Edmonds Stormwater Planning Workshop

Public Workshop #1
Tuesday, February 8, 2022
12:00 pm - 1:00pm

Public Workshop #2
Thursday, Feb. 10, 2022
6:00 pm - 7:00 pm

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Welcome & Introductions

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Agenda

Time	Topic
10 minutes	Welcome & Introductions
5 minutes	Project Background & Schedule
15 minutes	Key Findings
10 minutes	Q&A
15 minutes	Discussion
5 minutes	Wrap Up & Adjourn

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Speakers

Gretchen Muller

Patrick Johnson

Rebecca Dugopolski, PE

Mindy Fohn

Opening Remarks

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Workshop Goals

- Provide a brief description of the project & schedule
- Provide an update on the health of our local waterways and where potential opportunities may be
- Provide an opportunity to address clarifying questions
- Identify next steps and opportunities for feedback

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Warm Up Exercise

When thinking about Edmonds and our natural environment, what top 3 words come to mind?

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What is the Edmonds Stormwater Planning Project?

Project Background

- **Driver: Municipal Stormwater Permit**
  - Stormwater planning requirements include a water health assessment, selecting a priority watershed, and developing an implementation plan
- **Public Input**
  - Workshops
  - StoryMap and Survey

Photo courtesy of myedmondsnews.com

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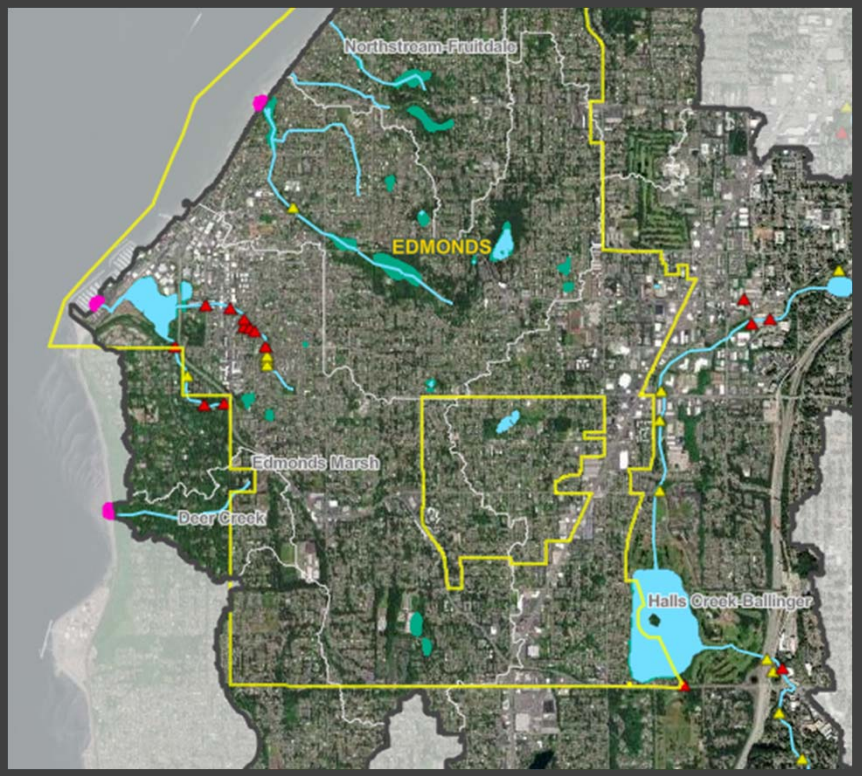
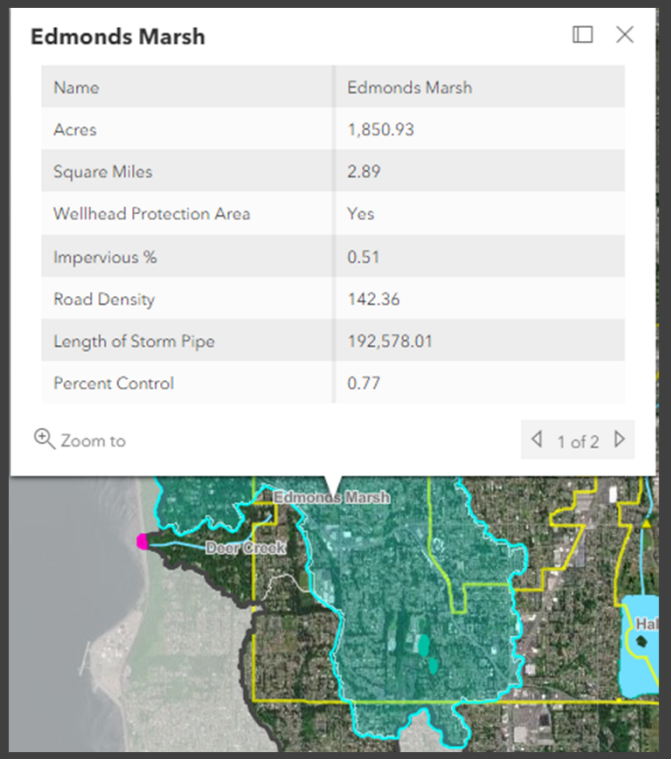
Explore Edmonds Watersheds





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Project Schedule

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What steps did we take?

Watershed Focused Planning

Assess All Watersheds

Move Priority Watersheds Forward

Detailed Watershed (or smaller scale) Assessment

Develop Implementation Plan

Stormwater Planning Process

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Terminology

- Watershed (or Basin): Land area contributing to a receiving water or group of receiving waters
- Waterway: Marine water (Puget Sound), fresh water (streams, lakes)
- Receiving Water: Where stormwater ends up (Puget Sound, streams, lakes, Edmonds Marsh)

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Terminology

- Hard (or impervious) surface: Paved surfaces (roads, parking lots, driveways, sidewalks).
- Ecosystem: Natural resources utilized by wildlife and people
- Stormwater: Water that meets hard surfaces
- Stormwater system: Drainage conveyance (pipes, ditches) for stormwater

