



US Army Corps
of Engineers
St. Paul District

Information Paper

Navigation: Upper Mississippi River 9-Foot Project Channel Maintenance, Minnesota/Wisconsin/Iowa



MV Warren, Quarters Barge Taggatz and Dredge Goetz underway

Contact

Steve Tapp, Operations Manager
(608) 687-3112 ext 1 (608) 687-8753 (fax)
steven.d.tapp@usace.army.mil

Location/Description

The St. Paul District is responsible for maintaining 244 miles of the Upper Mississippi River 9-foot channel navigation system from the head of navigation at Minneapolis, Minnesota, to Guttenberg, Iowa. The navigation system also includes the lower navigable portions of the Minnesota, St. Croix, and Black Rivers.

The navigation project is achieved primarily by a series of locks and dams, of which 13 are in the St. Paul District. Channel maintenance consists of dredging; the use of channel control structures such as wing dams, closing dams, and bank revetment; snag removal; accurate channel marking; and close monitoring of conditions.

Annually since 1985 the district on average has dredged 871,500 cubic yards at 28 locations. Both Government and contract hydraulic and mechanical dredges are used. Dredged material placement is extensively planned for the long term and is actively managed to maximize beneficial use of the material. Channel control structures are maintained to minimize dredging quantities without affecting natural resources.

Status

Annual operation and maintenance is required to ensure safe, reliable navigation. Coordination with project users, other river resource agencies, and the public is crucial to a successful program. Channel maintenance policies and procedures are explained in the district's Channel Maintenance Management Plan.

Operational agreements have been developed with State regulatory agencies to facilitate channel maintenance. The channel maintenance program is flexible and allows for consideration of emerging river resource management initiatives such as pool-wide water level management and long-range environmental pool plans. From 2002 through 2011, 100 percent of the material dredged was placed at beneficial use sites. The district is analyzing previously dredged material to see if it could be used beneficially as FRAC sand. This could lead to significant reductions in channel maintenance program costs in future years.

Capacity at temporary placement sites is maintained by periodically unloading dredged material and transferring it to permanent locations. In October 2011 unloading of the Reads Landing site near Wabasha, Minnesota, began and was substantially completed in July 2012 when equipment was pulled off to complete critical channel dredging. Completion is expected in fall 2012. A partial unloading of the Lower Boulanger site near Cottage Grove, Minnesota, is scheduled to be completed in fall 2012. Planning continues on a Channel Management Study in Lower Pool 2 to improve navigation safety and reduce future dredging requirements.

Authority

The 9-foot channel navigation project was authorized by the Rivers and Harbors Act of 1930. It is 100-percent federally maintained with the exception of short segments in Minneapolis and on the Minnesota River. Non-Federal sponsors are responsible for furnishing dredged material placement sites on those segments.

Fiscal

The Federal cost of channel maintenance in the St. Paul District is approximately \$13 million annually.