Solid Waste Division

2020Accomplishments and 2021 look ahead











Accomplished in 2020

How we improved service

Safety Measures Protect Employees and Customers at Recycling and Transfer Stations

Following Governor Inslee's "Stay Home, Stay Healthy" order to slow the spread of COVID-19, SWD preserved essential recycling and waste disposal services for its self-haul customers when neighboring solid waste jurisdictions closed their collection facilities. SWD facilities remained in operation thanks to new safety standards protecting SWD's customers and employees. Since early April, SWD has seen an average increase of around 25% more transactions a day compared to last year, or close to 500 more self-haul customers coming to King County garbage and recycling facilities daily. SWD deployed several strategies to manage the flow of customers and their expectations, including notifying the media with a press release encouraging customers to delay visits and make only essential trips. Customers were also directed to wear masks and prepare to wait in line. SWD also implemented a staggered entry system and required customers to prove they had residence or business within King County's service area. SWD managed the congestion with reader boards, cones, signage, and flaggers who helped direct traffic. Traffic control is still in force at Algona Transfer Station on Saturdays and Mondays to help manage traffic backing up onto West Valley Highway.

New Compactors Installed Improve Reliability

In June, SWD completed a project to install more efficient and reliable compactors at the Enumclaw and Factoria stations. Compactors generally have 25 years of useful life and the one in Enumclaw was nearly 27 years old. Although it performed well over the years, due to a lengthy manufacturing process, lining up a replacement before a major breakdown was critical. These new compactors deliver 261 tons of force, a weight equal to – and more efficient than – 40 elephants.





Successful Pilot of Battery and Lightbulb Recycling Project

In 2020, the national organization <u>Call2Recycle</u> presented SWD with a "2019 Leader in Sustainability" award for coordinating the first-ever pilot project to collect and recycle light bulbs and batteries from multi-family residences. In partnership with YWCA and King County Housing Authority, SWD collected nearly 500 pounds of batteries in South King County, keeping these hazardous materials out of the landfill.

Shift to Virtual Recruitment and Onboarding

SWD's hiring managers quickly adapted recruiting, hiring, and on-boarding processes from in-person to virtual while maintaining a high volume of essential hiring. In 2020, HR conducted 42 recruitments, hired 39 new employees and 10 special duty assignments, and said farewell to 14 retirees. Looking ahead, Human Resources

(HR) will be negotiating new labor agreements and supporting the recruitment for key positions such as the new Equity Social Justice Manager, Operations Manager, Project Management Office Manager, and Facilities Engineering Services Manager. The first virtual New Employee Orientation takes place on February 11.

Green Schools Program Goes Virtual

In August, SWD's popular <u>Green Schools Program</u> transitioned to the virtual realm with a new podcast, webinars, online gatherings for Green Team leaders and teachers to connect with each other, a Sustainability Scavenger Hunt Challenge on a mobile app, and additional internet resources. Green Schools





Program participants have enjoyed the program's online transition, and participation has been good with nearly 200 joining the virtual gatherings.

Waste Reduction and Recycling Schools Program

SWD's popular school program went virtual in 2020. SWD hosted 115 video workshops for grades K-5 and nearly 400 workshops for grades 9-12, all with updated materials and handouts. In the coming year, SWD will offer a virtual assembly program and handouts will be translated into Spanish, Vietnamese, Russian,

and Chinese.

How we support our communities

Incorporating ESJ into South County Recycling and Transfer Station (SCRTS)

In April, <u>SCRTS</u> project managers received approval to move forward on four recommended actions to advance equity and social justice in the community served by SCRTS. In addition to providing funding for farm equipment at a nearby refugee/immigrant community farm, SWD plans to fund the creation of wayfinding and interpretive signage on the 18-mile mixed-use Interurban Trail as it winds through SCRTS-host city Algona, and neighboring cities of Pacific and Auburn. At SCRTS, SWD will design and build a multi-purpose room for environmental education and job training opportunities and apprenticeships for youth in partnership with DIRT Corps, a local organization that provides youth opportunities to learn about green infrastructure and habitat restoration.

