

**Do you have
personal experience
with leaves and/or
flooding you would
like to share?**





Leaf Raking Pilot

Presented by

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Drainage Education & Outreach Programs
Emiko Takahashi, Economist



Agenda

- Purpose
- Describe Pilot
- Present Findings
- Next Steps
- Feedback / Ideas



Primary Team

Surface Water Management

- Kaniteli (Teli) Puloka (S. Chief)
- Shelly Effrig (N. Chief)
- North & South Crews

Maximo / GIS support

- David Shin
- Chris Baker

Community Affairs

- Marieke Rack

Economist

- Emiko Takahashi

Survey Team

- Frances Hernandez

Drainage System Planning

- Susie Walson

Solid Waste Liaison

- Hans VanDusen



TAKE WINTER BY STORM

WINTER WEATHER PREPAREDNESS TIPS & RESOURCES



WINTER WEATHER *RESOURCES*



September - October 2018

AT YOUR SERVICE

Information about your water, drainage, wastewater and solid waste utility services.

Solve Your 'Waste Woes' Online

Have a problem with your garbage, recycling, or food and yard waste? Skip the phone and report online – it's quick and easy!

Missed collection

Was your bin skipped? Report a missed pick up after 6 p.m. on your collection day.

Damaged or missing bin

Discover a dent in your bin? Has it disappeared entirely? Report online to get a replacement.

Change bin size

Need a smaller garbage bin? You can change the size of your bins to fit your needs. To report online, visit seattle.gov/util/aboutus/contactus.



Don't Let Storms Be a Pain, Rake Your Street Drain

Storm season is coming! During the stormy fall season, street drains can easily become clogged with fallen leaves and other debris. Clogged drains can cause water to back up and flood our streets and sidewalks.

Keep your neighborhood storm drains clear with these tips:

- Use a rake or broom to clear leaves and debris away from storm drains. Dispose of leaves and other yard waste in your food and yard waste cart. Other street debris goes in the garbage.
- Make sure to stay safe: wear gloves, work from the curb, and be aware of your surroundings. Adults should supervise any children who want to help.
- Report clogged drains and flooding to SPU by calling 206-386-1800.



For more tips on how to prepare for rain, flooding, and storms, visit takewinterbystorm.org.

Don't Flush Trash

Toilet paper is the only product, besides human waste, that breaks down when flushed. Everything else—even products that claim to be "flushable"—can cause expensive backups and clogs in your home and the city sewer system, leading to sewage overflows in our local waters.

Here are a few common items that should not be flushed:

- Wipes (even if labeled "flushable")
- Paper Towels
- Tampons
- Facial tissues
- Diapers
- Floss



Don't flush these common items.

Watch what happens when you flush garbage and other items at bit.ly/SPUFlush.







Seattle Public Utilities

November 8, 2018 · 🌐

It's leaf season! That means FREE extra yard waste pickup in November!
Learn more: <http://ow.ly/qBxi30mh0AL>



👍 Like

💬 Comment

Kathy Conroy O'Hara, Jessica Han, Kha Ha and 7 others like this.

Most Relevant ▾



Questions

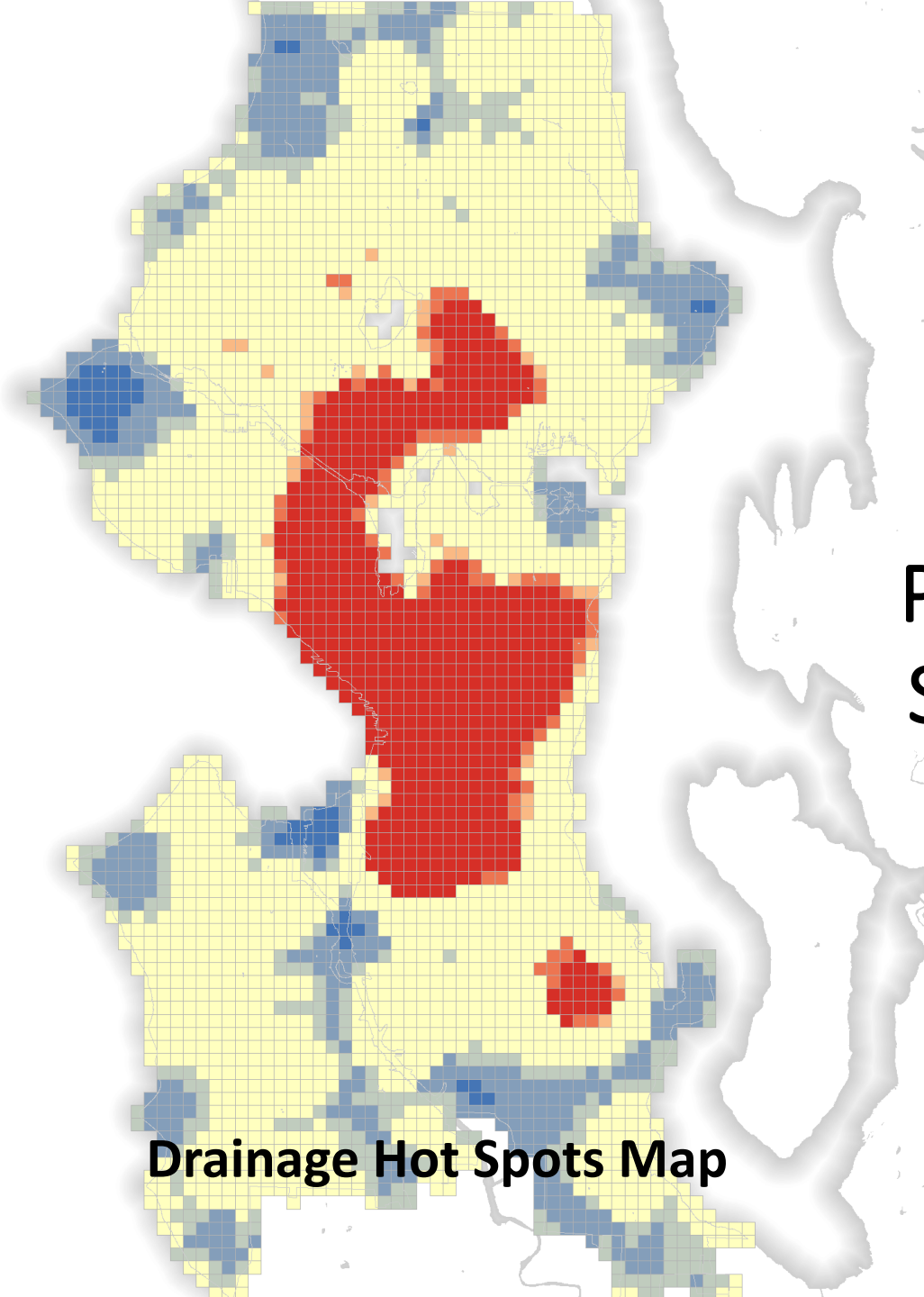
- How much outreach?
- Will community respond?
- Could it save crews' time?
- Will it improve system operation?



