

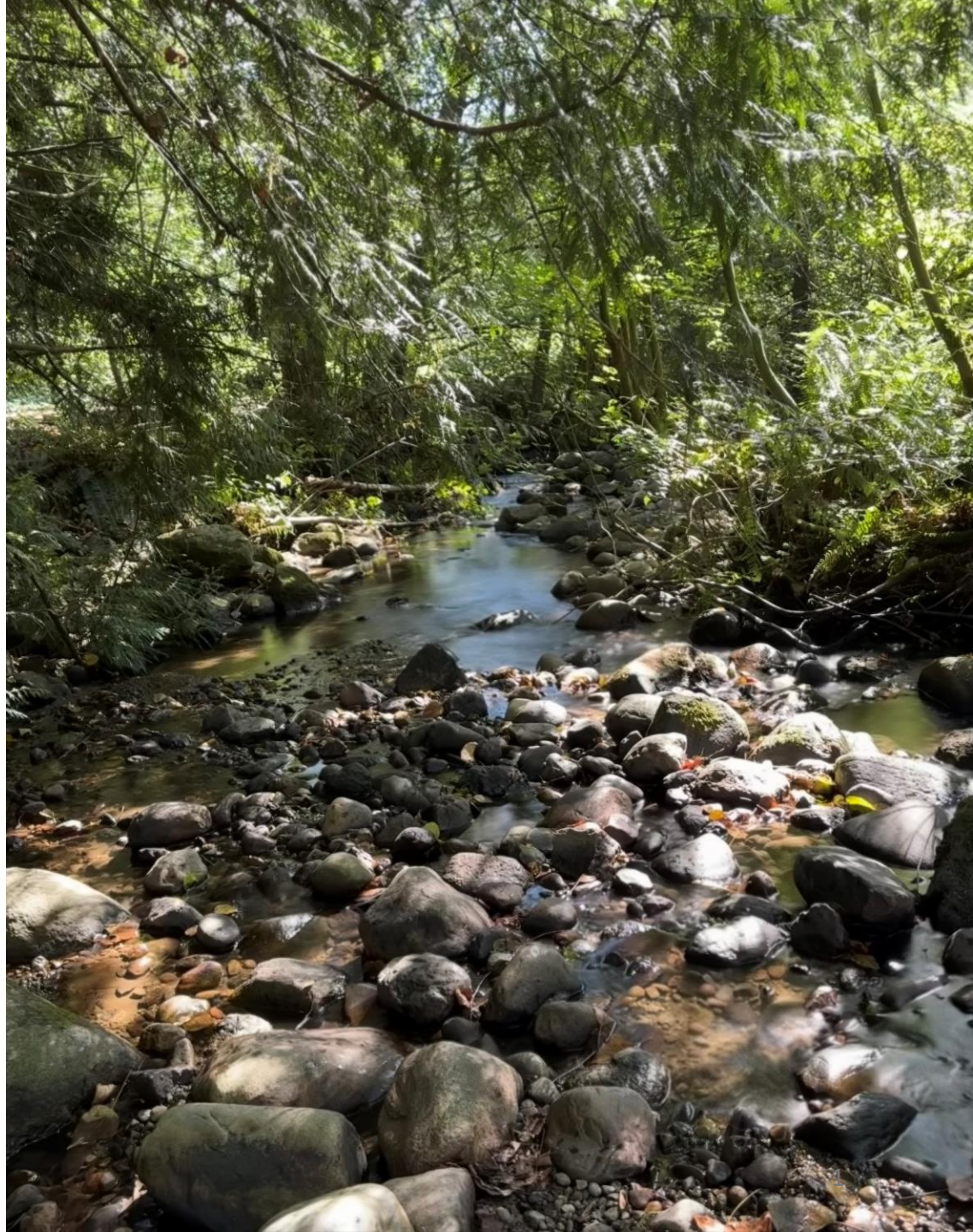
Strengthening Protections for the Stoney Creek Watershed

Delegation to the City of Burnaby
Planning & Development Committee

Stoney Creek Environment Committee

Feb 4th, 2026

John Templeton, President
Janice McAndrew, Secretary



Who We Are

Stoney Creek Environment Committee

75+ Volunteers protecting an urban salmon stream





Why Stoney Creek Matters

Burnaby's most productive salmon stream and habitat for the endangered Nooksack Dace

