

# Rain on our streets

## Stormwater features on multi-use roadways

Bike Ped Committee Meeting  
April 13, 2022

Roy Iwai, Multnomah County Water Quality Program



# Why is stormwater a concern?

Stormwater can cause flooding.

Stormwater transports pollution from cars, pets, people to our streams.

These pollutants cause harm to fish and people.



# Tire chemical kills coho salmon

*“Tire manufacturers acknowledge that they had no idea that 6PPD-quinone even existed, although the chemical’s parent compound, 6PPD, has been touted as essential to tire safety and used in nearly every tire on the market.”*

Christopher Dunagan, Puget Sound Institute Blog, August 26, 2021



Jennifer McIntyre, WSU

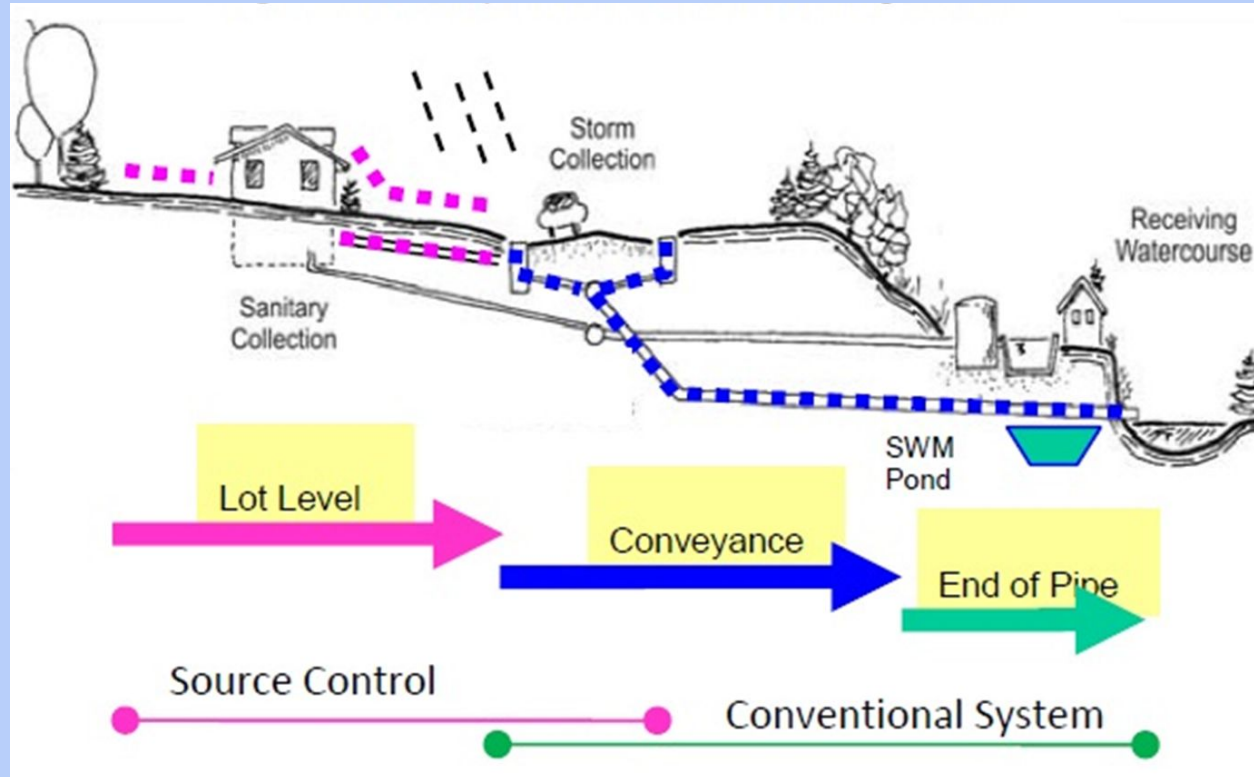
# Tire chemical can be filtered



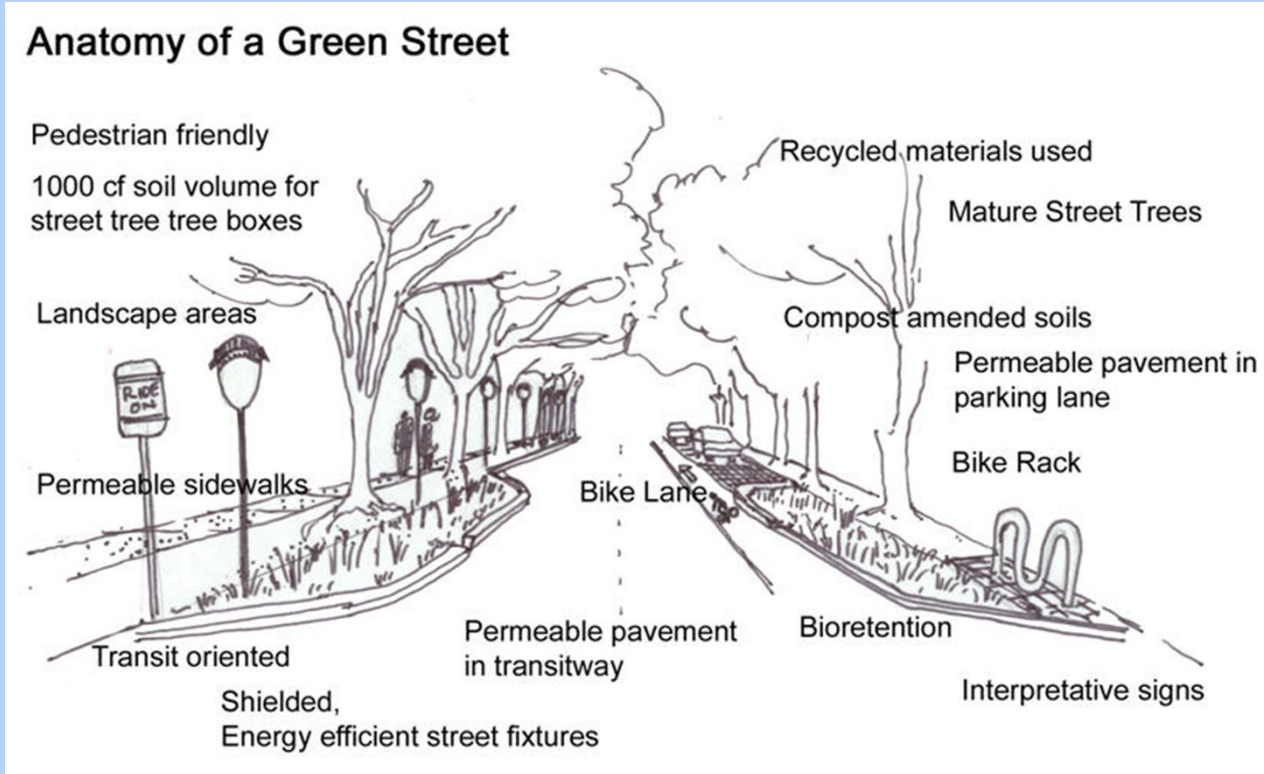
Jennifer McIntyre, WSU



# “Old fashioned” stormwater management



# “Modern” stormwater treatment



# Human-scale streets

*“The irony is that these types of wide, dangerous streets, which are **the site of a disproportionate share of pedestrian deaths**, were meant to make life better for residents. The idea, about a century ago, was to push cars away from neighborhood streets. But those good intentions created a monster.”*

## The Case for Turning Big, Wide Roads Into Human-Scale Streets

May 19, 2017 MDP SmartGrowth Manager

