

# Community With a Vision: Sewage Lagoon into Economic Boon



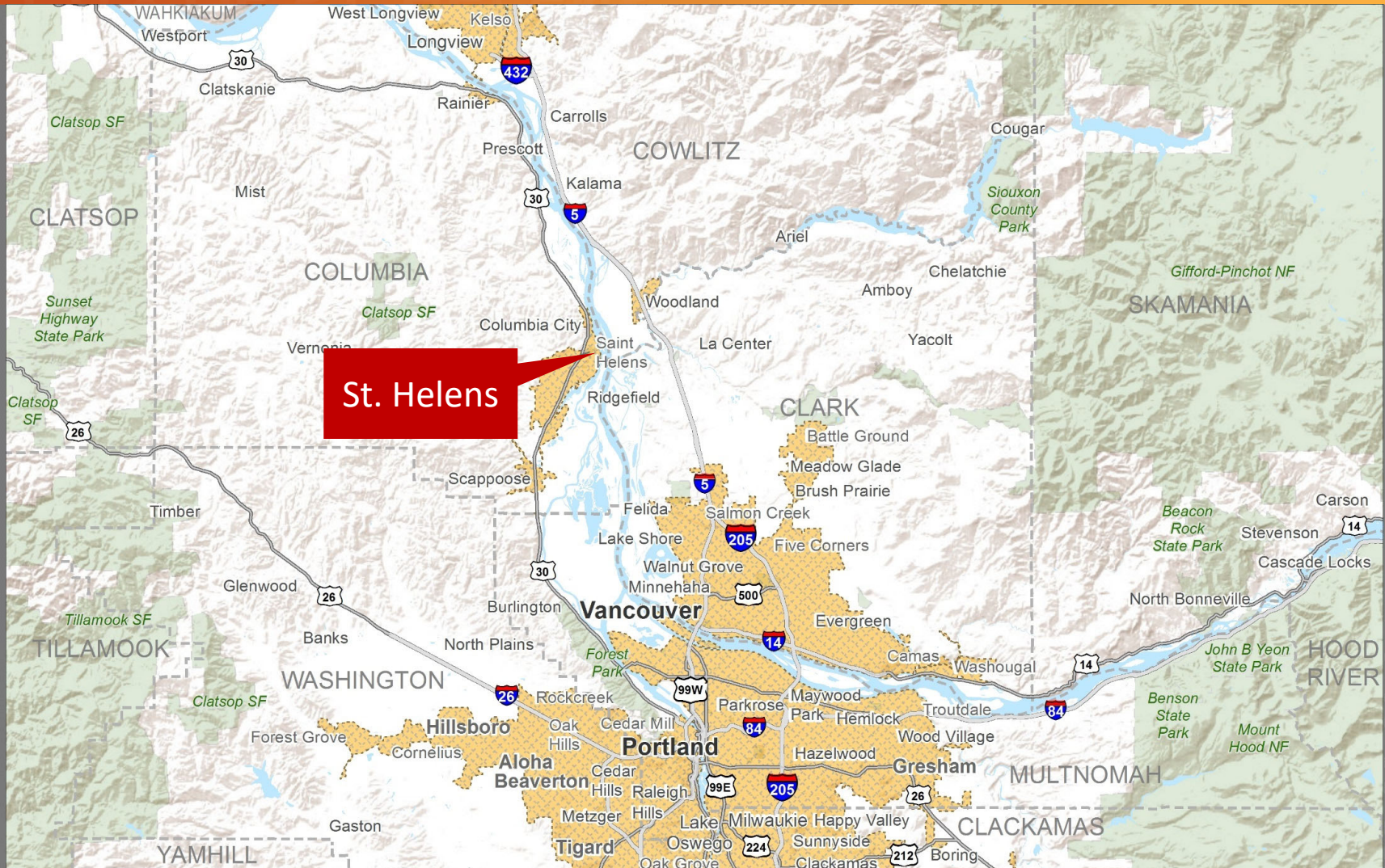
Jacob M. Faust, PE

Battelle Sediments Conference  
February 13, 2019



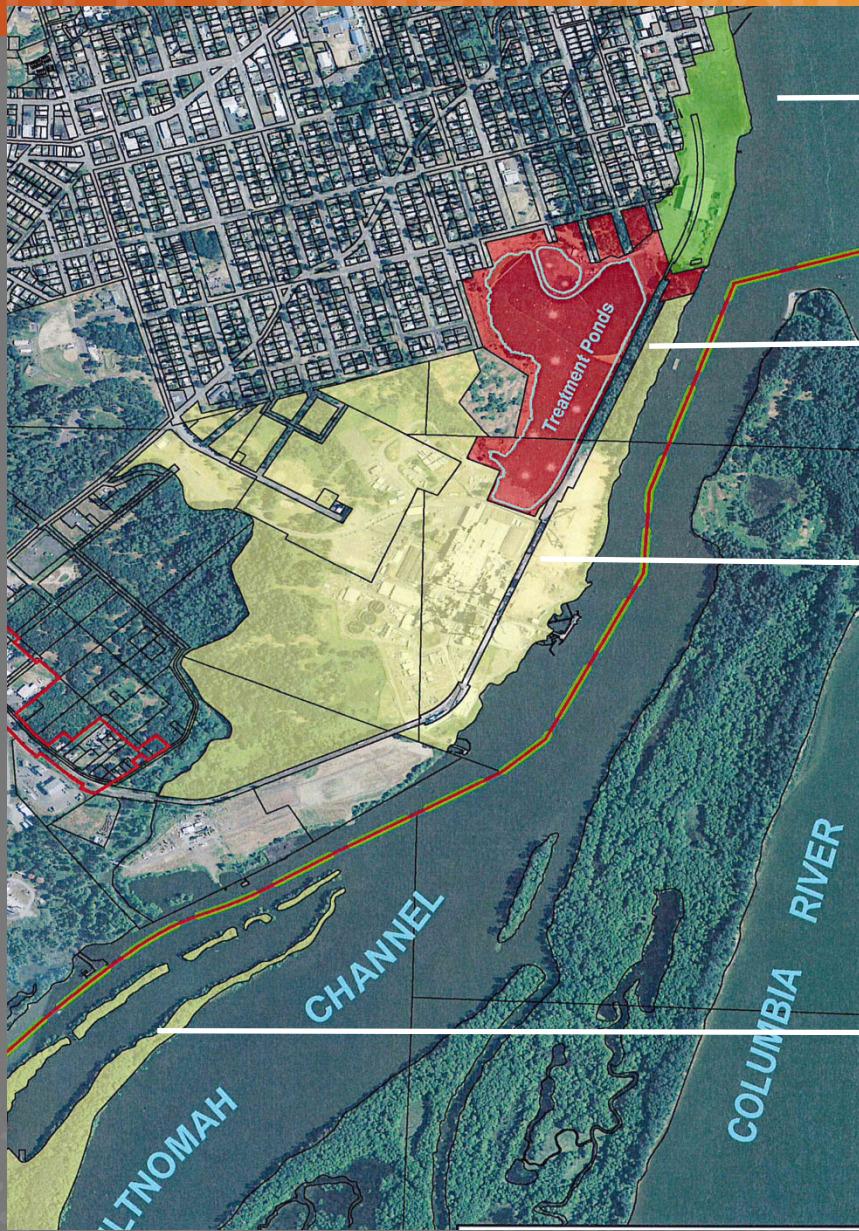
MAUL FOSTER ALONG

# CITY OF ST. HELENS



MAUL FOSTER ALONG I

# ST HELENS WATERFRONT



Veneer Site

WWTP Lagoon

White Paper  
Site

Peninsula



MAUL FOSTER ALONGI

# WASTEWATER TREATMENT PLANT LAGOON



# GROUND TRUTHING THE PROJECT

- Public Engagement
- Technical and Permitting Feasibility
- Wastewater Treatment Plant Impact Analysis
- Market Analysis