Salmon as Keystone Species

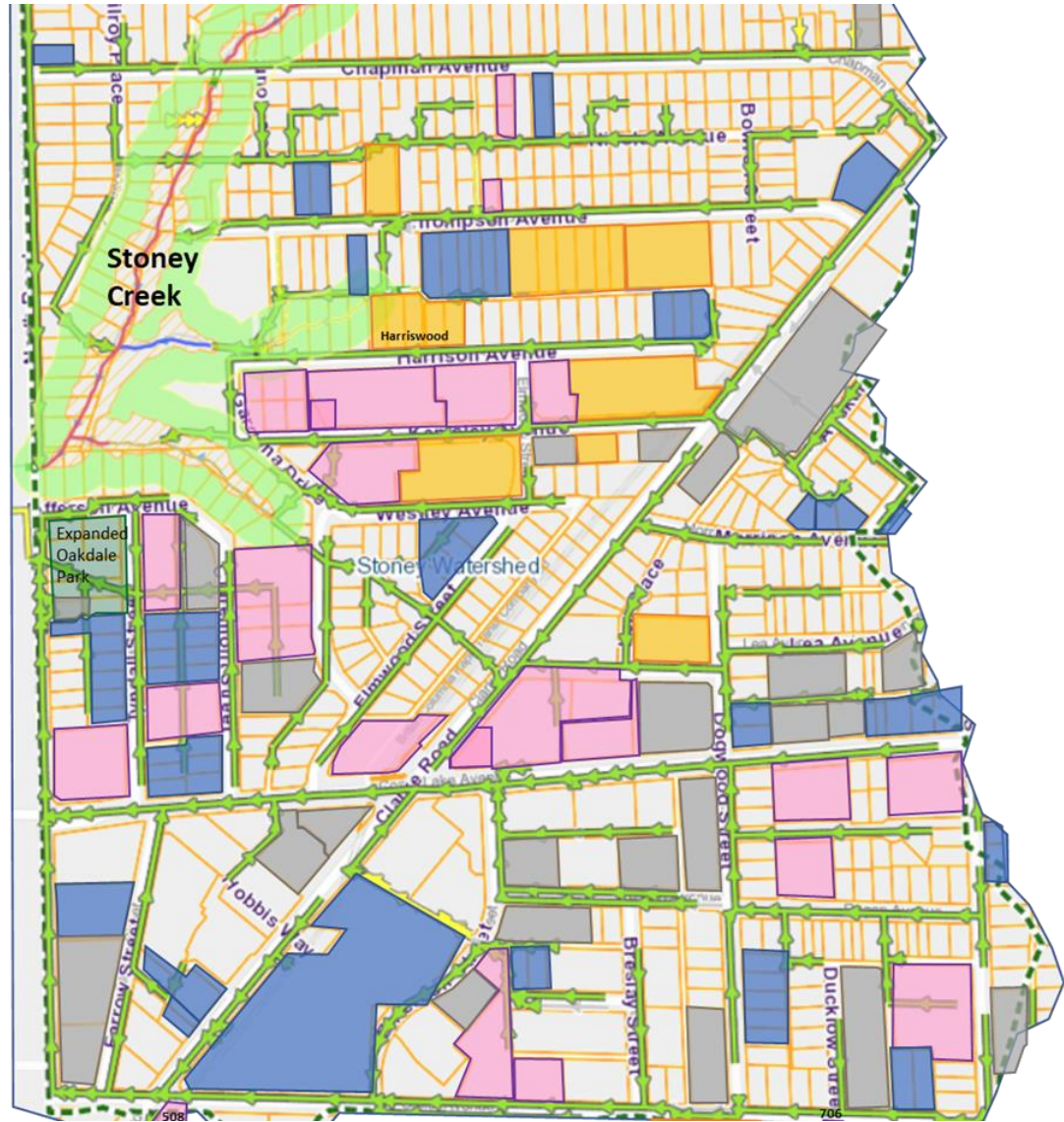
Protecting salmon
sustains ecosystems
and regional
fisheries



