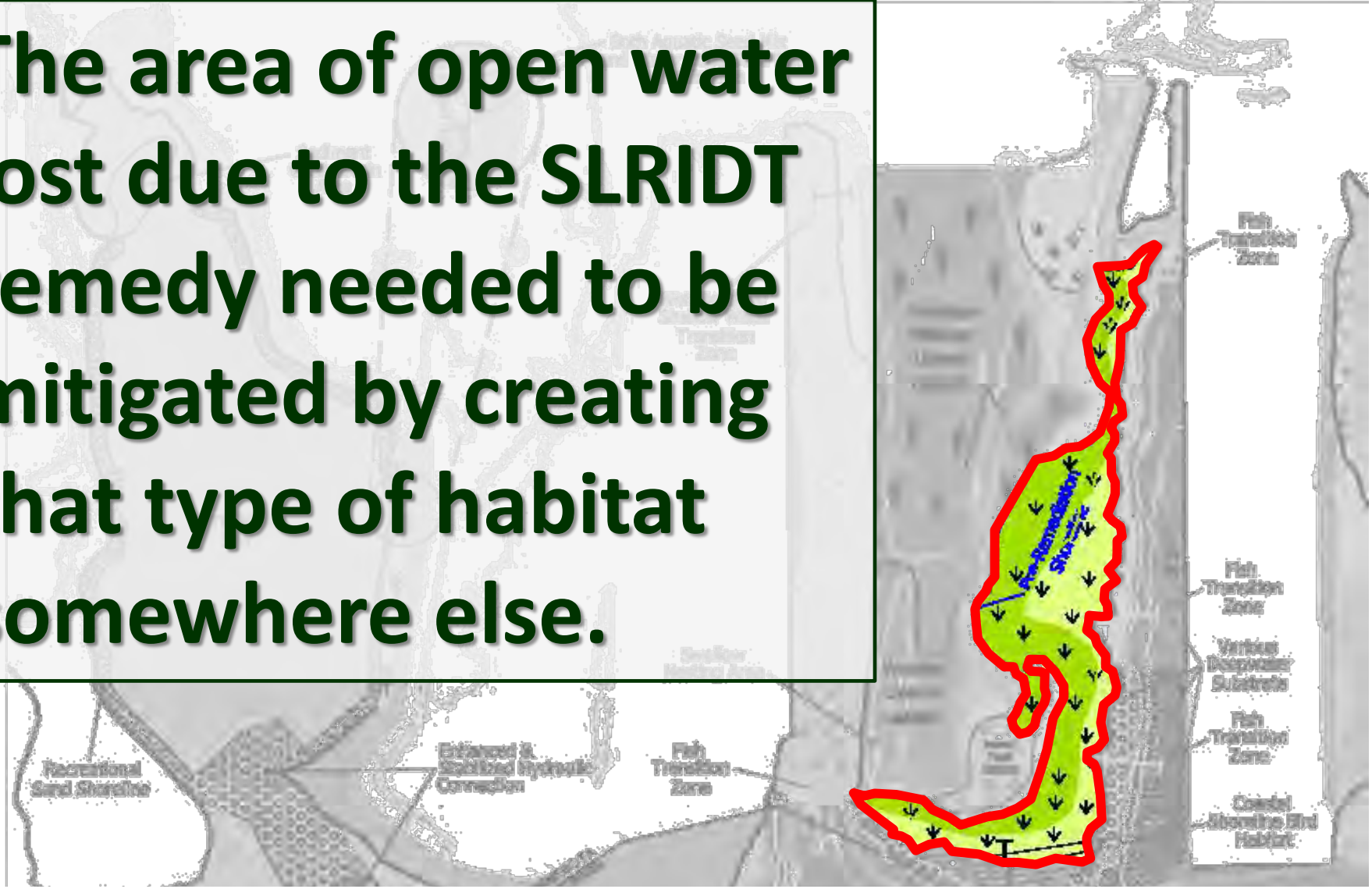
St. Louis River/Interlake/Duluth Tar Site (SLRIDT)

