



## BACKGROUND

During the course of the past 24 years, the Board of Water & Soil Resources (BWSR) and Soil & Water Conservation Districts (SWCDs), with help from non-government organizations including Ducks Unlimited, MN Waterfowl Association, and Pheasants Forever, have secured 5,500 long-term conservation easements on over 200,000 acres of critical lands for water quality, floodwater attenuation and wildlife habitat benefits. The program has seen several changes in priorities and process, as well as adaptations to incorporate emerging scientific information and partnership opportunities along the way. BWSR has expanded efforts to review the quality of its RIM program that started in 1986. This quality assurance effort is one way to evaluate the process and measure outcomes to assure a stronger and more effective program going into the future. It is a testament to the program that after 24 years, Reinvest in Minnesota (RIM) is stronger than ever and viewed by Minnesotans as a key way to provide critical water quality, wildlife habitat and flood attenuation on private land.

## OBJECTIVES

- Determine strengths and limitations of current inspection process.
- Identify ways to improve the inspection process.
- Evaluate compliance and conservation practices.

## PROCESS AND SCOPE

The Quality Assurance process consists of two parts: 1) an administrative program review and 2) a field review of easements. A sample set of five RIM easements in six different SWCDs (Fillmore, LeSueur, McLeod, West Otter Tail, Pope, and Redwood) were selected for review (30 in total). SWCDs were selected based upon geographic location and historic RIM activity (Figure 1). Easements were selected to include a variety based upon age, size and program type. Age of easement ranged from 2-22 years and included riparian, wetland restoration, and sensitive ground water areas. On-site administrative reviews were conducted in each office with SWCD staff, and BWSR field staff conducted field reviews of the easements. Approximately 6-7 hours were invested in each site for this quality assurance process.

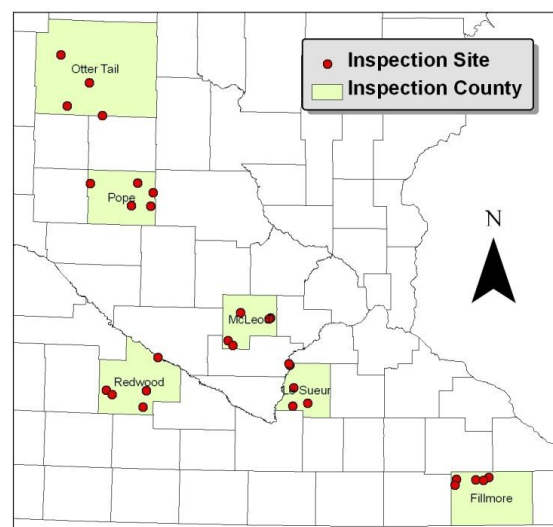


Figure 1: 2010 Inspection Locations

## ADMINISTRATIVE REVIEW

Although not fully standardized, RIM files are in excellent condition and well organized. A typical RIM file contains the original application for the program, agreements, easements, title insurance, conservation plan development and any amendments, practice installation, and the most recent easement site inspection. For all sites reviewed, the RIM site inspection process is being fully implemented, with inspections conducted every year for the first five years after recording, followed by a rotation of every three years. Payments to SWCD's for conducting these inspections are currently from a programmatic general fund appropriation that has declined (Figure 2). SWCDs foster strong relationships with RIM landowners, and are the critical local agent responsible for implementing the program.

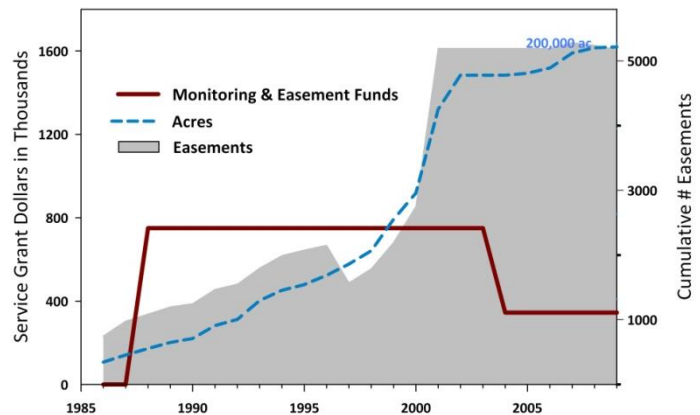


Figure 2: Programmatic Monitoring & Easement Funds available and # easements over time.

SWCDs foster strong relationships with RIM landowners, and are the critical local agent responsible for implementing the program.

## FINDINGS AND RECOMMENDATIONS:

1. Although required within the easement, tracking ownership changes has been difficult with some properties having been sold several times, and some easements being split via property subdivision.

Recommendation: Regularly capture change of ownership. Many counties now have public access to ownership records online.

2. Currently, the monitoring forms are used to address a perceived problem or violation. Compliance issues or management activities are not recorded in the existing database. Thus, BWSR does not always have the most current information on site conditions or ongoing management activities because these activities are conducted at the local level.

