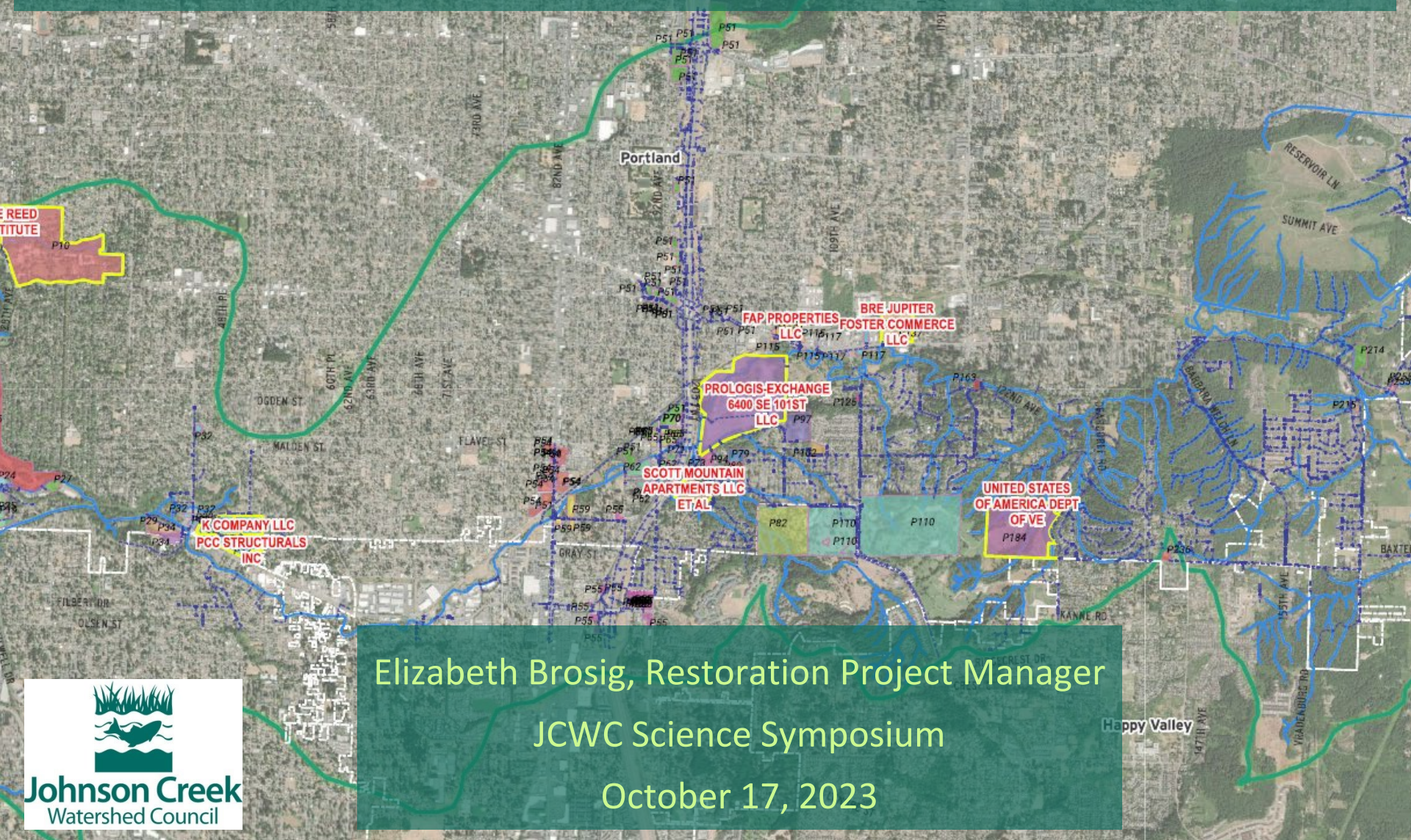


# Mapping a Path Forward in Urban Stormwater Restoration Projects

