making purchasing decisions that create consistent, reliable demand for recycled plastic. https://www.plasticsrecycling.org/recycling-demand-champions/demand-champion-companies

Goal 5: Create Clean and Marketable Feedstocks

Recommendation: Local governments and their service providers should require that the collecting, sorting, and processing of recyclable materials does not contribute to environmental pollution or endanger human health and safety and that materials are clean and suitable for remanufacture before being exported.

Action Items	Implementing Parties	Timeframe	RR Framework relevance
5A. Update City and County Recycling Contracts and Codes to prioritize domestic sorting and processing and require documentation of the chain of custody from sorting facilities to legitimate end markets.	KC SWD/ Seattle/ KC Cities	Start in 2019	Domestic Processing and Markets
5B. Remove plastic bags/film and shredded paper from the materials that are accepted in recycling programs in King County and the City of Seattle.	KC SWD/ Seattle/ KC Cities/ Communication Consortium/ Haulers	Start in 2019	 Quality vs. Quantity Regional Policy Alignment
5C. Support "Reusable Bag" legislation to reduce the number of plastic bags entering the garbage and recycling system.	KC SWD/ Seattle/ KC Cities	Start in 2019	 Quality vs. Quantity Regional Policy Alignment
5D. Develop a methodology for documenting the chain of custody to monitor adherence to recognized environmental and human health and safety standards.	KC SWD/ Seattle/ KC Cities/ Haulers	Start in 2019	Domestic Processing and Markets
5E. Develop a consistent process for evaluating and granting surcharges on recycling rates and waivers to allow for periodic disposal of recyclable materials.	KC SWD/ KC Cities/ UTC/ Haulers	Start in 2019	Regional Policy Alignment
5F. Measure real recycling by tracking and documenting MRF residuals, measuring contamination in bale breaks, and conducting periodic MRF material characterization studies.	KC SWD/ Seattle/ Haulers	Start in 2020	Measure Real Recycling
5G. Track the market price and conditions of recyclable materials on a monthly basis.	KC SWD/ Seattle	Start in 2019	Measure Real Recycling

Goal 6: Improve Upstream Design

Recommendation: Local government should partner with national organizations to get local companies to commit to using recycled materials in new products and develop product messaging and package design that supports a system of responsible recycling.

Actions Items	Implementing Parties	Timeframe	RR Framework relevance
6A. Engage with the Sustainable Packaging Coalition ⁷ and their How2Recycle ⁸ programs to help educate brands and packaging designers on recyclability of packaging, the use of recycled materials in packaging, and designing packaging that is less toxic and more recyclable (e.g., no PVC plastic).	KC SWD/ KC Cities/ Seattle	Start in 2019	Create Demand for Recycled Feedstock

2019 Work Program Action Items

The prioritized Goals, Recommendations, and Action Items presented in Table 1 have been developed into a work program that would begin implementation in 2019 by the King County Solid Waste Division (KC SWD), Seattle and their partner agencies and service providers. The following section outlines the actions that are necessary to accomplish the recommended goals. It identifies existing KC SWD resources and staffing that will be reallocated to implement each action item.

Goal 1: Establish Responsible Recycling Policies

Recommendation: Our region should support, create, and advocate for policies that establish a statewide system of responsible recycling.

<u>Action Item 1A</u>: Develop a comprehensive, statewide stewardship policy approach that helps achieve a funded, robust, and harmonized curbside recycling system throughout Washington State.

The action item that ranked as a top priority by the RRTF is to conduct a study of extended producer responsibility (EPR) systems to understand how the program/policy elements could be applied to Washington State to address issues of sustainable financing, consistency of programming and messaging, economies of scale, and reduce levels of contamination. The study will analyze the current recycling and solid waste laws in Washington and will document the existing recycling infrastructure to understand the changes that would be necessary to implement an EPR system in Washington. The report will recommend policies and programs to create an EPR system that would: establish a sustainable financing source; create a harmonized list of materials that are collected/recycled; create a harmonized outreach and messaging program; result in reduced contamination; provide access to packaging/product designers to help facilitate the recycling of products/packaging; and provide opportunities for research and development of new/enhanced domestic markets for the recyclable commodities collected in Washington State.