Incorporating ESJ into Northeast Recycling and Transfer Station (NERTS)

In October, NERTS project managers launched a robust public outreach effort as part of the siting process for the new facility. A 28-member siting advisory group is advising SWD on community interests, values, and concerns as SWD seeks to break down barriers to service delivery. The Siting Advisory Group (SAG) consists of representatives from government agencies, non-profit groups, businesses, interest groups, and interested residents. SWD sought to ensure SAG members represent the diversity of our community and made accommodations to enable full participation at the monthly meetings. SAG is expected to meet through summer 2022.

Incorporating ESJ in SWD Capital Projects

The Project Management Office, in coordination with the Strategy Communications and Performance (SCP) and Recycling and Environmental Services sections, has developed templates for an ESJ Management Plan that closely follows the ESJ Sustainability Scorecard. This new approach will be required for all new SWD capital improvement projects (CIP). Equity Impact Reviews (EIRs) will be required for very large projects. Development and implementation of ESJ Management Plans and EIRs are incorporated into the project milestone approval process. With this framework in place, the division will identify opportunities to advance division and county ESJ goals.





Incorporating ESJ in SWD Operations

SWD Operations changed its approach to onboarding new hires to create a more welcoming and supportive environment. Rather than scheduling check-ins with new hires every two months during the six-month

probation period, new hires now meet with their supervisor every two weeks to exchange feedback and develop rapport. After two months, new hires meet with a member of management and complete an onboarding evaluation interview. Also new is the elevation of harassment to an incident on par with a negligent accident, complete with swift consequences. This Zero Tolerance Policy toward harassment demonstrates SWD's commitment to promoting a fair workplace for all.

In response to the killing of George Floyd in May 2020 and the events that followed, the division created an anti-racism message to show its support and commitment to dismantling systemic racism and acknowledge the division itself had work to do in achieving this goal. The message was incorporated into 75 posters installed at transfer stations and the Cedar Hills Regional Landfill.





Transcreation of Recycling Guide into Four Languages

SWD trans-created the "Guide to King County Recycling and Transfer Facilities", the division's most popular communication document, into the top languages in our service areas including **Spanish**, **Vietnamese**, Chinese (traditional and simplified), and Korean. This document educates SWD's customers on how to use our stations and what is recyclable or not and now even more customers will find it useful.

Re-Engagement of Recícla Más Advisors and Facilitadores.

Committed to the equity principle of fostering community ownership, SWD modified the usual tactics for developing the 2021 workplan for the partnership coalition of Recícla Más Advisors and Facilitadores. This time, the community members - the facilitadores - themselves took the lead and met directly with constituents to inform and draft a workplan for how they can engage King County's Spanish language community on behalf of SWD and the Hazardous Waste Program in a virtual format. SWD provided technical, logistical and funding support such as financial compensation for their efforts, wi-fi hotspots and loaned iPads.

How we are responsible stewards

\$40M in Savings Postpones Rate Increase

After hearing partner and customer concerns about raising rates during the COVID-19 pandemic, SWD revised its budget and found a way to temporarily maintain the rate set in 2018 without customer-facing service cuts in 2021. This was possible thanks to the work of the Rates Task Force convened in fall 2019 and their efforts to identify \$40 million in savings. SWD's savings came from a variety of creative places, such as using low-interest rate bond financing for capital projects, to reducing reliance on outside contractors and the number of rented porta potties. In addition to delaying the rate increase, these savings allowed SWD to reinvest \$9 million toward climate and zero waste of resources goals.



Passing Financial Audits

In 2019, SWD's liability for the Cedar Hills Regional Landfill was extended from 30 years to 40 years, shifting SWD from an Enterprise Fund to a Major Enterprise Fund, placing SWD's financial management under greater scrutiny with yearly third-party audits. These audits review SWD's financial policies, data, and business practices to ensure SWD's financial health is strong and in accordance to industry best practices. In October 2020, the accounting firm Moss Adams completed their 2019 audit with no concerns and are currently auditing SWD's 2020 practices.

