

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

Tallas Island
Compensatory Mitigation
Project

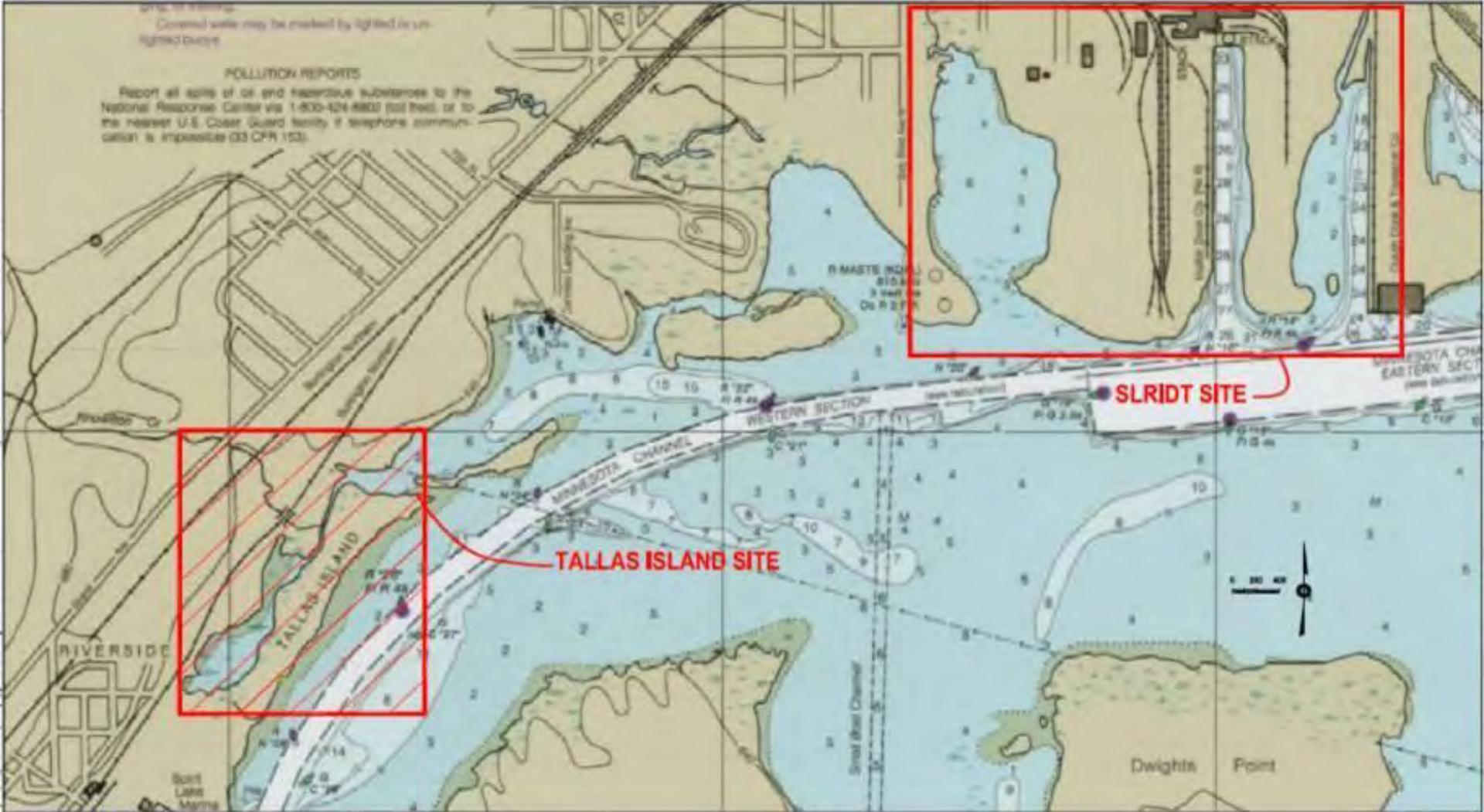
Minnesota Pollution
Control Agency



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



Shallow
Sheltered
Bay 3-5'
Deep

Hydrologic
connection
of the bay to
the river

