



Case Study

Organization

Southern Minnesota Beet
Sugar Cooperative

Location

Southern Minnesota

Industry

Agriculture

Sweet Savings in Southern Minnesota

Southern Minnesota Beet Sugar Cooperative (SMBSC) is a shareholder- and grower-owned cooperative that produces nearly three million tons of sugar beets every year. As a leader in sustainable farming, SMBSC is an active participant in programs that seek to offset the treated water used in its operations.

What did they do?

After a successful field measurement pilot program using mobile geographic information system (GIS) apps to validate contracted areas and field borders, SMBSC staff selected Collector for ArcGIS® to support the cooperative's Cover Crop Program. The program, which involves rigorous documentation and reporting of cover crop planting, helps SMBSC receive 13,000 phosphorous credits per year to offset wastewater discharge through the National Pollutant Discharge Elimination System and prevent soil erosion in its fields.

In 2014, SMBSC equipped four employees with Apple iPads to survey 98,000 acres of planted cover crop. Using the Collector for ArcGIS app, employees took photos and collected information on the status of cover crop in each field. After each shift, the collected information was fed into ArcGIS™ Online and a central database used by the environmental affairs manager for sustainability reporting.

"Using the Collector [for ArcGIS] app, we have reduced our man-hours by at least 50 percent and increased our accuracy by at least 20 percent."

Louis Kneiper

Environmental Affairs Manager,
Southern Minnesota Beet Sugar
Cooperative

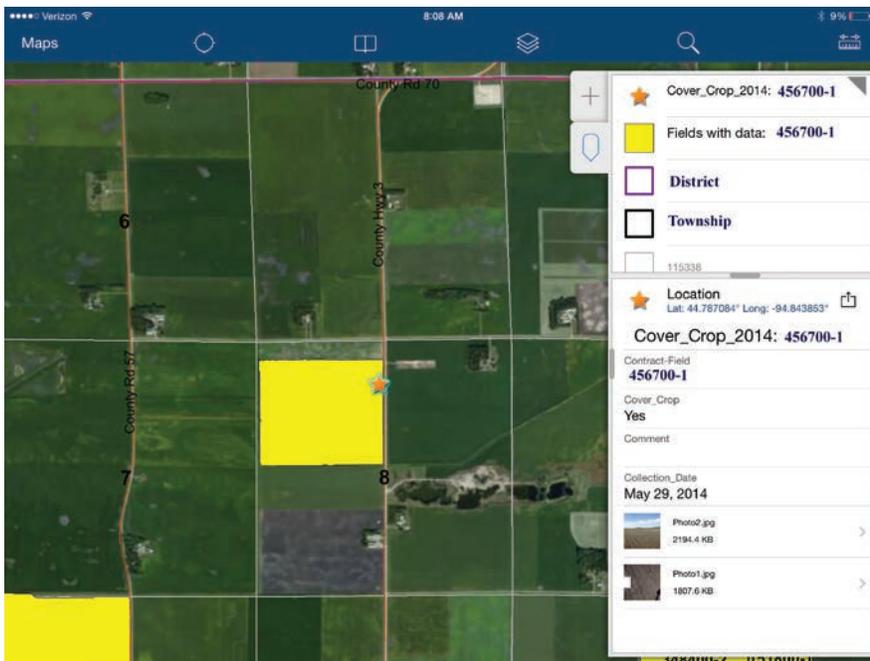
For more information,
visit esri.com/collector.



Do I need this?

In just one growing season, SMBSC saved more than 300 labor hours, thanks to its use of Collector for ArcGIS. By using ArcGIS Online maps synced with Collector, staff were able to more efficiently navigate to fields and capture required information, even without Wi-Fi or mobile data access. They also improved the quality and accuracy of captured information through the use of GPS tracking, which ensured the captured data related to the correct field.

The captured information enabled SMBSC's environmental affairs manager and GIS analyst to eliminate manual data updates. Instead of spending dozens of hours combing through paper forms, SMBSC staff can now focus on other environmental and geospatial needs at the cooperative. In tandem with Collector for ArcGIS, ArcGIS Online also provides critical data that growers and shareholders can use to better understand the success of their cover crop efforts and plan future soil remediation operations.



Agriculturists used Collector for ArcGIS on iPads to document cover crop in each field.

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