

# Lower Minnesota River Watershed District Legislative Agenda

## Funding for the management of dredge materials

**Position:** The Minnesota River 9-foot navigation channel contributes significantly to regional and statewide economies. For this reason, the Board of Managers of the Lower Minnesota River Watershed District (LMRWD) maintains that the State should share in the cost of managing the material dredged from the River in order to maintain the channel.

**Background:** In 1959, the counties of Carver, Dakota, Hennepin, Ramsey and Scott petitioned the Minnesota Water Resource Board (now the Minnesota Board of Water & Soil Resources), for the establishment of the LMRWD in order to create an organization to become the local sponsor for the US Army Corp of Engineers (COE) maintenance of a 9-foot navigation channel (the Channel) from River Mile 14.7 to the confluence of the Minnesota River with the Mississippi River. On March 23, 1960, the LMRWD was established and its first Board of Managers was appointed. The purpose of a local sponsor was to identify and acquire locations for material dredged from the river to be placed in order to maintain the Channel.

Locations for placement of dredge material were not difficult to find when the LMRWD was first established. Dredge material was placed in low areas and landfills adjacent to the River and was used as daily cover in landfills. Today, because of increased knowledge about the value of wetlands, areas identified as culturally significant, and the closing of landfills, it has become increasingly difficult to find locations that are appropriate to place dredge material.

Regulation from other levels of government has also made finding locations to place dredge material more difficult and costly for the District. At the same time, the need to dredge sediment coming from upriver, outside the confines and regulatory authority of the LMRWD continues to increase, from once every five years to every year. For these reasons, in 2006, The LMRWD purchased a 20 acre parcel of land from Cargill, Inc., with the intention of creating a permanent location where dredge material could be placed and then removed periodically as needed. The LMRWD manages this location sustainably so that no other location for placement of dredge material will be needed. Because the dredge placement site is within the floodplain it falls under local floodplain regulation, which requires a Conditional Use Permit. This permit has the potential to create additional future costs for the LMRWD in its management of dredge material, which are largely unknown.

In 2014, the LMRWD was able to find beneficial reuses for the dredge material as construction fill. Also in 2014, the LMRWD was approached by local users of the Channel that maintain river terminals to load barges. The local users have seen similar increases in the amount of material that must be removed from barge terminals. Since 2014, material from private terminals has been placed on the LMRWD dredge placement site to dry out before it is removed to a permanent disposal location. It is less costly to move the material for final disposal once it is drier. The LMRWD collects a fee for placement of the private material to help defray the cost of managing dredge material removed from the Channel. The sale of dredge material from the Channel also

helps to defray the cost of managing dredge material, however it is not enough to cover the cost of dredge management completely.

### **Establishment of MN River Basin Organization**

**Position:** The Board of Managers of the LMRWD maintains the Minnesota River Basin would be better managed through a basin wide management authority modeled after the Red River Watershed Management Board. We support the major river basin approach first introduced by Representative Morrie Lanning in 2009 that allows an integrated approach to solving major watershed issues. This approach allows the the basin wide management authority to raise taxes that help pay for authorized projects.

**Background:** Many studies have determined that increases in the amount of sediment coming from upstream can be attributed to a combination of increased rainfall and changes in agricultural practices, mainly increased use of drain tile. Decisions made locally to manage water (drainage authorities, etal.) often do not consider downstream consequences of actions taken and decisions made, nor are they required to consider such consequences.

Additionally, many studies and planning initiatives (WRAPS, TMDL studies and One Watershed, One Plan) have been prepared to better manage water. Many of these studies and plans do not identify downstream consequences of upstream activities. A basin-wide approach would better address solutions to upstream issues that consider downstream consequences.

Local funding is often inadequate to implement capital projects identified in the studies and plans. Taxing authority would ensure that implementation activities are funded. If an organization is created and modeled after the Red River Board, Basin wide funding is leveraged with local contributions.

Increases in the amount of sediment coming from sources outside the the LMRWD and beyond its control, make it important that the LMRWD work with water management organizations with the authority to manage the flow of water. The LMRWD has reached out to uprivers water management authorities with little success. It is difficult to get upstream water management authorities to acknowledge their contribution to the problem down river. A basin wide approach would provide a means to bring upriver water management organizations and authorities to the table to effect change.