Pilot Project Phase I

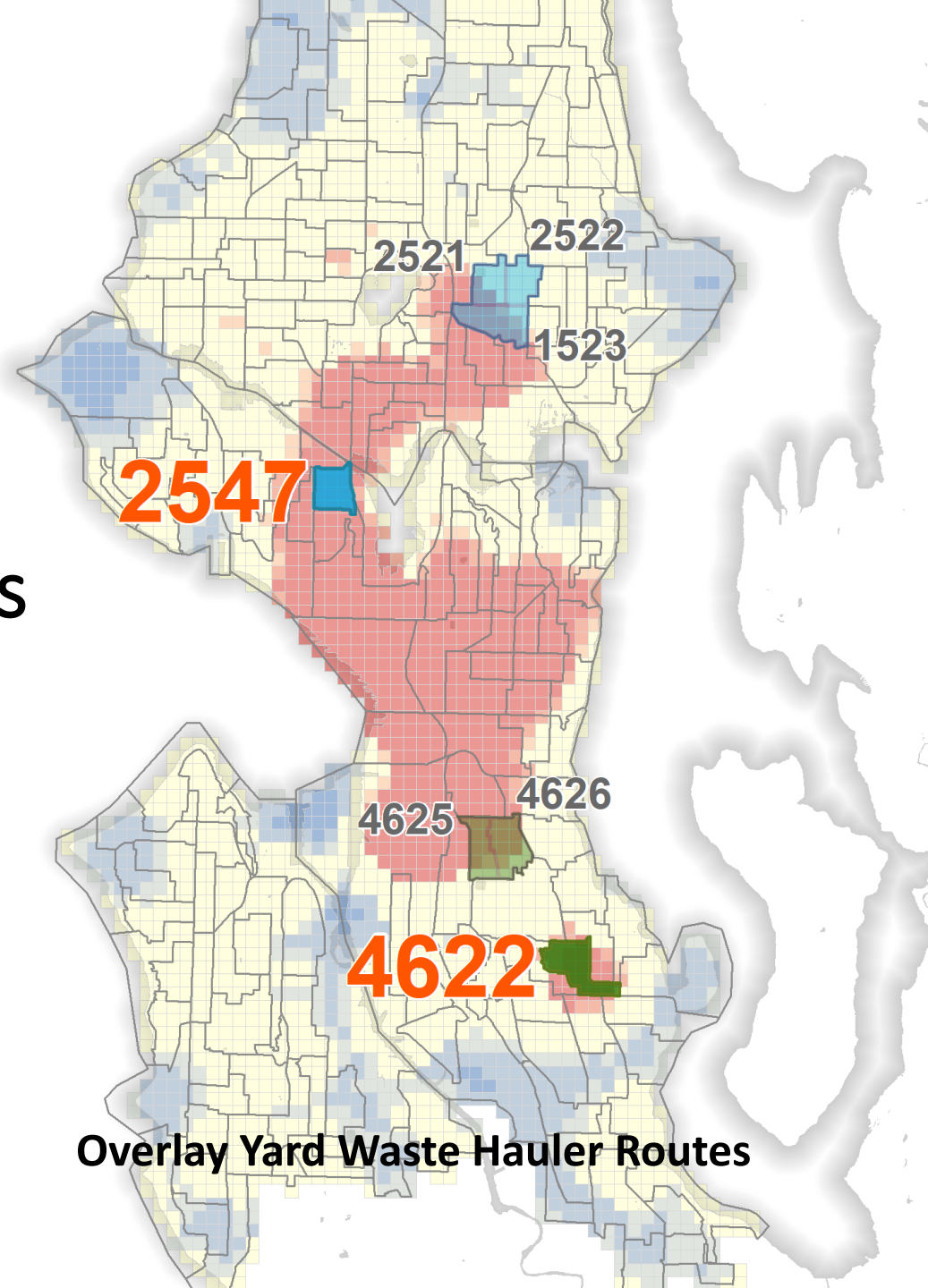
- Increase outreach in pilot neighborhoods
- Monitor extra yard waste collected
- Learn about customer behavior



