

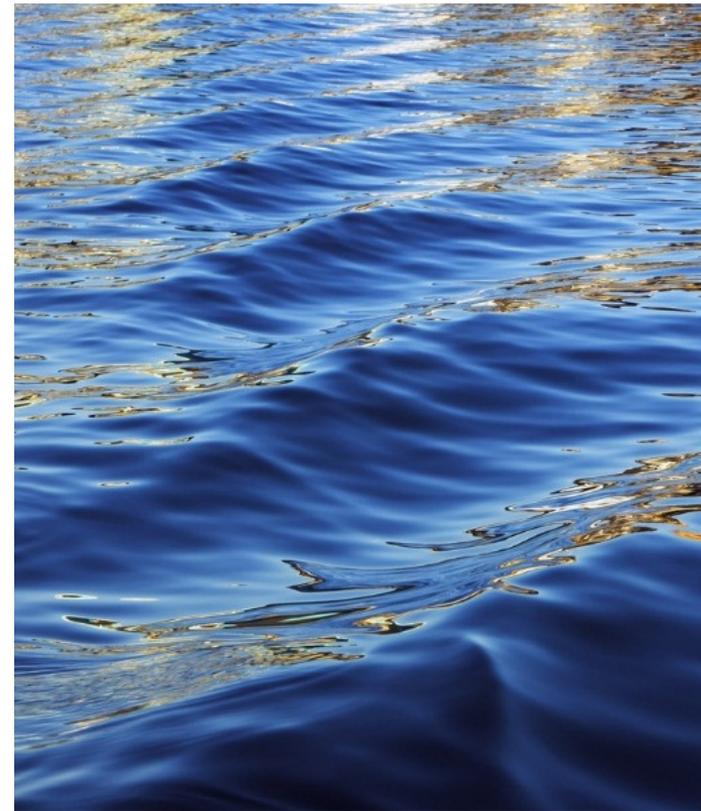


# Feed the Beach!

Restoring and protecting  
marine shoreline habitat on  
Vashon Island

Science Seminar  
November 2018