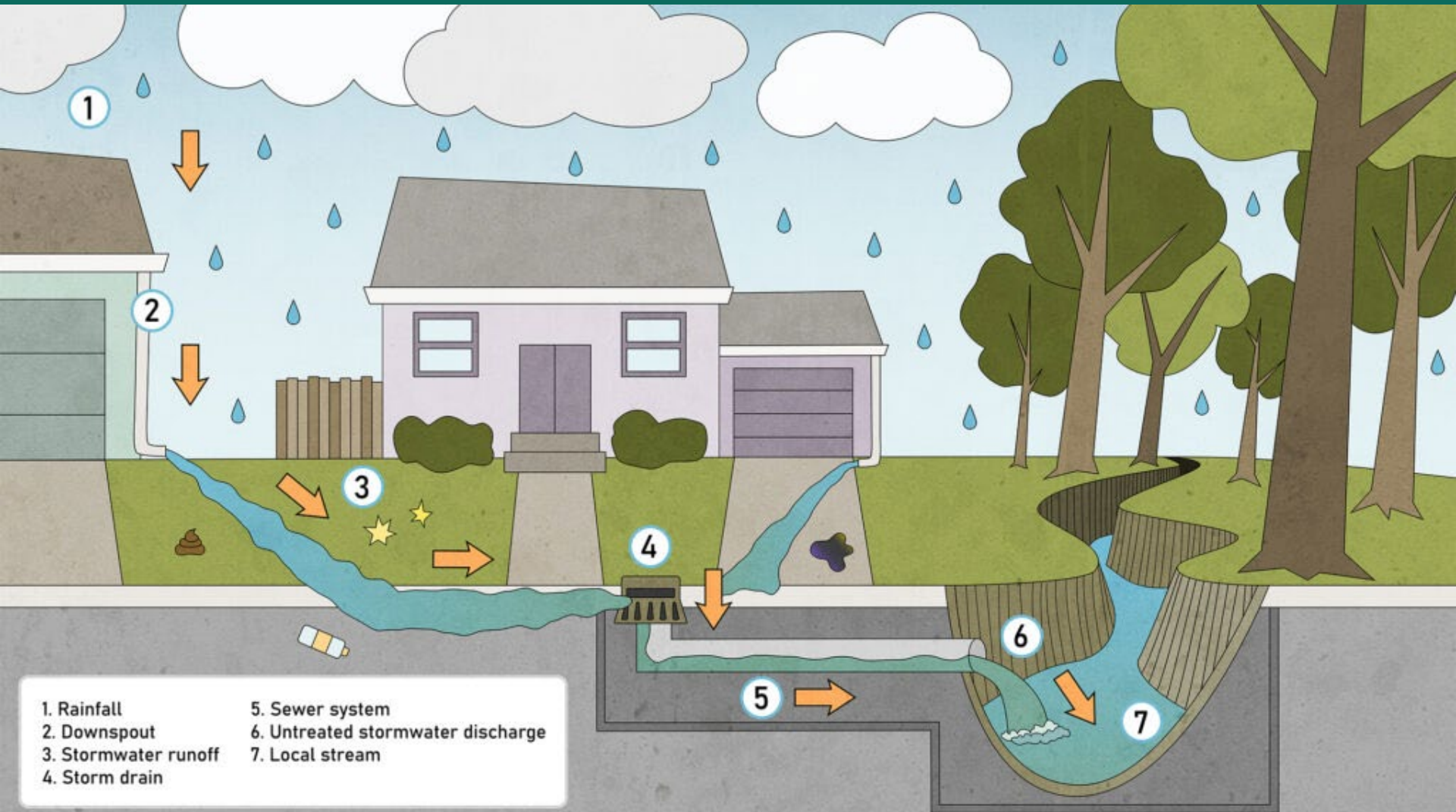


Elizabeth Brosig, Restoration Project Manager  
JCWC Science Symposium  
October 17, 2023