2021-2022 Budget Adopted

In November, King County Council adopted SWD's 2021-2022 budget which includes revenue estimates totaling \$301 million, with \$260 million from tipping fees, \$16 million for the sale of the Eastgate property near Factoria Recycling and Transfer Station, \$4 million from the sale of recovered landfill gas to BEW, and \$6 million from property rents. Expected expenditures of \$311 million includes \$112 million for the salaries and benefits of 433 full-time employees, \$7 million for activities to divert waste, \$2 million for carbon neutrality efforts such as a possible project piloting a small electric vehicle fleet. The Construction Fund received \$98.7 million to pay toward SCRTS, NERTS and closed landfill projects. The Landfill Reserve Fund received \$35.1 million to pay toward capital projects at Cedar Hills including Leachate Lagoon, Area 8 Closure and Area 9 Development projects.

Managing Flow Control

"Flow control", as stated in county code, requires that all garbage from within King County be disposed in county-approved and controlled disposal facilities. On the flipside, SWD does *not* have responsibility for waste generated outside of the system. In 2019, to have better accountability for the flow of garbage within the SWD system, SWD started two enforcement measures seemingly at odds with each other. To stop the flow of garbage *flowing in* from beyond our system, SWD required self-haul customers to provide proof of residence before visiting SWD transfer stations. To stop the flow of garbage *flowing out* of our system, SWD met with the three hauling companies to ensure any waste left after sorting out recyclables would be delivered to the Cedar Hills Regional Landfill. With these measures in place, the remaining landfill capacity is reserved for SWD customers and SWD collects significant revenues that would have otherwise gone elsewhere. In 2020, after just one year of compliance, SWD received \$3 million in residual tonnage fees.

Asset Management Maintenance

Every January, SWD engineers present their list of proposed repair and maintenance capital projects to be prioritized for the upcoming year. In 2020, that list included 84 projects ranging from cleaning gutters and painting walls to installing 2,200-lb aerators. In close coordination with Operations staff, the team accomplished 66 more projects than they had planned, for a total of 150 projects.

Eliminating Overweight Loads

Most of SWD's Recycling and Transfer Stations have scales that weigh trailers while they are loaded, but three of our older transfer stations do not, making it difficult for Transfer Station Operators to know when a load contains more weight than it should to travel safely on the road. In 2020, SWD's truck drivers and Transfer Station Operators worked together to devise a system to ensure only trucks with allowable weights leave the station. Trucks will be weighed before they leave for the landfill. If a truck is over the legal weight limit for travel, they will be set aside until the excess weight is distributed to another load.



How we prepare for the future

2021 - 2022 Business Plan

Intended as a companion-piece to the biennial budget, SWD planners completed the 2021-2022 Business Plan. This plan outlines SWD's strategies and actions toward achieving ESJ goals, supporting major capital projects, and advancing the division towards carbon neutrality. This year's plan describes major changes in SWD's budget that will allow the division to take action on long-term projects such as achieving zero waste of resources and maximizing capacity at the Cedar Hills Regional Landfill.

Baselining South County Recycling and Transfer Station (SCRTS)

The **SCRTS** project achieved a major milestone in 2020 with completion of preliminary design which includes the look and shape of the new facility, what it should cost, and the construction schedule. With input from Operations staff, the preliminary design supports garbage collection, a multitude of recycling services, and hazardous waste disposal for residential and qualifying small



A conceptual rendering of the future SCRTS facility that will start operating in 2024

businesses. Other design features include the generation of renewable energy, Electric Vehicle charging stations, rainwater capture, habitat restoration and drought-tolerant landscaping.

Striving for Zero Waste of Resources

Waste characterization studies consistently show that 70% of what is thrown away still has economic value. One of SWD's key missions it to divert these reusable materials toward better uses by 2030. SWD planners are working with a task force of representatives from cities, hauling companies, and community members to develop a plan for achieving this goal. This work promises to fundamentally change the division as new business lines will someday begin to replace burying these materials.



