



Mississippi River Dredging Project WINONA HARBOR EXPANSION—WINONA, MINNESOTA

In the summer of 2003, Pinnacle began working with the Winona Port Authority on the dredging and expansion of harbor facilities on the Mississippi River. The current configuration of the harbor limits the amount of materials that can be transported in and out of the Port of Winona by water. Pinnacle's work in the areas of environmental impact assessment, wetlands delineation and mitigation, sediment studies, environmental permitting, and engineering of the dredging plan and spoils management site are currently in progress.

Project Highlights

The project involves dredging in excess of 16 acres (over 350,000 cubic yards) of "open water" area in a backwater channel of the Mississippi River.

The Challenge: The project required extensive study of the potential sensitive environmental species and extensive wetland delineation and mitigation. In addition, extensive permitting and negotiations with ACOE, MPCA, MDNR, and BWSR were also a requirement. Each of these entities has specific interests and requirements for the project.

Environmental Assessment:

Pinnacle conducted a Environmental Site Assessment on the site, and completed an Environmental Assessment Worksheet (EAW) to ensure that all environmental aspects of the project were assessed. This EAW included research and field verification of rare species of mussels that had the potential to exist at the site. These field verification studies concluded that no rare or threatened species could have the potential to be impacted by the project.

Permitting Process:

Pinnacle worked with the MPCA, DNR, and the Army Corp of Engineers in obtaining permits for dredging and wetlands impacts. The permit process involved sediment sampling to determine if contamination was present in the sediments to be dredged, as well as a mussel survey to determine if any endangered mussel species were present.

Wetland Delineation and Mitigation:

Pinnacle is currently negotiating with the MDWR to obtain a variance from the Wetlands Conservation Act for the project. The areas to be dredged currently consist of open water from 0'-3' in depth. These areas will be enhanced as wetlands upon project completion. It is Pinnacle's opinion that these wetlands do not require mitigation and replacement under the WCA.

Project Team:

Eric Hansen, P.E. —V.P. Environmental Engineering/Geotechnical

Mike Hultgren, P.G. —Project Manager

Scott Thelen, Matt Bartus —Wetland Services

Eric Simonson —Field and Geotechnical Services

Jim Holland, P.E.—Principal-In-Charge