Knowlton
Creek
Outlet

Tallas Island
2002

Knowlton
Creek

Sheltered
Bay 1-2'
deep

Wet meadow
changing to
scrub shrub

Degraded
Aquatic Ecosystem

Restore and enhance the connection of Knowlton Creek to the bay

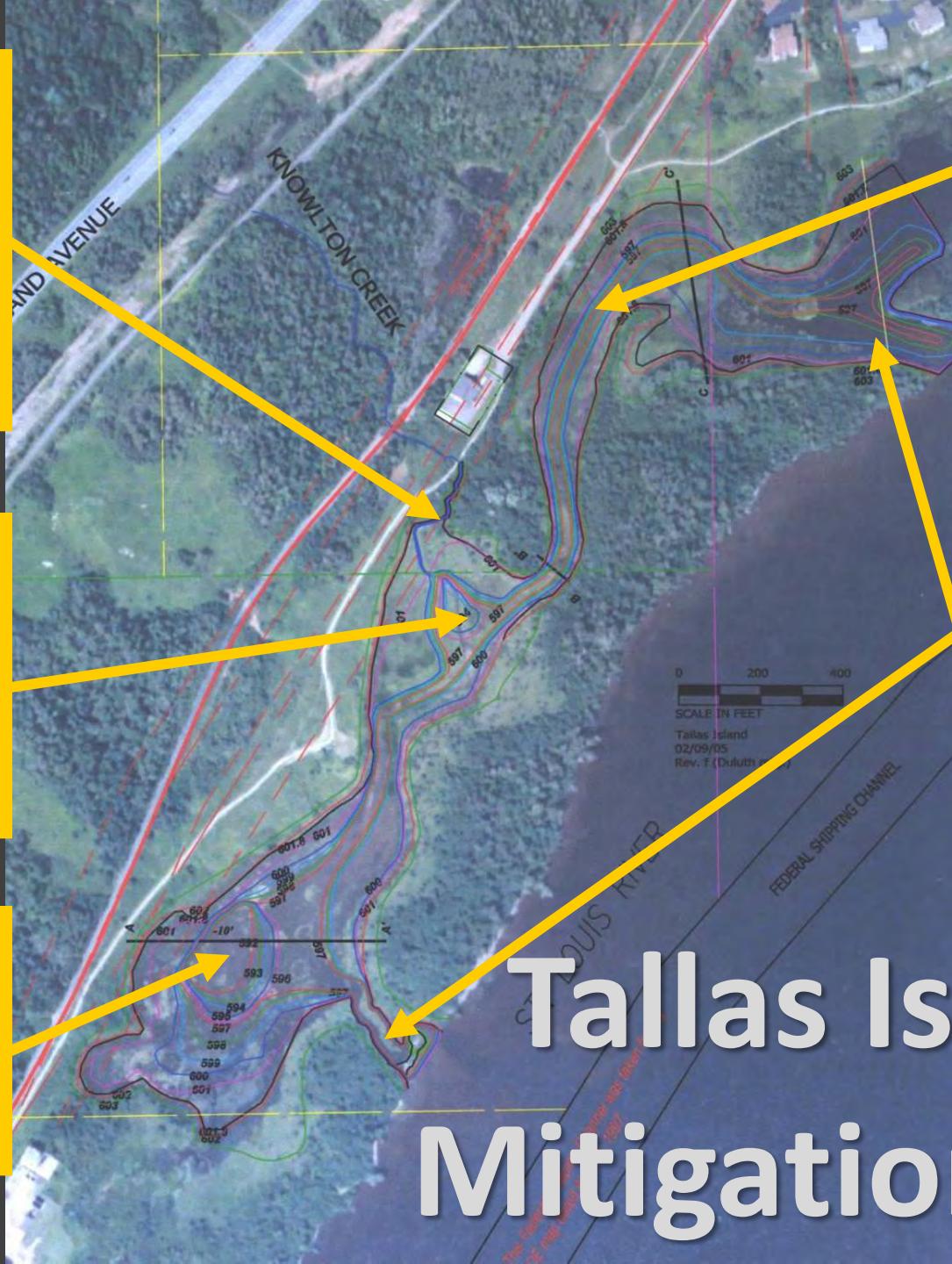
Large natural pool 7-8' deep to catch incoming sediment