Development Pressure

Watershed development is accelerating faster than protections

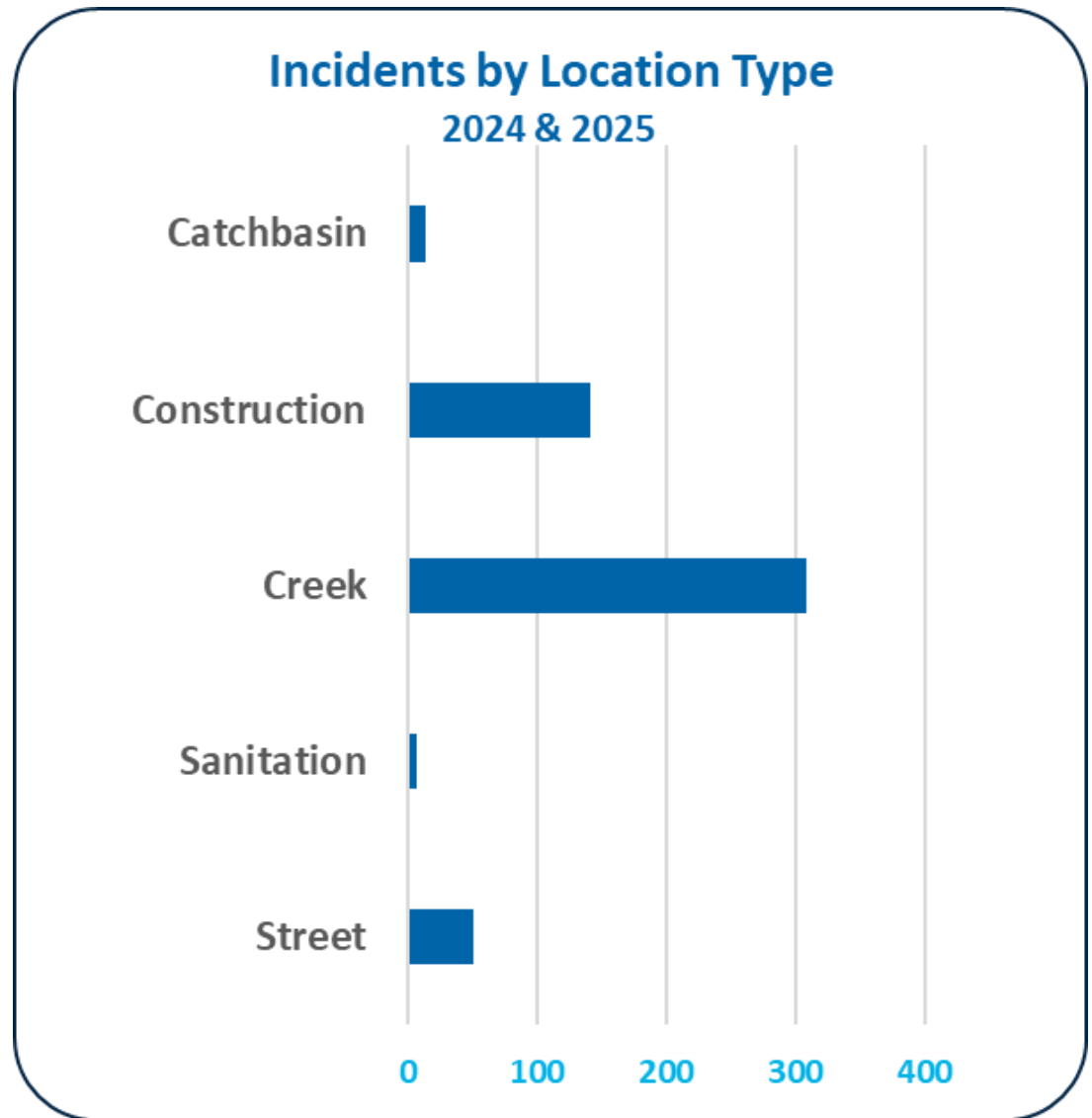
- 76 Projects
- 27 Completed
- 15,000+ new units



■ Application Stage ■ Building Permit Stage ■ Under construction ■ Complete

Incident Observation Locations

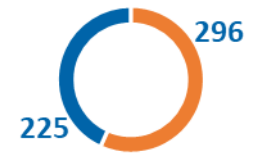
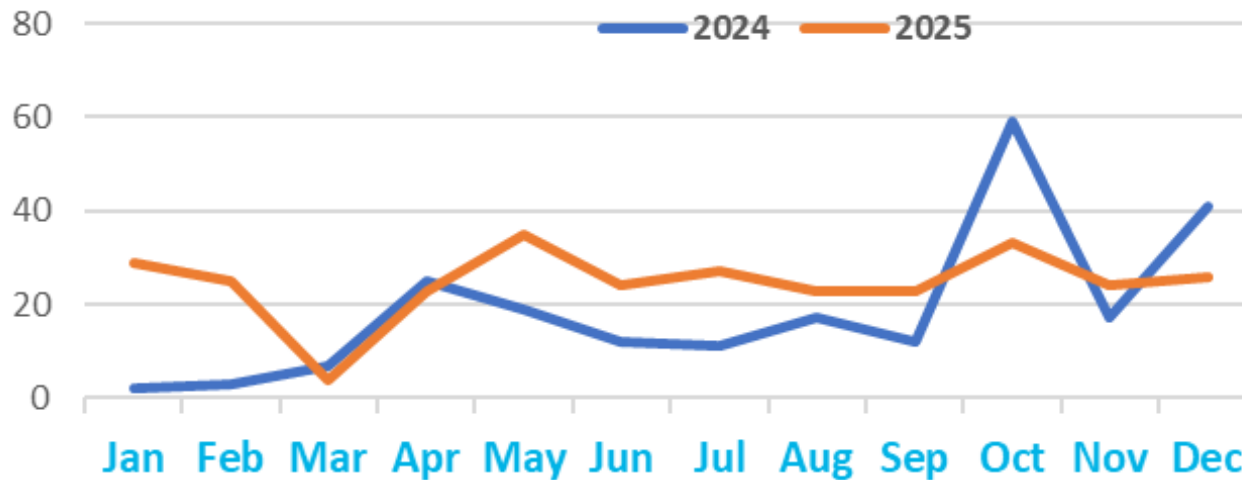
Construction activity is a major contributor to watershed stress



Incident Trends Over Time

Incident volume remains high year over year, with seasonal peaks linked to construction phases and rainfall

Incident Reports by Month




Fish Kills

Fish kills signal that cumulative impacts exceed the creek's capacity

Multiple fish kills have been reported in recent years

This event began on or before May 2nd and continued until at least May 8th.