# Stormwater in the Johnson Creek Watershed



# Project Background

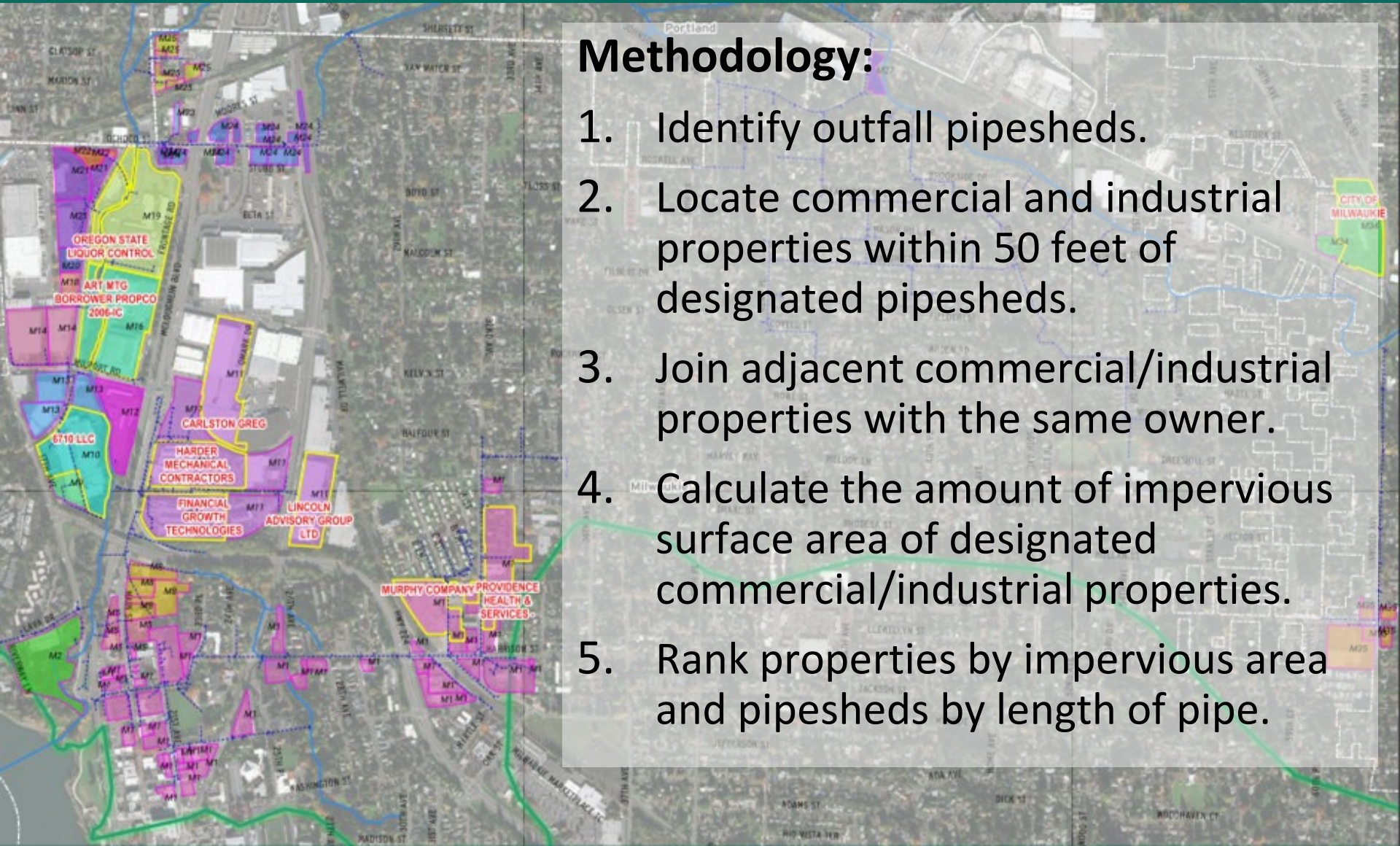
## Project Objectives:

- Develop an electronic (GIS) pipeshed map.
- Inventory the contributing surface area by land use type and property ownership.
- Prioritize stormwater outfalls.
- Develop outreach materials.
- Find commercial & industrial landowners willing to implement green stormwater infrastructure.