⁷ The Sustainable Packaging Coalition (SPC) is a membership-based collaborative that works to strengthen and advance the business case for more sustainable packaging. https://sustainablepackaging.org/about-us/

⁸ How2Recycle is a standardized labeling system that brands can choose to include on their packaging to clearly communicate recycling instructions to the public. http://www.how2recycle.info/

Implementing Parties

- KC SWD: KC SWD will work with consultants to perform a study of existing producer responsibility
 programs for packaging and printed materials and develop guidance for implementing an EPR
 system in Washington State.
- Cities, City of Seattle: Assist with the research and provide information as needed.

<u>Action Item 1B</u>: Support legislation that promotes the use of innovative technologies and/or processes to help develop and build local recycling infrastructure and market development.

It is expected that several bills will be introduced in the 2019 legislative session that support the development of new sorting and processing technologies and facilities in Washington State. The RRTF recommends providing input on these bills to ensure they are in line with the Responsible Recycling Framework and advocating for the passage of these bills.

Implementing Parties

• *KC SWD, Cities, City of Seattle:* Encourage elected officials to support these bills, put it on legislative agenda, ask Washington State Association of Counties (WSAC) and Association of Washington Cities (AWC) to support.

<u>Action Item 1C</u>: Support and refine Plastics Packaging Stewardship legislation in the 2019 legislative session.

It is expected that a bill will be introduced in the 2019 legislative session that would establish a statewide Responsible Recycling System for plastic packaging. The legislation requires the producers of plastics packaging to fund and oversee the program. It would require the use of recycled plastics in products and provide resources to clean up plastic litter. The RRTF recommends providing input on the bill and advocating for its passage.

Implementing Parties

• *KC SWD, Cities, City of Seattle:* Encourage elected officials to support the bill, put it on legislative agenda, ask Washington State Association of Counties (WSAC) and Association of Washington Cities (AWC) to support.

<u>Action Item 1D</u>: Advocate for Responsible Recycling policies by requesting that elected officials adopt a Responsible Recycling System in their jurisdictions.

The RRTF recommends developing a process for engaging elected officials to request their adoption of the Responsible Recycling Framework and advocating for Responsible Recycling Systems. At the start of each legislative session, identify bills that support and advance Responsible Recycling Systems and advocate for support of these bills.

Implementing Parties

• *KC SWD, Cities, City of Seattle:* Encourage elected officials to support these bills, put it on legislative agenda, ask Washington State Association of Counties (WSAC) and Association of Washington Cities (AWC) to support.

<u>Action Item 1E:</u> Develop a feasible model for beverage container stewardship in Washington similar to the Oregon Beverage Recycling Cooperative model.

Action Item 1E will be implemented starting in 2020. Please refer to the Work Program Action Items on page 21.

Goal 2: Develop Local Recycling Infrastructure

Recommendation: Our region should support the development of our local recycling infrastructure to build resiliency, create local jobs, minimize greenhouse gases from transportation and production, and increase the ability to document and measure real recycling.

<u>Action Item 2A</u>: Conduct pilot projects to encourage the development of a domestic recycling infrastructure.

The RRTF recommends conducting pilot programs to test the feasibility of sorting and processing recyclable materials here in the U.S. or in Canada. New domestic markets could be explored, for example, sending #3 - 7 plastics to a chemical recycling processor that recycles these plastics back into fuel or plastic monomers for recycling back into plastic products. If successful, pilot programs could be continued to support the domestic recycling infrastructure.

Implementing Parties

- **KC SWD:** Explore opportunities for pilot programs with their solid waste service providers and vendors. They will also look for opportunities to partner with cities on pilot programs.
- *City of Seattle:* Explore opportunities for pilot programs with their solid waste service providers and vendors. Partner with the county and other cities, when appropriate.
- *KC Cities:* Explore opportunities for pilot programs with their solid waste service providers and vendors. Partner with the county and other cities, when appropriate.
- Solid Waste Management Companies: Explore opportunities to test new technologies and
 processes for sorting and processing of materials to support domestic recycling infrastructure.
 Propose pilot programs to the cities and the county.

