

# Gorst Creek – Bremerton Auto Wrecking Landfill EE/CA

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## Site History

1950 – 1980 Operated as  
Ames Auto Wrecking

1980 – 1989 Operated as  
Bremerton Auto Wrecking

1989 Landfill operations closed

**1968** A 24-inch corrugated  
steel pipe installed in Gorst  
Creek ravine

Pipe becomes crushed  
sometime after the installation.  
Exact time is not known

1997 After rainstorm Gorst  
Creek backed up and flowed  
over the landfill

January 2002 another storm  
Gorst Creek backed up and  
flowed over the landfill



# Previous Investigations

## ★ 1999 Hart Crowser – Site Hazard Assessment

### ★ Surface Soil Sampling – 4 Samples

★ 16 Pesticides/PCBs, 22 SVOCs, 9 Metals above instrument detection limits

### ★ Sediment Sampling – 4 Samples

★ 1 pesticide, 14 SVOCs, 7 metals above instrument detection limit

### ★ Groundwater Sampling – 1 Sample

★ No detections above instrument detection limits

# Previous Investigations

- ★ 2003 Preliminary Assessment
  - ★ Desktop assessment of sources, human, and environmental receptors
  - ★ Recommended further investigation under CERCLA
    - ★ Potential threat to human health via potential groundwater migration of contaminants from the site
    - ★ Potential threat to the environment via potential surface water migration of contaminants to Gorst Creek which is habitat for Federal-listed threatened Salmonid species

# Previous Investigations

- ★ 2004 EPA Integrated Investigation
  - ★ Surface Soil Sampling – 6 Locations
    - ★ 2 Pesticides/PCBs, 1 metal, 1 SVOC above PRGs
  - ★ Subsurface Soil Sampling – 6 Boreholes
    - ★ 8 pesticides/PCBs, 5 metals, 6 SVOCs above PRGs
    - ★ 3 pesticides/PCBs, 1 metal, 3 SVOCs 10 times PRGs
  - ★ Groundwater Sampling
    - ★ 1 metal, 2 SVOCs above PRGs
  - ★ Sediment Sampling
    - ★ 5 pesticides/PCBs, 4 metals above PRGs
    - ★ All pesticides/PCBs 10 times PRGs

# EE/CA Sampling

- ✦ Surface Soil Sampling – 7 Locations
  - ✦ Chromium above RSL and MTCA in all samples
- ✦ Groundwater Sampling
  - ✦ Groundwater only encountered in 1 of 5 locations
  - ✦ Arsenic, chromium, cobalt, chloroform, and MTBE above RSLs
- ✦ Sediment Sampling – 4 Locations
  - ✦ 3 metals, 3 PCBs above TEL



# EE/CA Alternative

1. No action
2. Gorst Ravine Restoration
  - ✦ Remove Landfill contents and restore original channel
3. Gorst Creek Realignment
  - ✦ Move the creek to flow around the landfill
4. Micro tunneling/Pipe Jacking
  - ✦ Install new culvert under the landfill

# Alternative Criteria Comparison

★ Value of 1 to 5 for 3 criterion and an average

★ Effectiveness

★ Implementability

★ Cost

Criterion	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Effectiveness	1	4	3	3
Implementability	1	3	2	4
Cost	1	1	3	5
Total	3	8	8	12
Average	1	2.7	2.7	4



# 2011 Field Work



# Questions???