# GIS Pipeshed Analysis

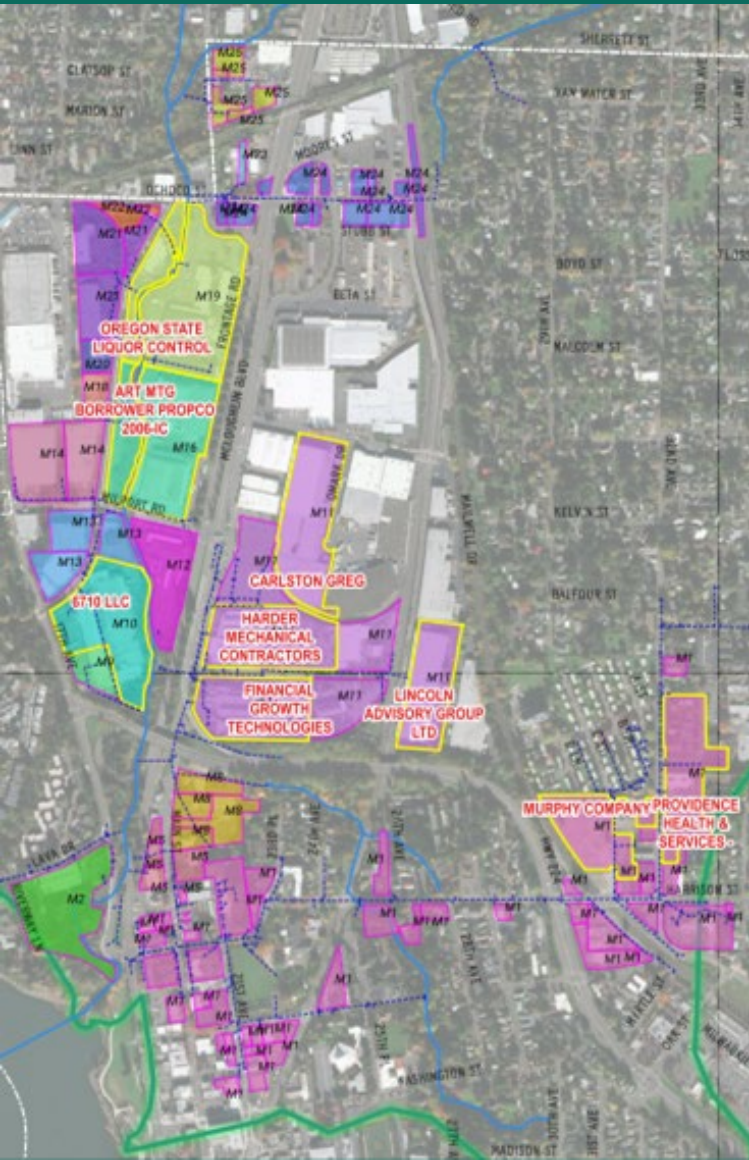


## Methodology:

1. Identify outfall pipesheds.
2. Locate commercial and industrial properties within 50 feet of designated pipesheds.
3. Join adjacent commercial/industrial properties with the same owner.
4. Calculate the amount of impervious surface area of designated commercial/industrial properties.
5. Rank properties by impervious area and pipesheds by length of pipe.



