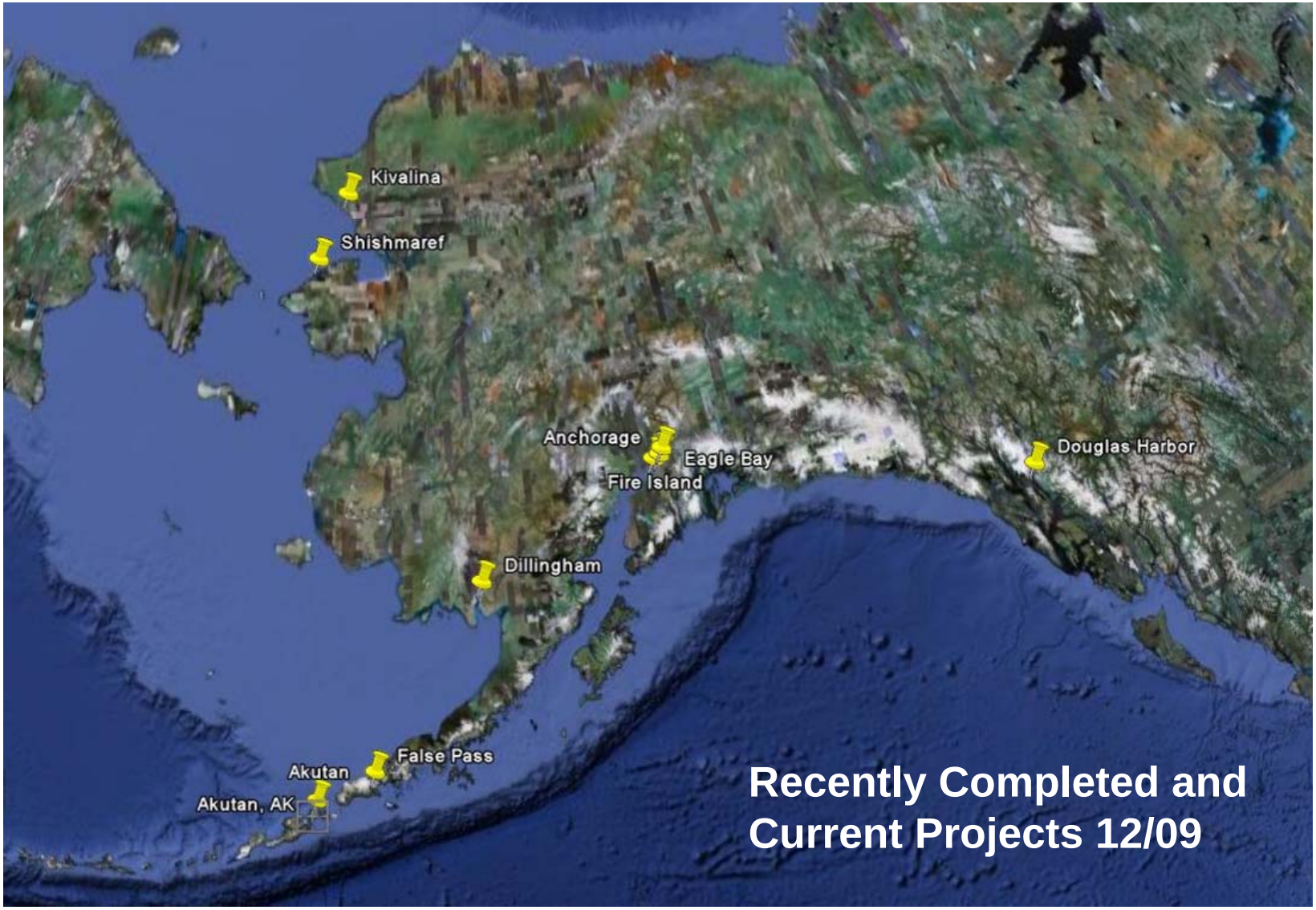
The Alaska District

Wendy Shaw

CIRP Workshop

December 1, 2009



Recently Completed and Current Projects 12/09

Douglas Harbor Breakwater

Breakwaters (Wave Barrier Structure & Rubble Mound)	
Design wave	2.30 ft
Length, total	374 ft (WB) / 75 ft (RM)
Crest elevation	+24 ft, MLLW
Crest width	6 ft (RM)
Rock volume	
Primary armor	785 cy
Secondary (B) rock	350 cy
Core rock	6,000 cy
Crushed gravel	NA
Innner slope armor	240 cy

False Pass Breakwater

Breakwaters	
Design wave	1.8 m
Length, total	568 m
Crest elevation	4.0 m MLLW
Crest width	2.4 m and 10 m
Rock volume	
Primary armor	22,700 m^3
Secondary (B) rock	15,600 m^3
Core rock	23,800 m^3
Crushed gravel	700 m^3
Entrance channel slope armor	1,500 m^3