<u>Action Item 2B</u>: Advocate for the expansion of the Wrap Recycling Action Program (WRAP) to establish an effective statewide program to capture plastic bags/film.

The Wrap Recycling Action Program (WRAP) is a national public awareness and outreach initiative by the American Chemistry Council (ACC) to provide retail drop off sites for plastic film including outer plastic wrap, bags, and flexible packaging. WRAP works with stakeholders including local and state governments, retailers, and material recovery facilities (MRFs) to educate consumers about what types of plastic film are recyclable, and how and where to recycle it.

The City of Seattle has conducted research on the availability of drop off sites for bags and film in the Seattle area and has initiated conversations with the ACC to explore ways to expand the program in Seattle. King County has a "Bag your Bags" website that provides information about many of the drop off sites in King County cities and unincorporated areas.

This action item would engage the ACC to provide additional drop off sites in the King County area and a national website directory of drop off sites that is maintained on the WRAP website and updated by their staff.

Implementing Parties

- *KC SWD:* Coordinate with the City of Seattle and all of the cities to move forward with a WRAP program. The Communication Consortium will be involved to roll out the program.
- *City of Seattle:* Coordinate with KC SWD, and promote the WRAP drop-off locations for plastic bags/film at retail stores.
- Communication Consortium: The Consortium will coordinate the education and outreach campaign
 for publicizing the removal of bags/film from the curbside recycling programs and the new drop off
 locations at retail stores.

Action Item 2C: Ensure resources to assist with development of markets for paper, plastic, and compost.

The RRTF recommends that cities, the county, and private sector companies provide resources that will help to establish and sustain markets for recyclable materials including paper, plastics, and compost. Through the KC SWD *LinkUp* program, resources will be secured to assist with pilot projects, research, and networking to help encourage new markets for the materials collected via our programs.

Implementing Parties

- KC SWD: Lead the effort to help develop markets for paper, plastic, and compost through the LinkUp program.
- *City of Seattle:* Provide funding and support to the *LinkUp* program.

Goal 3: Harmonize Recycling Programs and Messaging

Recommendation: All regional curbside programs should use consistent messaging about what is recyclable and not recyclable in the curbside recycling container.

<u>Action Item 3A</u>: Develop a process and criteria for adding/removing materials in the curbside recycling programs with criteria that is consistent with the responsible recycling framework.

The RRTF recommends developing criteria and a process for evaluating which recyclable materials are suitable for collection in commingled recycling programs. The criteria will be used to review the addition of new commodities or the removal of commodities that become problematic. The criteria would include an evaluation of the benefits and costs of collecting/sorting/processing a recyclable material (example: #3-7 plastics). The process will include annual reviews of the commodity markets and prices with SWAC, MSWMAC, and the City of Seattle.

Implementing Parties

- **KC SWD:** Lead development of the criteria and process for adding and removing materials from the recycling programs with input from the King County Advisory Committees.
- *City of Seattle:* Participate in the development of the criteria and process for evaluating the materials.
- KC Cities: Participate in the development of the criteria and process for evaluating the materials.

<u>Action Item 3B</u>: Continue the Communication Consortium to create unified messaging about curbside recycling to King County residents.

The RRTF recommends continuing the Communication Consortium that was establish in early 2018 as the first step to achieving the goal of harmonized messaging and programs. Members of the Consortium include communications staff from the KC SWD, City of Seattle, representatives from several King County Cities, the Sound Cities Association, and solid waste service providers.

In 2018, the Consortium developed a harmonized communications campaign and tool kit for agencies and elected officials to explain China's National Sword policies, the impacts to recycling programs, and why it is essential to reduce contamination in curbside recycling programs. The Consortium is now implementing consistent, regional messaging that instruct recyclers to make sure that their recyclable materials are "empty, clean, and dry" before putting them in the recycling container.

Implementing Parties

- KC SWD: Lead the Communication Consortium and contribute funding to implement outreach strategies.
- *City of Seattle:* Continue to participate in the Communication Consortium and provide funding as possible.
- *KC Cities:* Continue to participate in the Communication Consortium and provide funding and support for outreach efforts when possible.
- **Solid Waste Management Companies**: Continue to participate and support through their outreach efforts with their customers.