# GIS Pipeshed Analysis



## Statistics:

### Pipesheds: 543 Total

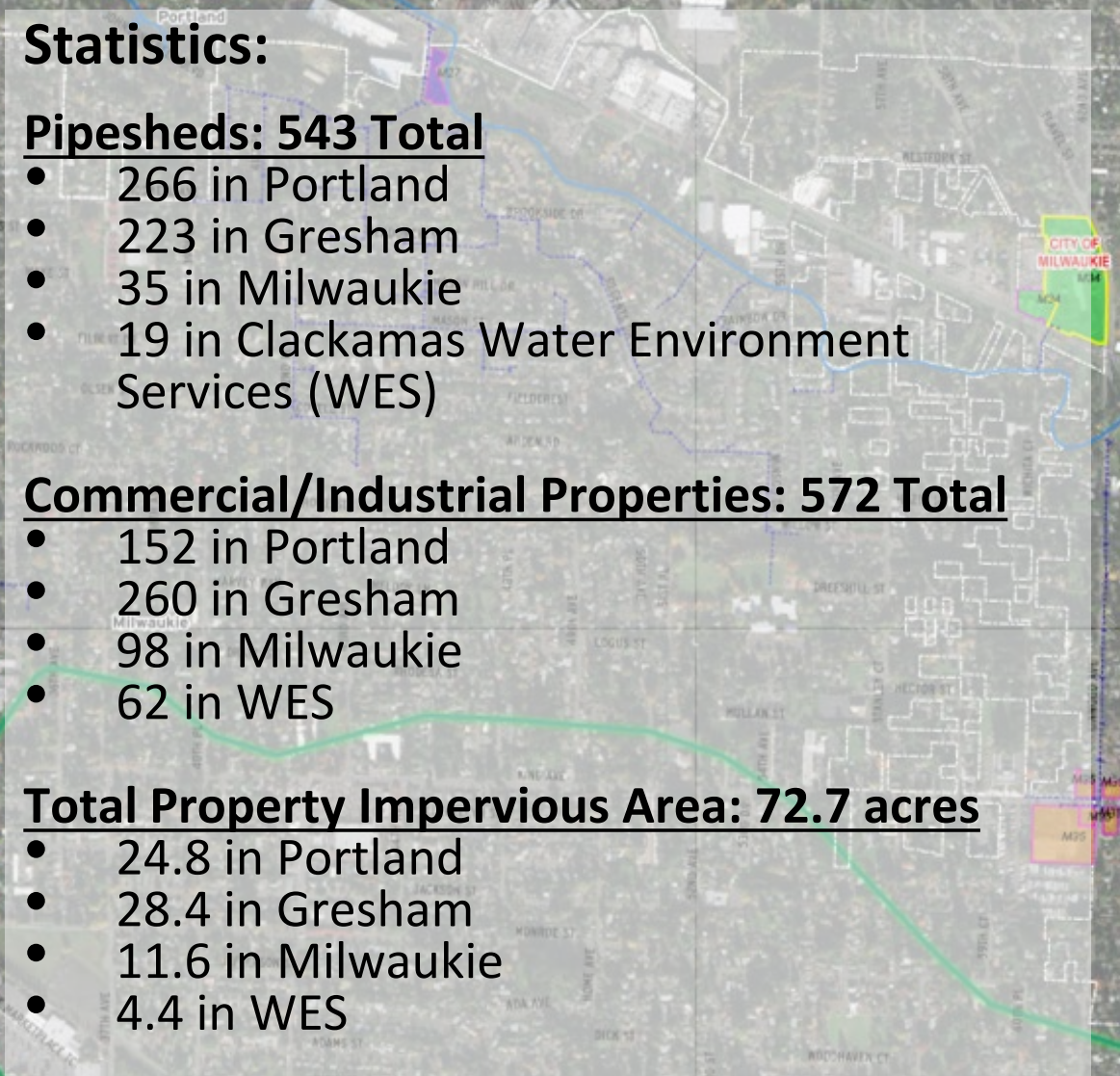
- 266 in Portland
- 223 in Gresham
- 35 in Milwaukie
- 19 in Clackamas Water Environment Services (WES)