New 9-10' deep pool to improve fish habitat

Continuous channel 5' deep by 30' wide

Improve connection to the river

Tallas Island Mitigation Plan



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

Winter Work
Vegetation Removal &
Dredge Stockpiling



Area Marked for Vegetation Removal



01/29/2010

Removing & stockpiling Vegetation



02/01/2010

Dredge Footprint after Vegetation Removal



01/20/2010

Frozen Vegetation & Sediment



02/01/2010

Dredging & Stockpiling Environmental Media



02/08/2010

One of the Difficulties with Winter Work



02/05/2010



02/05/2010

Loading Frozen Vegetation for Transport to SLRIDT Site



02/15/2010

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



03/04/2010

Loading Frozen Vegetation



02/18/2010

Frozen Vegetation Stockpiled at the SLRIDT Site for Composting



02/17/2010

Environmental Media Placed at SLRIDT South Wetland



02/25/2010

Dredging and Stockpiling Sediment for Summer Transport to SLRIDT Site



02/24/2010

More Difficulties with Cold Weather Work



02/10/2010



02/08/2010

Loading for Transport

Stockpiling Dredged Sediment



02/24/2010

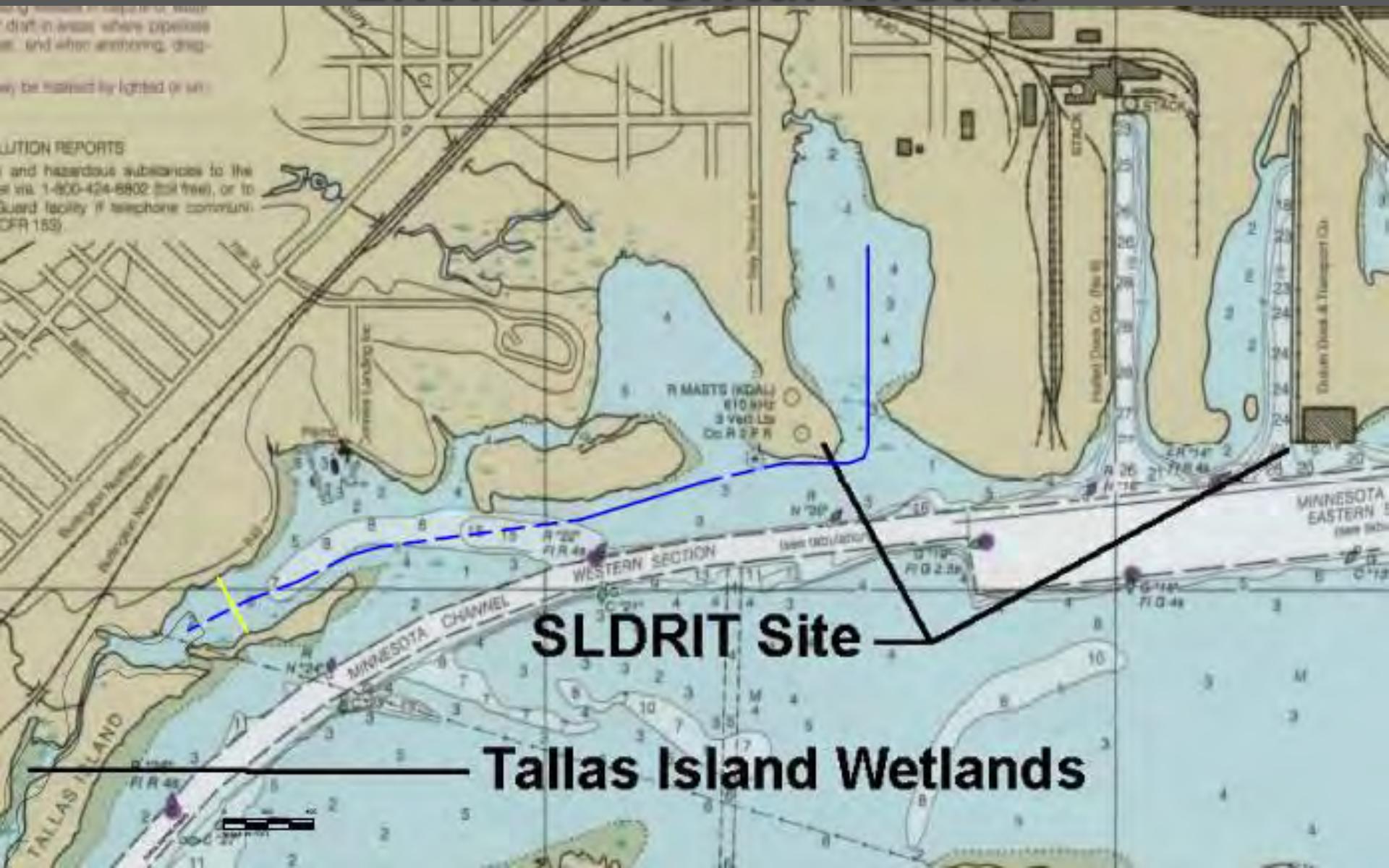
St. Louis River/Interlake/Duluth Tar Site (SLRIDT)