Recommendations: (1) A new database and GPS field application are currently being developed and will integrate inspection data into the system, as well as improve the accuracy of practice boundaries. (2) Redesign inspection forms to capture more meaningful inspection and management data. Rating categories could be better defined to provide more consistency among observers, and more specific information on vegetative cover. (3) Consider standardizing the program filing system at the local level and moving towards digital online master files instead of the master files being located in the SWCD office.

3. Local corrective actions can be time consuming and SWCDs are not being adequately compensated for increasing volume of easements and increased inspection rigor.

Recommendation: RIM Service Grants should be increased and/or reimbursable expense funding should be revised to address these circumstances.

4. SWCDs have many challenges in accomplishing all of their spring and summer field activities and responsibilities. Historically RIM Reserve easement inspection lists for monitoring are provided by mid-

June, and SWCDs have until mid-September to complete their inspections. SWCDs would like the opportunity to do inspections earlier to help identify potential weed problems.

Recommendation: Notification of easements to be inspected and return visits to problem sites from previous years will be accomplished by April 15th.

5. Training could be improved to increase consistency in program delivery and quality assurance. BWSR has been focusing training efforts on easement processing.

Recommendation: Increase capacity at the local level through training on monitoring compliance, practice quality and working with landowners on opportunities to enhance conservation practices.

6. SWCDs want to see RIM expanded and used as a tool to achieve multiple conservation benefits in their counties. They would like to see broader application of the program.

Recommendation: Pursue more flexible eligibility criteria to meet landowner and local priorities. Program payment rates can be tailored to meet targeted outcomes and conservation plan components.

## FIELD MONITORING

Field reviews were conducted on 28 sites. One site was not accessible due to high water levels, and portions of three sites were not accessible without permission from neighboring landowners or a canoe. Since all observations were made on foot or by ATV, condition of sub-aquatic vegetation in open water habitats was not evaluated.

In most cases—on 18 sites—all planned conservation practices were in place and progressing as planned. Expected vegetation was typically present, meaning the species planned/planted were observed. Native grass and forb plantings were of high quality and appeared successful. Sites with introduced grasses had solid perennial cool-season grass cover, and were meeting program goals as included in the easement and conservation management plan. Overall noxious weeds were well controlled. There were five sites where noxious weeds were observed at >10% cover of a practice area, and need additional control. Tree and shrub encroachment into the prairie had not achieved >5% at any of the sites we reviewed. Overall site conditions were excellent with perennial cover as specified, no evidence of erosion, and no buildings constructed on the easement.

## FINDINGS AND RECOMMENDATIONS:

1. On ten sites, at least one planned practice was not in place, or was not progressing as planned. It was not always clear whether the practice was never installed, or if it was attempted and failed. In a few cases, practices were present that were not in the plan (food plots, tree plantings, wetlands). In a majority of the sites reviewed, the conservation plan map could be revised to more accurately represent the practices that are in place on a site. When a conservation plan is revised by the SWCD and approved by BWSR, the changes aren't currently being made in the geo-database; only inside paper files.

Recommendation: Improve documentation of changes to conservation plans in the project file and geo-database. A system is being developed that will allow collection of field data to update geo-database records, and better capture progress or concerns at a site.

2. Minor crop encroachment was observed on three sites.

Recommendation: Easement boundaries should be clearly posted at regular intervals along high-risk edges such as those adjacent to row crop agriculture or hay fields.

3. Unauthorized haying or mowing occurred on three sites (mowing was observed on additional sites but was authorized by the SWCD for weed control purposes). Debris (old culvert material, equipment, decoy materials) was present on three sites.

Recommendation: Improve communications regarding what activities and impacts are compatible uses. Follow-up on construction projects to make sure all remnants are removed from the easement.

4. In three cases, easement boundaries need revision as they included a road or driveway.

Recommendation: Legal surveys of easement boundaries would eliminate these discrepancies, but this is a costly proposition. A less expensive option would be to require GPS coordinates as a starting point of legal descriptions during the sign-up process. For easements already enrolled, continue to improve easement boundary data by using the most current air photography available.

## CONCLUSION

High quality, low maintenance conservation restoration projects are dependent on five project aspects all being accomplished:

- good site selection
- well-planned design
- sustainable, site-appropriate seed and materials
- careful construction and practice establishment
- monitoring and early intervention for enforcement and maintenance

As the utilization of easements as a conservation tool continues to grow, there is a corresponding increase in workload to oversee the program. Staffing capacity is in decline or is being diluted with increased responsibilities at the local level. Some SWCD offices previously had a designated RIM coordinator, which no longer exists in a formal sense. Partially offsetting this decline in staff capacity, the newer easement conservation plans have a higher degree of accuracy and efficiency with evolutions in GPS, GIS, and aerial photography technologies. For example, aerial photos are now utilized in the monitoring program to conduct winter reviews of the previous growing season's photos to detect potential problems such as crop encroachment, unauthorized mowing, etc.

In order to keep pace with evolving landscapes and funding expectations, BWSR should invest time and resources now to update easement data and inspection protocols and sustain a well-trained field presence. More accurate information will then be readily available to support long term and on-going compliance and management of easements to assure that the multiple conservation benefits of these restored landscapes continue in perpetuity.

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