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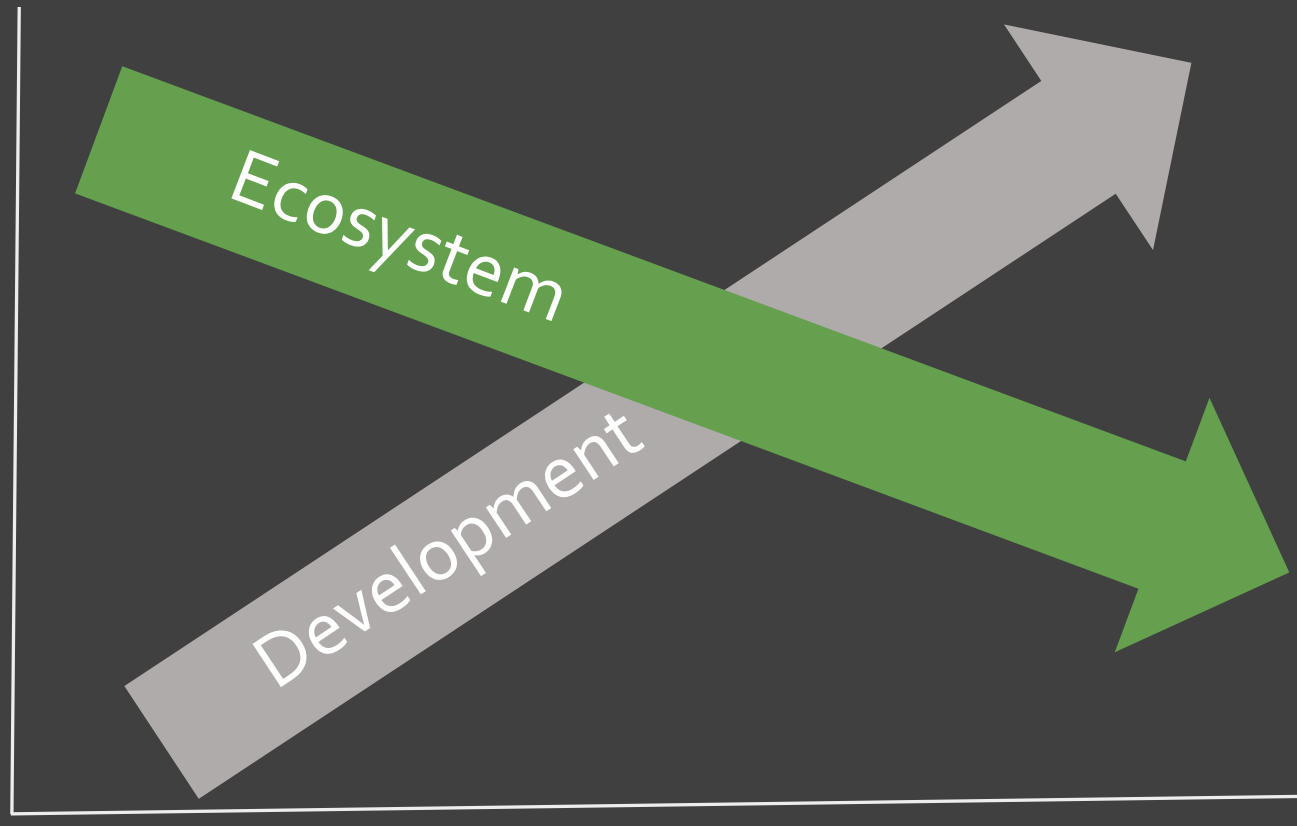
The Journey of Rain

Relationship Between Development and Ecosystems



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Watershed Assessment Framework