**Summer Work
Dredging & transport of
Environmental Media to
SLRIDT Site**

Minnesota Pollution
Control Agency



Pipeline Route for Hydraulic Transport of Environmental Media





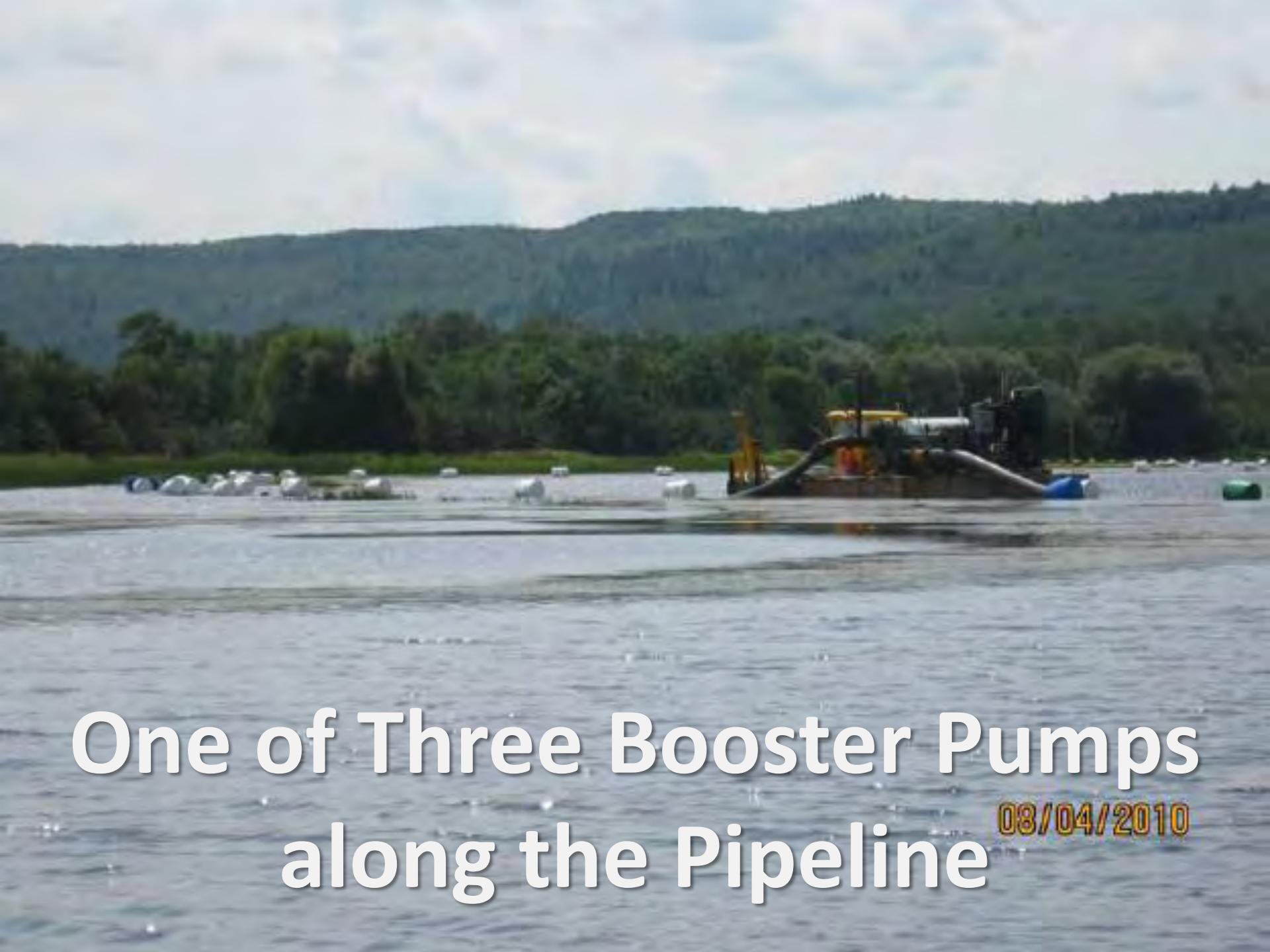
Hydraulic Cutter Head Dredge

08/04/2010

A photograph of a lake under a blue sky with scattered white clouds. In the foreground, a boat with a yellow canopy is positioned on the left, connected to a long, floating pipeline system. The pipeline consists of a series of white, cylindrical buoys connected by a dark line, stretching across the middle of the frame. The water is a deep blue. In the background, a dense forest line is visible across the lake, and the horizon is flat.