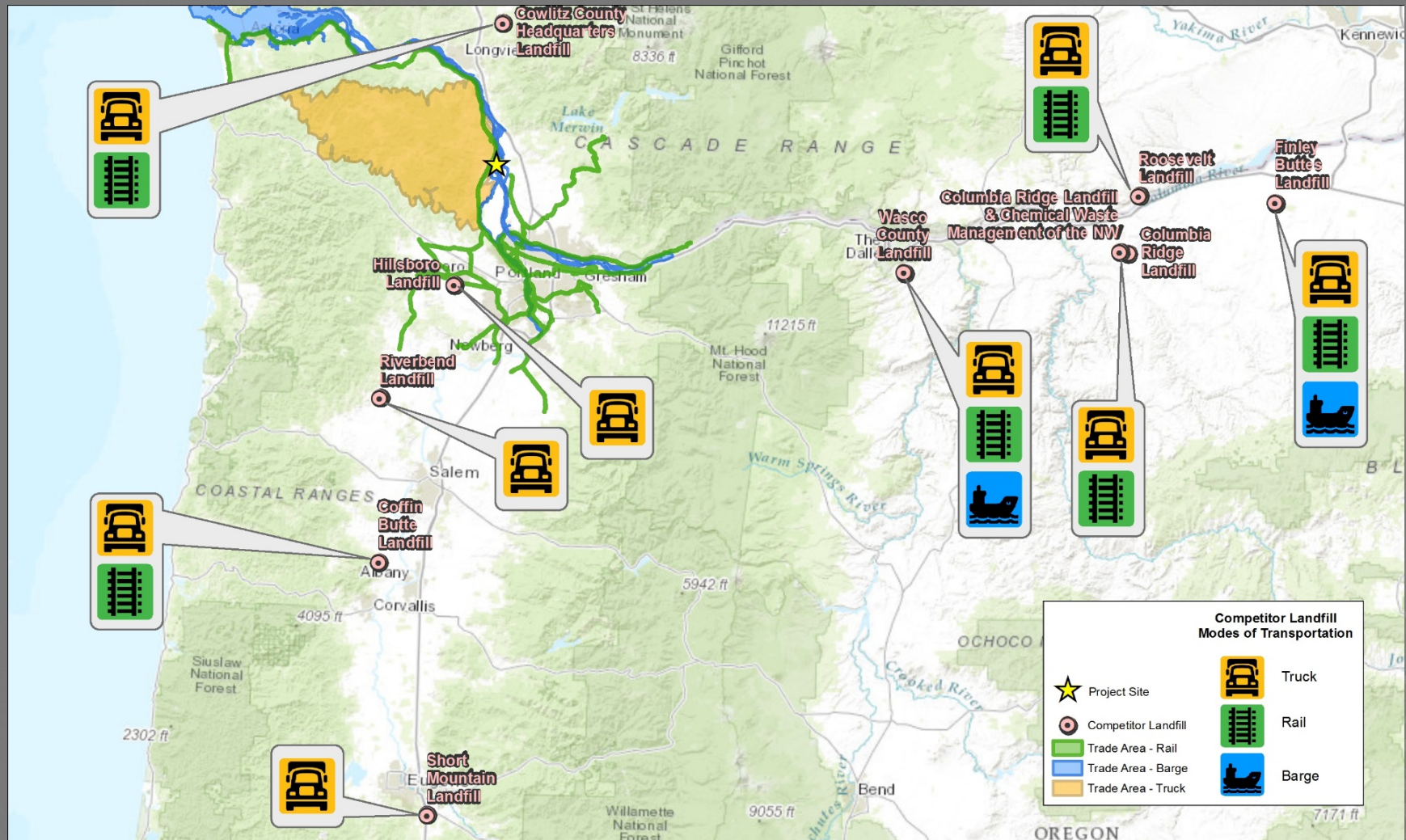


# REGULATORY STRUCTURE

- Permitted as Subtitle D Landfill
  - Receive Sediment, Soil, Wastewater Treatment Sludges
  - No Hazardous Designated Wastes
- Oregon Department of Environmental Quality
  - Permitting New Solid Waste Facilities Not Common
  - Concurrent Siting of WWTP