Waterway Uses

+

Water Conditions

Stormwater Impacts

+

Future Growth

=

Near-term actions

Potential future actions

High
Use
Impact
Growth
Poor Conditions

Low
Use
Impact
Growth
Good Conditions

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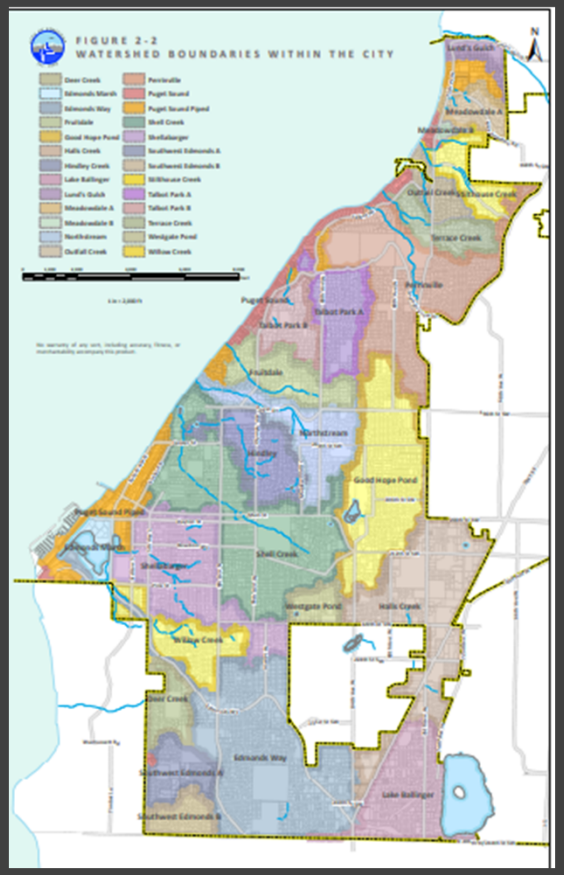
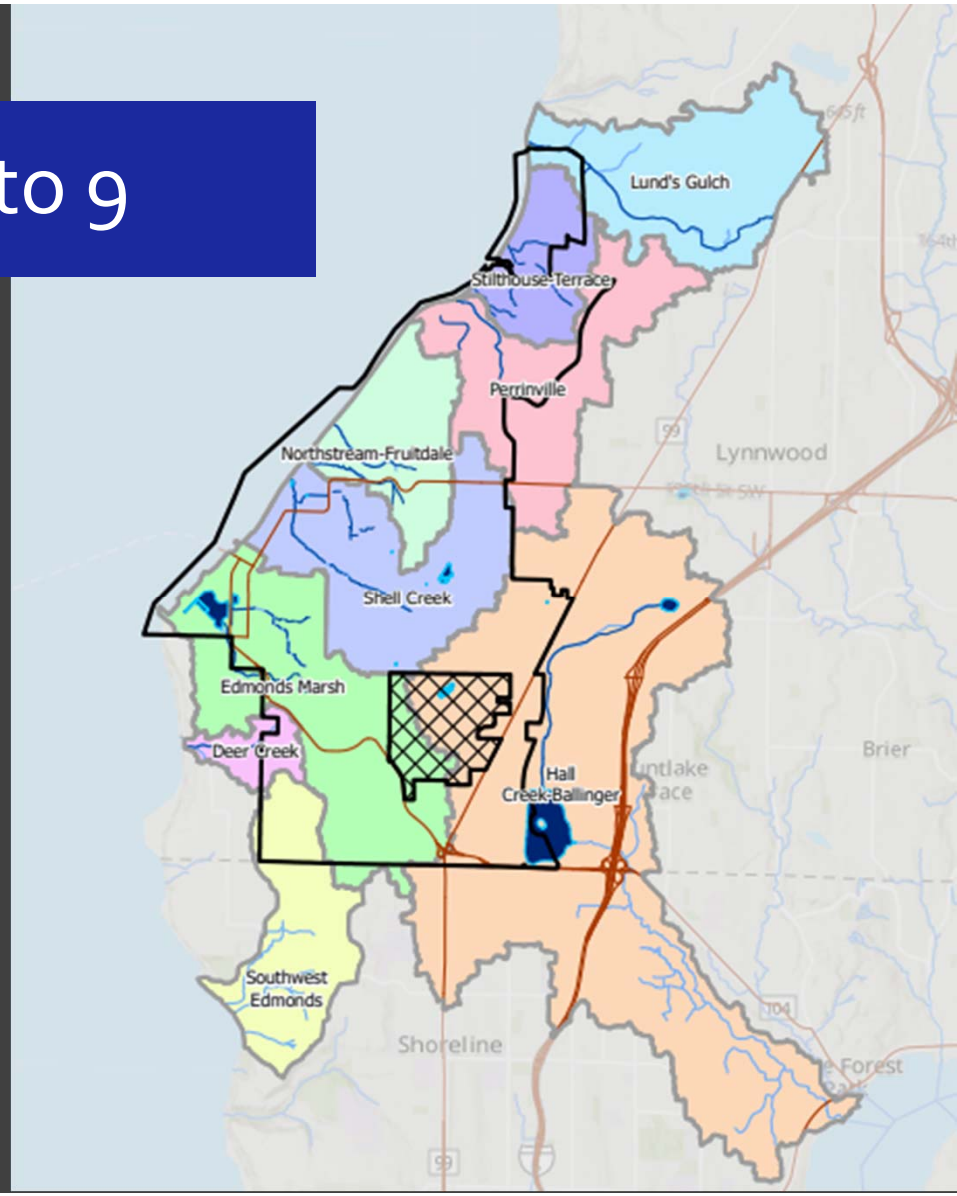
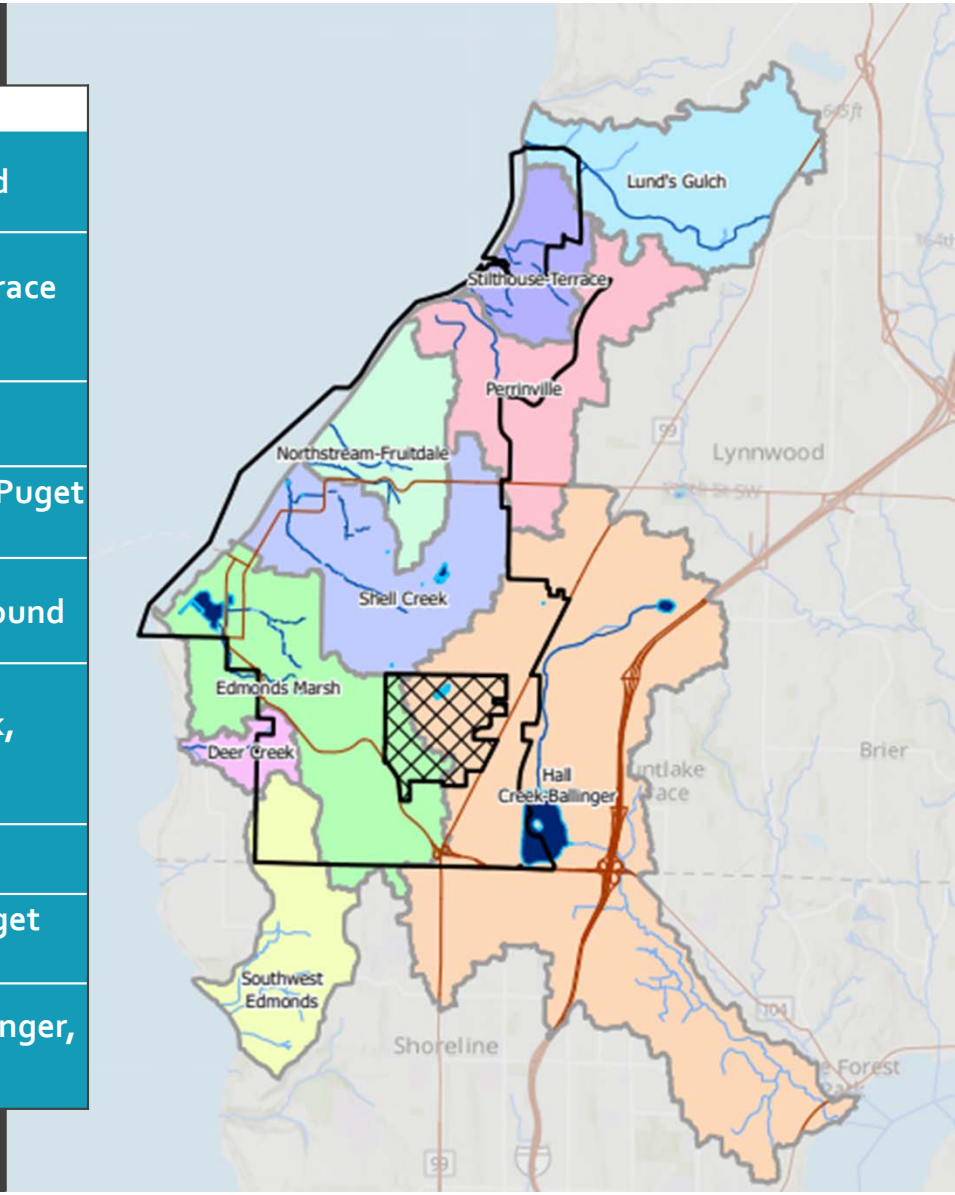
What did we learn?

