

# 2015 FEATURED PROJECT

## BIOREACTOR & WETLAND IMPROVEMENT

In 2015, the Middle Fork Crow River Watershed District teamed up with a local landowner to implement a woodchip bioreactor along side a wetland improvement structure.

The woodchip bioreactor treats subsurface agricultural tile water from the adjacent field before it reaches a wetland, and ultimately Diamond Lake. The bacteria in the woodchips naturally remove nitrates from the tile water through respiration, converting nitrate (NO<sub>3</sub>) to harmless nitrogen gas (N<sub>2</sub>) (as nitrogen gas comprises roughly 78% of the air we breath).



In conjunction with the constructed bioreactor, a pond skimmer with a retrofitted water control structure was implemented on the adjoining wetland. This structure allows for manipulated water retention providing maximum wetland capacity and viability. Through control of water levels, natural wetland processes of sedimentation and filtration will keep the area lakes clean of undesirable nutrients. Questions? Email Laura: [laura@mfcrow.org](mailto:laura@mfcrow.org)



### COST-SHARE ELIGIBLE AGRICULTURE BEST MANAGEMENT PRACTICES:

- conservation buffers
- wetland restorations
- nutrient management plans
- riparian tree plantings
- alternative tile intakes
- ditch bank side inlets
- controlled drainage
- feedlot upgrades
- sediment basins
- animal exclusions
- stream bank stabilizations/restorations

\*projects not listed may also qualify for incentives

### LEARN MORE ABOUT AG INCENTIVE COST-SHARE PROGRAMS CONTACT US:

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