### **Burnsville/Freeway Landfill**

**Position:** The Lower Minnesota River Watershed District is concerned that once mining operation at Kramer Quarry stop, pollution from Freeway Landfill will pollute the Minnesota River and the lake that will form once the quarry fills with water. The District supports state efforts to clean up the landfill to address this threat.

**Background:** Freeway Landfill began operation in 1969. At that time, there were few restrictions on what types of waste could be disposed of. A variety of chemicals and substances were legally

dumped in the landfill - things that would not be allowed under current regulations. The Freeway Landfill has created a known plume of underground pollution that has the potential to migrate toward the Minnesota thus polluting the River. Currently, dewatering at nearby Kraemer Quarry is keeping the level of groundwater below the level of waste at the Landfill. When the Quarry stops operations, groundwater levels will rise and that groundwater will become contaminated with chemicals and other substances from the landfill and begin flowing toward the Minnesota River. Some of it will also flow toward Kraemer Quarry and into the lake that will form when quarry fills with water. This has the potential to pollute the Minnesota and Mississippi River with contaminated waste from the landfill. The potential of groundwater pollution poses a significant threat to the Minnesota and Mississippi Rivers that will affect public health and welfare.

### **Limited Liability for commercial salt applicators**

**Position:** The Lower Minnesota River Watershed District supports passage and enactment of state law that provides a limited liability exemption to commercial salt applicators and property owners using salt applicators who are certified through the established salt applicator certification program to follow best management practices.

**Background:** Monitoring of our lakes, wetlands, streams and groundwater show high chloride levels in urban areas across the state. As of 2016, 39 waterbodies in the Twin Cities Metro Area (TMCA) are considered impaired for chlorides. The TCMA has monitored 10% of the waterbodies for chlorides so more are added to the list as monitoring continues. Once in the water, chloride becomes a permanent pollutant and continues to accumulate, with no feasible way to remove it. Excessive chloride in streams can harm aquatic life, including fish, invertebrates and aquatic plants.

The Nine Mile Creek TMDL study indicated that largest chloride source to our lakes and streams is through the application of chloride compounds on roads, parking lots, sidewalks and other hard surfaces for winter maintenance practices.

Municipal and county public works departments and the State Department of Transportation have adopted and implemented best management practices and policies for applying road salt and are currently exempt from liability under state law. Liability for damage or personal injury as a result of snow or ice is one of the main reasons over-salting occurs and many commercial contractors and property owners are reluctant to implement salt reduction practices for fear of increased liability.

In addition to providing certified salt applicators with limited liability protection, the legislation would also provide limited liability to property owners who hire certified salt applicators to maintain their property.

In short, providing limited liability to certified salt-applicators and property owners that use certified applicators would minimize the application of chloride compounds on roads, parking lots,

sidewalks and other hard surfaces for winter maintenance practices and reduce chloride loading to water resources.

The Minnesota Pollution Control Agency currently oversees a Smart Salting Certification Program that provides training to public and commercial salt applicators, private property owners and managers and others on how to maintain safe surfaces using salt efficiently, because excess salt increases costs and pollutes water resources.

### **Minnesota River Integrated Watershed Basin Study spin-off studies**

**Position:** The Board of Managers of the LMRWD supports participation of the appropriate state agencies in Minnesota River Integrated Watershed Basin spin-off studies.

**Background:** Since European settlement, native prairie has been replaced by agriculture and urban development, significantly altering the hydrology of the Minnesota River Basin. The alterations have caused increased erosion, impaired water quality, substantial increases to sediment and nutrient loads, and degraded riparian habitats and aquatic ecosystems in the Minnesota River, the Mississippi River and the Gulf of Mexico.

September 29, 2008, the US Army Corps of Engineers (COE) and the Minnesota Environmental Quality Board entered into a feasibility cost share agreement to study the Minnesota River Basin. An interagency study team has been formed to coordinate the study activities and oversee technical analysis of the basin.

The integrated watershed study will produce a watershed management assessment and decision support toolbox to aid water and land managers in the basin to address watershed water quality and ecosystem restoration needs at both the small and large watershed scales. The study will examine existing conditions, forecast future conditions and simulate alternatives to identify conditions that are ecologically sustainable, economically sound and socially desirable.

The study will integrate the efforts of local, state, federal and tribal agencies. Public involvement will be conducted to ensure that the plan reflects the diverse perspectives of interested stakeholders.