Watershed Delineation: 26 to 9



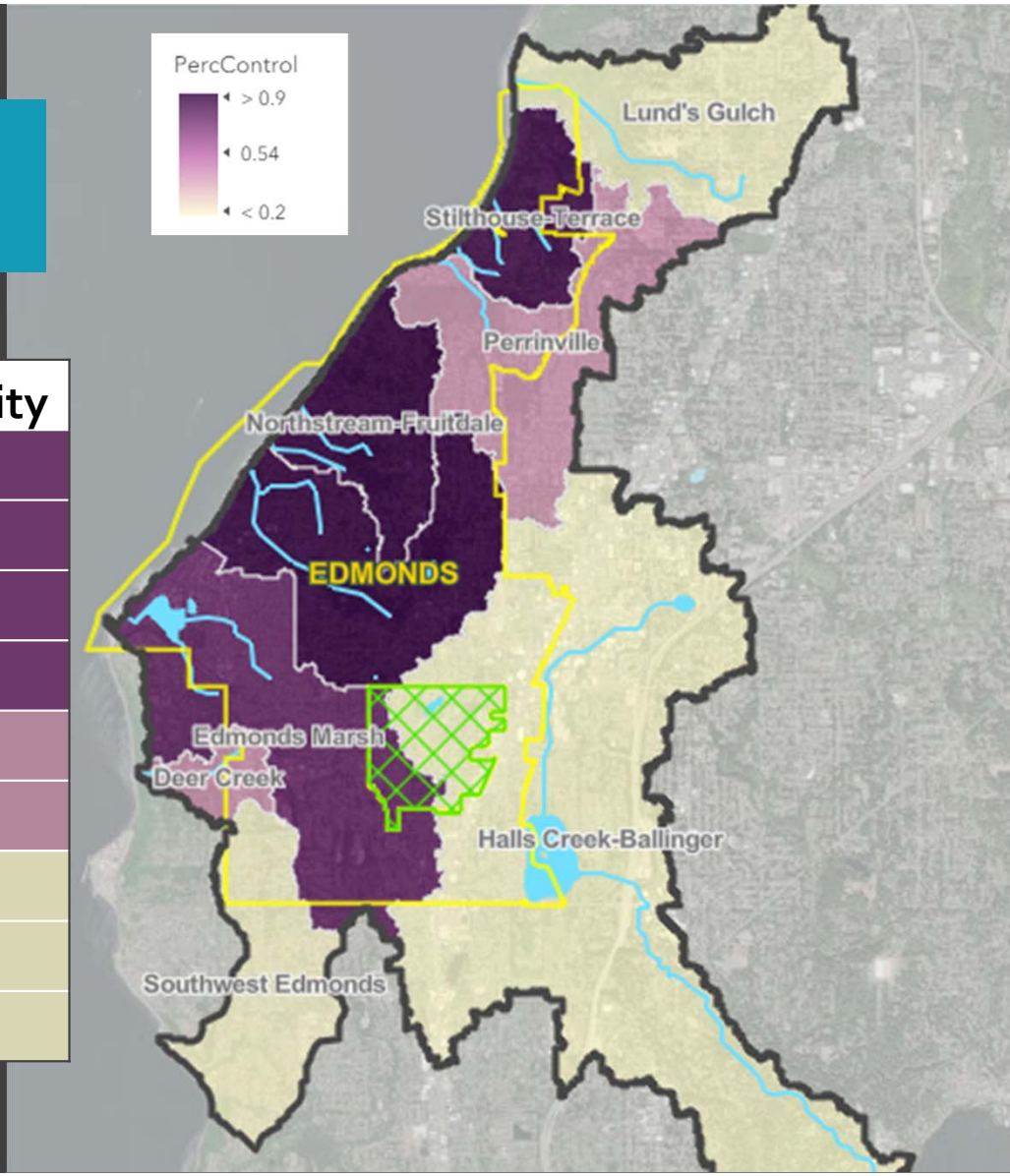


Watershed	Area (Sq Mi)	Receiving Waters
Lund's Gulch	2.11	Lund's Gulch Creek, Puget Sound
Stilthouse-Terrace*	0.87	Outfall Creek, Stilthouse Creek, Terrace Creek, Puget Sound
Perrinville	2.01	Perrinville Creek, Puget Sound
Northstream-Fruitdale	1.21	Fruitdale Creek, Northstream Creek, Puget Sound
Shell Creek	2.11	Hindley Creek, Shell Creek, Puget Sound
Edmonds Marsh	2.89	Shellabarger Creek, Willow Creek, Edmonds Marsh, Puget Sound
Deer Creek*	0.35	Deer Creek, Puget Sound
Southwest Edmonds	1.46	Unnamed Creek (outside City), Puget Sound
Halls Creek-Ballinger	8.1	Hall Creek, McAleer Creek, Lake Ballinger, Lake Washington



City Watershed Control

Watershed	Percentage in City
Northstream-Fruitdale	100%
Shell Creek	99%
Stilthouse-Terrace	86%
Edmonds Marsh	77%
Deer Creek	43%
Perrinville Creek	42%
Southwest Edmonds	21%
Hall Creek-Ballinger	16%
Lund's Gulch	4%



Waterway Use Metrics

Public Recreation
- Public access areas

Drinking Water
- Wellhead protection area
- Surface water protection area

Aquatic Species
- Habitat
  - Eelgrass
  - Pocket estuary
- Species
  - Salmon and trout
  - Forage fish

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Waterway Use Metrics Results

Public Access	Drinking Water Protection	Aquatic Habitat and Species
Number of Areas	Surface and Wellhead Protection Area	Abundance Score
Edmonds Marsh (4)	Deer Creek (65%)	Edmonds Marsh (9)
Hall Creek-Ballinger (2)	Southwest Edmonds (10%)	Shell Creek (8)
Lund's Gulch (1)	Edmonds Marsh (5%)	Hall Creek-Ballinger (8)
Stilthouse Terrace (1)	Hall Creek-Ballinger (4%)	Lund's Gulch (7)
Northstream-Fruitdale	*Lund's Gulch*	Perrinville Creek (6)
Deer Creek	*Stilthouse Terrace*	Deer Creek (5)
Perrinville Creek	*Perrinville Creek*	Stilthouse Terrace (2)
Shell Creek	*Shell Creek*	Northstream-Fruitdale (2)
Southwest Edmonds	*Northstream-Fruitdale*	Southwest Edmonds (2)

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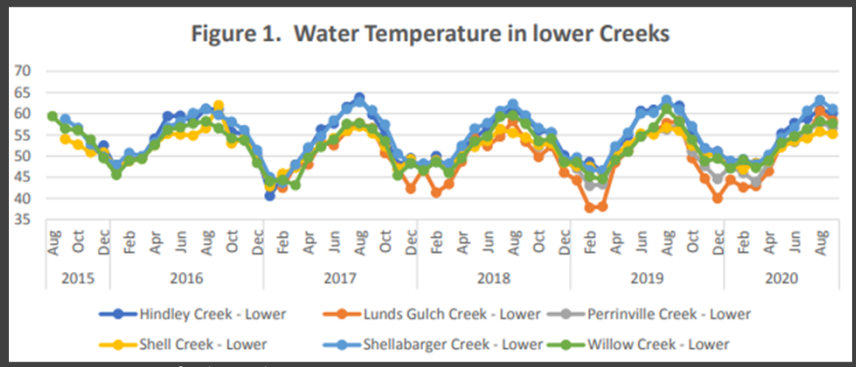
Waterway Health

Watershed	Concern
Hall Creek-Ballinger	Aquatic species
	Bacteria
	Dissolved oxygen
	Metals
	Phosphorus
	Temperature
Lund's Gulch	Aquatic species
	Bacteria
	Dissolved oxygen
	pH
Edmonds Marsh	Aquatic species
	Bacteria
	Sediment metals and organics
Perrinville Creek	Aquatic species
	Erosion
Shell Creek	Erosion
Deer Creek	*None*



Courtesy of Edmonds Stream Team Report, 2020

Note: No surface water data for Southwest-Edmonds, Stilthouse-Terrace and Northstream-Fruitdale

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Stormwater and Development Impacts on Waterways