Tallas Island Compensatory Mitigation Project

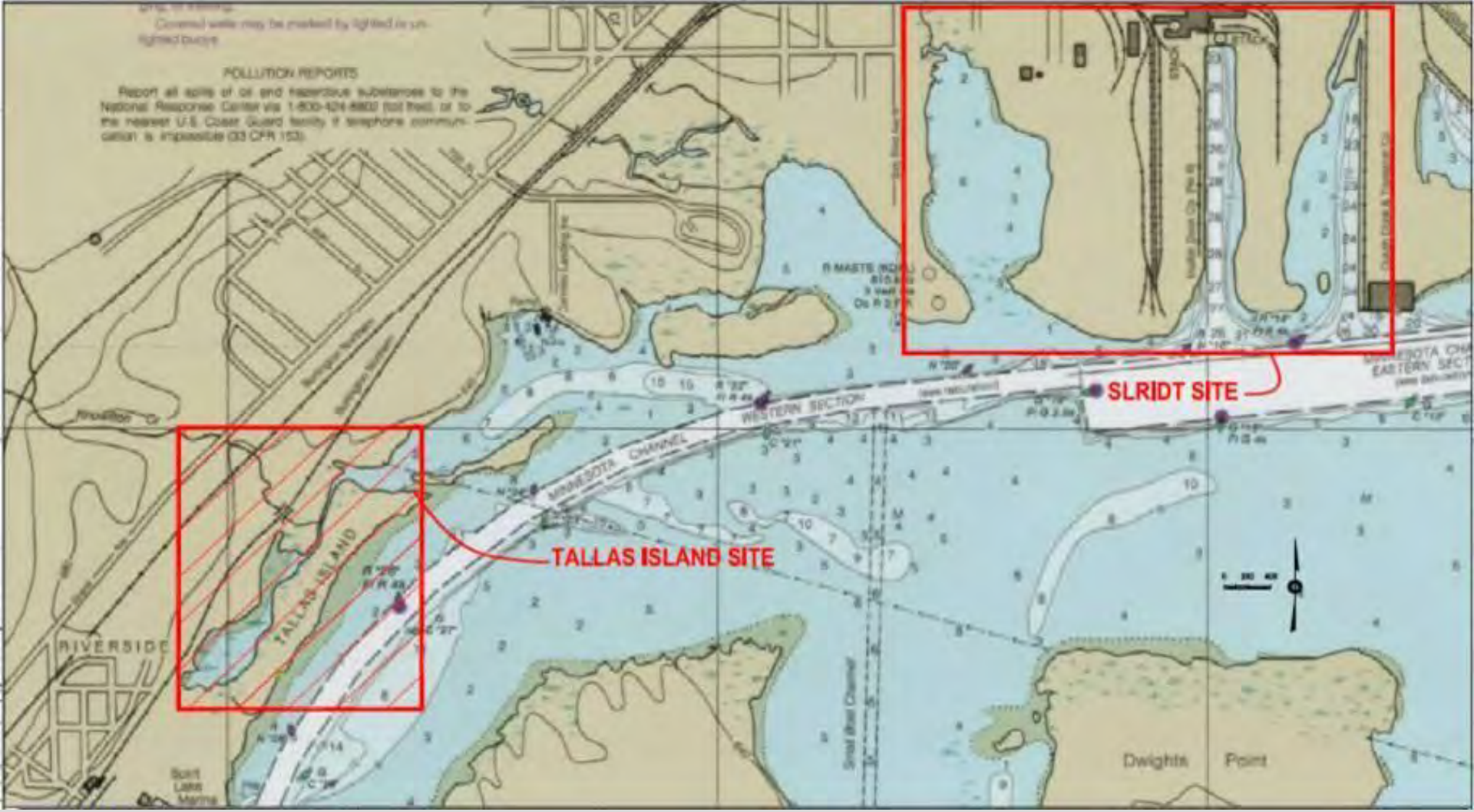
Minnesota Pollution Control Agency

c-s3-16w

The area of open water lost due to the SLRIDT remedy needed to be mitigated by creating that type of habitat somewhere else.



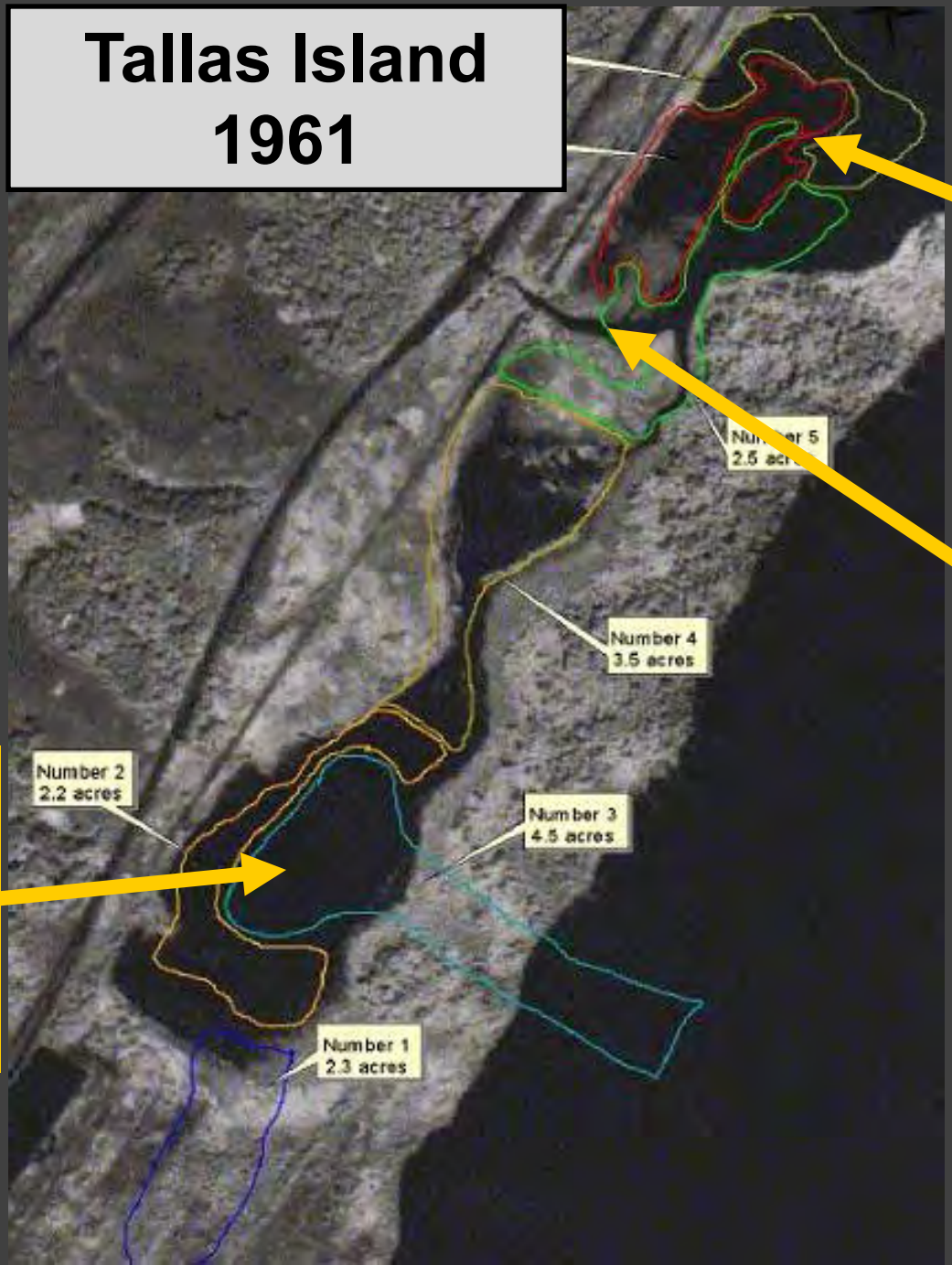
Tallas Island Compensatory Mitigation Project