### Commercial/Industrial Properties: 572 Total

- 152 in Portland
- 260 in Gresham
- 98 in Milwaukie
- 62 in WES

### Total Property Impervious Area: 72.7 acres

- 24.8 in Portland
- 28.4 in Gresham
- 11.6 in Milwaukie
- 4.4 in WES



# GIS Analysis Highlights

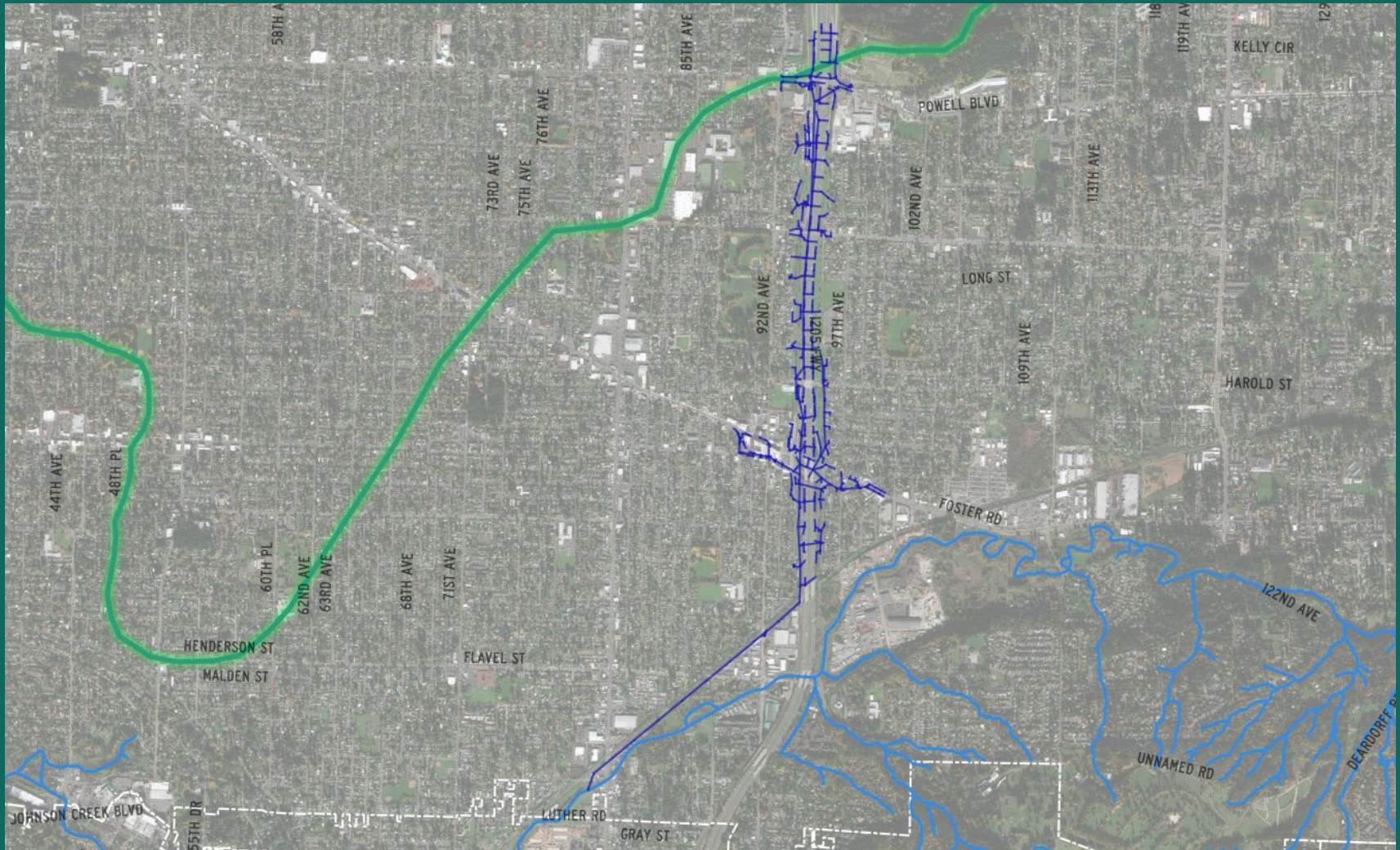
## Top 10 Impervious Area Properties

Pipeshed ID	Owner Info	Taxlot Info	Land-use	Taxlot Area-Sq ft	Taxlot Area-Acres	Impervious Area-Sq ft	Impervious Area-Acres
P113	PROLOGIS-EXCHANGE 6400 SE 101ST LLC , 1800 WAZEE ST #500, DENVER, CO, 80202	6400 WI/ SE 101ST AVE, PORTLAND, OR, 97266	C	388,357.0	8.92	233,014.5	5.35
G70	MUTUAL MATERIALS COMPANY , 7414 S 206TH ST, KENT, WA, 98032	2300 SE HOGAN RD, GRESHAM, OR, 97080	I	349,604.3	8.03	108,377.3	2.49
P10	THE REED INSTITUTE , 3203 SE WOODSTOCK BLVD, PORTLAND, OR, 97202	3203 SE WOODSTOCK BLVD, PORTLAND, OR, 97202	C	413,250.5	9.49	82,650.1	1.90
W1	WPC CROSSWHITE LLC , 307 LEWERS ST 6TH FL, HONOLULU, HI, 96815	9169 SE 67TH AVE, PORTLAND, OR, 97206	I	81,777.4	1.88	63,786.4	1.46
G223	PK I GRESHAM TOWN FAIR LLC , 500 N BROADWAY #201, JERICHO, NY, 11753	300-370 WI/ NW EASTMAN PKWY, GRESHAM, OR, 97030	C	72,367.2	1.66	59,341.1	1.36
P137	BRE JUPITER FOSTER COMMERCE LLC , PO BOX A3879, CHICAGO, IL, 60690	11411-11619 SE FOSTER RD, PORTLAND, OR, 97266	C	61,747.7	1.42	48,780.7	1.12