Real-time monitoring is essential — but other key risks are not monitored under current bylaws

Groundwater & Construction Wastewater

Groundwater and construction wastewater are discharged without required testing for key contaminants

- Only pH and turbidity are monitored

No testing is conducted for:

- Heavy metals
- Hydrocarbons
- Chemicals used in water treatment
- Hexavalent Chromium



Concrete Truck Wash Water

A major unmonitored source of high-pH, high-turbidity wastewater

- Only chute wash water can be captured
- Runoff flows directly into catchbasins
- Contains high pH, high turbidity, and hexavalent chromium
- High frequency – multiple pours per day, hundreds of trucks per pour
- Pumper trucks have no capacity to capture wash water

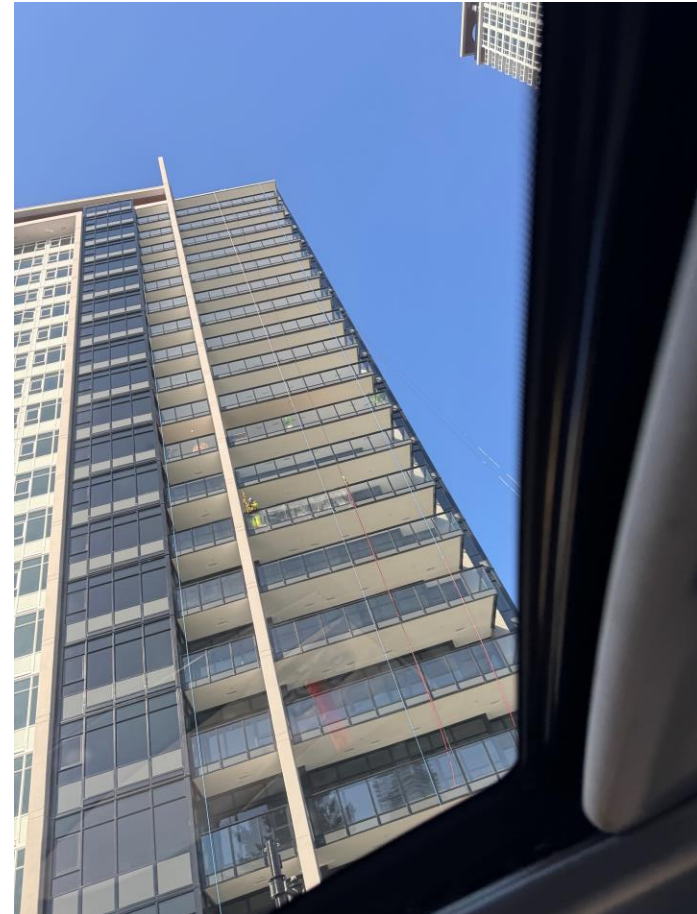


Finishing-Stage Activities

High-risk activities occur after monitoring systems are removed



Landscaping



Pressure Washing Building

Finishing-Stage Wastewater

Wastewater is discharged from detention tanks

Landscaping

- High in Nutrients → Algae
- Oxygen depletion
- High Ammonia
- High E. Coli

Pressure Washing

- Surfactants → Foam & Haze
- High pH
- High Turbidity
- Very Fine Sediment



Rathburn Culvert – Receiving finishing-stage wastewater

Erosion & Sediment Control

Sediment releases continue during construction



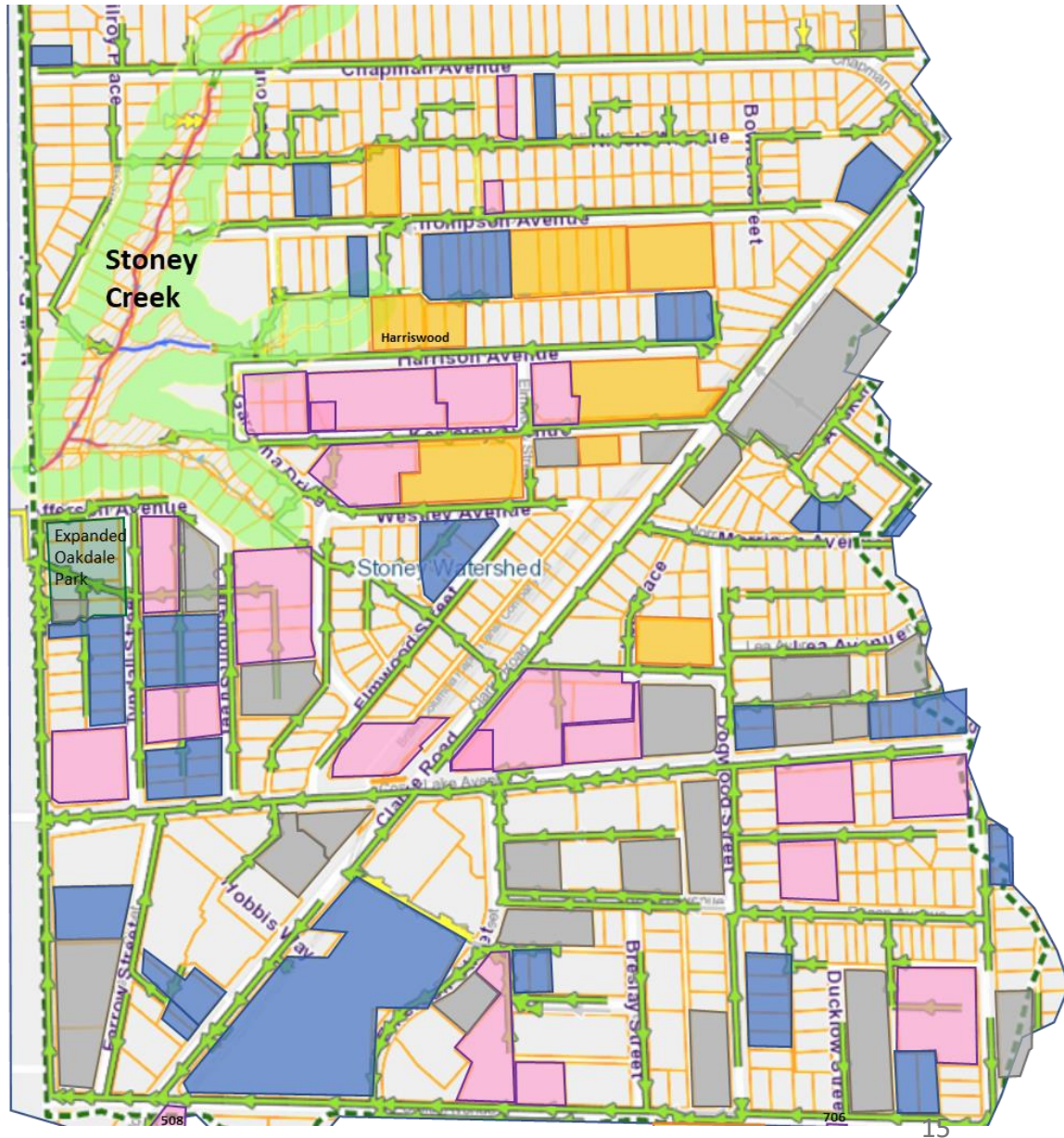
- Roadway sediment is washed into catchbasins during rain events
- Fine sediment blankets creek bed
- Proper sweeping is needed



Groundwater Pumping & Recharge

Large volumes pumped without limits or monitoring