- Water Quality
- Erosive Flows
- Fragmented Habitat

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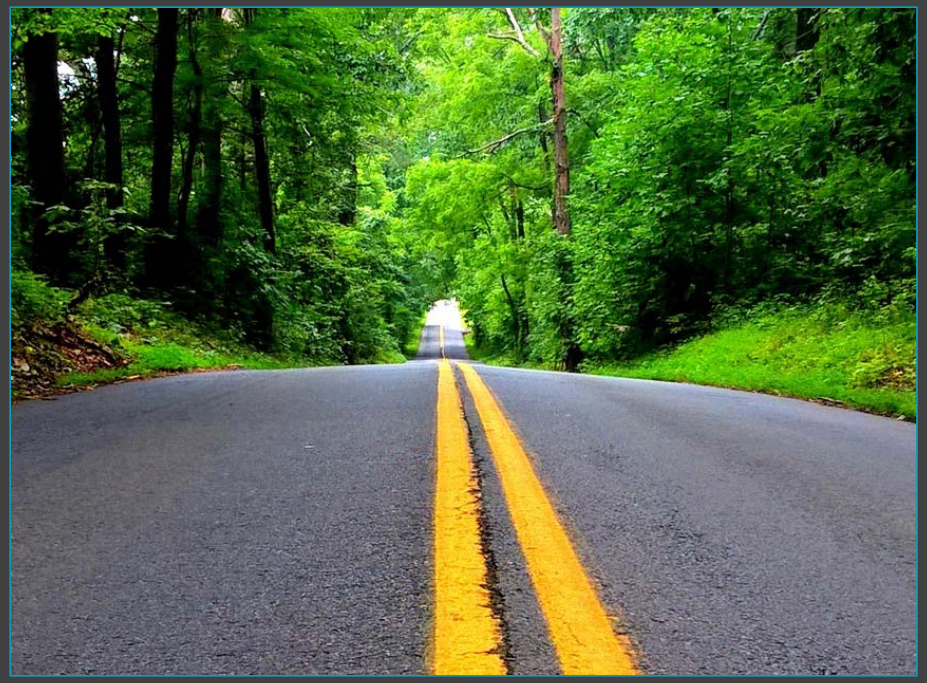
Stormwater and Development Metrics

- Percent Hard Surfaces
- Road Density
- Percent Tree Cover in Stream Buffer
- Fish Passage Barriers



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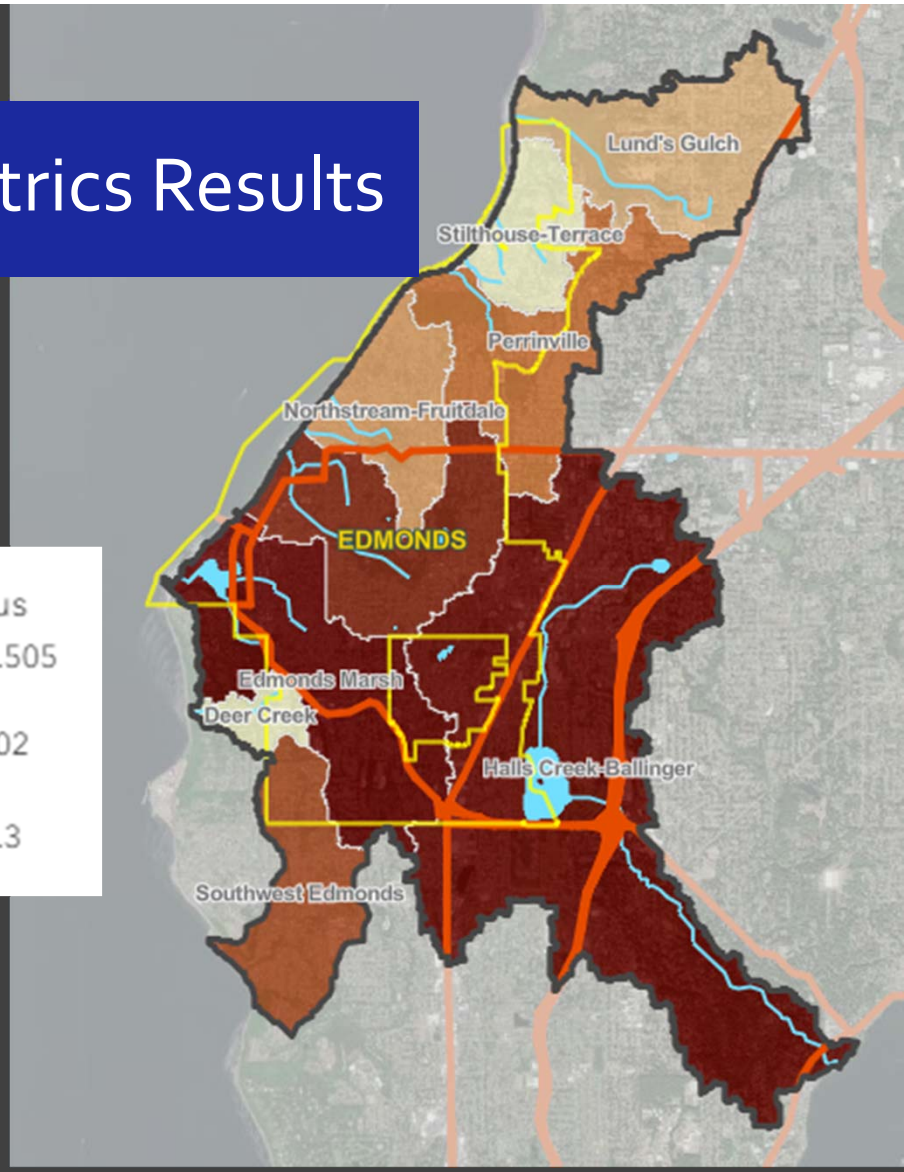
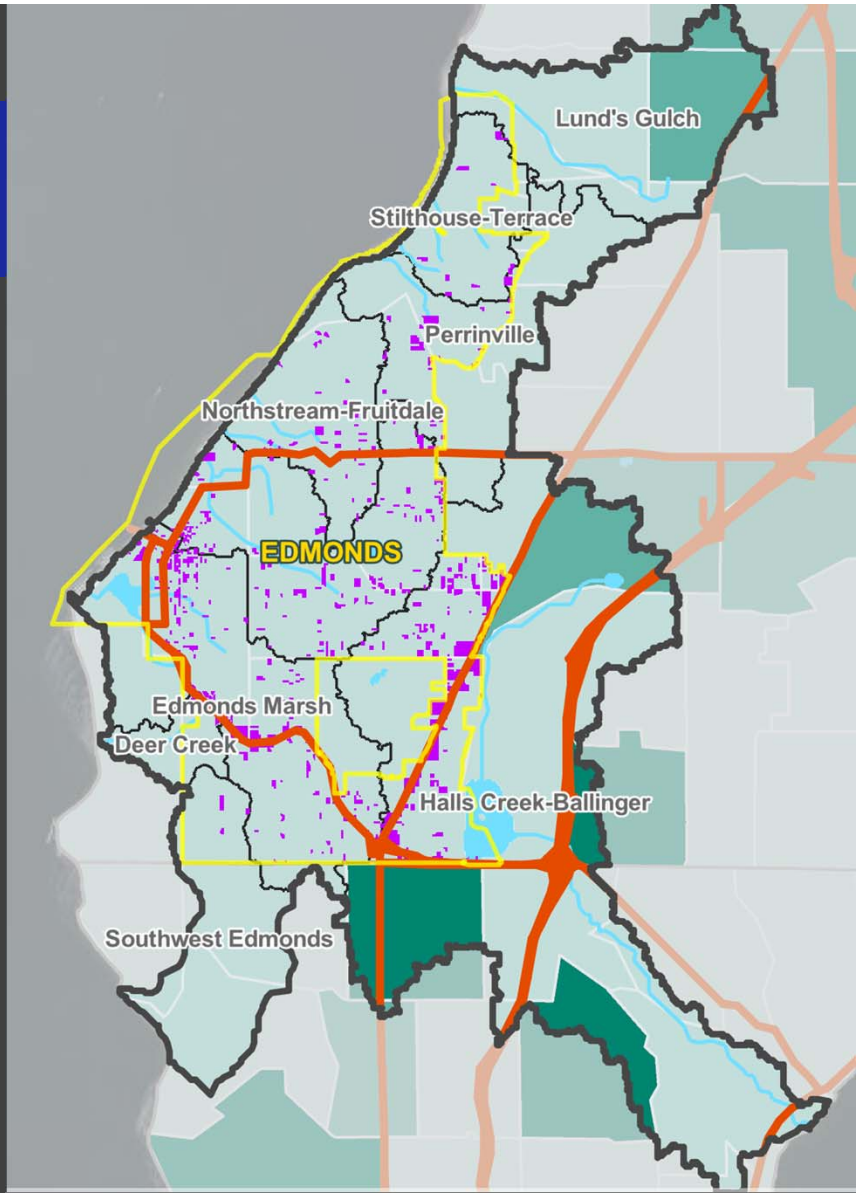
Stormwater & Development Metrics Results