Minnesota DNR identified a potential restoration project at Tallas Island

- **Sediment deposition in the bay is changing the habitat from an aquatic-based community to a terrestrial-based community.**

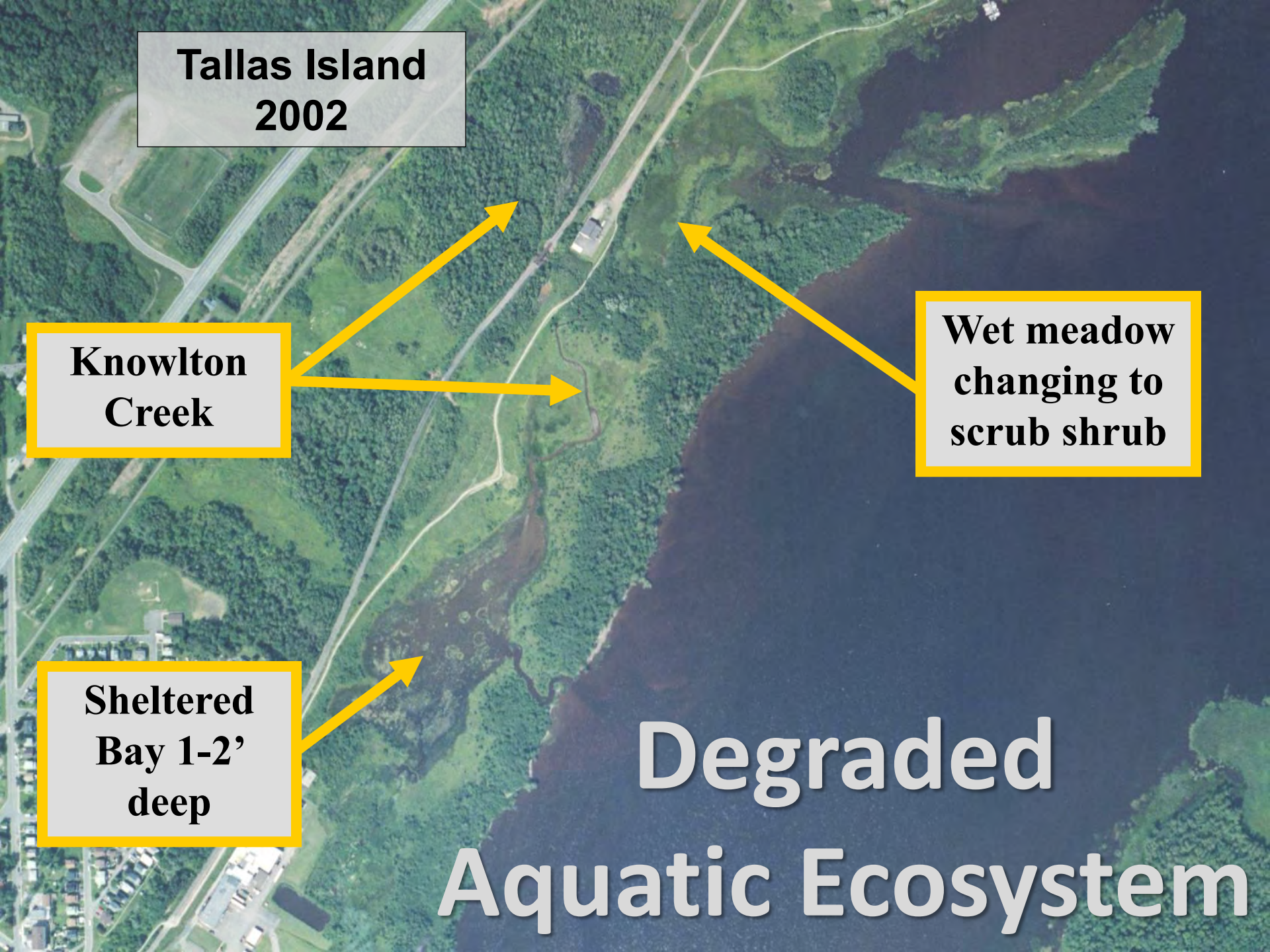
Tallas Island 1961

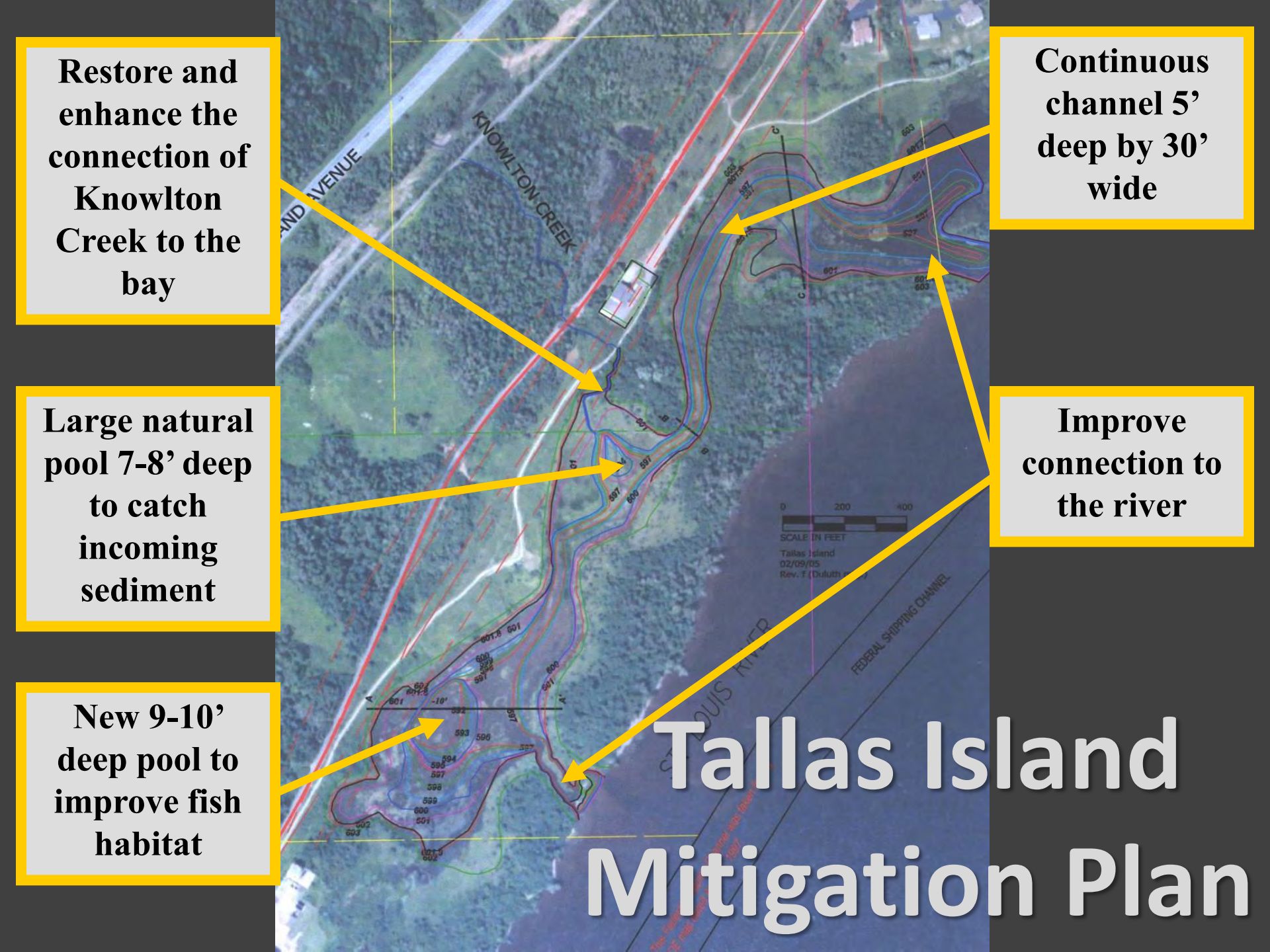


Hydrologic connection of the bay to the river

Knowlton Creek Outlet

Shallow Sheltered Bay 3-5' Deep


Tallas Island
2002
Knowlton Creek
Wet meadow changing to scrub shrub
Sheltered Bay 1-2' deep
Degraded Aquatic Ecosystem


Restore and enhance the connection of Knowlton Creek to the bay
Large natural pool 7-8’ deep to catch incoming sediment
New 9-10’ deep pool to improve fish habitat
Continuous channel 5’ deep by 30’ wide
Improve connection to the river
KNOWLTON CREEK
FEDERAL SHIPPING CHANNEL
SCALE IN FEET
Tallas Island
02/09/05
Tallas Island Mitigation Plan

St. Louis River/Interlake/Duluth Tar Site (SLRIDT)