- Only pH and turbidity tested
- No testing for metals, hydrocarbons or treatment chemicals
- Dewatering on multiple sites
- Increase in impervious surface areas



Sanitary Sewer Overflows

Sanitary surcharging adds ammonia and E. coli to the creek

- Heavy rain events cause sewer surcharging
- Overflows enter the creek
- Elevated ammonia and E. coli levels
- Overloaded infrastructure increases frequency
- Compounds impacts from construction wastewater



Our Request to the Committee

Recommend that Council:

- Develop protection for the Stoney Creek watershed through bylaws and rezonings
- Pause new approvals until protections are in place

Water Quality Protections

Safeguards to prevent contaminants from reaching Stoney Creek

- Testing Requirements for groundwater and construction wastewater
 - Metals, hydrocarbons, hexavalent chromium & treatment chemicals (e.g. flocculants, polymers)
- Testing Requirements for finishing-stage wastewater
 - Ammonia, E. coli, surfactants
- Real-time monitoring of pH, turbidity, conductivity and dissolved oxygen
- Threshold-based alerts to trigger immediate response

Site Management Protections

Practical measures to prevent sediment and concrete impacts

- Controls for concrete truck wash water
- Tightened Erosion & Sediment Controls (ESC) requirements
- Improved site housekeeping
- Measures to protect groundwater recharge and maintain baseflow

Not a Moratorium

Targeted protections, not a blanket stop

Goal: allow development to proceed responsibly while safeguarding salmon habitat

Thank You!