Fourteen Lean Green Belts in SWD

Fourteen SWD employees completed DNRP Continuous Improvement training program in 2020, earning their Lean Six Sigma Green Belt Certificates. They participated in a 40-hour course with other DNRP employees to learn how to improve organizational culture, embrace continuous improvement methodology, and focus on customers. Continuous improvement helps achieve this by identifying opportunities for efficiencies, removing obstacles that cause frustration, eliminating waste, and increasing value-added activities. With all these newly minted experts in-house, SWD's day to day operations are bound to function more efficiently.

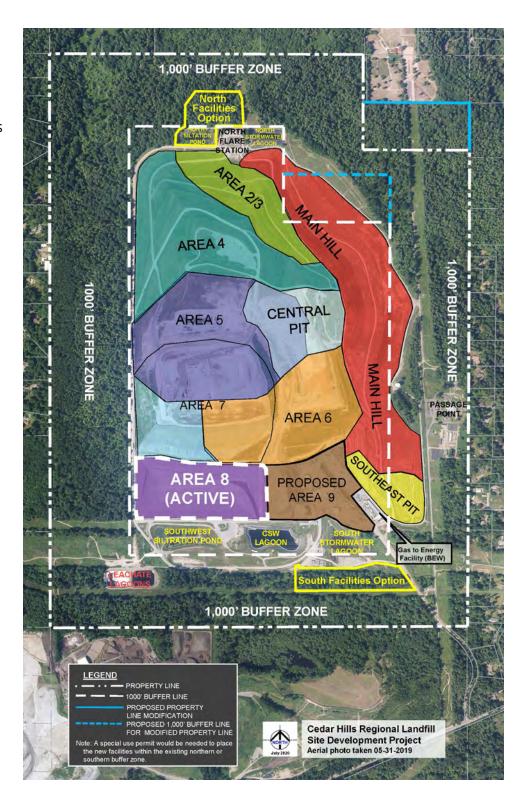


Cedar Hills Site Development and Facilities Relocation Draft Environmental Impact Statement (EIS)

The project to extend landfill <u>capacity</u> has several components beginning with evaluating the four alternatives for developing a new garbage disposal area (Area 9), relocating landfill support facilities to make room for Area 9, and pursuing a Special Use Permit, if SWD locates the new support facilities in the landfill's existing buffer zone. A Draft EIS is a document that evaluates the environmental impacts of a proposed action. In September, SWD issued a Draft EIS for public review and comment. A Final EIS will be issued in mid-2021 that considers the public comments received and recommends a preferred alternative for extending landfill capacity.

Supporting Employee Growth and Development

To increase opportunities for employee growth and development in 2020, SWD offered a 40-hour training course for employees interested in pursuing their Commercial Drivers License (CDL) and meeting the minimum qualifications to become a truck driver for SWD. Interested employees attended 40-hours of online training to earn their learner's permit, and then paired up with SWD's in-house stateaccredited CDL trainers. SWD paid for the tuition, textbook, time, and fees for these



employees to attend the program. A similar in-house training program is in development for employees who want to learn about becoming a Transfer Station Operator. Scale Operators are also learning about career development services available at King County's Central Human Resources Department.



How we rise to the occasion

ESJ Listening Sessions

In 2020, many challenges were faced by our employees and communities – not the least of which was racial inequity. Building upon similar events in the County aimed at informing dialog and action for equity, the Director's Office hosted multiple "listening sessions" to provide a safe and courageous space for staff of color to share their views while others to listen and sought to understand. These events coupled with site visits by the Director and Deputy Director helped to inform leadership and peers on the progress and remaining challenges ahead. In 2021, these will transform into Discussion Sessions and continue to broaden the dialog and accountably necessary to drive real change for our employees and the communities we serve.

Administered New COVID-19 Paid Leave Policies

To alleviate financial strain of those coping with COVID-19, the federal and county government created four new types of additional paid leave for qualifying employees to tap into if they needed to be absent from work. SWD's paid leave managers processed an unprecedented 20,000 hours of COVID-19 leave and responded to countless complicated and sensitive leave-related questions and issues.