Edmonds Marsh
Hall Creek-Ballinger
Shell Creek
Perrinville Creek
Northstream-Fruitdale
Southwest Edmonds
Stilthouse-Terrace
Lund's Gulch
Deer Creek

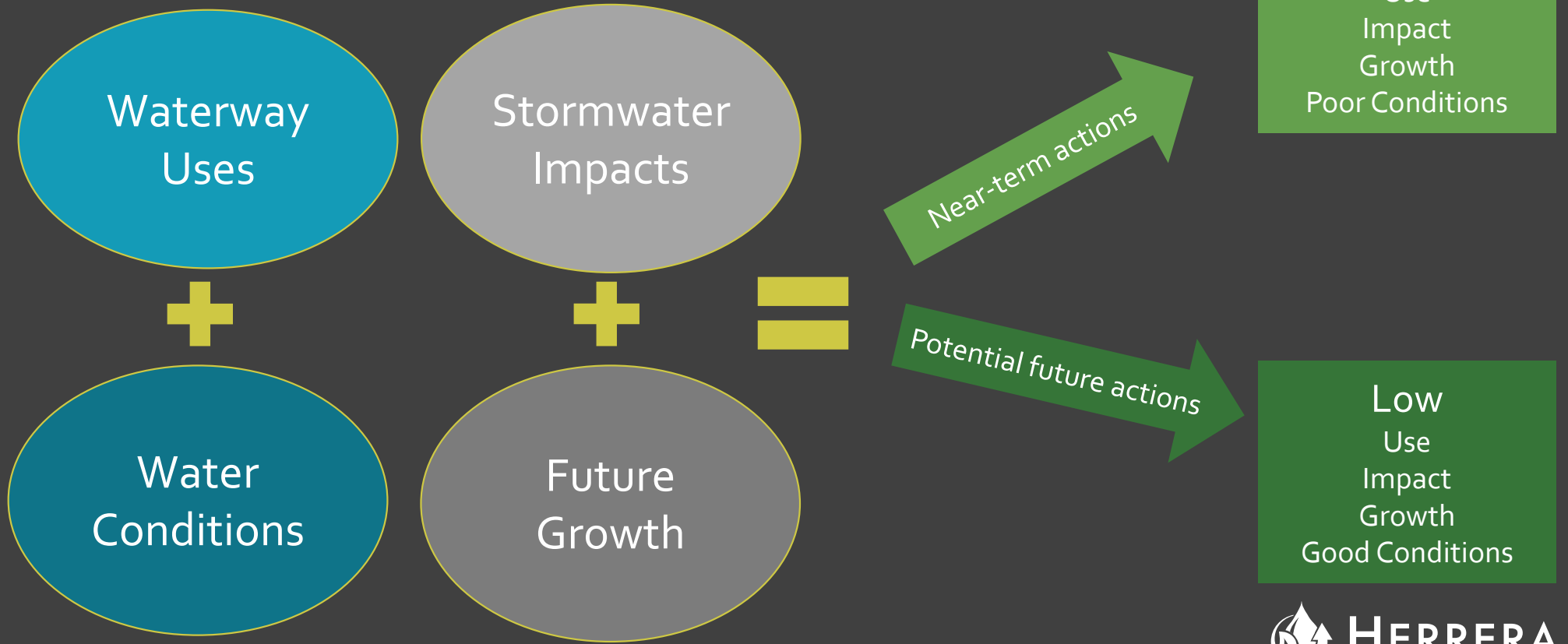


Future Growth Metrics

- Population Increase
- Redevelopable Lands
  - Lund's Gulch
  - Hall Creek-Ballinger
  - Edmonds Marsh



Watershed Assessment Framework



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Combining Metrics

Water Conditions + Waterways Use
Edmonds Marsh
Hall Creek - Ballinger
Lund's Gulch
Deer Creek
Shell Creek
Perrinville Creek
Southwest Edmonds
Stilthouse-Terrace
Northstream-Fruitdale

Higher

Lower

Stormwater Impact + Future Growth
Edmonds Marsh
Hall Creek-Ballinger
Shell Creek
Northstream-Fruitdale
Stilthouse-Terrace
Perrinville Creek
Southwest Edmonds
Lund's Gulch
Deer Creek

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What projects are currently planned or in progress?