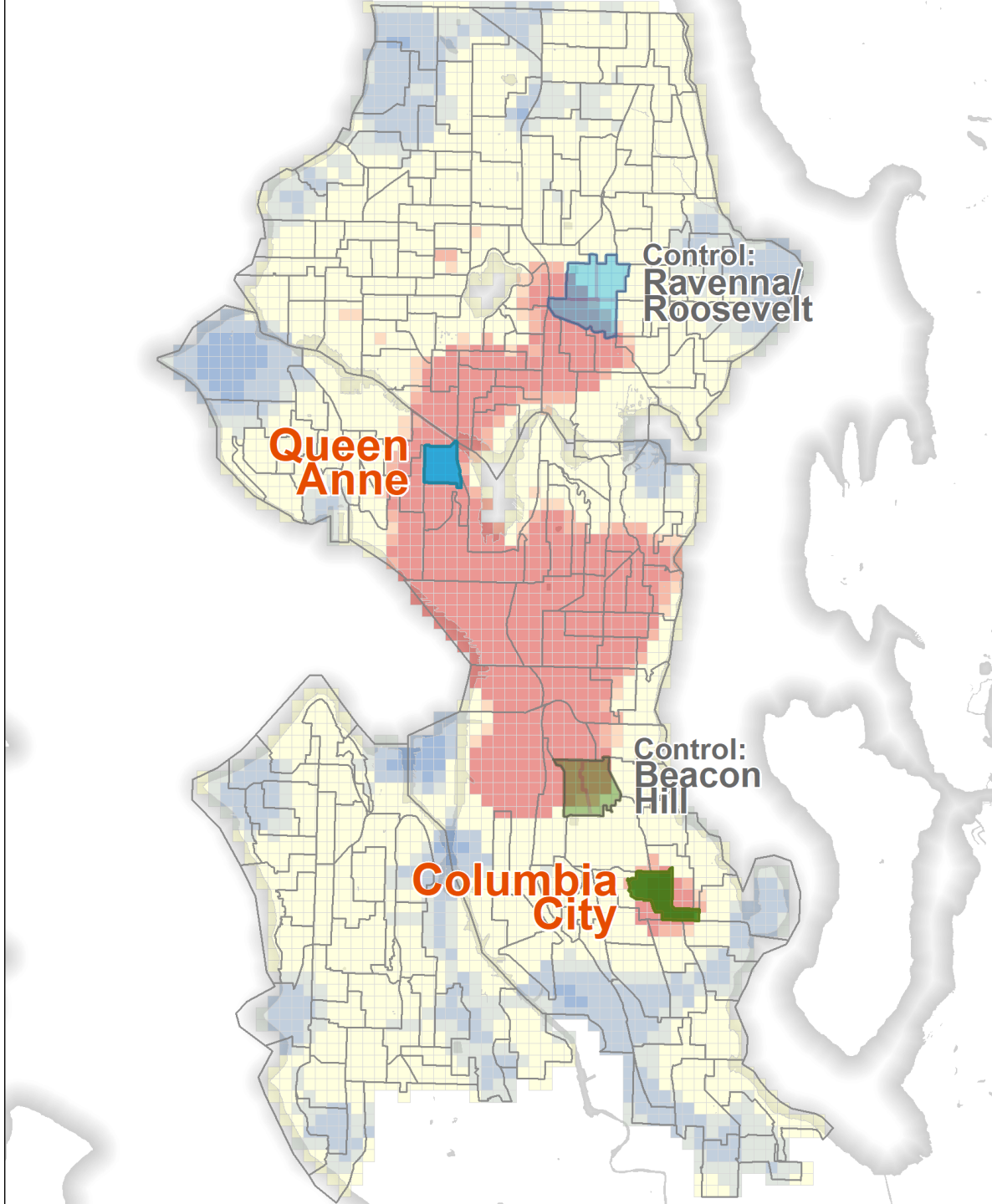


Drainage Hot Spots Map

Pilot Areas Selection



Overlay Yard Waste Hauler Routes



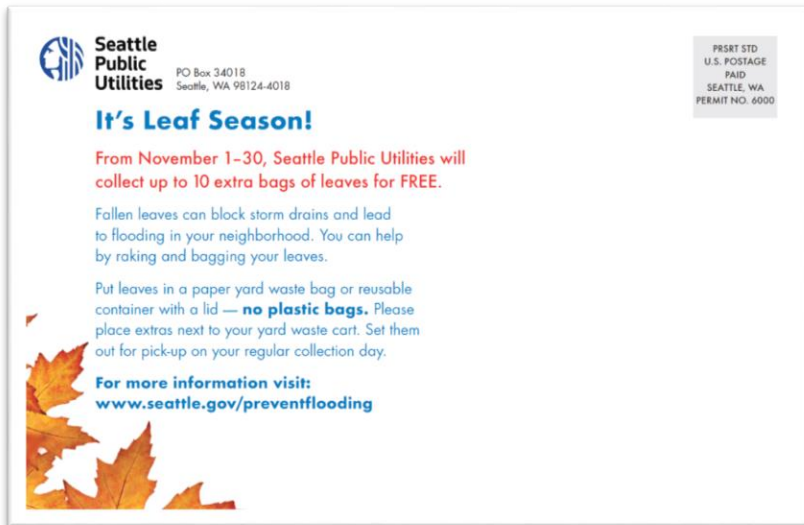
**Queen
Anne**

**Control:
Ravenna/
Roosevelt**