Houghton Landfill Neighbor Relations During Gas Detection

In May, elevated levels of methane gas were detected in one of the 35 gas probes at the 35-acre <u>Houghton Landfill</u> that closed in 1994. An Incident Command Team of 16 employees from multiple sections quickly formed and within 24 hours tested for gas inside homes within 1,000 ft of the probes. The Incident Command Team ensured all the required testing was completed and notifications were sent to neighbors, officials and regulatory agencies. The team also enacted improvements to the gas monitoring and collection system.

Cleared Leachate Lagoon Pipeline Blockage

In September, operations crews detected a blockage in the 7-mile pressurized pipeline that conveys leachate (stormwater/wastewater) from the Cedar Hills Regional Landfill to the South Treatment Plant in Renton. The need for repairs was urgent because of the approaching rainy season and the risk of overflows. SWD staff coordinated a swift response with King County's Wastewater Treatment, Road Services and Stormwater Services divisions. In response to this incident, the division enacted new measures to reduce the risk of backups and overflows of the leachate lagoons such as developing a testing plan and maximizing onsite storage capacity.

Ahead in 2021

New Systems Ahead

New Five-Day Work Week

Business priorities, policy goals, and economic conditions have resulted in a significant decline in the garbage coming to the Cedar Hills Regional Landfill, which accounts for about 95% of the revenue that funds SWD. For these reasons, the division is advancing a plan to reduce hauling and tipping operations at the landfill from seven days a week to five days a week starting in July 2021, which would affect union-negotiated work schedules. This new schedule could eliminate the need for about 20 full-time positions. The division hopes to achieve this through eliminating vacant positions or through early retirements. SWD managers met with potentially affected employees and is working with the Office of Labor Relations and Locals 302 and 174 to initiate a bargaining process for these changes.



Asset

Life

Cycle

New Safety and Emergency Response Team

SWD identified the need and opportunity to invest in an enhanced safety culture, and to be positioned to prepare for and respond to emergencies that affect our unique system. From that, the Safety and Emergency Management Team was founded. It started with hiring the Safety and Emergency Manager in March



2020. Two Safety Program Managers/Officers positions were added throughout the year, and an Emergency Coordinator will be joining the team in 2021. This new team reports to the Director's Office, and is represented on SWDMT, to support the division-wide scope and commitment to these critical elements of SWD's work.

New Asset Management Unit

A new Asset Management Unit is forming to manage the division's physical assets such as buildings, infrastructure, equipment and rolling stock. This unit will consist of a supervisor, three engineers, and a program planner who will ensure we manage our assets are properly inventoried, maintained, and replacements or upgrades are timely purchased and used.

New Compliance and Permits Unit

A Compliance and Permits Unit is also forming in FES, this one will expand the team of environmental scientists responsible for monitoring the division's compliance with regulatory requirements in our permits. The new unit will consist of a supervisor, the field sampling team, and two new project managers tasked with following and participating in developing new environmental regulations and SEPA compliance.

New Structure and Processes in Enterprise Services

With a new way of working, and new leadership at the helm of Enterprise Services, SWD's financial managers have started to evaluate workload distribution and responsibilities and identify standard work and opportunities for continuous improvement. The goal of these efforts is to provide an even greater level of customer service and promote employee development. In the spirit of continuous improvement, Enterprise Services will remove silos separating Accounts Receivable and Accounts Payable roles so staff will have more opportunities to develop skills and grow in their careers.

New Rate Restructure Shifts Away from Tonnage

Around 95% of division revenues come from tipping fees based on disposal tonnage, which are highly variable. A new rate structure is needed in 2023 and beyond as we move towards diverting the 70% of these tons to better uses through our zero waste of resources goal. We are working with cities, haulers, and community members now to develop a more stable revenue source for the future.