Kivalina Erosion Control

2008
2009
2010
Phase II

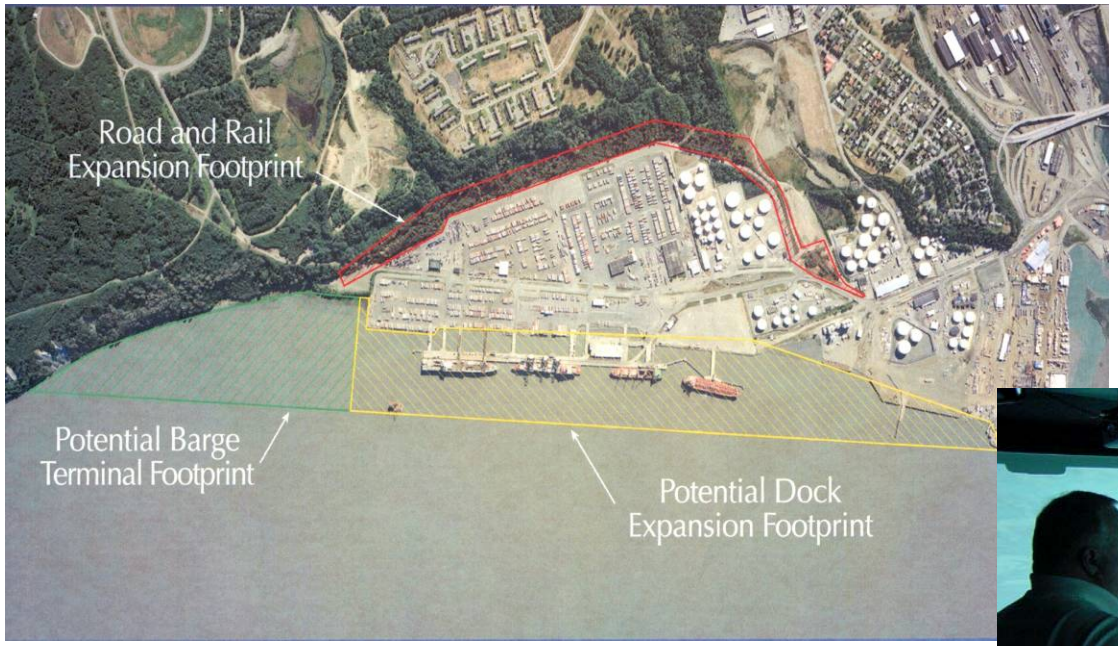
Shishmaref Erosion Control

October 2004 Debris Line
Corps Authorized Project Area
Corps Phase I (625 ft.) Complete Aug 08
2005 City Project
2005 Corps Project
2003 Kawerak Project
Corps Phase III (550
In Design
Corps Phase II (750 ft.)
Contract Award Sep 2008
Construct in 2009
2006 HESCO Bastions
(Covered by Corps Phase I)
Corps Phase IV (1225 feet)
Includes Improvements to
2003 Kawerak and 2005 City Project
1,000 500 0 1,000
Feet

Cook Inlet Physical Model

Flood Comparison of Historic Port vs. Partially Completed Expansion

Port of Anchorage Ship Simulator Study

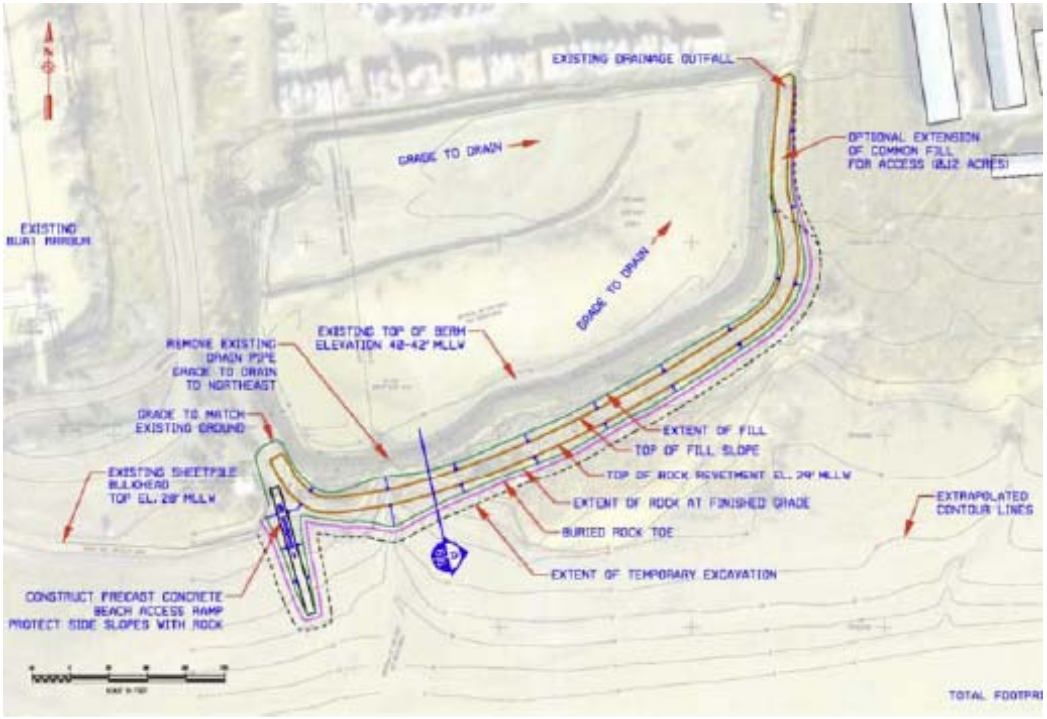


Dillingham Revetment & Breakwater

Aerial View in 1985

Aerial View in 2002

Dillingham Revetment & Breakwater



Revetment, 950 ft long
1V:3H, three-layer system
+32 feet MLLW

Breakwater, 391 ft long
1V:1.5H, three-layer system
+32 feet MLLW

Revetment, 950 ft long
1V:1.5H, three-layer system
+32 feet MLLW

The Alaska District

Questions?