Deploying 10 inch Floating
Pipeline between Tallas Island
and the SLRIDT Site

07/23/2010



One of Three Booster Pumps
along the Pipeline

08/04/2010

Dredge Working Near North End of Tallas Island



08/10/2010

Clearing debris from Dredge Cutter Head



08/19/2010

Dredging Sediment Stockpiled in Winter



09/03/2010

Maintaining Booster Pump



08/04/2010

Dredge Operator



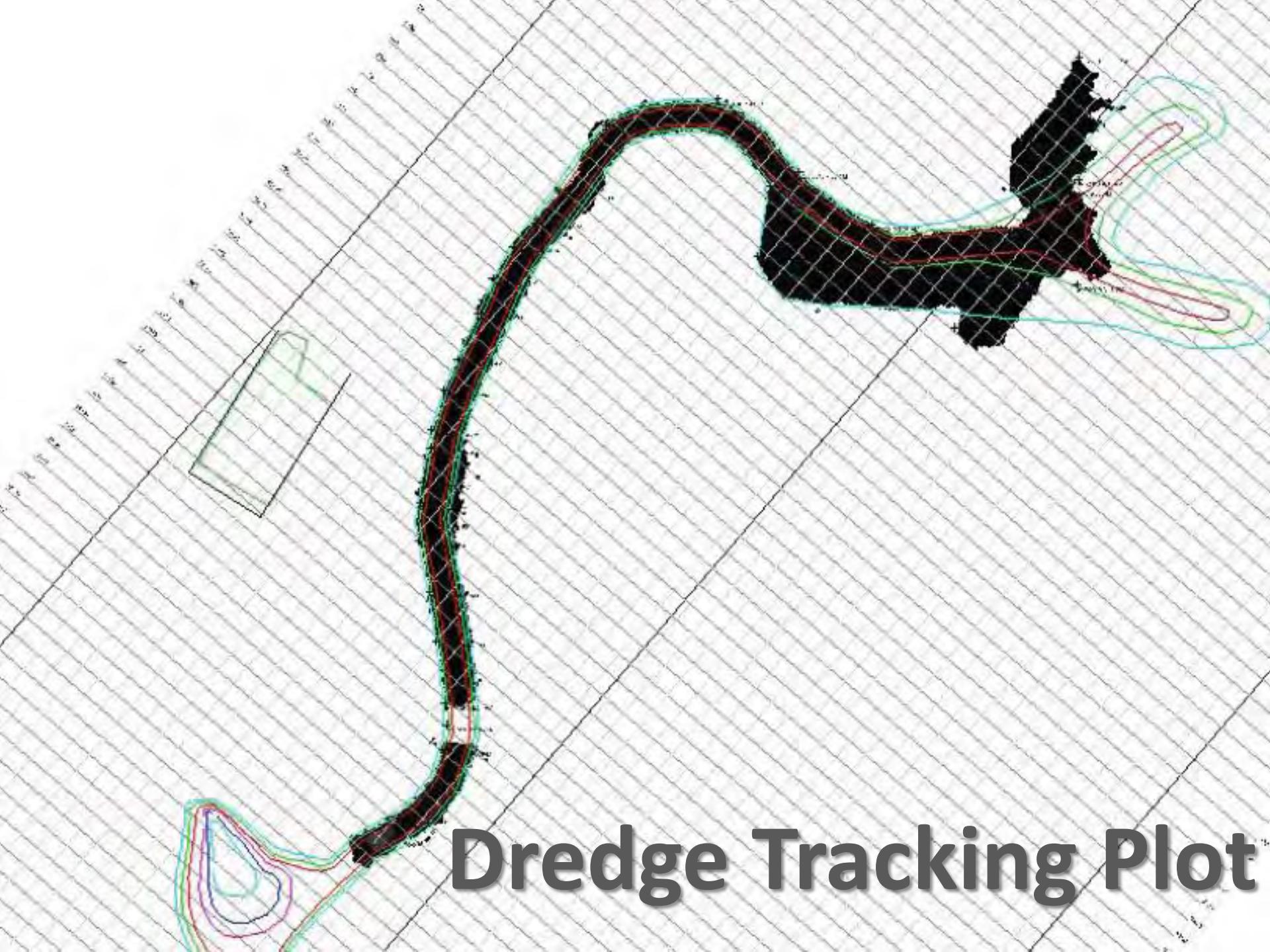
08/05/2010

NOTICE
A LIFE JACKET
MUST BE WORN
ON THIS VESSEL

DANGER
NO SMOKING
NO SPARKS
NO FIRE



11/04/2010



Dredge Tracking Plot



08/26/2010



10/13/2010



10/11/2010

Completed Dredge Area



10/27/2010

Working Near South End of Tallas Bay



10/30/2010

Demobilizing Dredge & Pump Equipment



11/10/2010



Area Dredged to Provide Aquatic Habitat, Water Circulation & Access

An aerial photograph of the Tallas Island area. The image shows a winding river flowing through a forested landscape. To the left, a small town with several houses and buildings is visible. A road runs along the river, and a bridge is visible in the distance. The water is a dark blue color, and the surrounding land is a mix of green forests and some cleared areas.

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!