John Templeton, President
20-years of dedicated service



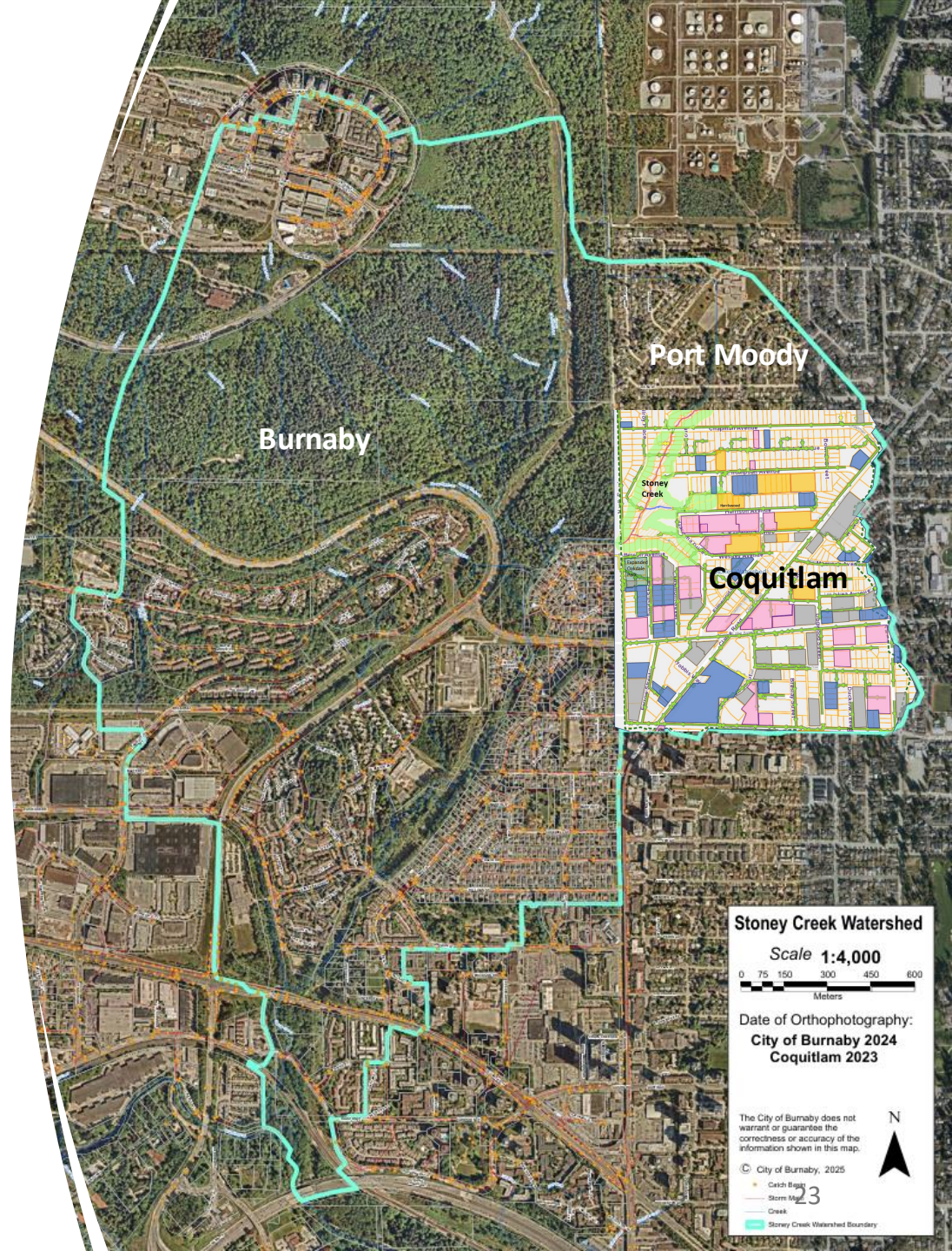
Janice McAndrew, Secretary

Thank you for your time and leadership!

