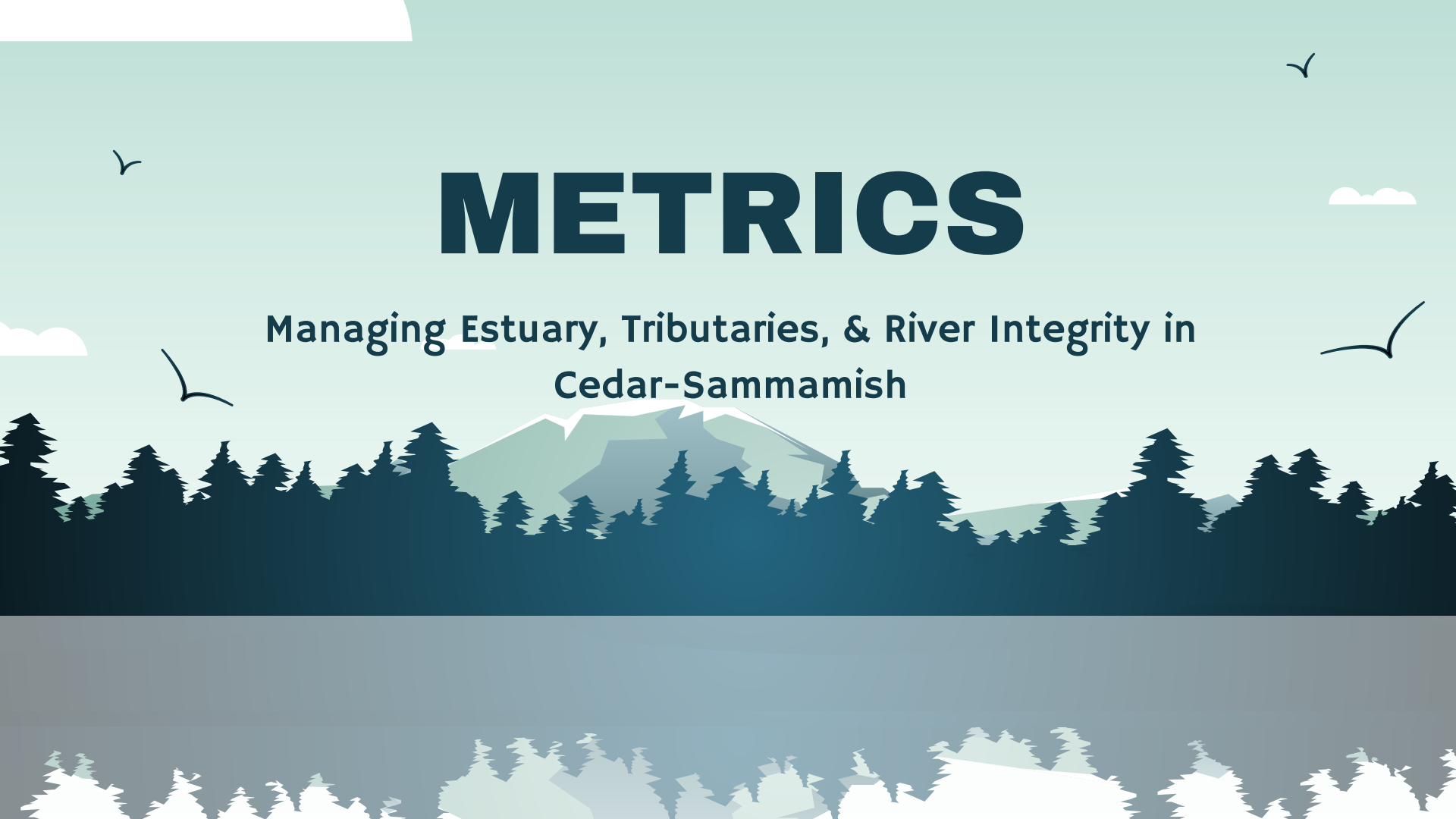


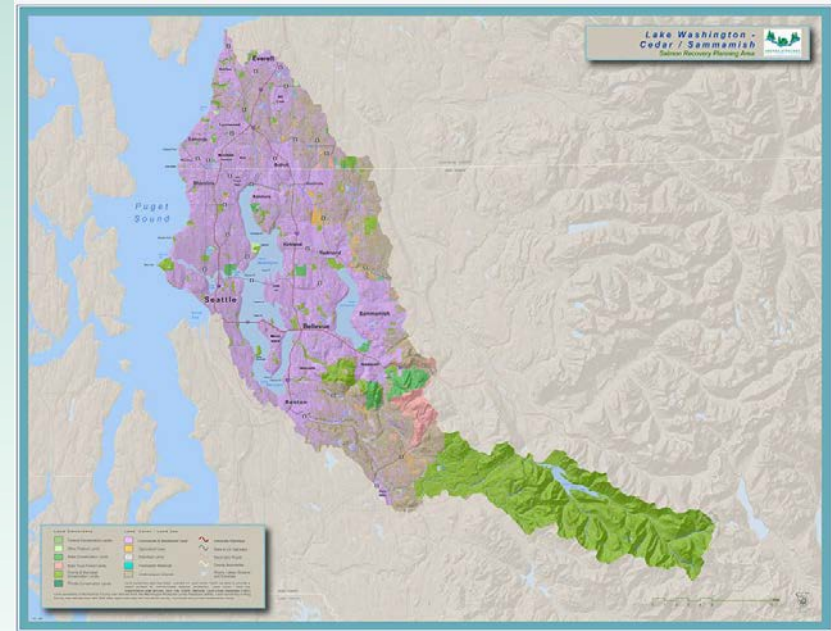
The background is a stylized landscape. At the top, a light teal sky contains several white birds in flight and a few white clouds. Below the sky is a dark teal silhouette of a forest of evergreen trees. In the center, a mountain range is depicted with green and blue tones. The bottom of the image features a horizontal band of lighter teal and white, suggesting a body of water or a misty foreground.

METRICS

Managing Estuary, Tributaries, & River Integrity in
Cedar-Sammamish

Outline

- Mission Statement
- Background &
- Current Policies and Mandates
- Problem & Goal 1
- Problem & Goal 2
- Problem & Goal 3
- Conclusion



Mission Statement

The WRIA 8 **METRICS** Initiative's mission is to reduce pollutant loads and restore ecological integrity within the Lake Washington-Cedar-Sammamish Watershed in Washington State by implementing coordinated regional stormwater upgrades, green infrastructure expansion, and habitat restoration projects to achieve measurable improvements in water quality, salmon recovery, and public health by 2045.



Background

The Lake Washington-Cedar-Sammamish Subbasin (WRIA 8) is located within the Central Basin of Puget Sound in western Washington State. Approximately 4.7 million residents, roughly 68% of Washington's population, live within the broader Puget Sound region, with Seattle serving as the largest urban center.