<u>Action Item 3C</u>: Develop a system to coordinate with the City of Seattle on recycling programs and policies.

The RRTF is a coordinated effort between King County, King County Cities, and the City of Seattle. The City of Seattle is a member of the planning team and an active participant in the Task Force. Continued coordination between all members of the Task Force is essential to successfully implement the Action Items included in this Report and to achieve the identified Goals.

The City of Seattle will develop and utilize a parallel process for presenting Recommendations and Action Items for approval from its solid waste advisory committee (SWAC). Recommendations that are brought to King County SWAC and MSWMAC will be also be brought to the Seattle SWAC in the same time frame. Every effort should be made to adopt harmonized messaging, policies, and programs that support the Responsible Recycling Framework.

Implementing Parties

- **KC SWD**: Work with the City of Seattle to establish an ongoing work group to coordinate on the Recommendations that will be transmitted to the respective SWACs for approval. Continue to coordinate on the implementation of programs and policies that are approved by the SWACs.
- City of Seattle: Establish a mechanism for bringing Task Force recommendations to the City of Seattle SWAC.

Goal 4: Increase Demand for Recyclable Materials

Recommendations and Action Items for *Goal 4: Increase Demand for Recycled Materials*, will be implemented starting in 2020. Please refer to the Work Program Action Items on page 21.

Goal 5: Create Clean and Marketable Feedstocks

Recommendation: Local governments and their service providers should require that the collecting, sorting, and processing of recyclable materials does not contribute to environmental pollution or endanger human health and safety and that materials are clean and suitable for remanufacture before being exported.

<u>Action Item 5A</u>: Update City and County Recycling Contracts and Codes to prioritize domestic sorting and processing and require documentation of the chain of custody from sorting facilities to legitimate end markets.

The Task Force recommends that cities and the county take measures to ensure that materials that are collected in recycling programs are actually recycled into new products and that it is done in a manner that is protective of human health and the environment. The following responsible recycling elements should be included in city or county recycling contracts as they are amended and/or new contracts are established:

- Prioritize that sorting and processing take place in the U.S. or Canada.
- Require that no mixed bales that contain non-recyclable materials are exported.
- Require downstream due diligence, documenting sale to end market.
- Consider risk sharing on commodity prices.

Implementing Parties

- KC SWD: KC SWD has executed a new contract to collect, transport, and process recyclable materials
 from customers at its transfer stations. The contract with the solid waste management company can
 serve as a model for other cities and counties to use to incorporate the responsible recycling
 elements.
- KC Cities and City of Seattle: Include the responsible recycling elements in RFPs and contracts for recycling services.

<u>Action Item 5B</u>: Remove plastic bags/film and shredded paper from the materials that are accepted in recycling programs in King County and the City of Seattle.

An action item that can be immediately implemented to achieve the goal of clean and marketable materials is to remove plastic bags, film, and shredded paper from the region's curbside recycling programs. These materials cannot be recycled effectively through the commingled curbside recycling programs. Once they reach the Materials Recovery Facilities (MRFs) where all of the commingled materials are sorted, the plastic bags and film get tangled in the MRF equipment and it requires the staff to extract the bags/film from the equipment. The bags and film become dirty and end up being disposed rather than recycled. Shredded paper is too small to be sorted by the MRF equipment and ends up being disposed of as residuals. The labor and disposal costs to deal with these materials is significant and does not result in the materials being recycled.

The City of Seattle found that MRF operators are only able to remove about 25% of the plastic bags during the pre-sort process. The remaining bags consistently contaminate other baled material. They further found that while plastic bags and film make up roughly 0.2% of incoming material by weight (about one bale per day),

approximately 20-30% of recycling center labor is attributed to these materials, costing \$700 - \$1,000 per ton to remove this material. A strategy and education campaign will be developed to remove these materials from the region's recycling programs.