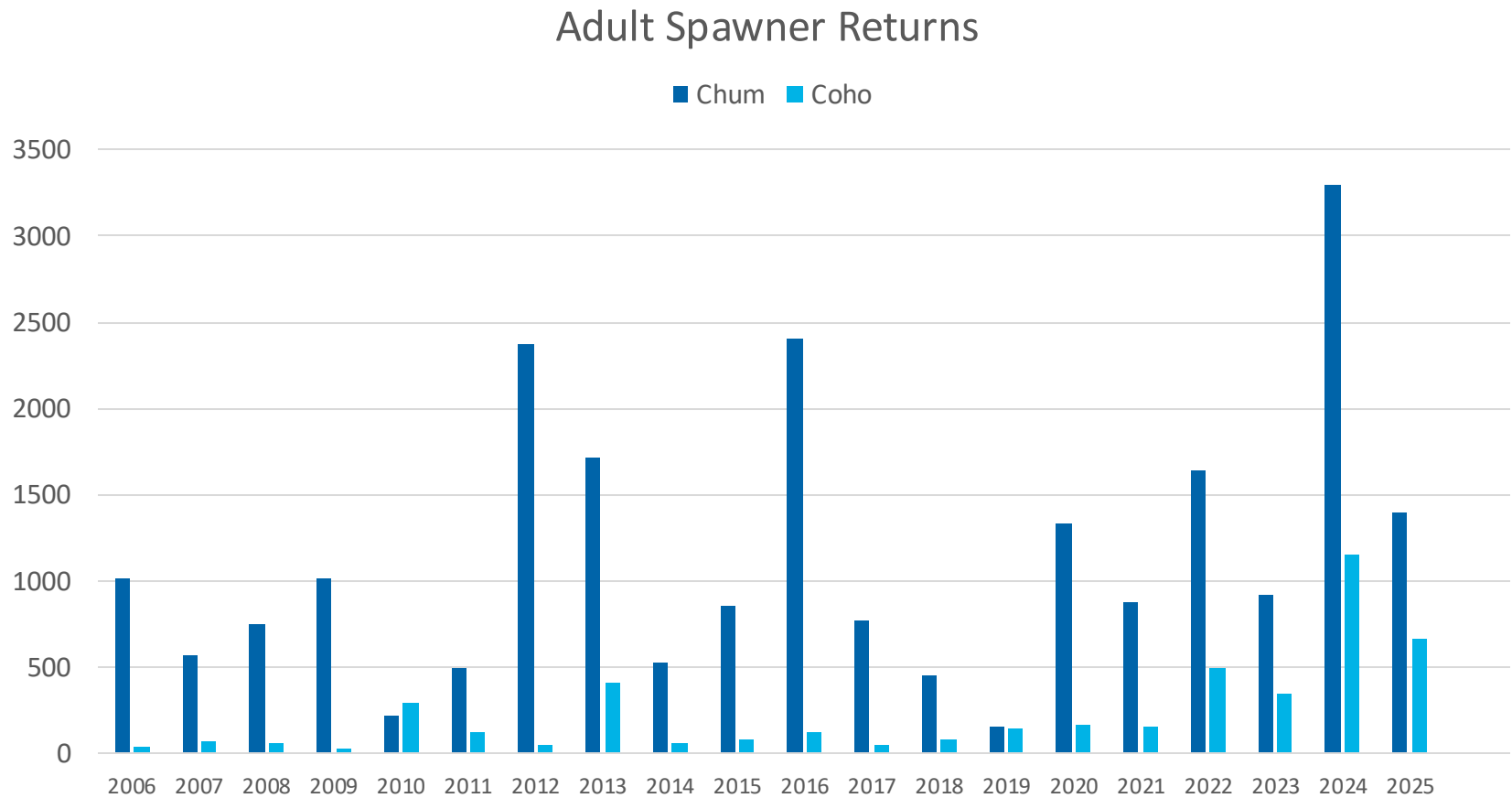
Reference Slides

Stoney Creek Watershed

- Originates from ground water
- Runs through 3 municipalities
- Roughly 4km
- Flows into the Brunette River



Returning Spawner Counts



Concrete Truck Wash Water

Key issues

- The chute bucket only captures chute wash water
- Water used to wash tires, drum, and back of chute typically lands on the ground
- Runoff flows directly into the nearest catch basin
- Contains high pH, high turbidity, and hexavalent chromium
- Each truck might only release 10 – 20 L; a single pour involves hundreds of trucks
- Multiple pours often occur in the watershed on the same day
- 1L of wash water with a pH of 11 must be mixed with 10,000L to get the pH back to a more normal pH level of 7
- Puddles attract children, pets, and wildlife
- Residue dries on the roadway and becomes airborne dust under traffic, and may contain hexavalent chromium

Hexavalent Chromium

A Zero-Threshold Carcinogen

Transmountain was required to test for it, why not here? -- we know it is present.


We have tested and found it in

- Concrete truck wash water (puddles)
- Overflowing water treatment tanks
- Chute bucket waste disposed of at the side of the road
- Stoney Creek