New Data Management Tools for Special Waste Unit

SWD's Special Waste Unit plans to roll-out new online system to capture and manage data for load inspections, and waste acceptance and KCC Title 10 violations in 2021.



The new South County Recycling and Transfer Station is designed to include green building standards.

New Policies Ahead

New Green Building Ordinance

While King County has had a green building policy since 2001, it was last updated in 2013. An updated <u>Green Building Ordinance</u> was needed to re-align King County Code with the current countywide policies such as the <u>2020 Strategic Climate Action Plan</u>, and others related to climate, equity and social justice, sustainable materials, and water. The updated Green Building Ordinance addresses the long-term fiscal benefits of upfront investment, adds requirements to implement green building practices for those who lease county property, and institutes new green building rating systems for county-managed capital projects. This updated ordinance reinforces the county's commitment to green building priority actions and performance targets.

New Codes for Construction and Demolition Debris (C&D)

SWD planners worked with the multi-jurisdictional Regional Code Collaboration to develop new green building codes available for cities to voluntarily adopt that will increase material reused and recycled. For example, a city could require a construction contractor to assess or inventory jobsite debris and materials that could be salvageable. This would make it easier for salvage companies to get involved in C&D projects and would cause more material getting salvaged.

New Built Green Multifamily Checklist

SWD planners are looking forward to collaborating with the <u>Built Green</u> green-building certification program to add a new section that advances economic and social justice in their Built Green Multifamily Checklist. Cities who add these codes to their green-building checklists will incentivize project owners, designers, and builders who want third-party validation on their green-building credentials will need to become educated on equity matters and put into practice actions to support ESJ.

New 2022 Rate Proposal

The one-time savings SWD staff found in 2020 won't exist going forward so an increase in the rate is needed in 2022 so SWD can continue to support current services and make progress on division goals such as zero waste of resources and carbon neutrality. SWD planners are working with advisory committees and the Executive's Office to help shape what the ultimate rate proposal will be in the summer 2021.



New Extended Producer Policy Framework for Washington State

SWD staff developed a policy framework with the Northwest Product Stewardship Council (NWPSC) to create a system for extended producer responsibility (EPR) in Washington State to address residential packaging and paper products (PPP). This system would require PPP producers to fund the system for collecting and recycling PPP in Washington State. There is hope! The American and Washington Beverage Associations have expressed support to an EPR bill in WA. Others, such as the Consumer Goods Forum, comprised of 36 large retailers and manufacturers, have expressed support generally but under certain conditions.

New King County Model Recycle Project

SWD is taking the lead on a new King County Model Recycle Project, first to analyze how DNRP facilities practice waste management and then to develop a standardized program for better waste management practices. The project will produce two programs: Guidelines for DNRP Employees and Facilities and a Sustainability Steward volunteer program. The intent is to expand this program throughout the rest of King County's facilities in collaboration with the Facilities Management Division (FMD).

New Projects Ahead

Capping Area 7

Between June 2010 and July 2019, SWD buried 8.1 million tons of garbage in cell known as Area 7. It will be capped with a final cover, covering about 26 acres starting in late spring 2021. The final cover project includes installing a robust gas collection system, more stormwater capture and conveyance, laying down air-tight and water-tight covers and linings, soil, hydroseed, and access roads. This project is expected to be completed by early fall 2021. While already at its peak height of 788 feet, Area 7 abuts the older Areas 5 and 6, to the north, each with lower elevation and the potential capacity to contain more garbage once Area 9 is at capacity.

New Services Ahead

Accepting Oil Based Paint Collection at Hazardous Waste Facilities

In 2021, SWD will be a collector in the statewide paint product stewardship take-back program for oil -based paint collected at the Household Hazardous Waste facility at the Factoria Recycling and Transfer Station and the Wastemobile. Paint manufacturers will manage the collected paint, relieving residents and small businesses of the cost of state governments handling that waste stream. SWD hazardous waste facilities do not accept latex paint because it is water-based and no longer made with hazardous materials.



The Wastemobile helps properly dispose of hazardous household waste, including oil-based paint.