

# CUSTOMER SPOTLIGHT

## MINNESOTA: STEWARDING A PROUD LANDSCAPE

FROM ACRES OF FOREST TO MILES OF RIVERS, MINNESOTANS TIE THEIR SCENIC WONDERS TO THEIR CULTURAL IDENTITY. BUT MANAGING VAST TRACTS OF LAND CAN OFFER AS MANY CHALLENGES AS REWARDS—AND CALLS FOR CUTTING-EDGE TECHNOLOGY.

For the people of Minnesota, land—from the thundering river gorges of Gooseberry Falls to the 300-mile hiking trails of Chippewa National Forest to the towering cliffs at the Split Rock Lighthouse—is more than a tableau of natural beauty. It's part of their cultural identity. Ask the anglers fishing for walleye on Mille Lacs Lake. Or the deer hunters treading quietly on the leaves of Itasca State Park. Whether they are canoeing along the St. Croix River, bouldering at Banning State Park or mountain biking through the Cuyuna Country trails, Minnesotans derive enormous pride from their natural landscape.

For the Minnesota Department of Natural Resources (DNR), the organization tasked with administering and protecting that scenic heritage, the staggering size of state-owned and operated land presents awe-inspiring opportunities as well as vast and complicated responsibilities. Of Minnesota's 51 million acres, more than 10 percent of the surface estate and 25 percent of the mineral estate are state-owned and administered. Some 5.5 million acres are designated in state forests, wildlife management areas, parks and recreation areas, or other land management programs. Mineral interests underlie more than 10 million acres of public land. And that acreage is expanding. Each year, DNR continues to acquire more land, from ownerships to easements to tax-forfeited properties.

"Minnesota public land is enormous," Ben Schaefer, an acquisition project manager with DNR. "This is a state that demands responsible stewardship of its resources, as well they should. There's a lot to do on our watch."

Indeed, under the auspices of DNR's 2,700 employees, the state requires the most transparent and efficient land management system possible to merely inventory and access all its holdings—from the four million acres in its 58 state forests to the 600 miles of wild and scenic rivers. And along every inch of land and water, DNR confronts issues like transactions, conservation and management of natural resources. "It's a lot to wrap your head around," Schaefer joked.

But past land records systems (LRS) weren't always able to keep up with the state's natural demands and DNR's overflowing workload transactions and activities. DNR employees had difficulty accessing reliable and current land records information. Land transactions were confusing, inefficient and time consuming. The transparency of the transactions—including public access to the department's land records—was inadequate. Merely getting a handle on land inventory was a challenge. "We knew our system was not meeting our needs," said Kathy Lewis, DNR assistant director of lands and minerals. "Something had to be done."

Over the last few years, DNR has built on a state mandate and changed the way it does business—land management business, that is. In 2009, the state gave the DNR the financial and political backing to modernize its land administration technologies. The organization was tasked with trading its aging land records system, one that was often slowed by a literal paper trail, hand-entered data and little-to-no geographic information systems (GIS) capabilities for state-of-the-art automation technology. The overarching



goal was to substantially revamp the state's land records framework while promoting efficiency, fostering transparency, protecting natural resources and, ultimately, attracting responsible investments.

In 2013, the DNR in partnership with Thomson Reuters deployed Thomson Reuters Aumentum Registry. DNR officials could be forgiven if they came to the decision with their fingers crossed. While the new system had produced stellar results overseas in countries like Liberia and Nigeria, it had never before been employed to manage US land administration. Could an LRS that helped refugees reclaim their homes in Monrovia and restored order to the land chaos of Calabar have any real relevance for the urban residents of St. Paul?

The answer came quickly. Almost overnight, DNR officials say, the state bureau replaced loosely structured business processes and data capture with more than 150 land transaction types in an automated workflow-centric system.

Natural resource managers had land information at their fingertips. Staffers conducted transactions through a newly efficient and effective process. Divisions requesting transactions were greeted with newfound transparency. And the public and other external stakeholders had smooth access to a greater array of land information.

The new system was a first step in paying off on the promise of stewardship. Suddenly the DNR's goals—from improving workflow and better managing secure and complete estate data to increasing public trust and promoting responsible investment—seemed within reach.

"We were looking for a complete transformation of the way we manage the land that has been entrusted to us," said Mike Jordan, IT business services supervisor with the DNR Lands and Minerals Division. "It's a responsibility we take very seriously."

## ACTIVE LAND

From the Lake of the Woods to the Tall Grass Prairie, Minnesota's DNR administers a uniquely large amount of land. But those forests and fields aren't stagnant. Minnesota boasts "active land," as Schaefer puts it. On every parcel, transactions run the gamut from real estate leases to utility licenses to road easements. Public land use is an important thread running through Minnesota's environmental and cultural fabric, whether it requires hunting cabins and boat house leases or fishing licenses along Lake Vermilion.