WRIA 8 includes:

- Lake Washington
- Lake Sammamish
- Cedar River
- Sammamish River
- Numerous tributaries and urban streams



Current Policies

- The Restore and Protect Project through King County is part of phase 2 of the **Puget Sound Partnership (PSP)** recovery goals for improving stream quality. Utilizes Benthic Index of Biotic Integrity (variety of stream bugs present) **for recommendations**.
 - Protecting healthy sites: Rock Creek
 - Restoring degraded sites: Stensland Creek & Tibbetts Creek
- Statewide **'Climate Commitment Act' (2021)** funding Puget Sound & salmon recovery projects
 - \$60.5 million of state funds to PSP's Puget Sound Acquisition & Restoration (PSAR) Fund
- King County Ordinance 15728 creating the special purpose **King County Flood Control District**
 - Funding & policy oversight for projects/programs across 40 jurisdictions

Problem I

Flooding (Combined Sewer Overflows: CSOs)

- ❖ Heavy rain causes older sewage systems to overflow, discharging raw sewage into the Sound.

Causes:

1. Legacy Infrastructure
2. Excessive stormwater volume
3. Climate change



Goal I

Modernize Stormwater & Sewer Infrastructure

Objective: Reduce untreated stormwater and sewage discharge to protect water quality and reduce flood risk.