**Control:
Beacon
Hill**

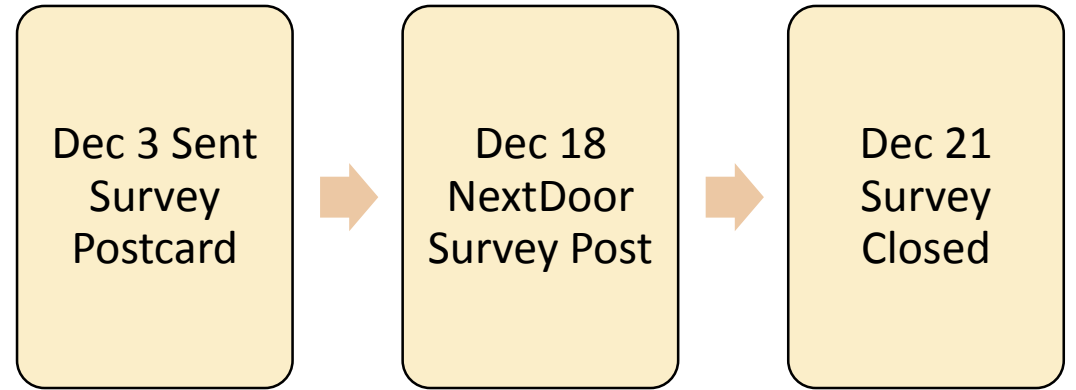
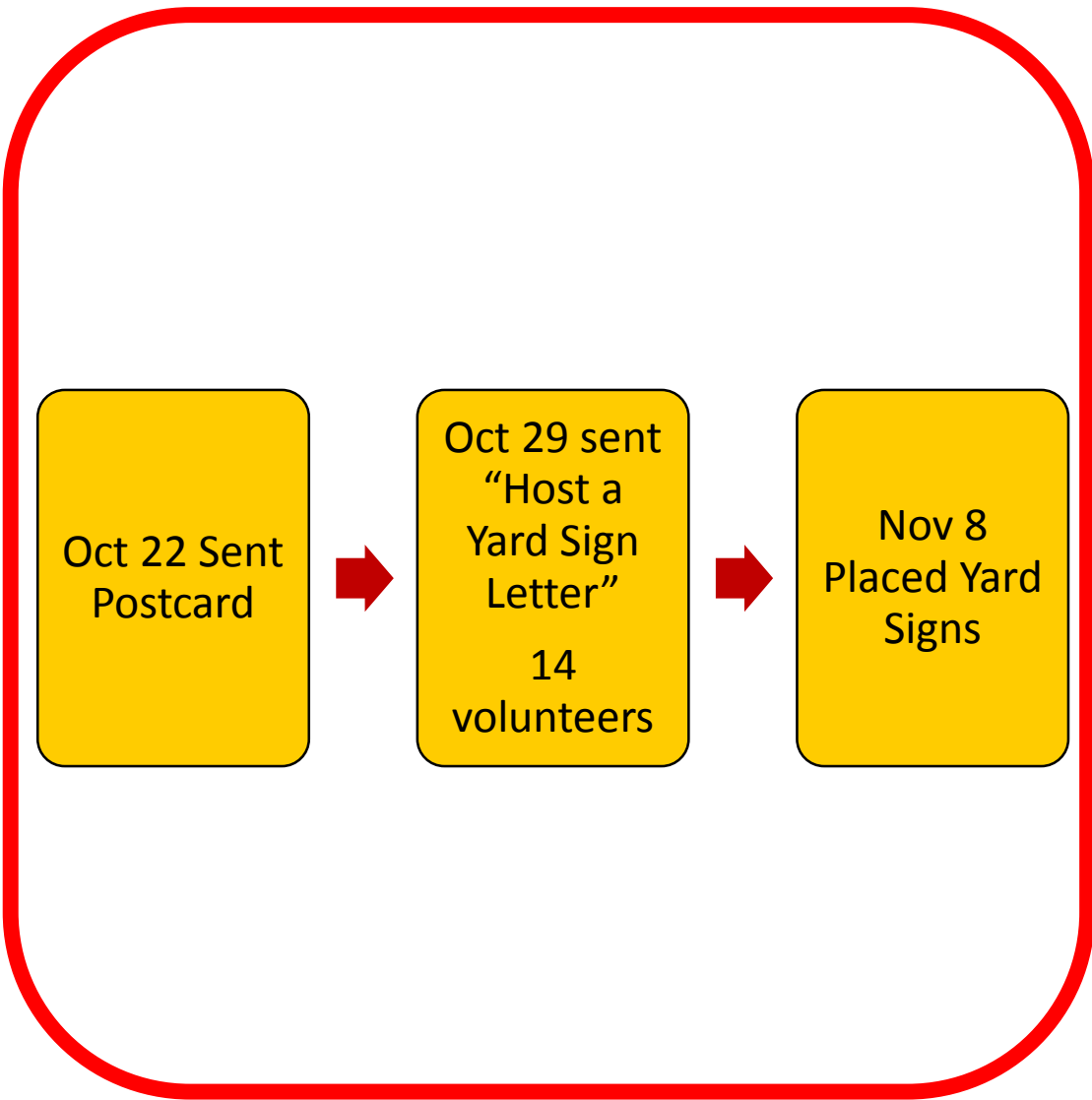
**Columbia
City**

Postcard

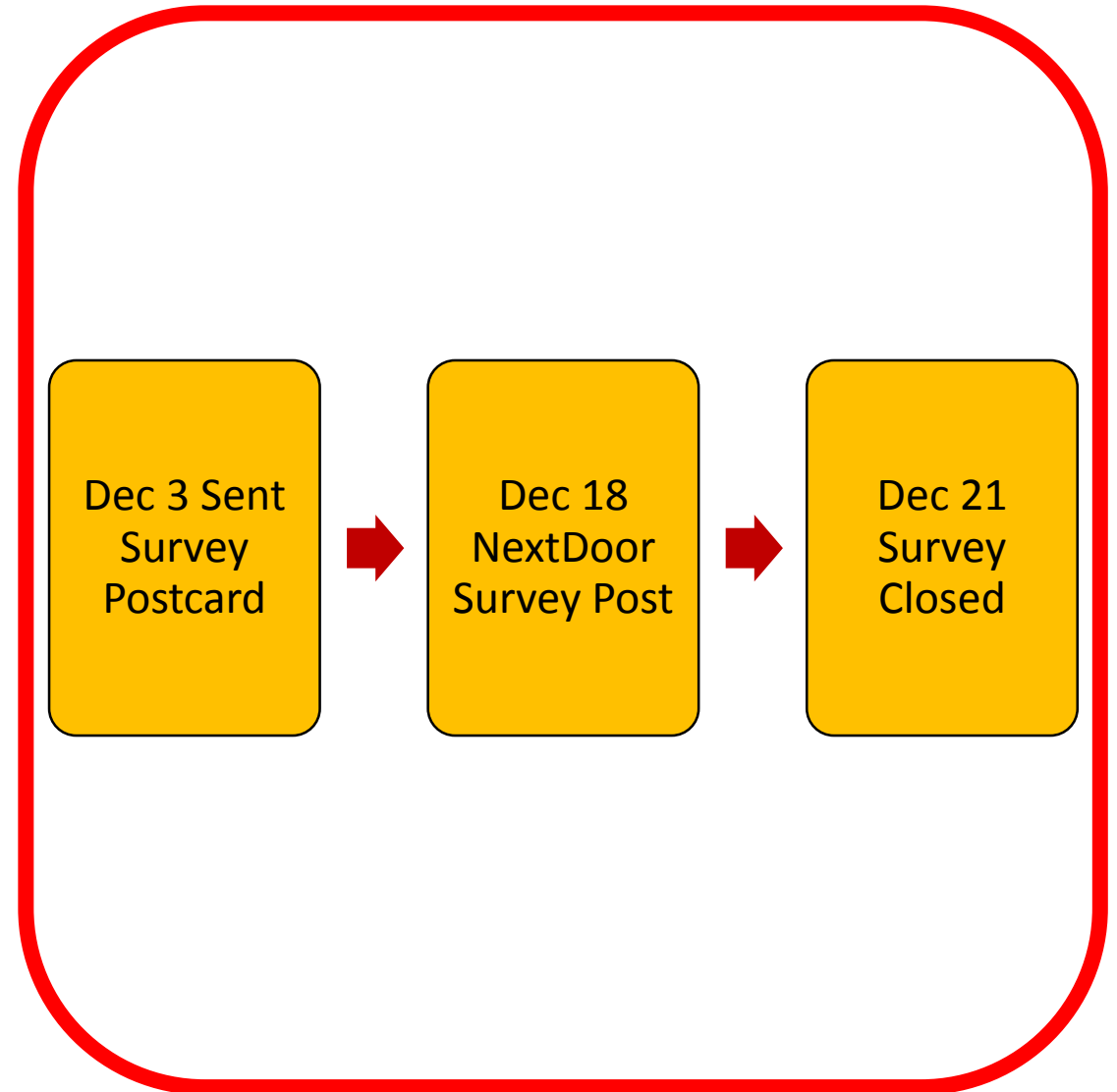
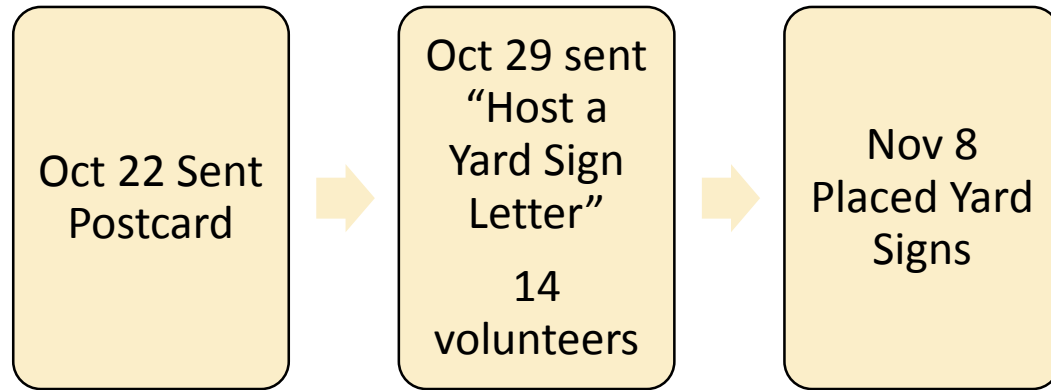