Implementing Parties

- *KC SWD:* Coordinate the process to obtain approval from all of the cities to move forward with an education and outreach campaign.
- KC Cities and City of Seattle: The cities will determine whether recycling contracts will need to be
 amended to remove these materials from the curbside recycling list. Another option is to leave the
 materials in the contract but deemphasize recycling of bags/film and shredded paper in educational
 materials and promote alternative recycling options such as drop off of plastic bags/film at retail
 stores and community "shred events."
- **Communication Consortium:** The Consortium will coordinate the education and outreach campaign for publicizing the removal of these materials from the curbside recycling system.
- Solid Waste Management Companies: Provide support through outreach efforts with their customers.

<u>Action Item 5C</u>: Support "Reusable Bag" legislation to reduce the number of plastic bags entering the garbage and recycling system.

KC SWD and the Cities should support legislation to ban single-use plastic bags. This action supports the goal of clean and marketable materials by reducing the number of plastic bags entering the system, thus reducing contamination while promoting the use of durable bags. A bill will be introduced in the 2019 legislative session that prohibits the use of single-use plastic carryout bags and will require a charge of 10 cents on all paper carryout bags to encourage shoppers to bring their own reusable carryout bags. The retailers will retain the 10 cents charge. The bill requires that bags be made with paper that include recycled fiber and requires that compostable bags be tinted either green or brown to reduce confusion by consumers.

Implementing Parties

KC SWD, Cities, City of Seattle: Encourage elected officials to support the bill, put it on legislative
agenda, ask Washington State Association of Counties (WSAC) and Association of Washington Cities
(AWC) to support.

<u>Action Item 5D</u>: Develop a methodology for documenting the chain of custody to monitor adherence to recognized environmental and human health and safety standards.

The RRTF recommends that a methodology be developed to ensure that if there are no domestic markets for sorting and processing recyclable materials and materials must be exported to other countries, they are sent only to countries that have established and enforced standards and regulations that are protective of human health and the environment. Research will be conducted to identify standards that already exist such as those developed by the International Organization for Standardization (ISO) and the <a href="Organisation for Economic Cooperation and Development (OECD). The information will be used to develop the methodology for exporting recyclable commodities and for requiring specific documentation to ensure the materials are being processed responsibly.

Implementing Parties

- KC SWD: KC SWD will lead the research efforts and provide recommendations for review by the King County Advisory Committees.
- KC Cities and City of Seattle: Representatives from the Cities will contribute to the research efforts.
- **Solid Waste Management Companies:** Representatives will participate in the process to develop the methodology and providing information to support this effort.

<u>Action Item 5E</u>: Develop a consistent process for evaluating and granting surcharges on recycling rates and waivers to allow for periodic disposal of recyclable materials.

The RRTF recommends developing a consistent process and criteria for evaluating whether to grant permission to dispose of recyclable materials when recyclable materials become damaged and/or are unable to be recycled. In addition, criteria and a process should be developed for granting a temporary surcharge or rate increase in cases where there is a significant, sudden shift in the availability of markets for recyclable materials.

Implementing Parties

- **KC SWD:** Take the lead and work with the cities to establish the process and criteria for granting waivers to allow disposal of damaged recyclable materials.
- KC Cities: Work with KC SWD to develop the process and criteria.
- **WUTC:** Work with KC SWD to determine if adjustments are needed to their process for granting surcharges.
- Solid Waste Management Companies: Work with KC SWD and cities to develop the process and criteria.

<u>Action Item 5F:</u> Measure real recycling by tracking and documenting MRF residuals, measuring contamination in bale breaks, and conducting periodic MRF material characterization studies.

Action Item 5F will be implemented starting in 2020. Please refer to the Work Program Action Items on page 21.

Action Item 5G: Track the market price and conditions of recyclable materials on a monthly basis.

The RRTF recommends tracking the sale prices of recyclable materials on a monthly basis to understand and prepare for downturns in the recyclable materials markets.

Implementing Parties

- **KC SWD:** Collaborate with the City of Seattle and the WUTC to understand the market data they already track. Develop a method for regularly sharing with cities and other interested parties. In addition, KC SWD could track other sources of this data.
- City of Seattle: Collaborate with KC SWD to share the market data they track.