Water Health Improvement Projects

Edmonds Marsh

- Willow Creek Daylight and Marsh Enhancement Project

Hall Creek - Ballinger

- Ballinger Regional Stormwater Facility
- Lake Ballinger Aquatic Ecosystem Restoration Project (outside of City)

Perrinville Creek

- Perrinville Creek Stormwater Flow Reduction Retrofit Study/Projects
- Lower Perrinville Restoration Project

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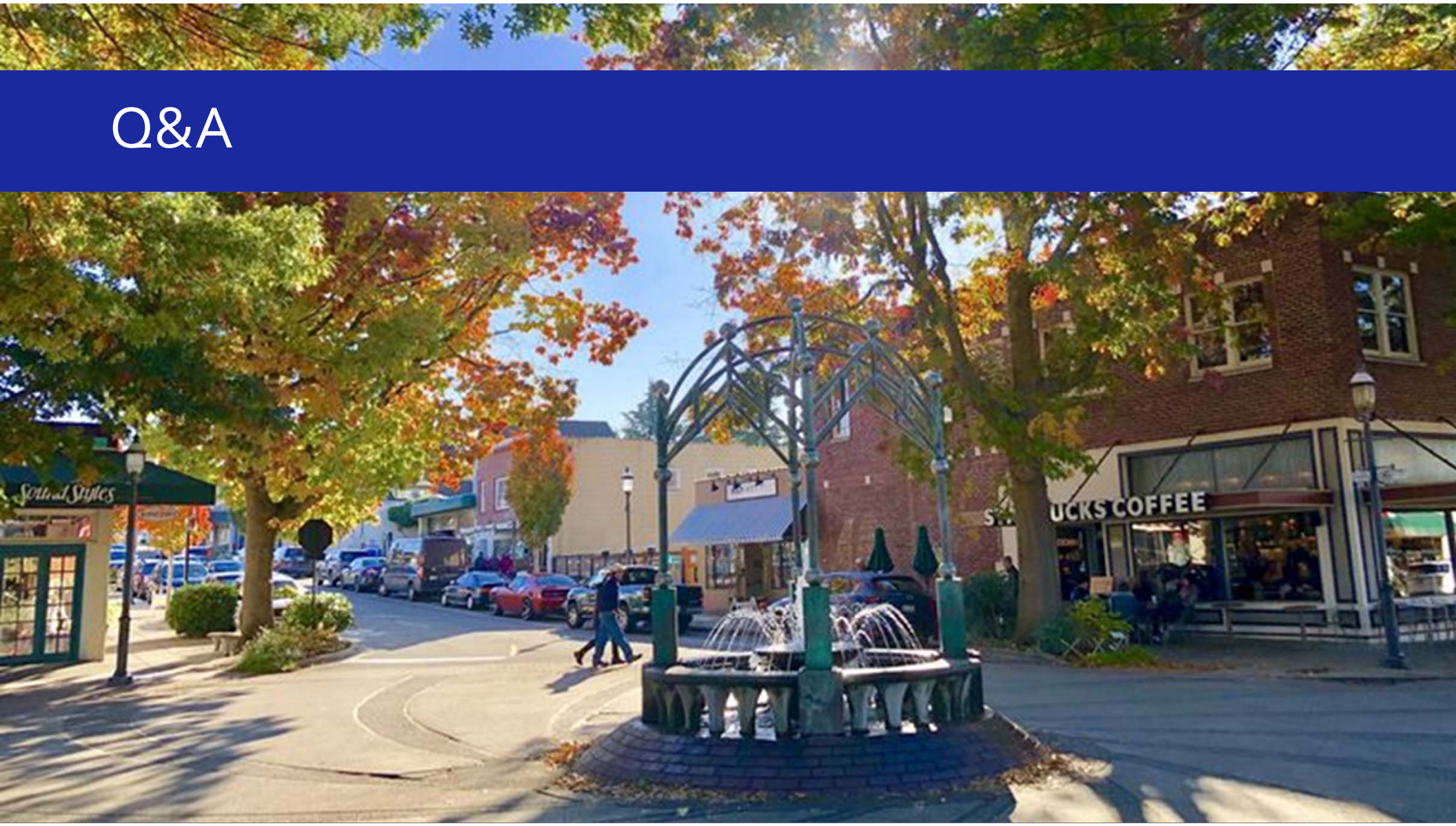
Q&A



Q&A

Do you have any questions on the content that we covered today?