Winter Work
Vegetation Removal & Dredge Stockpiling

Minnesota Pollution Control Agency

Area Marked for Vegetation Removal

Removing & stockpiling Vegetation

Dredge Footprint after Vegetation Removal


Frozen Vegetation
& Sediment
02/01/2010

Dredging & Stockpiling Environmental Media

One of the Difficulties with Winter Work


02/05/2010

Loading Frozen Vegetation for Transport to SLRIDT Site

Environmental Media (Mud) to be Transported to the SLRIDT Site

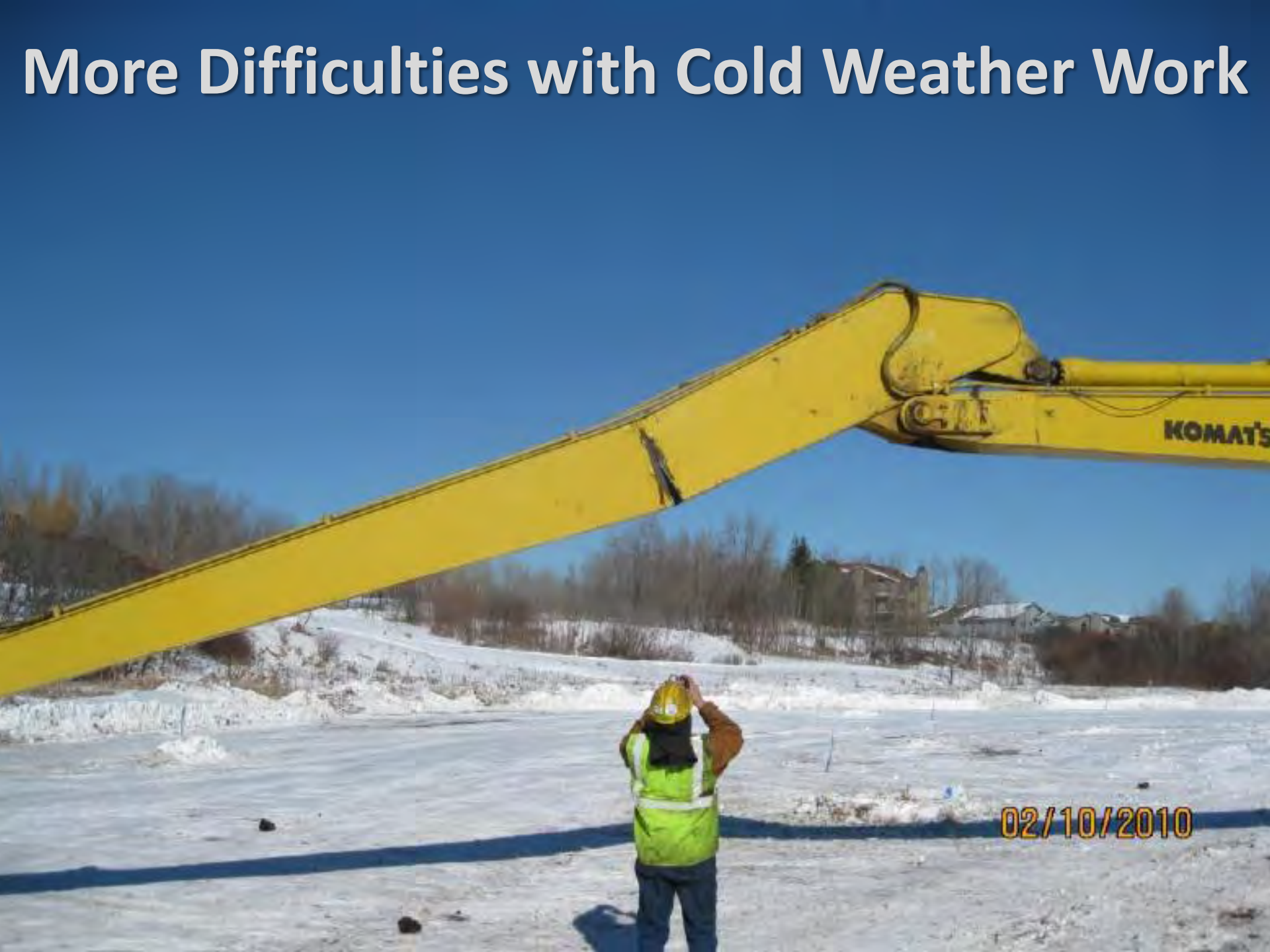
Loading Frozen Vegetation

Frozen Vegetation Stockpiled at the SLRIDT Site for Composting

Environmental Media Placed at SLRIDT South Wetland

Dredging and Stockpiling Sediment for Summer Transport to SLRIDT Site

More Difficulties with Cold Weather Work



Loading for Transport

Stockpiling Dredged Sediment

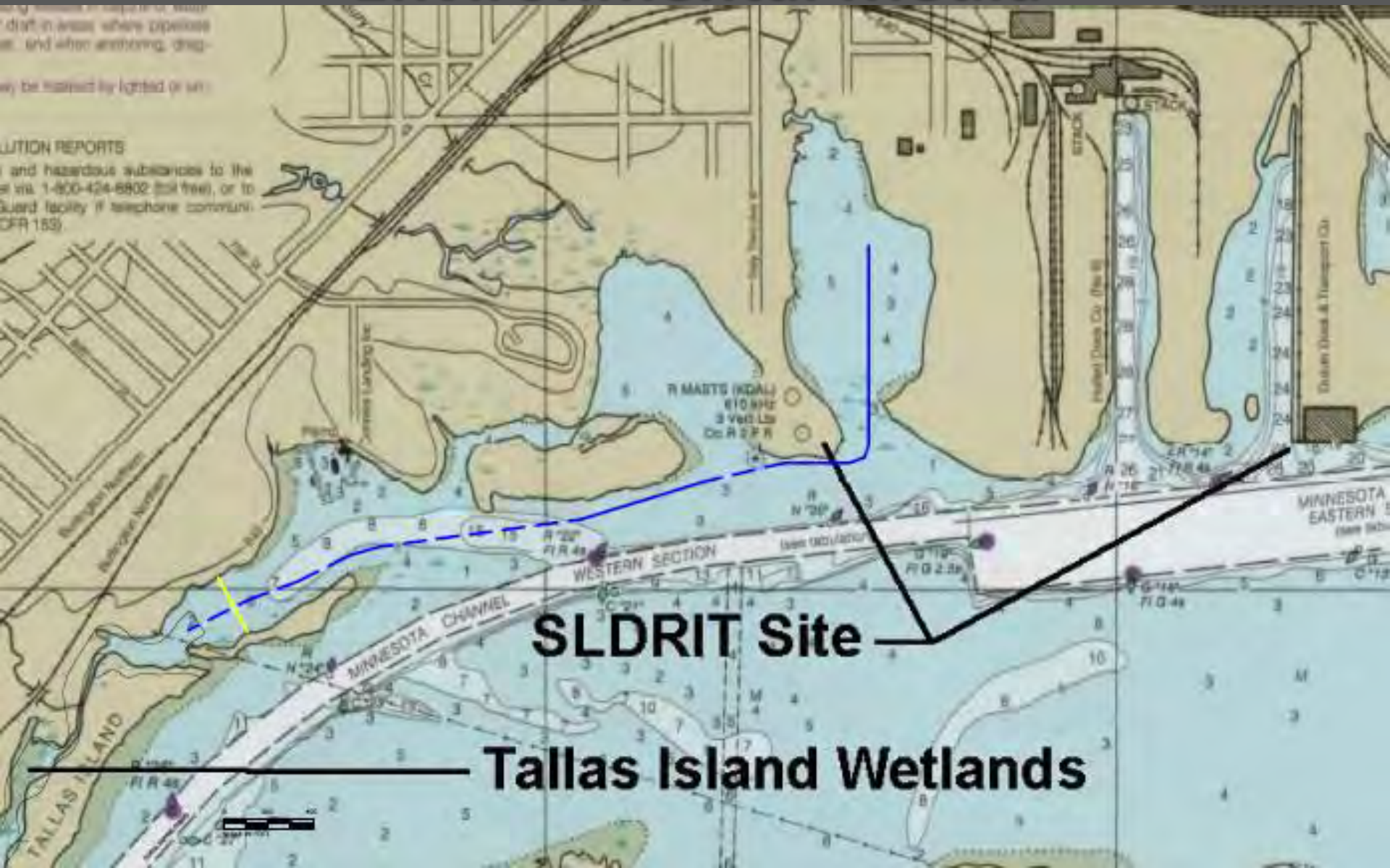
St. Louis River/Interlake/Duluth Tar Site (SLRIDT)