Goal 6: Improve Upstream Design

Recommendation: Local government should partner with national organizations to get local companies to commit to using recycled materials in new products and develop product messaging and package design that supports a system of responsible recycling.

<u>Action Item 6A</u>: Engage with the Sustainable Packaging Coalition and their How2Recycle programs to help educate brands and packaging designers on recyclability of packaging, the use of recycled materials in packaging, and designing packaging that is less toxic and more recyclable (e.g., no PVC plastic)

The RRTF recommends engaging package designers with the goal of increasing their understanding of the types of packaging that can and cannot be sorted and processed, the importance of using recycled materials in packaging, and the importance of using materials that are less toxic and more recyclable (no PVC plastic for example).

The first step to achieve this action is to attend, network, and present at the Sustainable Packaging Coalition (SPC) conference, taking place in Seattle in April, 2019.

Implementing Parties

- KC SWD: KC SWD will continue its membership in the SPC and speak at the SPC conference in April
 2019. KC SWD staff will continue to collaborate with SPC leaders and will coordinate with them on
 packaging design and recycling initiatives such as the WRAP program.
- *City of Seattle:* Seattle staff will continue to participate in the SPC to support their members' efforts in our region. Engage with KC SWD and Cities to support SPC's efforts in our region.
- *KC Cities:* Support Seattle's leadership in participating in the SPC.

2020 Work Program Action Items

The following action items will be implemented in 2020 and beyond.

- Action Item 1E: Develop a feasible model for beverage container stewardship in Washington similar to the Oregon Beverage Recycling Cooperative model.
- Action Item 4A: Establish recycled-content legislation that requires that certain products be made with a certain amount of recycled material.
- Action Item 4B: Establish or update procurement ordinances that require the purchase of products made with post-consumer recycled materials and train staff on implementing the ordinances.
- <u>Action Item 4C:</u> Work with the Association of Plastic Recycler's Demand Champions program to
 encourage King County companies to procure items made with recycled plastics such as pallets, garbage
 cans and other "work in process" items.
- Action Item 4D: Explore other procurement opportunities similar to the Demand Champions, for buying
 products made with recycled materials such as office paper, cardboard, shipping containers etc.
- <u>Action Item 5F</u>: Measure real recycling by tracking and documenting MRF residuals, measuring contamination in bale breaks, and conducting periodic MRF material characterization studies.

Mechanisms for Implementation

The recommendations in this Report can be implemented via the "committees" described below. The RRTF also recommends continued collaboration with the City of Seattle to ensure consistent implementation of the Responsible Recycling Recommendations. This could be accomplished by having a staff member from the City of Seattle participate on the following committees.

- Continue the **Communication Consortium** to provide consistent messaging across the County, including the City of Seattle.
- Create a Responsible Recycling Committee made up of members of the RRTF to track the progress toward implementing the approved recommendations. The Committee could meet on a regular basis to track progress and would report back to the King County and Seattle leadership and SWAC.
 - o Track implementation of the work program.
 - o Track recycling legislation that conforms with the Responsible Recycling Framework and make recommendations about whether to support, modify, or take other actions on the legislation.
 - o Engage elected officials in supporting policy-related recommendations and action items.

Next Steps for Adoption and Implementation

- Q1 2019: Bring recommendations and action items to King County Advisory Committees (SWAC and MSWMAC).
- January 2019: KC SWD to present on 2019 bills that pertain to Responsible Recycling.
- **February 2019:** Develop the Responsible Recycling Committee, establish charter, work program, and meeting schedules.
- **February 2019:** KC SWD develops work program to implement the Priority Recommendations for 2019.
- February 2019: KC SWD sets the agenda items for 2019 SWAC and MSWMAC meetings.

APPENDIX A: MEETING STRUCTURE AND MEMBERS

The Responsible Recycling Task Force met nine times during the time period from April 2018 – December 2018. Each meeting was designed to address a different topic related to the responsible recycling framework. Guest speakers and Task Force members were invited to present at each meeting to share information and spur discussion around alternate methods of recycling and other innovative ways to build a system of responsible recycling.