Yard Sign









We added Control Areas and did a Leaf Raking Customer Survey



Seattle Public Utilities

We need your input!

Seattle Public Utilities is conducting a survey to learn more about raking leaves in your yard. Leaves can clog storm drains and cause street ponding and flooding. Your survey feedback will help us keep leaves away from storm drains.

The survey is online here:
surveymonkey.com/r/rakingleaves

Survey feedback is anonymous and takes less than 10 minutes.

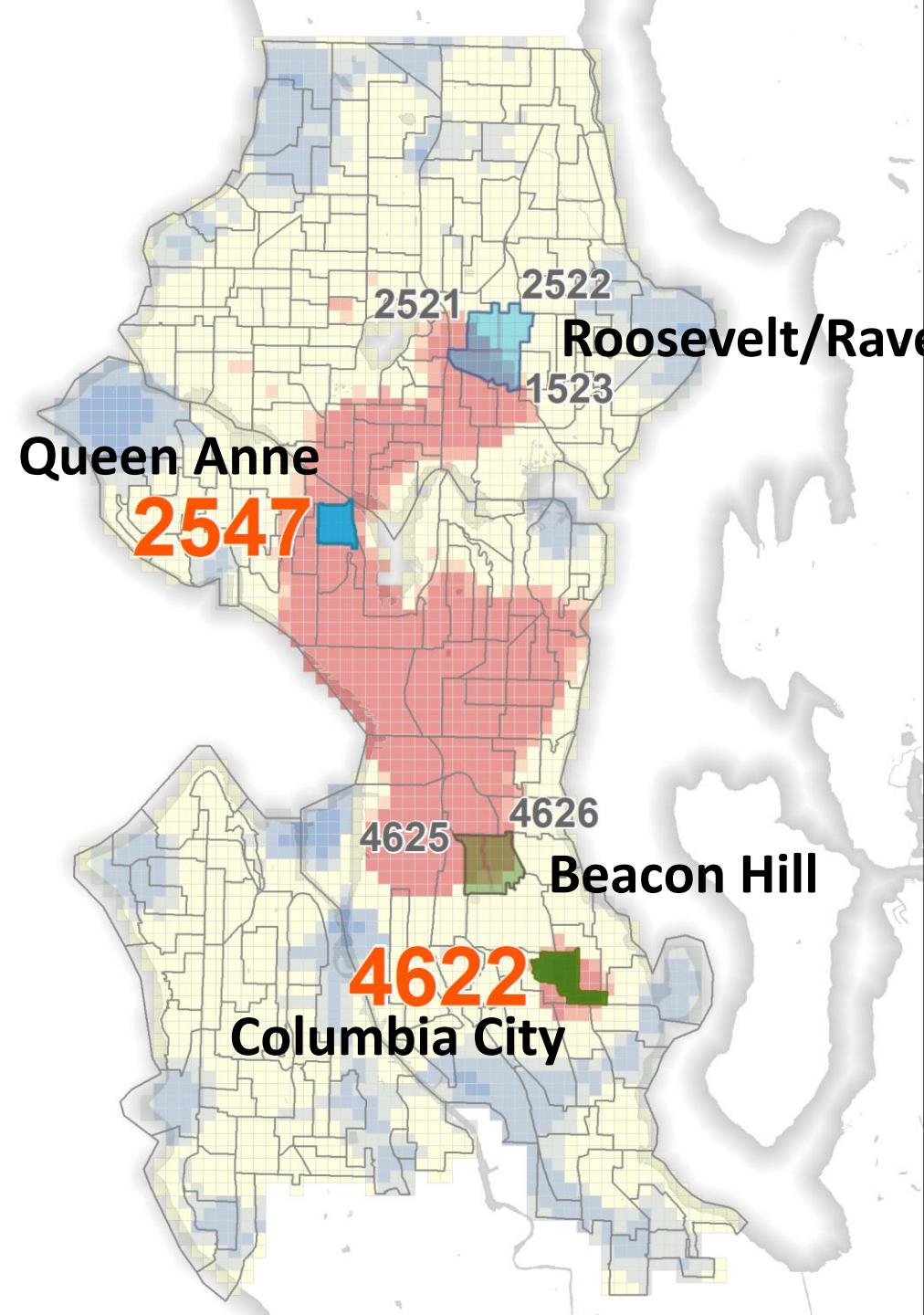
Complete the survey and receive a one year subscription for a **FREE** online **Chinook Book** App or a Paper Copy while supplies last (\$25 value).
The Chinook Book App includes hundreds of offers from local and regional environmentally friendly businesses.