W12	FRED MEYER STORES INC , 1014 VINE ST PROP TAX 7TH FL, CINCINNATI, OH, 45202	8955 SE 82ND AVE, HAPPY VALLEY, OR, 97086	C	60,631.1	1.39	48,504.9	1.11
G14	PORTLAND GENERAL ELECTRIC CO , 121 SW SALMON ST, PORTLAND, OR, 97204	LEVY CODE 026, GRESHAM, OR, 97080	C	160,450.4	3.68	48,135.1	1.10
P32	PCC STRUCTURALS INC , 4600 SE HARNEY DR, PORTLAND, OR, 97206	5001 SE JOHNSON CREEK BLVD, MILWAUKIE, OR, 97222	I	46,875.2	1.08	43,593.9	1.00
W12	STERLING RLTY ORGNZTION CO , 777 108TH AVE NE STE 2150, BELLEVUE, WA, 98004	9600 SE 82ND AVE, HAPPY VALLEY, OR, 97086	C	58,391.2	1.34	42,625.6	0.98



# GIS Analysis Highlights

Longest Pipeshed: P51 along I-205 Corridor (11.9 miles)



# Moving Forward

***We Can Help:***  
**Stormwater  
Management  
&  
Your Business**  
Johnson Creek Watershed Council



- Look into classification errors.
- Work with local agencies to develop criteria to prioritize stormwater retrofit projects.
- Landowner outreach and coordination to determine project feasibility.



***By being creative and working together, we can go a long way towards reducing our urban impacts on water resources.***



October 21st

# Depave Event at Trinity Lutheran Church



Johnson Creek  
Watershed Council



Elizabeth Brosig  
JCWC Restoration Project Manager  
Elizabeth@jcwc.org

<https://www.jcwc.org/events/depave-event-at-trinity-lutheran-church/>