Task Force members and guest speakers include:

Task Force	Task Force Members			
April	Atwood	Seattle University, SWAC Vice Chair		
Stacey	Auer	City of Redmond		
Elaine	Borjeson	City of Bellevue		
Joe	Casalini	Republic Services		
Sabrina	Combs	City of Bothell		
Uki	Dele	City of Shoreline		
Tony	Donati	City of Kent		
Mary	Evans	Waste Management		
Susan	Fife-Ferris	Seattle Public Utilities		
Jeff	Gaisford	KCSWD		
Mason	Giem	City of SeaTac		
Sego	Jackson	Seattle Public Utilities		
Carla	Johnson	Republic Services		
Phillippa	Kassover	City of Lake Forest Park, SWAC		
Kevin	Kelly	Recology, SWAC Chair		
Linda	Knight	City of Renton, MSWMAC Vice Chair		
Ann	Larue	Washington Utilities & Transportation Commission		
John	MacGillivray	City of Kirkland		
Ken	Marshall	KC SWAC		
Michelle	Metzler	Waste Management		
Joan	Nelson	City of Auburn		
Emily	Newcomer	Waste Management		
Joyce	Nichols	City of Bellevue		
Sarah	Ogier	City of Bellevue		
Janet	Prichard	Republic Services		
Cameron	Reed	City of Shoreline		
Andy	Rheaume	City of Redmond		
Lisa	Sepanski	KCSWD		
Gary	Schimek	City of Redmond		
Stephanie	Schwenger	City of Bellevue		

Matt	Stern	Waste Management
Penny	Sweet	City of Kirkland
Hans	VanDusen	Seattle Public Utilities
Rob	Van Orsow	City of Federal Way
Mike	Young	Washington Utilities & Transportation Commission
Included o	n Task Force Com	munications
Cynthia	Foley	Sound Cities Association
Jennifer	Jessen	Public Health
Alli	Kingfisher	Department of Ecology
Brad	Lovaas	WRRA
Meg	Moorehead	KCSWD
Yolanda	Pon	Public Health
Kerwin	Pyle	KCSWD
Terra	Rose	King County Council
John	Walsh	KCSWD
Dorian	Waller	KCSWD
Guest Spea	akers	
Priyanka	Bakaya	CEO and Founder, Renewlogy (10/26/18 meeting)
Sam	Baker	Recycle BC (8/24/18 meeting)
Cherilyn	Bertges	BottleDrop Give Program Manager, OBRC (10/26/18 meeting)
Jeff	Brown	Epicenter Services, LLC (6/18/18 meeting)
Tamara	Burns	VP Supply Chain, Recycle BC (8/24/18 meeting)
Kim	Carswell	Director of Packaging, Target (11/15/18 meeting)
Eric	Elliott	Recycling Coordinator and Compost Technician, Seattle University (7/18/18 meeting)
Scott	Farling	Titus MRF Services (7/18/18)
Nina	Goodrich	Executive Director, Sustainable Packaging Coalition (8/24/18 meeting)
Norma	Smith	WA House of Representatives, 10 th Legislative District (9/19/18 meeting)
Heather	Trim	Executive Director, Zero Waste Washington (9/19/18 meeting)
Kim	Van Ekstrom	KCSWD/Communication Consortium (6/1/18 meeting)

For specific meeting topics and agenda details, please review Appendix B: Meeting Agendas and Topics.

APPENDIX B: MEETING AGENDAS AND TOPICS

Meeting 1

- o Date: April 30, 2018
- Meeting Topic: Task Force Introduction and The Responsible Recycling Framework
- Agenda and Presenters:
 - Welcome and Introduction
 - Task Force Goals and Final Outcomes Jeff Gaisford (KCSWD)
 - Responsible Recycling Framework Lisa Sepanski (KCSWD)
 - Current Conditions in King County Sego Jackson (SPU), Matt Stern (Waste Management),
 Janet Prichard (Republic Services), Kevin Kelly (Recology)
 - Communication Updates Jeff Gaisford
 - Task Force Meeting Schedule and Proposed Topics
- Meeting Minutes
- Meeting Presentation