Targets:

- Reduce combined sewer overflow (CSO) events to fewer than 1 untreated discharge per outfall per year by 2035.
- Retrofit 50% of high-priority urban drainage basins with green infrastructure (bioswales, permeable pavement, rain guards) by 2040.
- Reduce total stormwater runoff volume entering waterways by 30% by 2045.

Specific Policies to Achieve Targets

I.1) Direct the King County Flood District Funding to upgrade & monitor aging sewer infrastructure

I.2) Formulate grants for increased permeable cover in urban areas & other municipal stormwater management projects

I.3) Implement an additional annual stormwater fee based on sewer overflow-monitoring data/trends



Problem 2

Salmon Recovery

- ❖ Watershed is home to endangered/'threatened' Chinook salmon, as well as Lake Sammamish Kokanee salmon, though population returns are dwindling with fewer returns in their migration patterns.



Causes:

1. Development/man-made blockages on streams/rivers
2. Pollution/contamination of waters, poor quality waters
3. Stormwater runoff due to lost vegetation, forests, wetlands, and increased impervious surfaces causing stronger flows and more erosion
4. Water temperature

Goal 2

Restore & Protect Salmon Habitat

Objective: Improve habitat connectivity, water quality, and temperature conditions to support Chinook and Kokanee recovery.

Targets:

- Remove or retrofit 90% of high-priority fish passage barriers by 2040.
- Restore 500 acres of riparian and floodplain habitat by 2045.
- Reduce summer stream temperatures in priority tributaries by 2C through shading and flow restoration by 2045.



Specific Policies to Achieve Targets

2.1) Removal of Fish Passage Barriers by offering tax incentives to private landowners for removing blockages

2.2) Restore Riparian & Floodplain Habitat by expanding public funding to prioritize critical areas

2.3) Reduce summer stream temperatures by limiting water withdrawals from critical salmon streams and updating stormwater policies

Problem 3

Bacteria

- ❖ Bacterial contamination reduces water quality, harms salmon habitat, forces shellfish bed closures, and poses serious public health risks, making it a major barrier to ecological recovery in Puget Sound.



Causes:

1. Local sewage treatment plants and collection facilities repairs, improvements, and expansions/replacements not meeting rising needs. Infrastructure strain on aging systems.
2. Difficulty implementing and funding programs to help local property owners maintain and repair on-site septic systems.
3. Sewage from vessels/boats
4. Farm-waste management is complicated to study/track, which impacts management of livestock-associated bacterial pollution.

Goal 3

Reduce Toxic & Bacterial Pollution

Objective: Decrease persistent bioaccumulative toxins (PBTs) and fecal contamination in surface waters.

Targets:

- Reduce priority toxic chemical concentrations in sediment and biota by 25% by 2045.
- Repair or replace 80% of failing septic systems in high-risk areas by 2035.
- Reduce shellfish bed closures due to bacterial contamination by 50% by 2045.