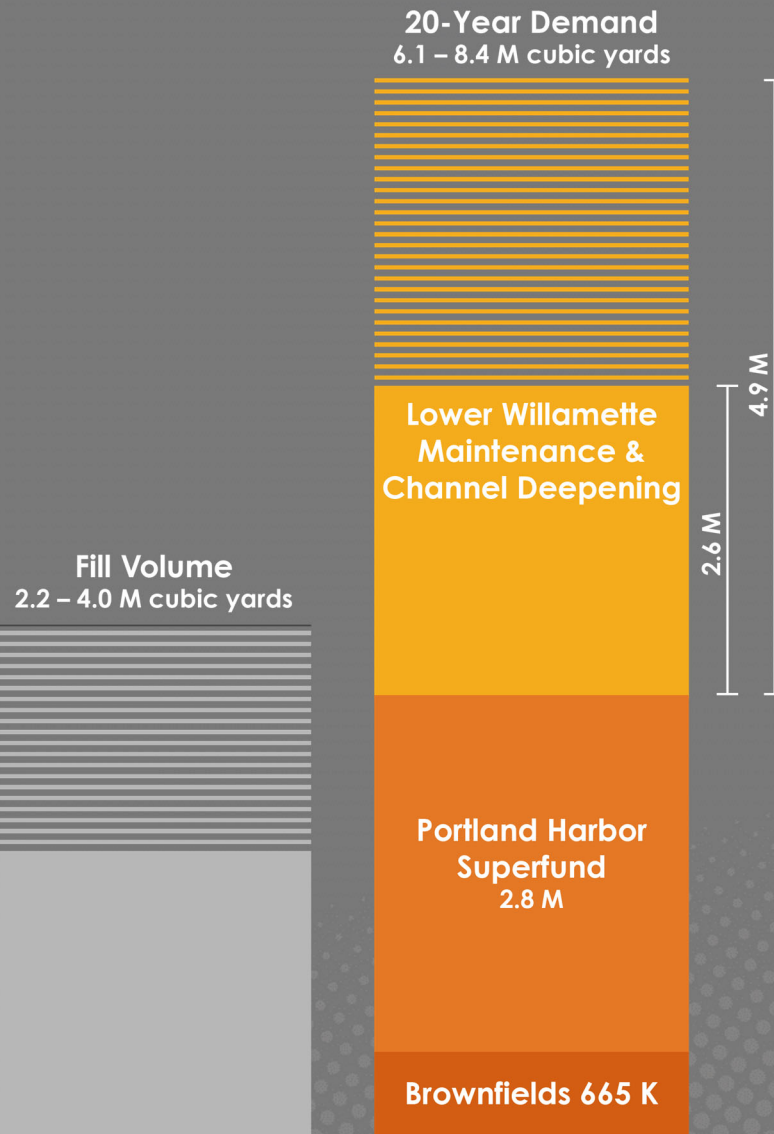


# MARKET ANALYSIS-TRADE AREAS AND COMPETITORS



MAUL FOSTER ALONGI

# FILL CAPACITY, DISPOSAL DEMAND



MAUL FOSTER LONGI

# MARKET ANALYSIS-NET PRESENT VALUE

Total Project NPV: \$56-72 Million

- Included in NPV:
  - WWTP Replacement
  - Facility Design, Construction, Operation, Closure, Post-Closure
- Not Included in NPV:
  - Development Revenue
  - Tax Base Increase
  - Employment



# ADVANTAGES FOR LOCAL CLEANUPS

- Lower Cost
  - Shorter Transport
  - Direct Offload, No Double Handling
  - Avoids New PH Transload Facility
- Provides Multi-Modal Flexibility
  - Barge, Rail, Truck Access
- Speeds Remedy
- Safer
- Lower Carbon Footprint



# ENVIRONMENTAL BENEFITS

- Long-term Stability
- Long-term Security
- Reduced Greenhouse Gas Emissions

Source	Import Amendment (Diatomaceous Earth)		Sediment Transport (Alternate Facility)	
	Truck Trips	Road Miles	Truck Trips	Road Miles
Portland Harbor	6,720	4,368,000	140,000	5,600,000
Navigation Channel	11,810	7,675,000	246,000	9,840,000



# CURRENT WORK

- IGA With State of Oregon Executed January 2019
  - Initial Funding Package for Phase I Site Investigation and Conceptual Design
  - Approximately 1/3 of Total Phase I Scope
- Business Oregon Grant
  - Public Engagement
  - Governance Structuring



# BEGIN WITH THE END IN MIND

