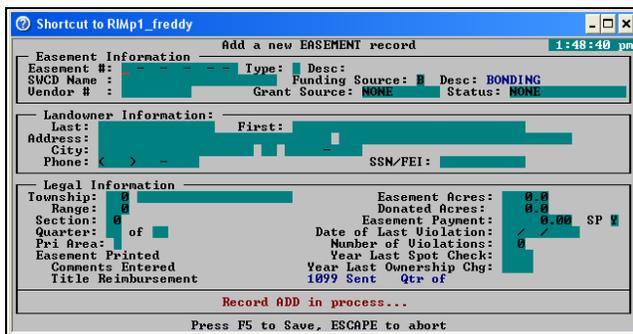




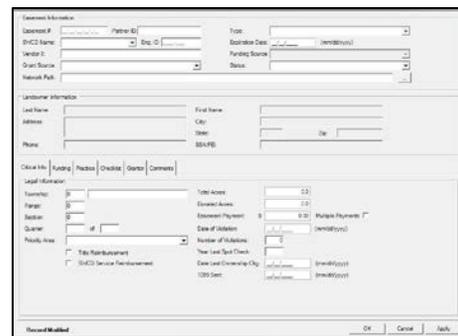
Database and Mapping Improvements in BWSR's Easements Section

August 2014 Snapshots

Since 1986, BWSR's Reinvest in Minnesota (RIM) Reserve conservation easement program has processed and recorded 6,915 easements totaling 260,931 acres. In the early days of this successful easement program, the intricate acquisition process—from application stage to agreement stage to easement stage to recorded easement—was tracked on paper with the assistance of a FoxPro database which utilized an MS-DOS user interface. Over the years, program requirements and processes evolved, and the FoxPro database platform was no longer supported.



FoxPro Database Interface



Oracle Database Interface

The multitude of new program and reporting requirements that resulted from the 2008 passage of the Legacy Amendment pushed the limits of the FoxPro system. It became clear a modern database platform was badly needed. The challenge: how to “re-tool” the RIM machine while keeping this busy program running full steam. The new system also needed to be flexible enough to accommodate future changes in easement tracking and reporting requirements.

A new database system was designed, tweaked and tested through the combined efforts of a team of BWSR easements staff, MN.IT staff, and a third party software developer. In October 2013, the new RIM database was launched. BWSR Conservation Easement Section Manager Bill Penning said it was the smoothest database launch he'd ever been a part of.

The new and improved system is based on a powerful, flexible and modern Oracle relational database, which is more reliable and stable than the outdated FoxPro platform and gives easement staff quicker access to the data they need to assist with processing, planning, targeting and reporting. Quicker access to data means increased responsiveness to BWSR's partners in the program.

Advances in technology have also impacted the easement boundary mapping process. In the early days of the RIM program, boundaries were drafted on paper. In the early 2000s, new boundaries were mapped in AutoCAD while the older paper maps were manually digitized. This year, the process was migrated into an ArcGIS workflow which allows multiple easement staff to edit the same spatial layers simultaneously and see each other's edits in real-time. Soon, easement spatial data will be linked directly with attribute data in the new RIM database in real time, which will further improve efficiency and accuracy.