Water and Land Resources Division



**King County**

# Shoreline armoring



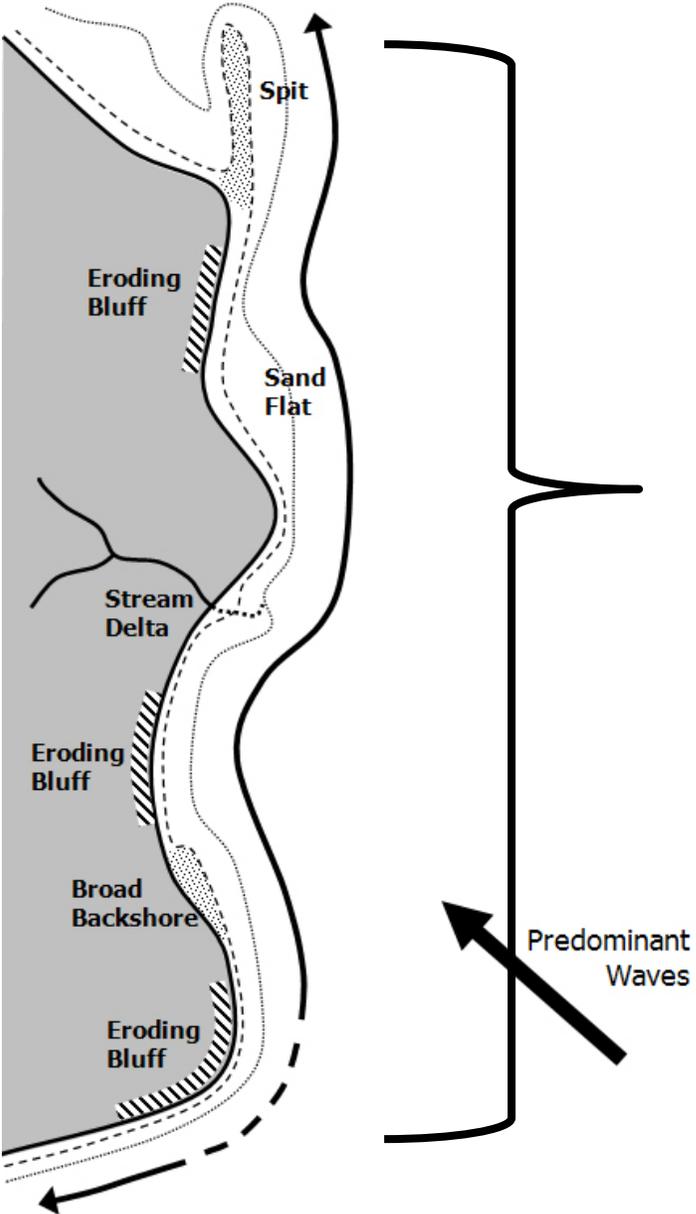






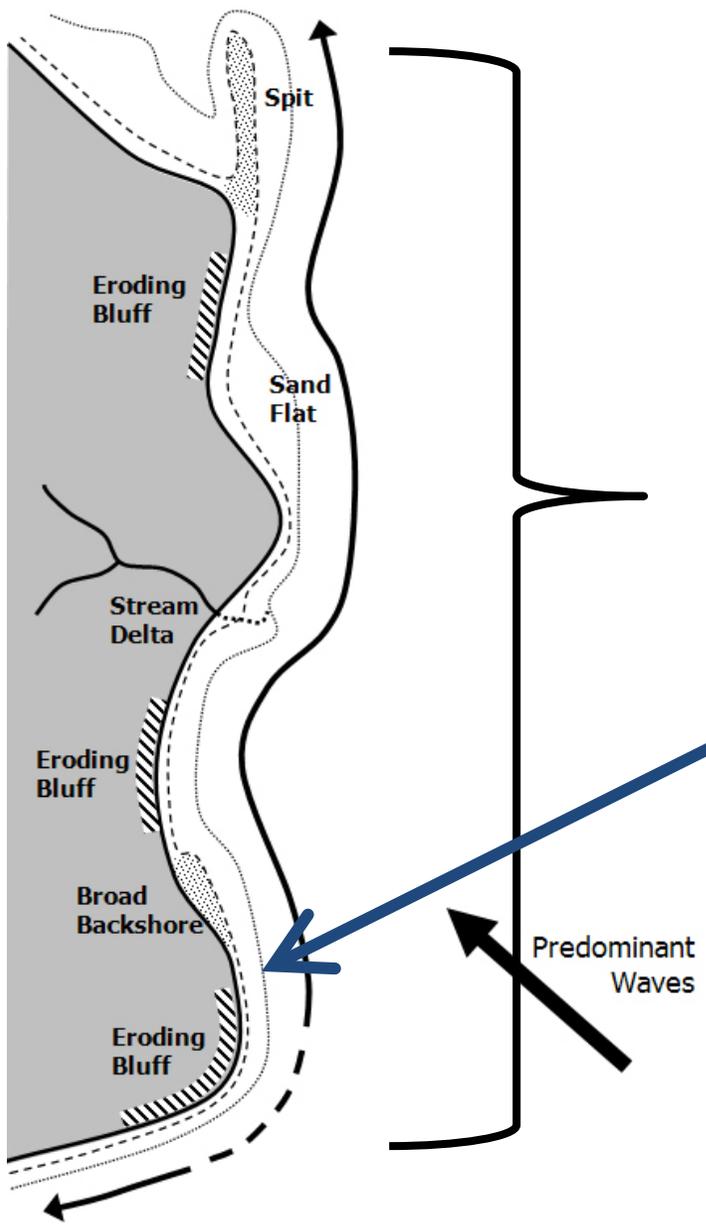