The study team has focused on detailed modeling efforts on portions of the Norway Lake (Kandiyohi County) and Seven Mile Creek (Nicollet County) sub-basins. From these models, the study team began to scale up assessments to the different geographic regions of the watershed and determine how various land and water management measures could be used effectively throughout the basin to reduce erosion, sedimentation, and flooding and improve water quality and habitat. The study is expected to be finalized in 2018.

With the approaching finalization of the study, the COE, has the opportunity to conduct spin-off studies, which would build upon information learned from the basin study.

Two such studies have been suggested. Details of each study follow along with suggested partners/sponsors and funding required:

1. Analysis of how land-use changes may increase or decrease sediment delivery rates to the lower Minnesota River and an assessment of the ecological and economic impacts of sedimentation has on the Lower Minnesota River Watershed.

Sponsor: Lower Minnesota River Watershed District and Minnesota Pollution Control Agency

General Scope: This detailed look at sedimentation in the Lower Minnesota River Watershed will require monitoring, modeling, and analysis of sediment sources, sinks, and pathways in the watershed, a summary of how sources, sinks, and pathways may have changed over time, and estimates of the economic and ecological effects of sedimentation including:

- changes in stage-discharge relationships, which may affect flooding,
- effects on the cost to maintain a commercial navigation channel on the Minnesota River
- effects on the ecological conditions on the LMRW

Through these analyses a new baseline can be established and an understanding for how changes in land-use will alter that baseline in the Lower Minnesota River Watershed and create a new future condition.

Analysis needed to accomplish:

- Research available sediment rating relationships for tributaries
- Integrate the most simplistic sediment routing within existing HEC\_RAS model from Mankato to the mouth.
- Link HSPF hydrograph outputs for existing condition 12-year simulations at tributary confluences and route for a baseline
- Assess natural reaches of sediment sources and sinks
- Compare to USGS monitoring data
- Use HECRAS+sediment to route another land use condition with the same period of record (12 years).

Budget: \$600,000 (50% non-fed/50% fed)

2. Assessment of water storage opportunities and benefits associated with water storage in the Minnesota River basin

Sponsor: Lower Minnesota River Watershed District and Board of Water and Soil Resources

General Scope: Utilize the Agricultural Conservation Planning Framework (ACPF) and the Prioritize, Target, and Measure Application (PTMApp) efforts going on in the basin to determine the flow reduction benefits received from placing storage measures in key locations throughout the basin. This analysis will achieve a better understanding for the threshold for

meaningful change realized in the basin and recommend specific levels of storage in the basin.

Analysis needed to accomplish:

- Hydro-corrected DEMs for the lower watershed where storage impacts are desired
- Run ACPF on priority sub-basins to determine where storage opportunities exist.
- Develop a detailed Hydrologic model if one doesn't exist.
- Run existing and storage scenario to determine how much discharge could be lowered for hypothetical rainfall events ranging from 10 year to 100 year events.
- Summarize the saturation of storage and the maximum change anticipated in the specific agroecoregion.

Time and Budget: \$600,000 (50% non-fed/50% fed)

The LMRWD also suggested a study to determine the impact sedimentation of the Lower Minnesota River floodplain has on the flood elevation and potential future impacts to public infrastructure; levees, bridges, recreational facilities, etc.

### **Minnesota River Basin Data Center (MRBDC)/ Water Resource Center at Minnesota State University Mankato**

**Position:** The Lower Minnesota River Watershed District supports full state funding for the Minnesota River Basin Data Center housed at the Water Resource Center at Minnesota State University, Mankato.

**Background:** The data center was established in 1997 funded in part by a grant from the Legislative Commission on Minnesota Resources. The data center functions to simplify the task of identifying and acquiring information and data necessary to facilitate natural resource decision making and education within the 37 counties of the Minnesota River Basin. The data center operates as a clearinghouse to make data easily and readily accessible and provides a service to link users with the best sources of information and data available. A Board of Directors, representing a broad cross section of basin residents guides the data center.

The MRBDC operates a website which contains information about the Minnesota River Basin and its major watersheds including maps, geographic information system data, data inventories, lists of projects and available reports, contact persons and organizations, and links to other websites with information about the watershed. Beyond data, the Center provides support, training and outreach for both the scientific community studying the basin as well as citizens of the basin.

It is the mission of the MRBDC to provide for the inventory, development, retrieval, interpretation and dissemination of pedigreed data and information on topics that impact the environment, economy and communities within the Minnesota River Basin.