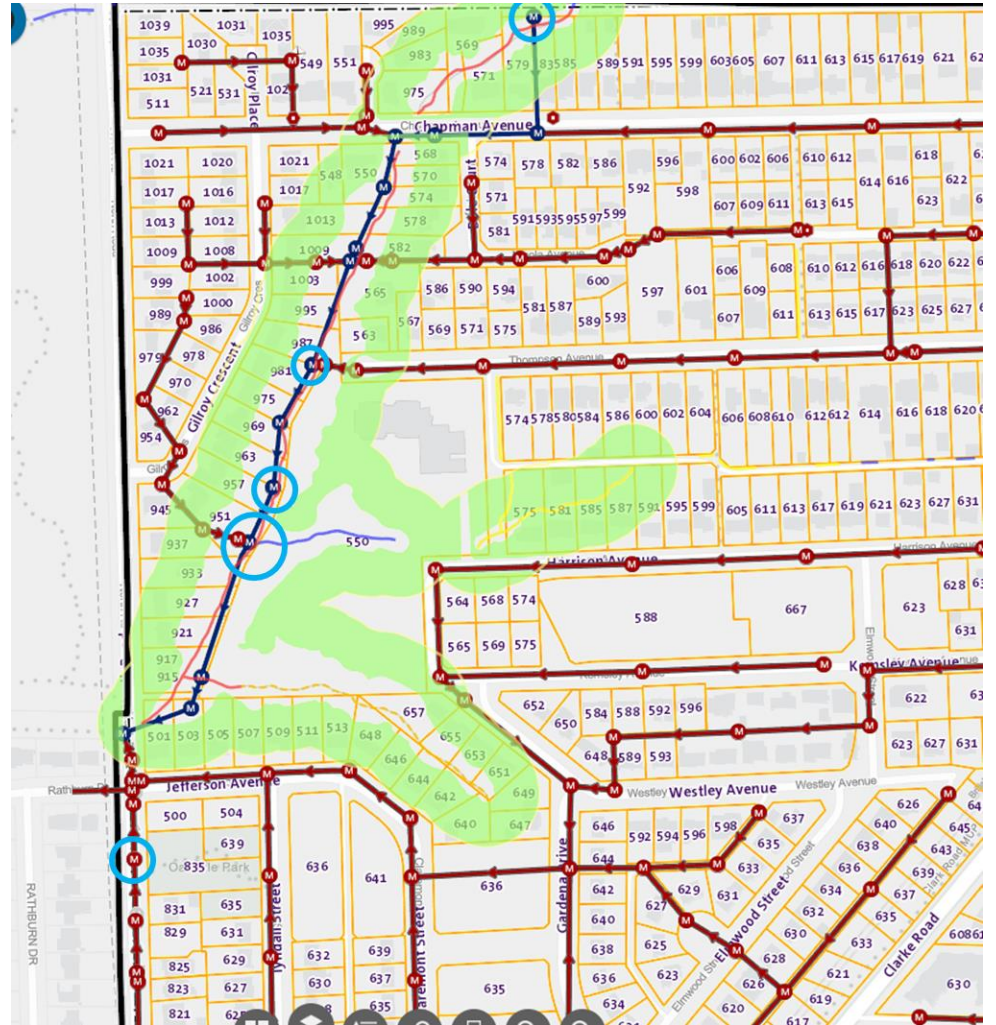
Sewage Overflows

Recent Events:

- Saturday, Oct 19th, 2024
- Monday, Jan 12th, 2026

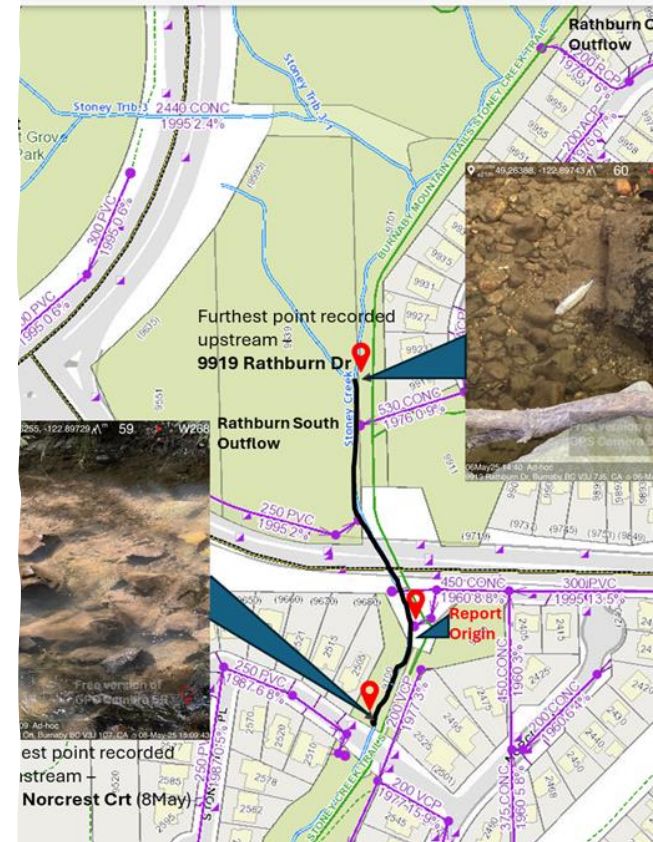
 Impacted Manholes

At least 9 homes in Coquitlam and Port Moody have been impacted as well



Fish Kill – Reported May 6th, 2025

- Entry Point: Likely Rathburn Culvert
- Origin: Likely construction site
- Cause: Likely pressure washing & landscaping in the watershed
- Duration: ~7+ days
- Area Involved: At least 1 km of the creek
- Fish Killed: At least 4-6,000




Rathburn Culvert – May 6th – 10:30 am
(2 hours after discovery)

Why is the Rathburn Culvert so Bad?

- It drains a large area compared to other outflows
- Many active constructions sites in the watershed
- A lot of civic work underway



 Rathburn Culvert Outflow

What is Coquitlam Doing?

The city of Coquitlam has done a number of things over the past several years, including:

- Requires Real-time Water Quality Monitoring on all but, small development projects.
- Adopted zero-tolerance policy for violations of bylaws & good neighbour policy
- Hired more staff
- Installed Jellyfish
- Strengthened ESC protections & Bylaws
- Reacting instead of proactively planning

Fish-bearing Creeks in Burnaby

Stoney Creek: A major salmon-bearing stream (Chum, Coho) and home to endangered species like Nooksack dace.

Byrne Creek: Features spawning habitats in a ravine park, often monitored for salmon and trout.

Beecher Creek: A tributary of Still Creek, supporting Cutthroat trout and Coho/Chum salmon.

Still Creek: One of the few urban streams with returning salmon, running through an industrial area.

Eagle Creek: Known for shaded spawning areas along trails.

Guichon Creek: Located near BCIT, a notable urban stream for salmon spawning.

Buckingham Creek: Located near Deer Lake, supporting smaller salmon populations.

Cariboo Dam (Burnaby Lake): A critical passage point for spawning fish.

Silver Creek: Sandwiched between Stoney Creek and Eagle Creek with an open channel downstream of the Firehall near Costco, along the BNSF railway tracks.

These streams are vital to the local ecosystem and are actively managed by various [Burnaby streamkeeper groups](#).