# Puget Sound Drift Cell

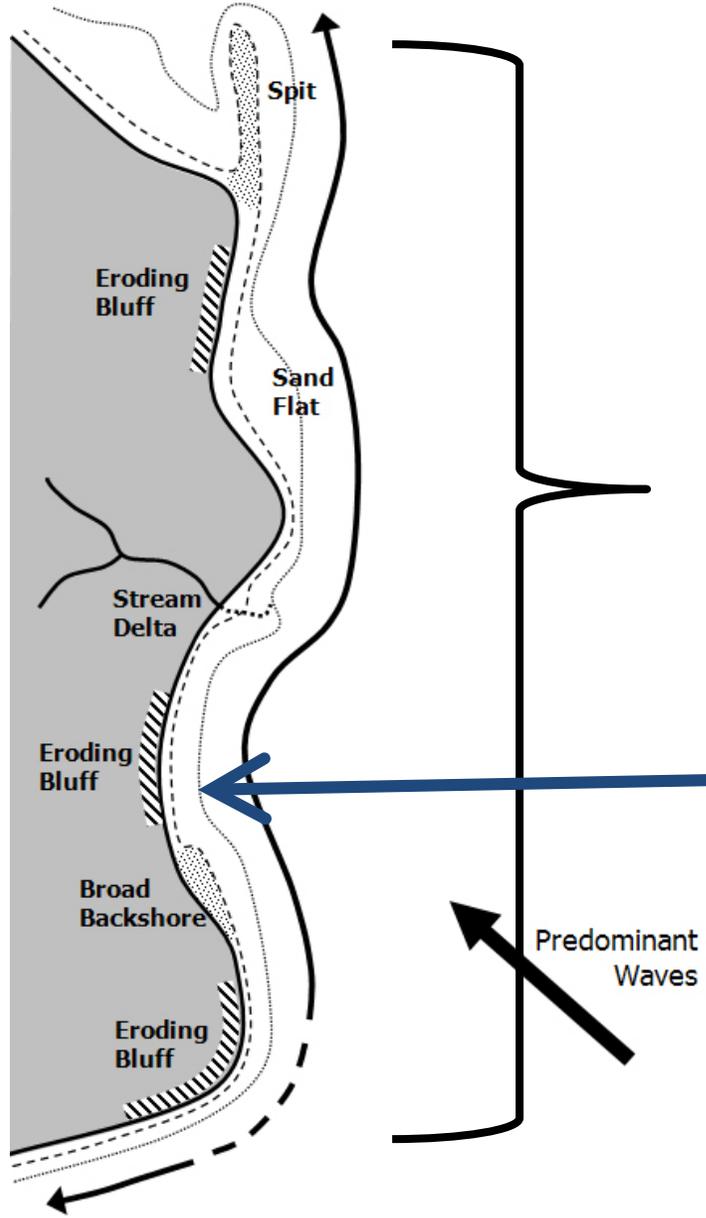


A Drift Cell = the area within which sediment transport is confined. Includes:

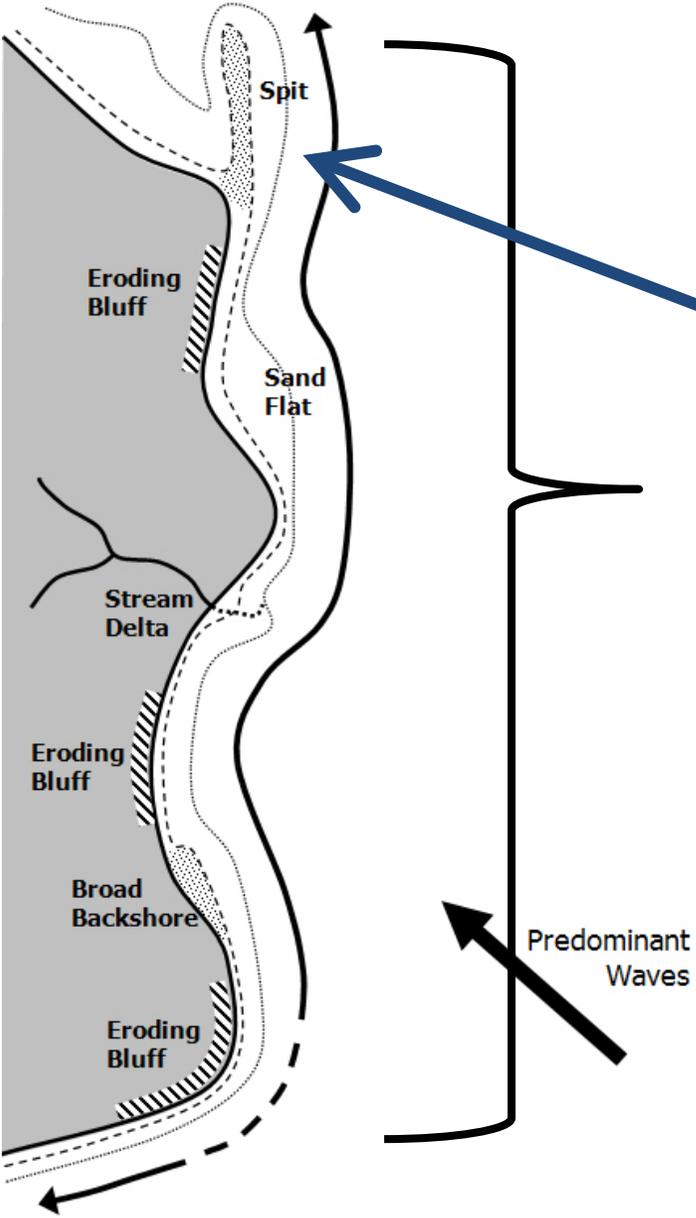
# Source or Feeder Bluff



# Transport Zone



# Deposition or Accretion Area



# Armored Shorelines vs. Natural Shorelines

- Smaller / steeper beaches
- Less spawning habitat
- Less riparian vegetation
- Less drift wood
- Less beach wrack
- Fewer invertebrates = less fish food