Summer Work

Dredging & transport of Environmental Media to SLRIDT Site

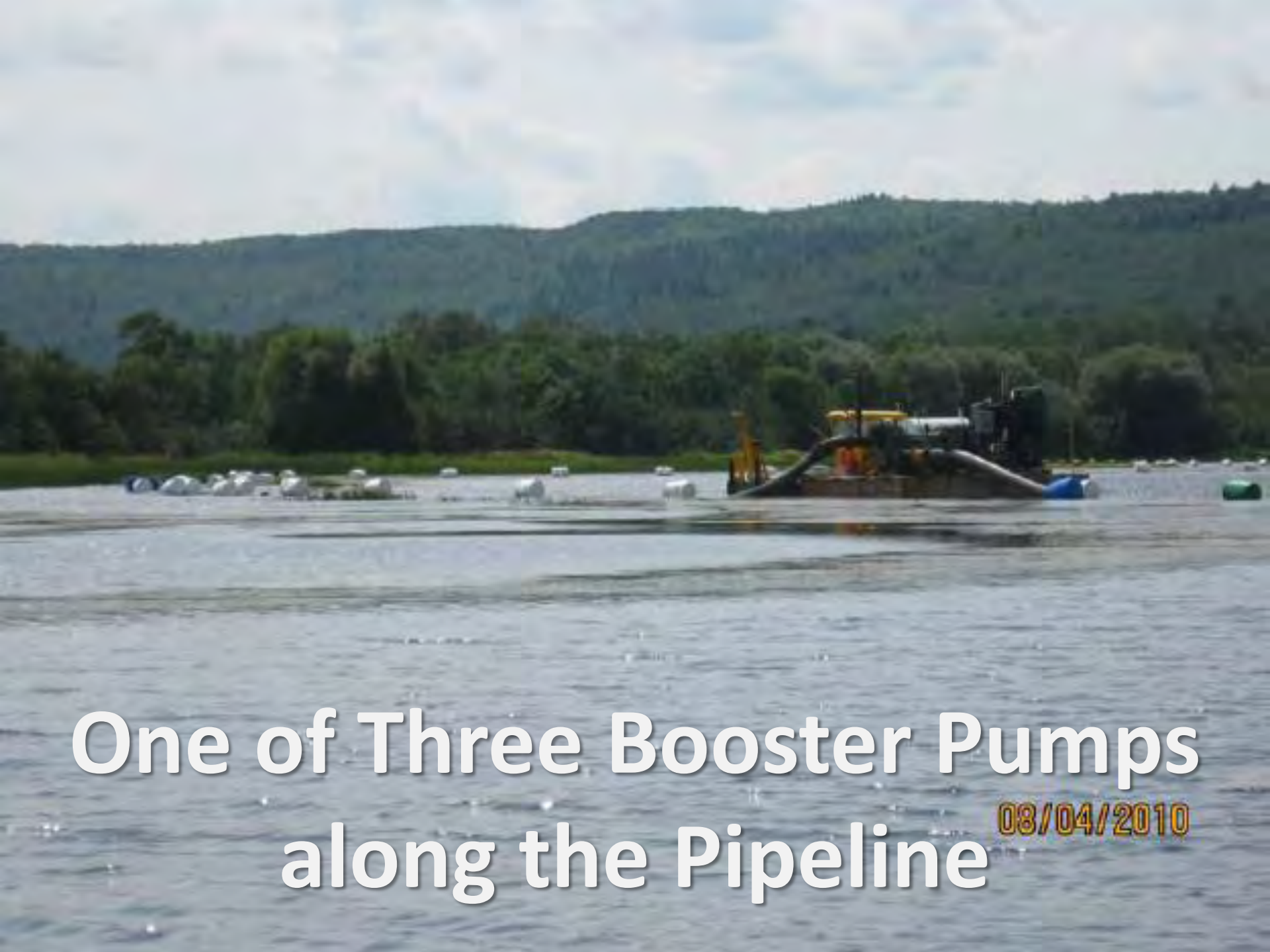
Minnesota Pollution Control Agency

Pipeline Route for Hydraulic Transport of Environmental Media



Hydraulic Cutter Head Dredge


Deploying 10 inch Floating Pipeline between Tallas Island and the SLRIDT Site
07/23/2010