For a paper copy or translation services:
Call (206) 386-9139 or email Susan.Harper@Seattle.gov

Chinook Book

Please complete your survey no later than **December 21.**

THANK YOU!



Organics data can have a lot of variance

- Route changes
- Trucks sometime help each other
- Seasonal factors warmer summer
- Better weekend weather
- Wind events blowing off leaves
- Holidays such as Halloween and Thanksgiving

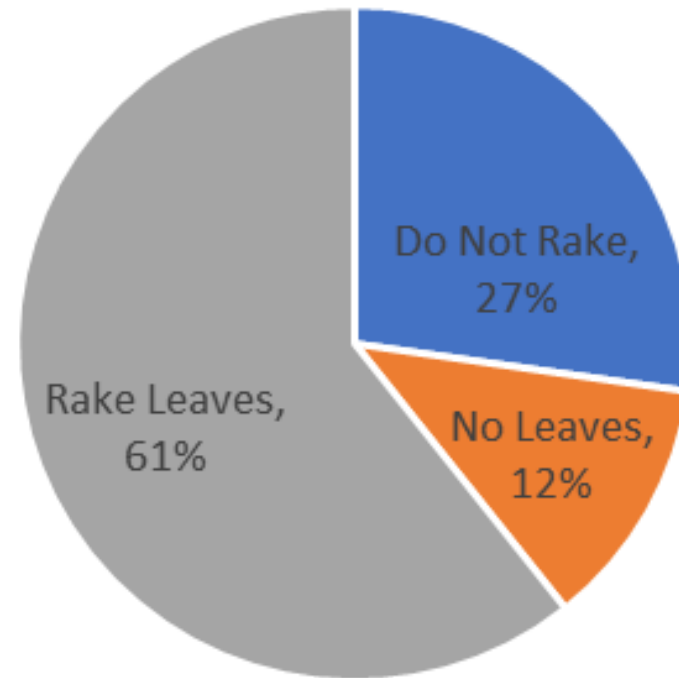
Extra Bags Collected

(% change In bags/route)

	2017			2018		
Route	October	November	December	October	November	December
City Wide	28%	117%	81%	-1%	-7%	-27%
1. Queen Anne	89%	55%	-22%	50%	32%	197%
2. Columbia City	-59%	345%	145%	406%	95%	9%
1. Control for QA	30%	72%	77%	-9%	-8%	-44%
2. Control for CC	-25%	364%	24%	68%	26%	-1%
Red are active areas in 2018						



Survey Responses:
61% of 598 respondents had leaves and raked



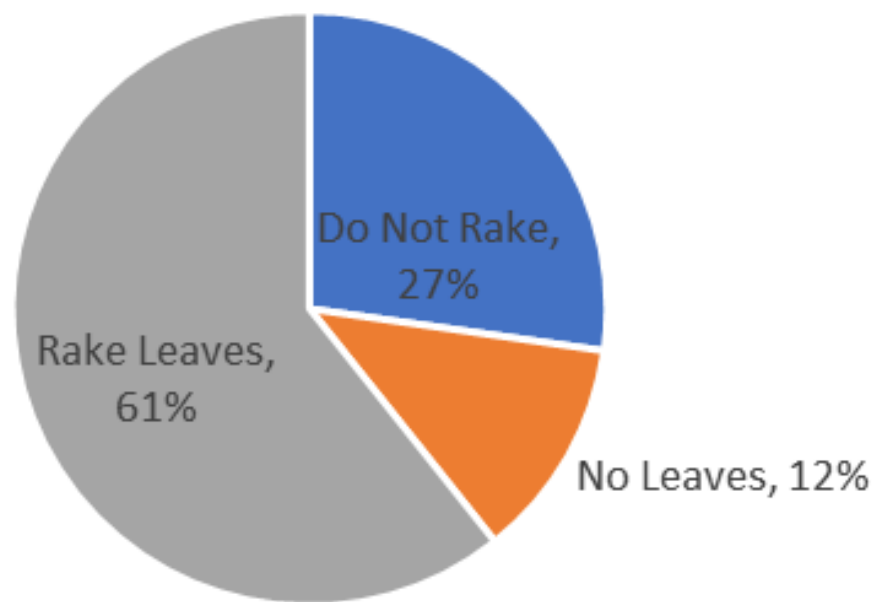


Which of the following reasons explains why you rake up and bag leaves?

- 91% to keep yard maintained and tidy
- 81% to keep leaves out of street/storm drain
- 77% slipping hazard (safety)



Survey Responses:
27% of 598 respondents had leaves and didn't rake





Which of the following reasons explain why you DID NOT rake up and bag leaves?

- 49% use leaves as compost in garden
- 40% extra yard waste costs money
- 31% mulch mow
- 29% cost of extra bags



