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## RESTORING AGRICULTURAL DRAINED WETLANDS: A "REINVEST IN MINNESOTA" (RIM) INITIATIVE†

THOMAS A. WENZEL‡ AND DAVID H. BEHM

### ABSTRACT

Minnesota possessed about 18.5 million acres of wetlands in 1950; by the 1980s, the acreage had been reduced to 7.5 million acres. An innovative, locally-administered state program is helping to bring back a part of this heritage.

The wetland restoration component of the Reinvest In Minnesota (RIM) Reserve Program acquires perpetual conservation easements from landowners to restore drained wetlands and convert them back to their natural state. The program provides limited funding to cover costs associated with restoring drained wetlands and establishing vegetative cover on adjacent uplands. The Board of Water and Soil Resources (BWSR) administers the program through local soil and water conservation districts (SWCDs). Cooperating agencies and conservation organizations often contribute financial assistance to participating landowners when their costs exceed the state's payment limits. In addition, cooperating agencies provide technical assistance directly to the participating landowners or to SWCDs. The objective of this paper is to provide a summary of the RIM Reserve Wetland Restoration Program's operation and highlight its accomplishments.

### INTRODUCTION

An innovative, locally-administered state program is helping to bring back drained wetlands in Minnesota. The wetland restoration component of the RIM Reserve Program pays landowners to restore their previously drained wetlands and convert them back to their natural state. These efforts provide an opportunity to achieve a "net gain" in wetlands in Minnesota.

Protecting water quality, preventing excessive erosion, and enhancing fish and wildlife habitat are important priorities which are the basis for the RIM concept. The RIM Reserve Program was created as part of the Reinvest In Minnesota (RIM) Act of 1986. The program offers landowners a financial incentive to allow the state to acquire an interest in the management activities of marginal agricultural lands such as drained wetlands. The RIM Reserve Program is administered by the BWSR through the 91 local SWCDs covering all 87 counties in the state.

### Program Overview

The RIM Reserve Program obtains cropping, grazing and drainage rights through the acquisition of perpetual conservation easements. Landowners who are accepted into the program receive a per ac payment based on a percentage of the average estimated market value of agricultural land in the township. Lands that have a cropping history receive a higher payment rate than other non-cropped lands.

The program provides funding to the landowner to cover the costs associated with establishing conservation practices on the easement area. This includes the costs to restore the drained wetlands as well as costs to establish upland vegetation. The state limits its share of those costs to \$100 per ac for establishing grasses and legumes, \$300 per ac for planting trees and \$300 per ac for restoring drained wetlands. Other state and federal agencies and conservation organizations; including the U.S. Fish and Wildlife Service (FWS), North American Wetlands Conservation Council, Pheasants Forever, Ducks Unlimited, and the Minnesota Waterfowl Association, often contribute financial assistance to participating landowners for wetland restoration activities or the establishment of permanent vegetative cover. This support is especially valuable when establishment costs exceed the program's statutory payment limits.

After designated application periods, a local screening committee reviews and prioritizes the applications. Screening committees look for a variety of items when evaluating applications. Drained wetlands with a cropping history must be given the highest consideration. Other factors are: sites whose restored wetlands would most likely abate and prevent additional sediment and nutrients from entering an adjacent waterbody; sites that offer opportunities for waterfowl production; sites that offer enhanced flood control benefits; and sites surrounded by habitat that would provide good cover and feeding

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opportunities for wildlife. Prioritization is based on conditions that would be most beneficial to water quality, soil erosion reduction, flood control, and enhancement of fish and wildlife habitat.

Prioritized applications are then submitted to the BWSR for funding consideration. Applications selected for funding then begin the process of easement acquisition. The SWCD and the landowner jointly develop a conservation plan to identify and schedule the implementation of necessary measures to restore the drained wetland as well as establish permanent vegetative cover on the adjacent upland areas also enrolled in the easement area.

The BWSR provides SWCDs with engineering assistance to develop and implement the larger and more complicated wetland restoration plans. SWCDs also receive occasional technical assistance from the FWS, Soil Conservation Service, and the Minnesota Department of Natural Resources.

Land eligible for enrollment must meet the following criteria:

- no less than five ac, unless a whole field as designated by the Agricultural Stabilization and Conservation Service;
- the wetland must have been legally drained and must be restorable; and
- up to four ac of adjacent cropped upland may be enrolled for each ac of wetland restored and enrolled, or up to one ac of adjacent non-cropped land may be enrolled for each ac of wetland restored and enrolled.

All areas enrolled must be under perpetual easements.

**Program Accomplishments**

To date, the RIM Reserve Wetland Restoration Program has had a significant impact on Minnesota's agricultural landscape (Table 1). Over 540 wetland basins totalling 5,740 ac have been or are in the process of being restored. Type 2 and 4 restored wetlands (Circular 39) are common; however, the largest percentage of wetland restored is Type 3 (Circular 39). The average size of wetland restored in the program is about 10.5 ac. In addition, over 9,000 ac of adjacent uplands have been enrolled and when necessary, established with vegetative cover. This results in an upland to wetland ratio of almost 1.6 to 1. Hundreds of ac of tree have also been planted on these upland areas. Table 1 summarizes the wetland restoration accomplishments of the RIM Reserve Program.

**CONCLUSION**

The future of the RIM Reserve Program looks very good. The Minnesota Legislature continues to provide adequate funding to support the program. Landowner interest in the program remains very high with demand greatly exceeding funds available. Through the RIM Reserve Program, we have shown that voluntary wetland restoration on long term easements works and can be a model for any state's net-gain initiative.

**Table 1. Reinvest in Minnesota Reserve Wetland Restoration Program accomplishments†.**

Year	Easements ----- # -----	Area		Wetlands/ Basins ----- # -----
		Total	Wetland	
		----- acres -----		
1986	19	576	114	27
1987	44	1,170	426	62
1988	35	1,010	313	49
1989	44	1,770	703	55
1990	36	1,160	424	55
1991	96	3,370	1,400	128
1992	19	507	507	29
1993	59	2,440	1,020	71
1994	62	2,840	1,140	65
Total	414	14,850‡	5,740‡	541

† Number of easments taken directly reflects the amount of available funding for that given year.

- Average easement size = 35.8 acres
- Average area of restored wetland = 10.5 acres
- Average upland to wetland ratio = 1.6:1
- Average wetland restoration cost = \$340 acre<sup>-1</sup>
- Average upland grass establishment cost = \$ 78 acre<sup>-1</sup>
- Average tree and shrub establishment cost = \$330 acre<sup>-1</sup>
- Average payment for land with crop history = \$567 acre<sup>-1</sup>
- Average payment for land without crop history = \$340 acre<sup>-1</sup>

‡ Total values differ because of rounding.