



# Root River Conservation Drainage Integrated Whole Farm Designs



## Clean Water Funds: 2010

Clean Water Grant	\$71,600
Leveraged Funds*	\$43,000
<b>Total Project Budget</b>	<b>\$114,600</b>

\* Leveraged Funds include required 25% local match

### Targeted Water:

Root River Watershed

### Project Sponsor:

Mower SWCD

### Partners:

Minnesota Department of Agriculture, The Nature Conservancy, BWSR, University of Minnesota, and the Agricultural Drainage Management Systems Task Force (ADMS) and Coalition (ADMC)

### Grant Period:

January 2010 - December 2011

### Project Contact:

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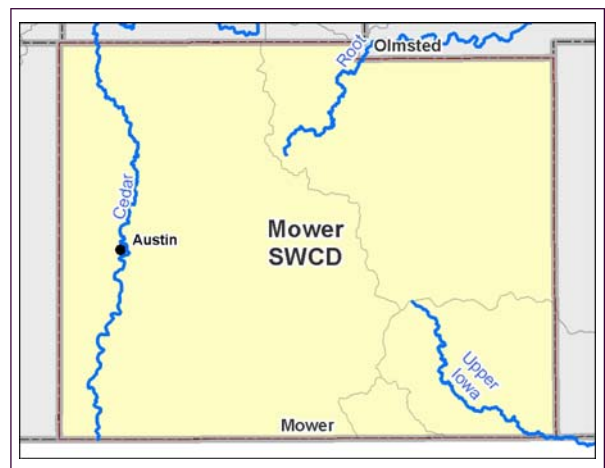
## Project Narrative

This project aims to mitigate flow and nitrate impacts from agricultural drainage to the Root River through the installation of a suite of multi-purpose drainage management practices.

An existing partnership among agencies, land grant institutions, non-governmental organizations, engineers, landowners and farm managers presented a unique opportunity to demonstrate and expand innovative conservation practices within the headwaters of the Root River Watershed near Grand Meadow, MN. This proposal increases filtration basin storage capacity, treats subsurface flow with managed drainage, and a woodchip bioreactor, and treats surface runoff with rock trench side inlets. Project partners will conduct outreach and evaluate the applicability of these practices throughout the area.

## Actual Outcomes

This project will install an infiltration basin with a woodchip bioreactor, side-inlet controls, and drainage water management control structure to mitigate the impacts of agricultural drainage from a 388 acre watershed.



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A lowflow bioreactor inlet control structure



Looking downstream across the length of the bioreactor



A bioreactor outlet control structure flowing into surge pond and the high flow (bypass) outlet