One of Three Booster Pumps along the Pipeline

Dredge Working Near North End of Tallas Island

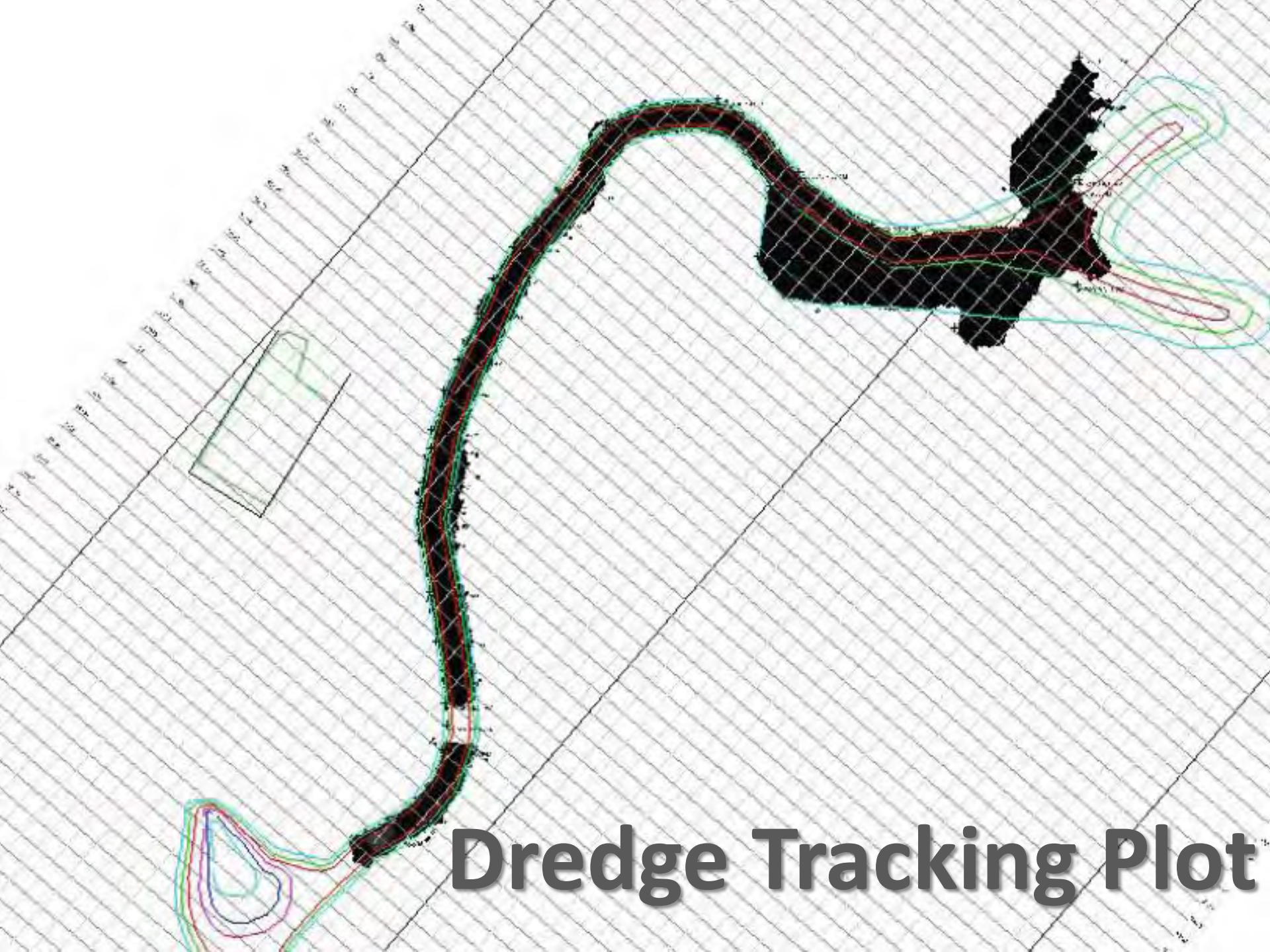
Clearing debris from Dredge Cutter Head

Dredging Sediment Stockpiled in Winter

Maintaining Booster Pump

Dredge Operator


11/04/2010



Dredge Tracking Plot


08/26/2010

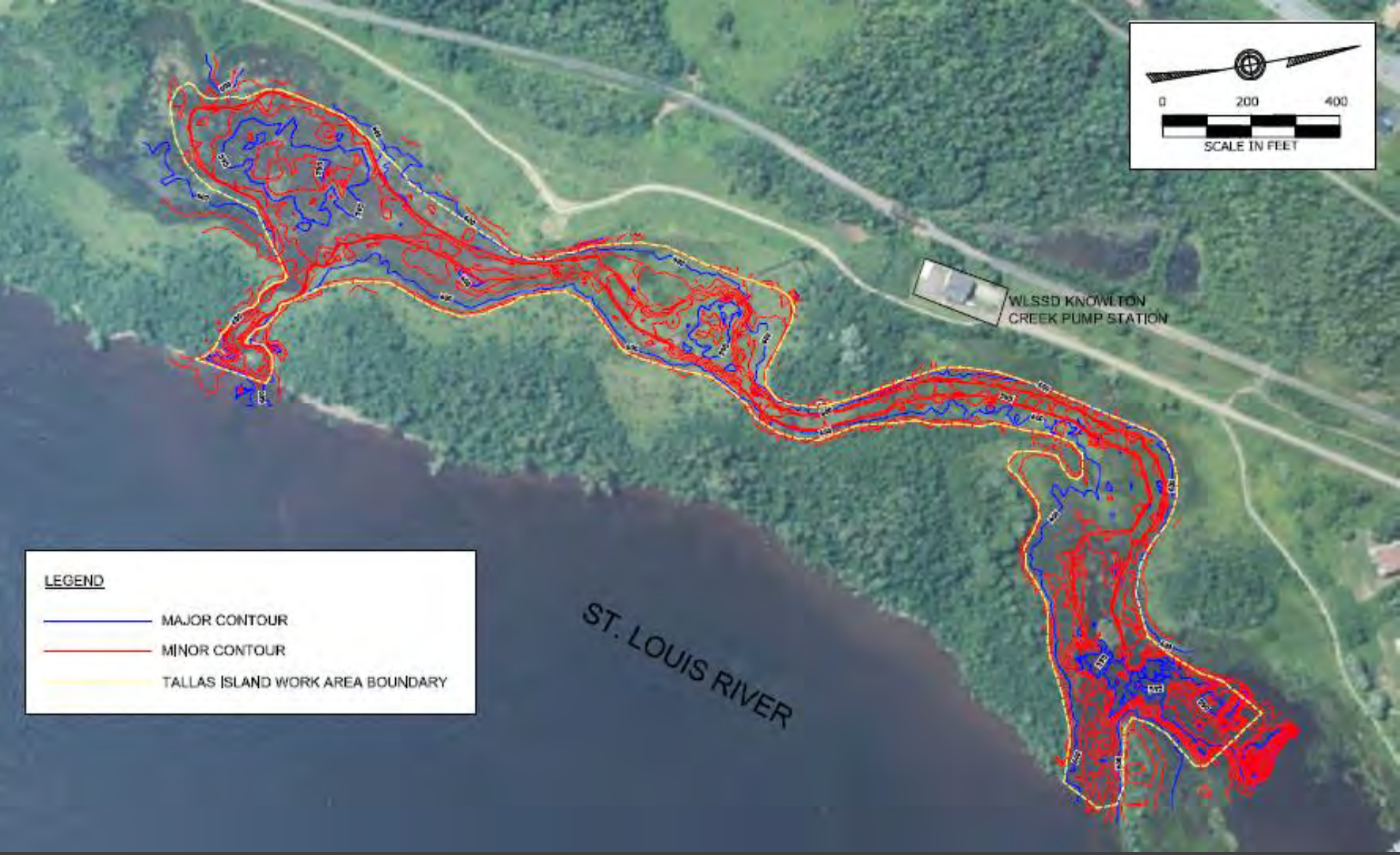

10/13/2010


10/11/2010

Completed Dredge Area

Working Near South End of Tallas Bay

Demobilizing Dredge & Pump Equipment



Area Dredged to Provide Aquatic Habitat, Water Circulation & Access


Rendition of
Tallas Island area
after project
completion

View of Completed Project

St. Louis River/Interlake/Duluth Tar Site (SLRIDT)

Thank You
It's a Wrap!

Minnesota Pollution Control Agency