As the organization began the shift to a new LRS, officials realized that, before they could improve land management, they first needed to better identify and track the amount of land under its purview. "In the past, we didn't have the tools to clearly understand exactly what we owned," Schaefer said. As the new process took shape, he said, "Our top priority was visibility."

That meant taking full advantage of the LRS's GIS capacities, a feature missing from previous systems. For the first time, DNR was able to map both its territory and its transactions. "We can now see what is happening on the ground," Jordan said. From unobtrusively bored fiber lines to power cables crossing plots, the GIS system allows DNR officials to track every encumbrance attached to every parcel before completing a transaction. That feature has given DNR an accurate inventory and aided in transparent transactions. It has allowed them to identify patterns of ownership, recreation sites and resources.

"Simply put: You can't transact real estate without a picture," Jordan said. "Now that we can see every parcel, connect it with a deed, identify ownership and use, the expectations of what we can provide in terms of visuals have gone through the roof."

In addition to having more data at their fingertips, the LRS has vastly improved the quality and reliability of that data. Previous systems required time-intensive and inefficient processing, often by hand. Questions arose about accuracy and security. Some documents were riddled with errors; none were completely trusted. "There was a real concern about data quality," Jordan noted. "Now there's more concentration on getting that data right in order to produce a correct document—a clean document with reliable information."

The new system needed to establish a workflow process, Lewis said. Previously, the DNR was handcuffed by bottlenecks and bureaucracy. Take the case, for example, of an acquisitions manager who procured a tax-forfeited cabin along the banks of Lake Bemidji. In the past, that parcel's deed was hidden in one of hundreds of folders in the St. Paul office—250 miles away from the Bemidji staffer and seemingly as far by email and fax. "The person in St. Paul would have to search through folders to find the deed—if they ever found the right folder. Then they'd scan or copy it, and email or fax it to the person sitting in Bemidji," Lewis said.

With the automated system, each DNR employee manages workflow from their own desk. Whether in Bemidji or St. Paul, transactions can be efficiently and transparently initiated and tracked. The built-in GIS maps the landscape and the system records a step-by-step transaction blueprint.

"Basic information items are now available to the public and the staff throughout the state," Lewis said. "We now pride ourselves on having accessible data."

## A BREATH OF FRESH AIR

DNR Realty Specialist Amy Marrier is responsible for managing land and minerals transactions in Minnesota's northeast quadrant. That's 450,000 acres with the largest amounts of leases and licenses in the state. No wonder that, not long ago, it wasn't unusual to find her in the Grand Rapids office well past five o'clock. There was just too much work to do.

When Marrier isn't licensing gas pipelines and sewer water drains, she's thinking about the bigger picture. The DNR's responsibilities include balancing the use of public land for commercial purposes and the conservation of natural resources. The department also administers the land granted to the state in trust for the benefit of public schools and universities—and those assets have provided a much-needed revenue boost to its public education system. Marrier sees the long hours at her desk as a means to preserving ecological and historical resources while benefiting Minnesota schools.

"We do everything we can to manage that parcel in a way that will be as profitable as possible to put money into the school systems," she said.

The LRS has done more than save the organization on overtime. DNR officials now trust the efficiency, transparency, accuracy and security of each transaction. Staffers like Marrier can now better understand and manage inventory, leading to greater ease and reliability of transactions. "We have a better sense of every parcel, of every title and license," Marrier said.

The proof, officials said, is in the numbers. Internal accounts show that the number of users interacting with the system has grown from about 50 in the old system to over 600 today. DNR reports also say the new system has slashed the time it takes to process transactions, often cutting it in half. Transactions that once took 6-8 weeks to complete can be done in 2-3 weeks, sometimes even one. For example, a typical lease renewal that used to take 3-4 months can now be completed in 6-8 weeks.

Less than two years into the new system, DNR continues to collect data on the breadth and reach of the LRS. The project's next step is to survey external stakeholders on improvements in the efficiency, transparency and speed of transactions. The long-term goals, in addition to seeing more operational benefits, are to realize financial revenue benefits while continuing to protect the region's natural resources and increase the public's access to land use and information.

In the long run Minnesota DNR's needs are not unlike other government agencies responsible for the stewardship of public land resources. Nor does it differ from the mission of other nations seeking to gain a more transparent, efficient and responsible investment in the administration of state-owned lands.

As the state's population and development grows, so does the need for increased conservation of its public lands and waters. With the new land administration system, the DNR is better positioned to pursue its mission and prepare for tomorrow's challenges. As the steward of Minnesota's public land—as, essentially, the keeper of the state's natural and cultural identity—DNR's priority is, according to its vision statement, "to create unforgettable park, trail, and water recreation experiences that inspire people to pass along the love for the outdoors to the next generation." For the people of Minnesota—for the anglers, hunters, hikers and canoers—that goal seems more attainable than ever.

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**Mike Jordan**  
IT business services supervisor with  
the DNR Lands and  
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