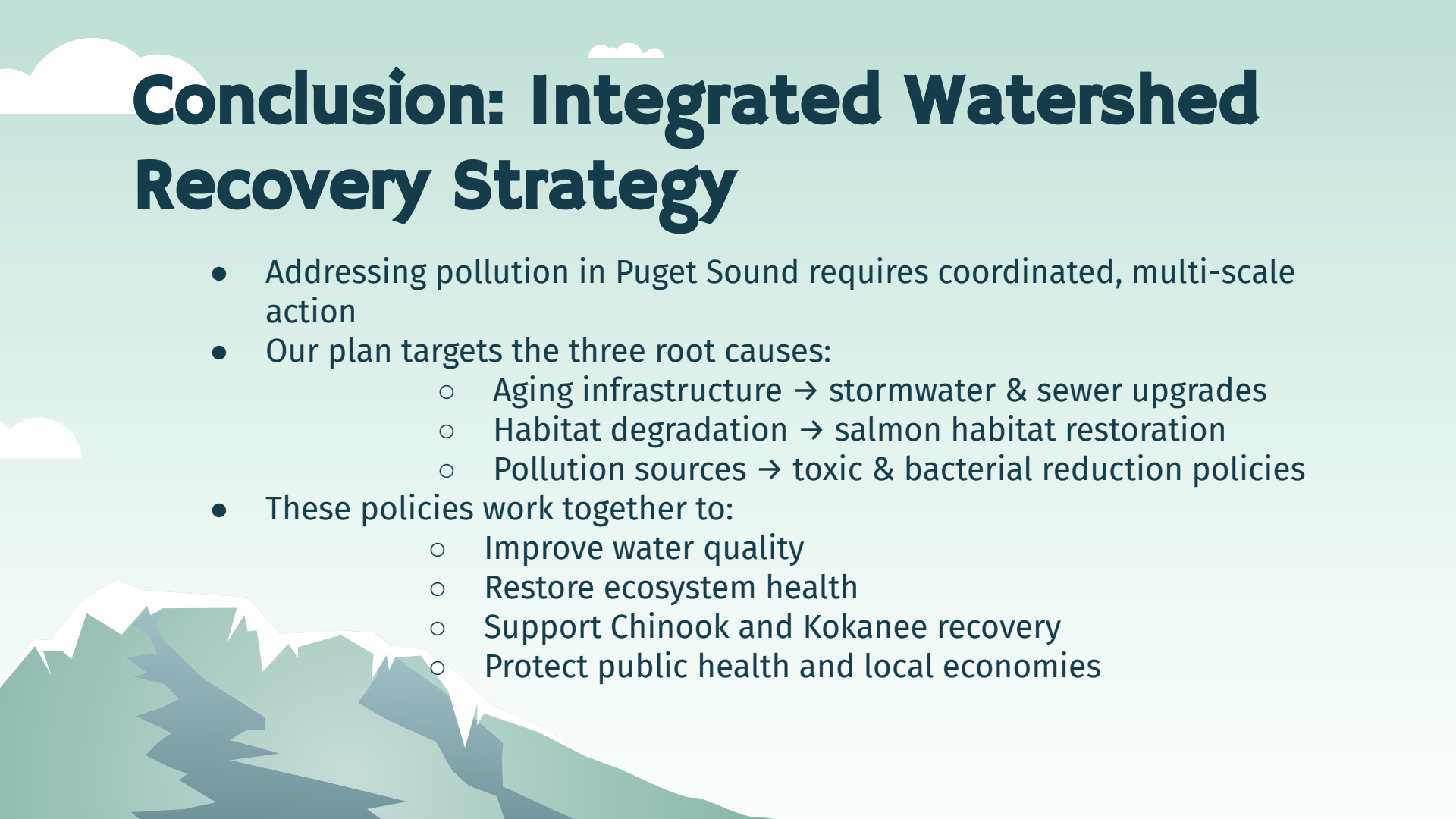
Specific Policies to Achieve Targets

3.1) Reduce toxic chemical concentrations by strengthening industrial discharge regulations

3.2) Repair/Replace Failing Septic Systems using financial assistance programs and requiring mandatory maintenance and inspections

3.3) Reduce bacterial runoff through stormwater & agricultural controls





Conclusion: Integrated Watershed Recovery Strategy

- Addressing pollution in Puget Sound requires coordinated, multi-scale action
- Our plan targets the three root causes:
 - Aging infrastructure → stormwater & sewer upgrades
 - Habitat degradation → salmon habitat restoration
 - Pollution sources → toxic & bacterial reduction policies
- These policies work together to:
 - Improve water quality
 - Restore ecosystem health
 - Support Chinook and Kokanee recovery
 - Protect public health and local economies

Long term watershed recovery depends
on integrating infrastructure,
environmental restoration, and pollution
control into one unified strategy.



Sources

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A stylized landscape illustration. In the foreground, a dark blue lake reflects the sky and the mountains. On the left and right sides of the lake, there are clusters of dark green evergreen trees. The middle ground features rolling hills and mountains in various shades of green and blue. A large, bright white sun or moon is positioned on the left side, partially obscured by the hills. The background shows a range of mountains, with the highest peaks covered in white snow. The sky is a light teal color with a few small, white, fluffy clouds scattered across it.

Questions?