



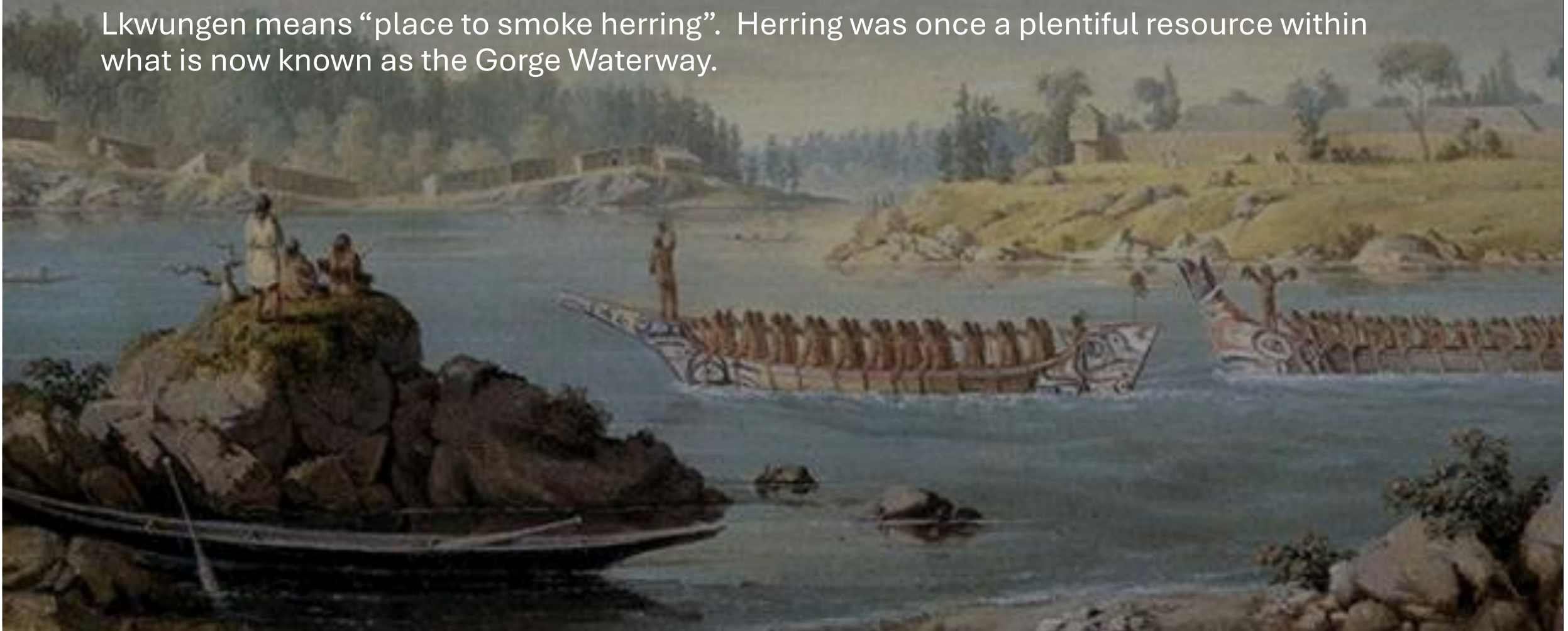
# Esquimalt Gorge Park Green Shores Restoration and Demonstration Project 2024 Lessons Learned and the Importance of Biological Expertise

Presented by Rebecca Nielsen, BSc, EPt, Project Lead

# Land Acknowledgement

Esquimalt Gorge Park is located within the Traditional Territories of the Lkwungen Peoples including the Esquimalt and Songhees First Nations.

Lkwungen means “place to smoke herring”. Herring was once a plentiful resource within what is now known as the Gorge Waterway.