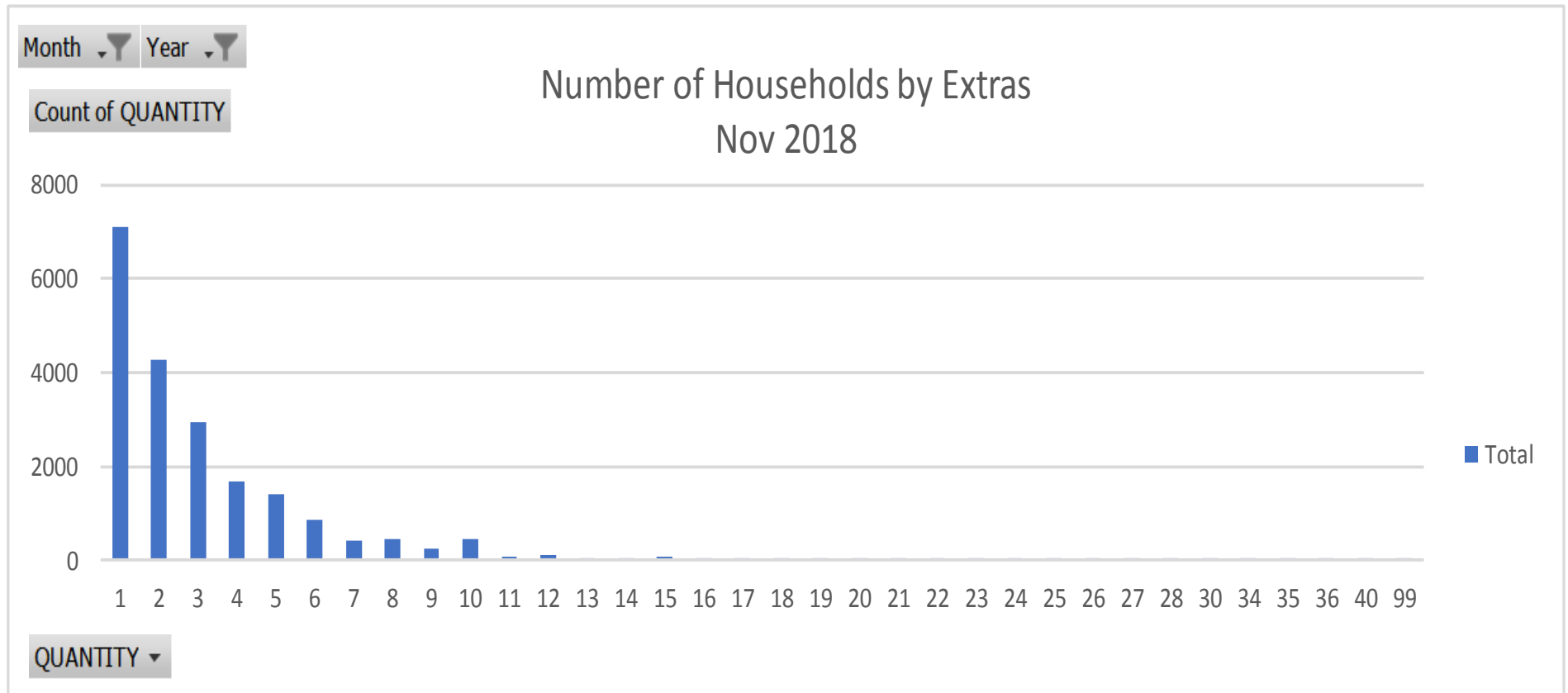
Was postcard/yard sign campaign effective? Compare Active vs. Control

	Active	Control
Aware of extra yard waste collection	65%	28%
Learn from postcard	54%	14%
Learn from yard sign	18%	0%



How many extra bags of leaves were collected from your household?

- 44% 1-3 bags
- 21% 4-6 bags
- 13% 7-10 bags
- 7% answered over 10








Adjusting how we track leaves as an issue for problems using Maximo





- Our outreach successfully encouraged more leaf raking
- We identified data we can track
- Learned about customer behavior
- Updated Maximo to better track leaves as a problem

Leaf Pilot Phase II Implementation Timeline

Jan/Feb/March 2019	April/May/June 2019	July/Aug/Sept 2019	Oct/Nov/Dec 2019	Jan/Feb/March 2020
Prepare findings & Recommendations from Phase I	Finalize Project Management Plan for Phase II	Implement plan and conduct early outreach	Implement campaign and track results	Prepare findings & Recommendations from Phase II
Brief DWW Management Engage Stakeholders 	Engage Crews and Managers 	Phase II Presentation System Maintenance Division All Hands Meeting 		Findings and recommendations to DWW Management & Identified Stakeholders 