- Project Background
- Project Schedule
- Key Findings

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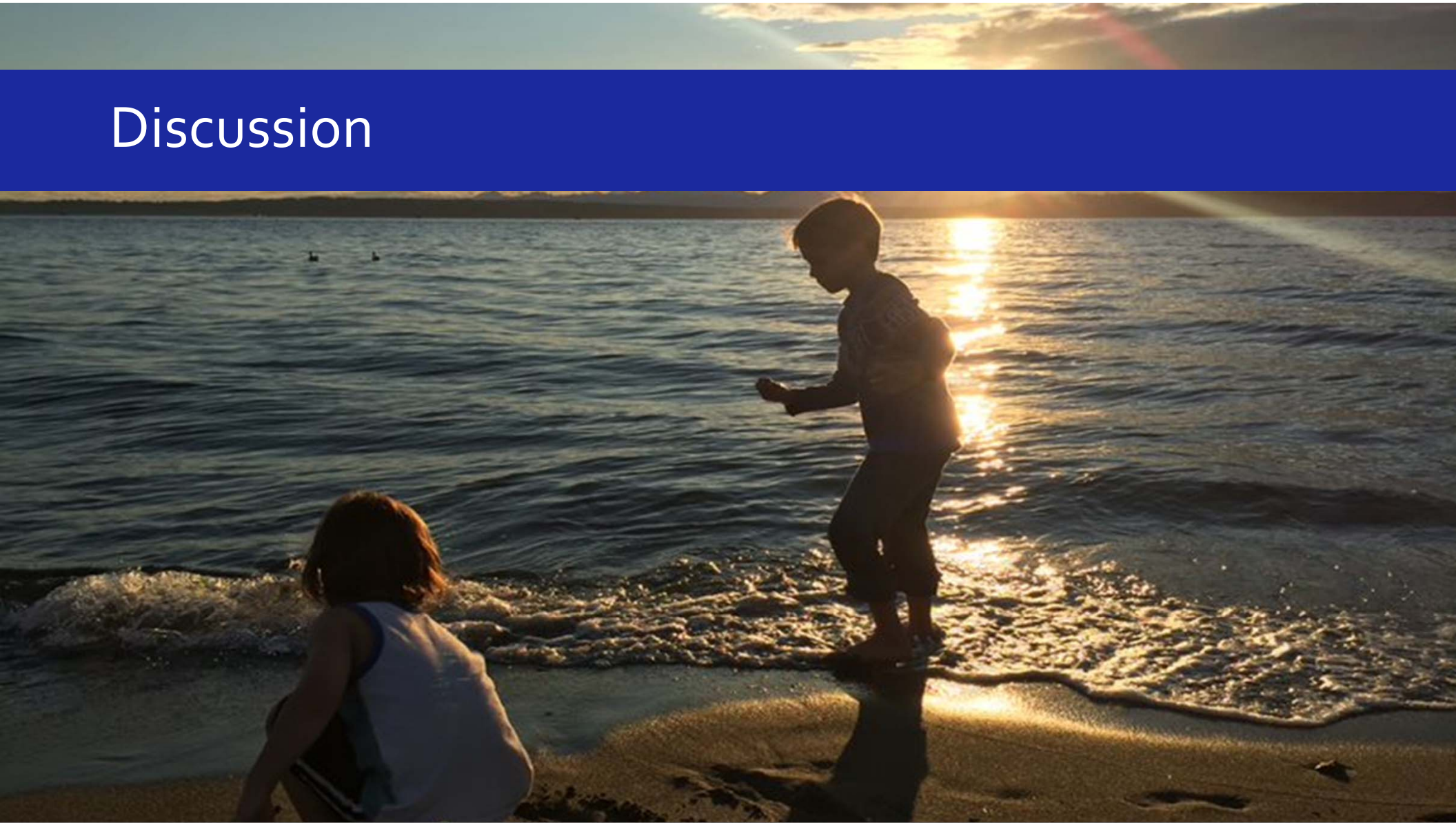
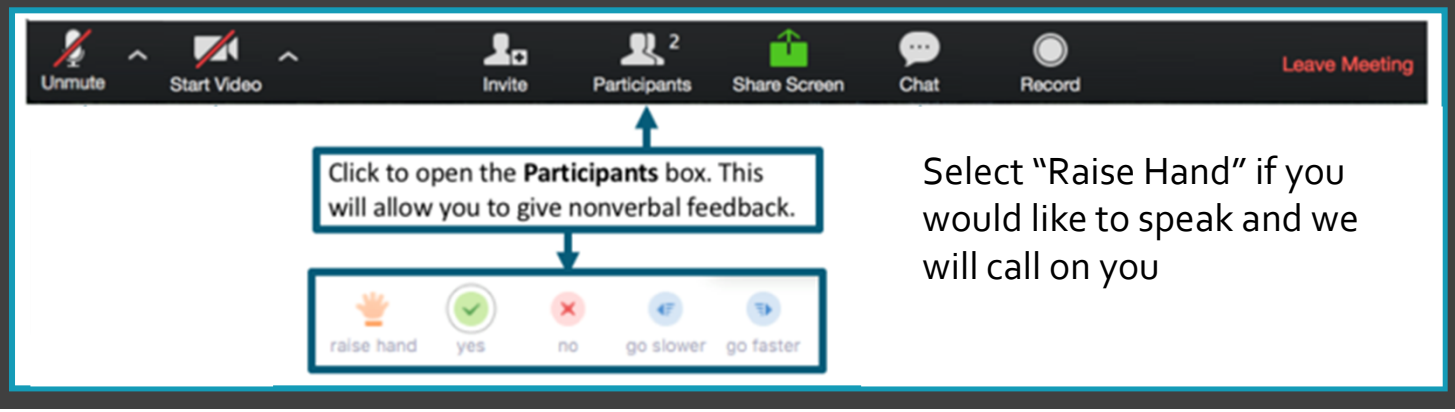
Discussion



Discussion

Following up on the poll question regarding which surface waters should be prioritized for City actions:

- Why did you select that waterway as your top priority?
- 1-2 minutes per speaker (as time allows)



Select "Raise Hand" if you would like to speak and we will call on you

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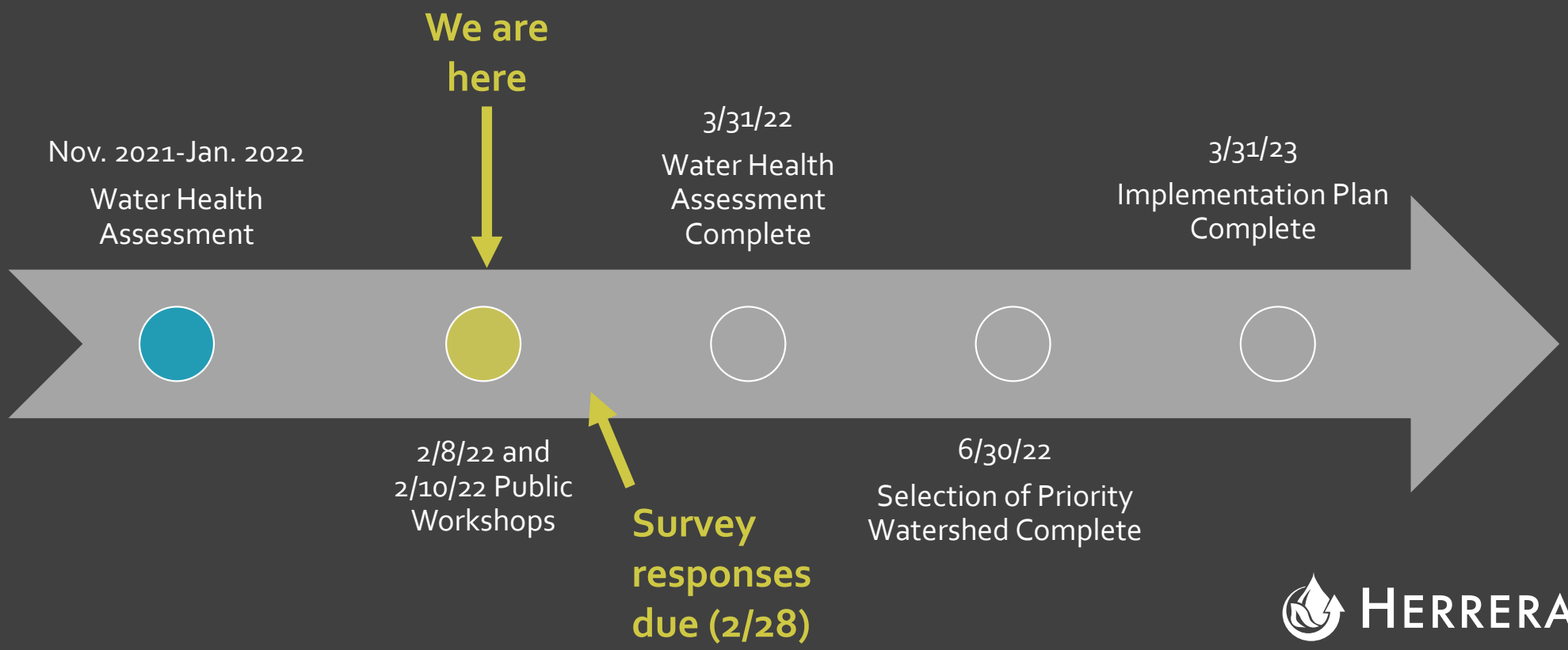
What’s next?

Next Steps



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Next Steps

- Slides and recording will be posted to the project web page after this workshop
- Remember to review the StoryMap and fill out the survey by **February 28, 2022**
- Tell your friends and neighbors about the StoryMap, survey, and upcoming workshop (**February 10, 2022**)

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Contact Information

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