Meeting Purpose & Agenda

- Introductions, Meeting Purpose & Public Participation Overview
  Ian Fawley - Ecology

- Ecology Role, MTCA Process & Requirements
  John Guenther - Ecology

- Site History & Sub-Areas
  Ben Howard - Port of Bellingham

- Contaminant Exposure Pathways & Current Conditions
  Sylian Rodriguez, Julia Fitts – Anchor QEA

- Previous & Future Site Cleanup Work
  John Guenther - Ecology

- Closing & Next Steps
  John Guenther, Ian Fawley - Ecology

- Questions & Answers
Meeting Purpose

• To present information on the Draft Cleanup Action Plan for the Central Waterfront Cleanup Site
  - Describe State Cleanup Process
  - Describe the site history and exposure pathways
  - Describe current conditions
  - Discuss previous cleanup work and the proposed cleanup action
  - Outline the legal agreement between Ecology and the Port of Bellingham/City of Bellingham

• Opportunity for public to ask questions, obtain additional information and provide input
Second 30-Day Comment Period
(Sept 16 – Oct 15, 2019)

- Cleanup Action Plan
- Agreed Order Amendment
- State Environmental Policy Act – Determination of Non-Significance
Central Waterfront Site Location
Site History & Uses

- Municipal Landfill
- Lumber Mill
- Boat Maintenance/Storage
- Bulk Fuel Terminal
- Olivine Processing Plant
- Fueling Operations
- Foundry Operations
- Miscellaneous Industrial Uses
“Sub-Areas”

- Hilton Ave Properties
- Landfill
- C Street Properties
Exposure Pathways

- **Air**: Human Inhalation
- **Soil**: Human Direct Contact/Ingestion, Terrestrial Species Direct Contact/Ingestion
- **Ground Water**: Human Contact
- **Surface Water**: Human Consumption of Seawater

**Legend**:
- Contaminant Transport Pathway
- Point of Exposure
- Exposure Pathway / Screening Level

**Table**:
- **Air**: Air for Protection of Humans
  - Sub-area specific empirical soil vapor data
  - Calculated soil screening levels protective of vapor intrusion
- **Soil**: Sub-area specific empirical soil vapor data
  - Sub-area specific empirical soil vapor data
  - Calculated soil screening levels protective of vapor intrusion from CLARC
- **Ground Water**: Sub-area specific empirical soil vapor data
  - Groundwater screening levels protective of vapor intrusion from Ecology (2009) & sub-area specific empirical soil vapor data
  - Calculated groundwater (porewater) screening levels protective of sediment
- **Surface Water**: Sub-area specific empirical soil vapor data
  - Groundwater screening levels protective of marine water from CLARC
  - Site does not include sediment in adjacent Whatcom Waterway and I & J Waterway sites. However, groundwater screening levels applied at Site protect against recontamination of Whatcom Waterway and I & J Waterway sediment (exposure pathway M), as described in Section 4.2.1.
Hilton Ave Properties - Conditions

- Soil impacts from industrial activities
  - Petroleum
  - Volatile Organic Compounds (VOCs)
  - Metals
  - Polycyclic Aromatic Hydrocarbons (PAHs)
Landfill - Conditions

- Refuse and groundwater impacts from landfill
  - Refuse
  - Landfill Gas
  - Volatile Organic Compounds (VOCs)
  - Metals
  - Polycyclic Aromatic Hydrocarbons (PAHs)
C Street Properties - Conditions

- Soil and groundwater impacts from bulk fueling and boat yard activities
  - Petroleum
  - Metals
  - Polycyclic Aromatic Hydrocarbons (PAHs)

- Shoreline work completed as part of Whatcom Waterway Cleanup
Elements of the Cleanup

- Clay Berm/ASB Construction
- UST Decommission
- Tissue Warehouse (capping)
- Whatcom Waterway Containment Wall, Dredging and Capping
- Chevron Independent and Interim Actions
- C Street Terminal Interim Action
- All American Marine Interim Action
Whatcom Waterway Containment Wall, Dredging and Capping
Previous Cleanup Work

- Chevron Independent and Interim Actions
MTCA Cleanup Requirements

- Remedial Action Objectives
- Cleanup Standards
  - Chemical- and media-specific
  - Protective of human health and the environment
- Points of Compliance
  - Location where cleanup level must be attained
- Applicable, Relevant, and Appropriate Requirements
  - Local, state, and federal laws
Figure 5-2
Relationship Between Benefits and Costs

- Overall Environmental Benefit Score (weighted)
- Estimated Total Costs ($, Millions)
- Benefit-to-Cost Ratio (Benefits Score per $100,000)
Preferred Cleanup Action

- Soil / Refuse Cap
- Hotspot Soil Removal
- Landfill Gas Controls
- Monitored Natural Attenuation
- Contingent Groundwater Treatment
Next Steps

• Draft Cleanup Action Plan Public Comment Period
  - 30-day public comment ends **October 15**
  - Ecology response to comments
  - Ecology Finalize Cleanup Action Plan based on comments received

• Cleanup Design & Permitting, 2019-2020
• Cleanup Construction, 2021
• Long Term Monitoring, 2021 and beyond
Ecology Wants Your Comments

• Document Availability

Ecology’s Web Site:
bit.ly/CentralWaterfront

Document Repositories
• Bellingham Library - Main Branch
• Ecology’s Bellingham Field Office – 913 Squalicum Way
• Ecology’s Northwest Regional Office – Bellevue

• Submit Comments by October 15, 2019

- John Guenther, Department of Ecology, 913 Squalicum Way, Unit 101 Bellingham, WA 98225
- jgue461@ecy.wa.gov
Questions?