By David Sachs via [Streetsblog Denver](#)



Where Federal Boulevard meets Alameda Avenue. Image: Google Maps

We know that wide streets like Federal Boulevard and Sheridan Boulevard, known as “arterials,” endanger people’s lives and act as barriers to physical activity and wellness. But it doesn’t have to be that way: New research suggests that arterials with lower traffic volumes, safe crosswalks, generous pedestrian infrastructure, and street trees perform better on several quality-of-life indicators. The challenge is transforming the streets.

# Stormwater as street feature



Paso Robles, CA ([www.svrdesigns.com](http://www.svrdesigns.com))





# Traffic separation



El Cerrito, CA

# Pervious pavers delineate zones



# How do we define a “road”?

Traffic calming

Pedestrian safety

Human scale

Liveability

Water quality

Connecting us to our rivers





Stormwater pipe-shed

Lane widening

Stormwater Master Planning

OK, Which plan  
should NOT  
include  
stormwater?

- Stormwater master plan
- Traffic corridor plan
- Urban development plan
- Downtown livability plan
- Toxics reductions/sustainability plan
- Water clean up plan
- Alternative transportation plan
- Pedestrian safety and ADA plan
- What else?

# What will the future look like?

Can stormwater features help make things  
better for pedestrians and bicyclists?

**Questions?**