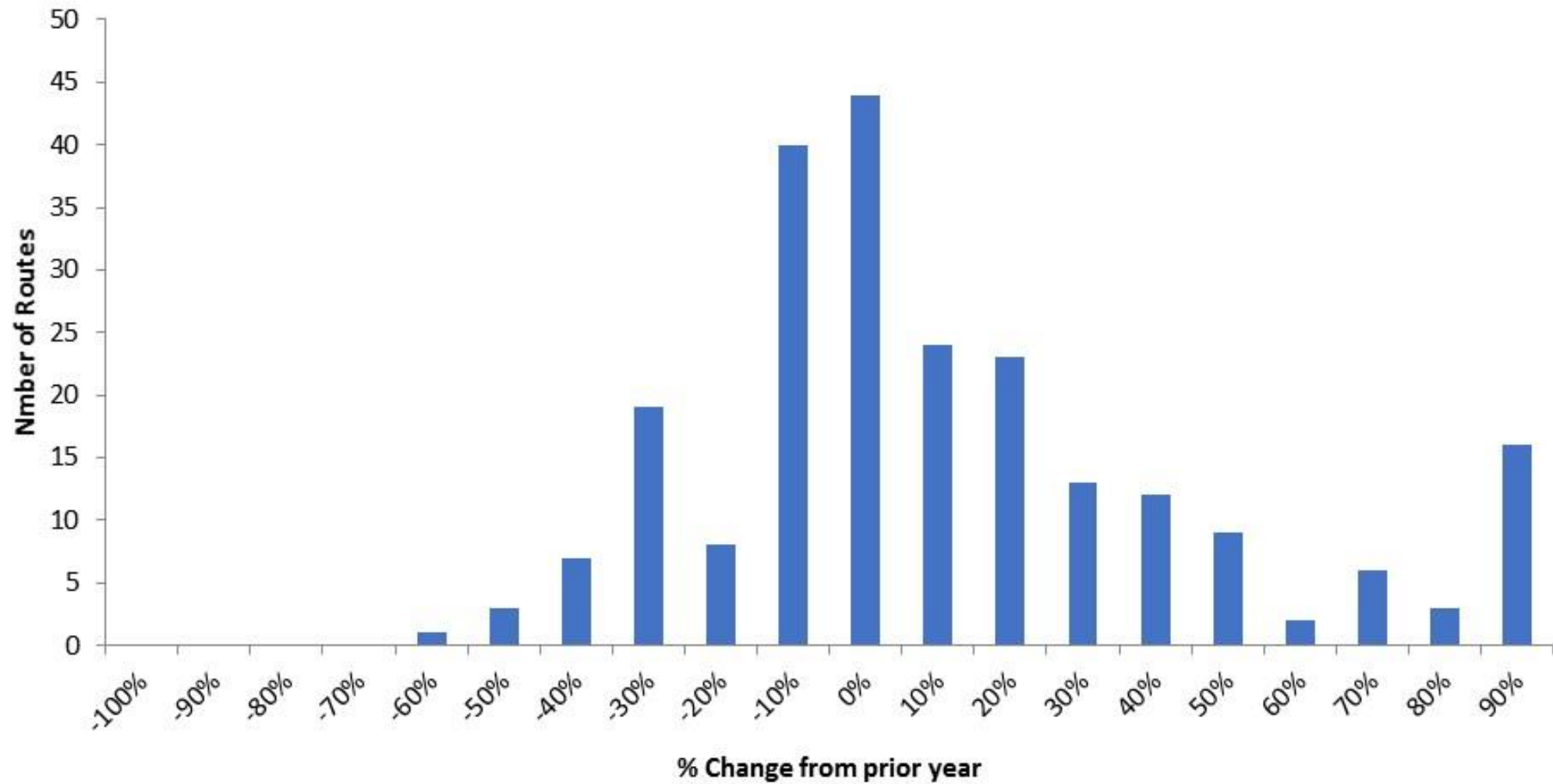


<https://youtu.be/7xEX-48RH CY?t=9s>

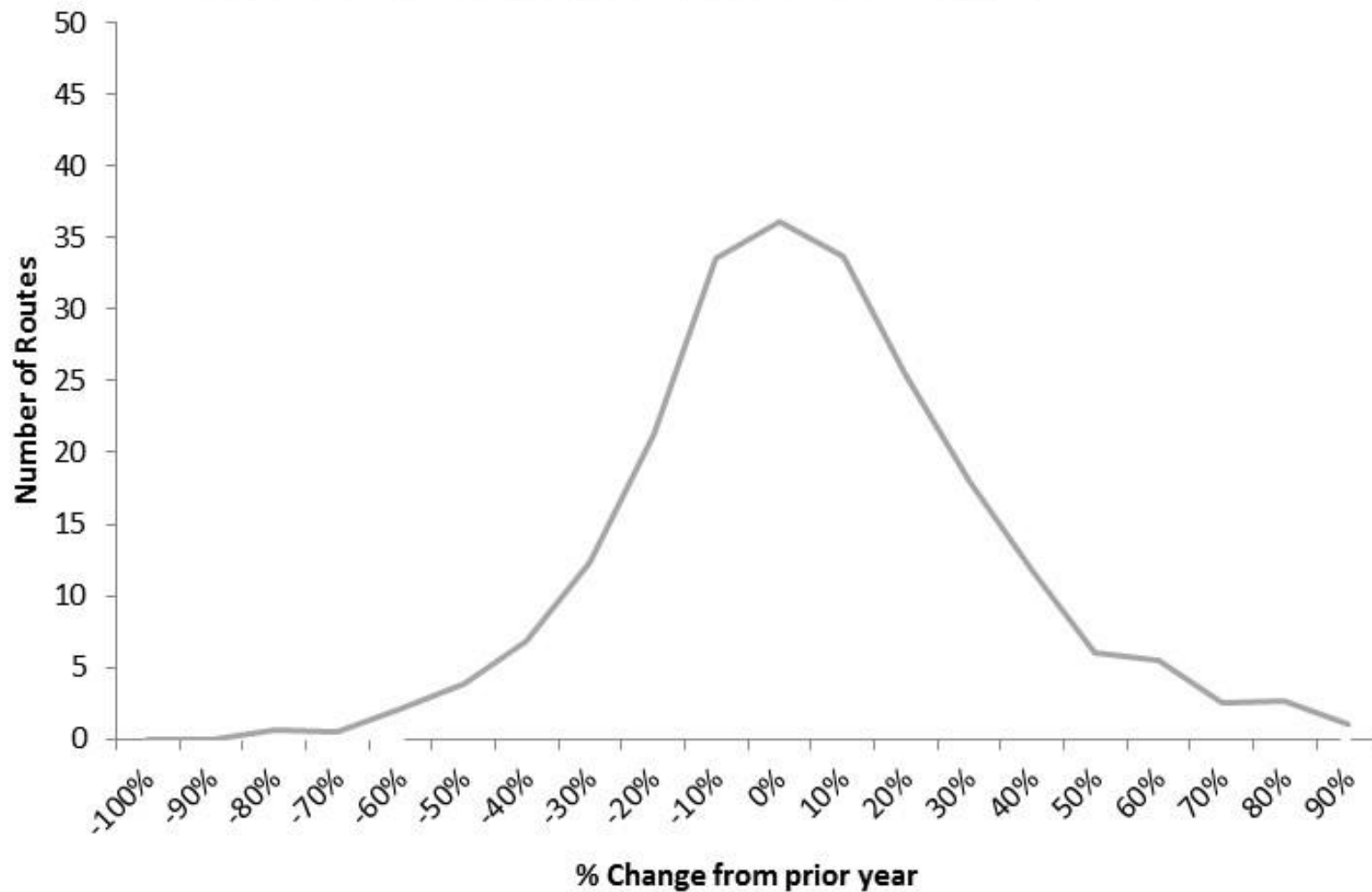
Do you have any ideas about additional factors we could track?

Customers need to take action in Oct/Nov.
Do you have any outreach ideas or thoughts on how to engage customers to take action?

Large variance in % change in Dec 2017 from prior year In Tons of Organics over 230 routes



Average variance Oct-Nov 2017 and 2018 in Tons of Organics over 230 routes



Organics Collected

(% change In tons/route)

	2017			2018		
Route	October	November	December	October	November	December
City Wide	0%	-6%	-8%	0%	6%	9%
1. Queen Anne	7%	-24%	33%	-35%	-59%	-47%
2. Columbia City	197%	29%	-35%	-25%	-4%	-8%
1. Control for QA	-3%	-4%	6%	47%	1%	-18%
2. Control for CC	-5%	52%	-33%	-54%	-2%	0%
Red are active areas in 2018						