Meeting 2

- o **Date:** June 1, 2018
- o Meeting Topic: What's in the Bin?
- Agenda and Presenters:
 - Welcome and Introduction
 - Task Force Problem Statement
 - Responsible Recycling Task Force Meeting Schedule
 - What's in the Bin? Lisa Sepanski (KCSWD)
 - Communication Consortium Update Kim van Ekstrom (KC)
 - Wrap Up and Next Steps
- Meeting Minutes
- o Meeting Presentation

Meeting 3

- o **Date:** June 18, 2018
- o Meeting Topic: Contracts, Waivers and Surcharges
- Agenda and Presenters:
 - Welcome and Introduction
 - Waivers Panel Jeff Gaisford and Meg Moorehead (KCSWD)
 - Surcharges Mike Young (WA UTC)
 - Contract Panel Hans Van Dusen (SPU) and Jeff Brown (Epicenter Services, LLC)
 - Wrap Up and Next Steps
- Meeting Minutes
- Meeting Presentation

Meeting 4

- o **Date**: July 18, 2018
- Meeting Topic: Domestic Processing Infrastructure: Fiber & Plastics
- Agenda and Presenters:

- Welcome and Introduction
- Fiber Markets Overview Kevin Kelly (Recology) and Eric Elliot (Seattle University)
- Plastic Sorting, Processing and Markets Sego Jackson (SPU) on behalf of Merlin Plastics
- Secondary Sorting and Processing Scott Farling (Titus MRF Services)
- Existing Research and Further Study Lisa Sepanski (KCSWD)
- Wrap Up and Next Steps
- Meeting Minutes
- Meeting Presentation

Meeting 5

- o Date: August 24, 2018
- Meeting Topic: Working with Producers
- Agenda and Presenters:
 - Welcome and Introduction
 - Recycle BC Overview and Framework Tamara Burns and Sam Baker (Recycle BC)
 - National and Private Sector Sustainable Packaging Efforts Nina Goodrich (Sustainable Packaging Coalition)
 - Wrap Up and Next Steps
- Meeting Minutes
- o Meeting Presentation

Meeting 6

- o Date: September 19, 2018
- o Meeting Topic: Policy Approaches in Support of Responsible Recycling
- Agenda and Presenters:
 - Welcome and Introduction
 - Legislation for Recycling and Recycling Markets Representative Norma Smith (WA House of Representatives)
 - Plastic Packaging Stewardship Sego Jackson (SPU)
 - Local and Statewide Reusable Bag Ordinances Heather Trim (Zero Waste Washington)
 - Recommendations Review
 - Wrap Up and Next Steps
- o **Meeting Minutes**
- o **Meeting Presentation**

Meeting 7

- o **Date:** October 26, 2018
- Meeting Topic: Recycling Systems and New Technologies
- Agenda and Presenters:
 - Welcome and Introduction
 - Technologies: Renewlogy & Chemical Recycling Priyanka Bakaya (Renewlogy)
 - Recycling Systems: Oregon's Beverage Recycling Cooperative & BottleDrop Program -Cherilyn Bertges (OBRC)
 - October 26 Recommendation Discussion
 - Recommendations Review
 - Wrap Up and Next Steps

- Meeting Minutes
- o Meeting Presentation

Meeting 8

- o **Date:** November 15, 2018
- o Meeting Topic: Creating Demand & Recommendation Chart Review
- Agenda and Presenters:
 - Welcome and Introduction
 - Creating Demand for Recycled Content: Target and the Demand Champions Kim Carswell (Target)
 - Recommendations and Action Items Review
 - Wrap up and Next Steps
- o Meeting Minutes
- o Meeting Presentation

➤ Meeting 9

- o **Date:** December 14, 2018
- o Meeting Topic: Final Report Review
- Agenda and Presenters:
 - Welcome and Introduction
 - Report Feedback
 - Top Priorities for Achieving Responsible Recycling
 - Implementing Parties
 - Transmittal Process
 - Wrap Up and Next Steps
- Meeting Minutes
- o Meeting Presentation

"Do the best you can until you know better. Then **when you know better, do better.**"
- Maya Angelou.