*Dethier et al. 2016*



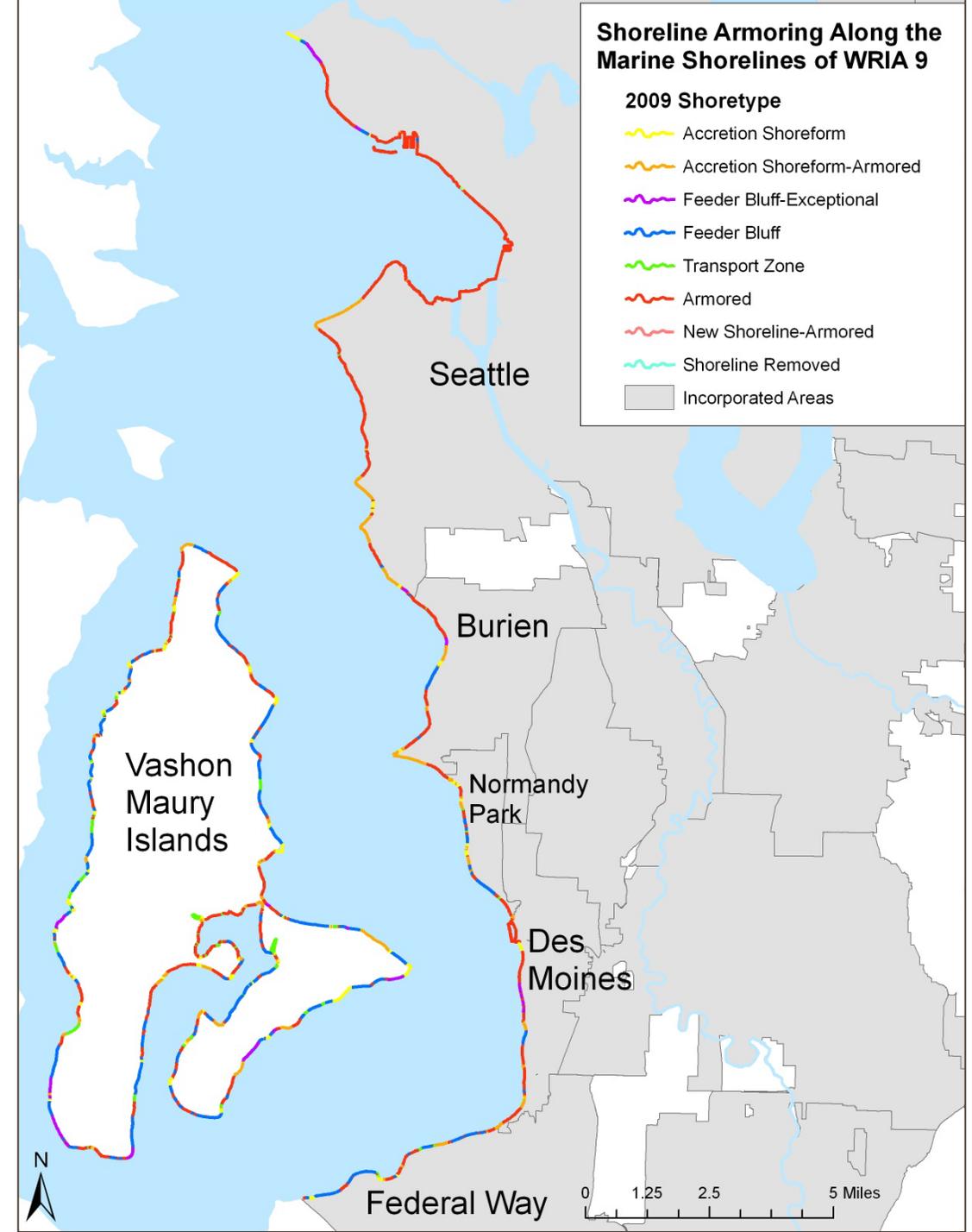
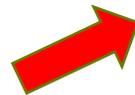




# Extent of the problem: Shoreline Armoring

- 26% of Puget Sound
- 50% of Vashon 25 of 50 miles

Red and Pink lines represent armoring



# What is the Vashon Stewardship Program doing about it?

- Protect
- Restore
- Engage



# Protect and Restore Priority Drift Cells

- Pt Heyer
- Three largest drift cells in the Maury Island Aquatic Reserve.



# Pt. Heyer Drift Cell



Over 2 miles long

90% of shoreline is  
natural and  
unmodified

# Point Heyer (KVI) Salt Marsh



# Point Heyer (KVI) Salt Marsh



# Maury Island Aquatic Reserve

- Large blocks of intact shoreline
- High impact armoring
- Sand lance, surf smelt and herring spawning
- Maury Island Aquatic Reserve



# Strategy for success

- Broad geographic scope
- Build off of successes
- Engage with residents
- Excellent Team