## Gorge Creek Estuary within the Gorge Waterway

- Sea walls surround much of the Gorge waterway
- Few remaining beaches become depleted of sand
- Sedimentation from freshwater streams has become main “beach nourishment”



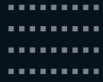
# Restoration Objectives

- |                                    |                                  |
|------------------------------------|----------------------------------|
| 1. Tidal Marsh Enhancement         | 6. Accessible Beach Mat          |
| 2. Forage Fish Habitat Enhancement | 7. Riparian and Native Plantings |
| 3. Nourished Recreational Beach    | 8. Permeable Path                |
| 4. Rip Rap Removal                 | 9. Interpretive Signage          |
| 5. Large Woody Debris              | 10. Swing Set Relocation         |



# Gorge Creek Estuary Shoreline Recontouring

- Rip rap removal
- Fill removal and regrading
- Forage fish spawning mix
- River rock veneer
- Woody debris and boulder
- Native Riparian plantings



# Beach Nourishment

- Fine washed sand added to escarpment height along recreational beach
- Addition of forage fish spawning blend
- Woody debris and rip rap placed along highwater mark





# Community Planting Parties

- >1000 native riparian and shoreline plantings
- > 30 community members planting over 3 days
- Salvaged salt grass and sea asparagus placed along highwater mark for erosion and sediment control



# *Lessons Learned*

## Surveys and Background Research

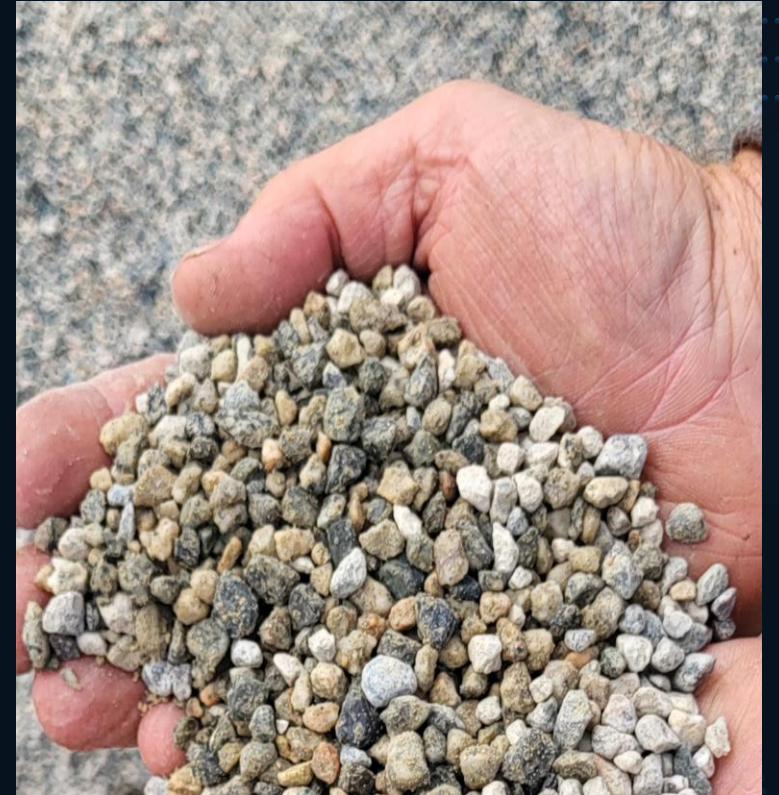
- Surveys of existing and historic species inform restoration strategies and permitting requirements
- Archeology may impact design and timeline – get Arc requests and/or permit applications in asap!
- Local fauna may require management to protect new plantings and seedlings (goose/deer exclusion)





## *Lessons Learned* Plant Selection

- Existing plants identified during initial surveys may be salvageable
- Confirm plants are native to your region and are site appropriate
- Consult local First Nations on traditional planting selections



## *Lessons Learned* Inspect all materials

- Protect your project from the spread of invasive species
- Confirm suitability of materials for intended purpose
- Prevent contamination from unwashed aggregates



Township of  
**ESQUIMALT**



This project was undertaken with the financial support of the Government of Canada.  
Ce projet a été réalisé avec l'appui financier du gouvernement du Canada.