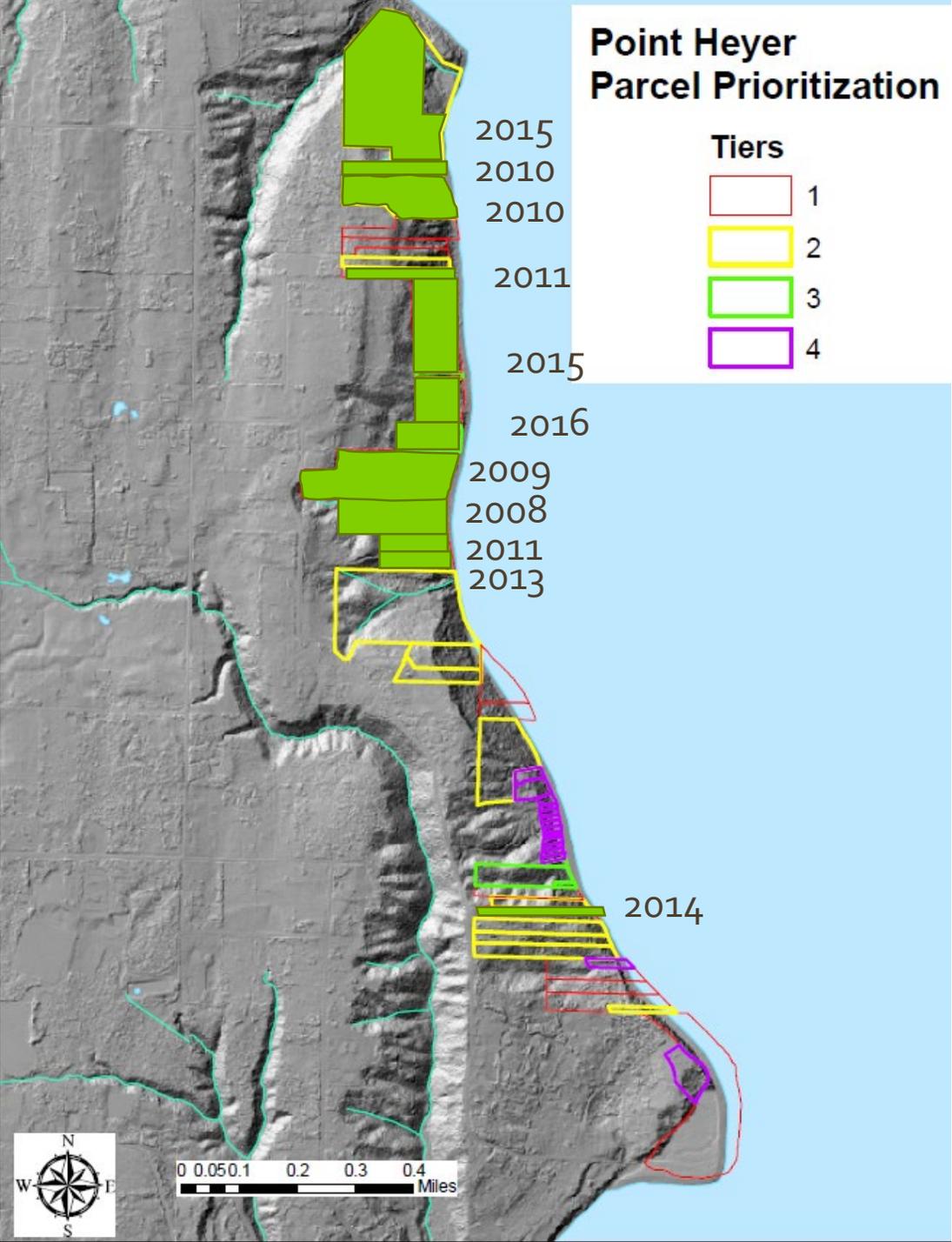


# Goal

Protect and restore about seven miles of shoreline in four drift cells.



# Point Heyer Drift Cell



# Public Engagement and Education

- BeachNET - Vashon Nature Center
- Vashon Ed talks
- Media
- Site visits



# Sea Level Rise

- Remove infrastructure.
- Room for erosion.
- Creates resilient projects.



# Progress

- Over 1400' of armoring removed
- Pt. Heyer (KVI) 35% complete  
¾ mile of 2 miles
- Maury Island Aquatic Reserve 60% complete  
3.2 miles of 5.4 miles
- About 40 potential sellers remain



# Piner Point Before



# Piner Point After



# Dockton Natural Area Before



# Dockton Natural Area After



# Maury Island Natural Area Before



# Maury Island Natural Area After



# Lost Lake Before





# Lost Lake After



# Forest Glen Before





# Forest Glen After



# Piner Point Before





# Piner Point After



# Challenges

- Funding/capacity
- Landowner willingness
  - Long timeline
  - Property value
- New armoring (unpermitted and permitted)



# Unpermitted shoreline armoring



# Thanks to our sponsors, supporters and partners!

Vashon Nature Center







**King County**



Thank you.

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