



Iowa Agricultural Soil Conservation Financial and Reports Management System (FARMS)

Executive Summary

The Iowa Agricultural Soil Conservation - Financial and Reports Management System (FARMS) is a web-based system that provides technical and financial assistance on soil and water conservation to landowners. The FARMS system was developed and is operated by the Iowa Department of Agriculture and Land Stewardship (IDALS), the state agency charged with regulating and supporting all aspects of agriculture and protecting and preserving Iowa's agricultural land.

One of IDALS' key result areas is the protection and preservation of soil and water quality. Within the State of Iowa, there are 100 Soil and Water Conservation Districts (SWCD), local units comprised of five elected officials and support staff. Each district office, with assistance from state and federal agencies, delivers soil and water conservation technical and financial assistance to Iowa landowners.

Prior to the FARMS system, state and local offices conducted business with landowners primarily using paper documents, most of which were filled out in triplicate, with one copy for the landowner, one copy for the SWCD, and one for IDALS. Some of the central statewide financial incentive ledgers were being kept in MS-Excel spreadsheets; however, many district offices were still using handwritten, hand-calculated ledgers when FARMS was implemented.

For landowners, the FARMS system:

- Provides education and information on financial incentive programs available for soil and water conservation.
- Significantly improves the financial incentive application process, supporting a simplified web-enabled process.
- Reduces the processing time for financial incentive awards once land and water conservation practices are implemented.
- Provides the ability to check the status of an application and/or a financial incentive claim at any time.

FARMS will improve public policy supporting water quality and soil productivity and will result in a net savings estimated to exceed \$1.8 million in its first five years.

Title: Iowa Agricultural Soil Conservation Financial and Reports Management System (FARMS)

Concise Description of the Business Problem and Solution, Including the Length of Time in Operation:

Federal, state, and local government offers multitude of soil and water conservation technical and financial assistance programs to landowners. In our state, the federal and state financial awards for these programs are administered through the Iowa Department of Agriculture and Land Stewardship (IDALS). Within the State of Iowa, there are 100 Soil and Water Conservation Districts (SWCD), local units comprised of five elected officials and support staff. Each district office, with assistance from IDALS and the federal Department of Agriculture, delivers soil and water conservation technical and financial assistance to Iowa landowners.

For many years, state and local offices conducted business with landowners primarily using paper documents, most of which were filled out in triplicate - one copy for the landowner, one copy for the SWCD, and one for IDALS. All of the processing associated with the financial assistance applications was done by hand. A few of the central statewide financial incentive ledgers were being kept in MS-Excel spreadsheets; however, the majority of the district offices were still using handwritten, hand-calculated ledgers in 2006. Educational materials were only available to landowners in printed form and notifications for soil and water conservation financial assistance programs were typically printed and posted on bulletin boards in the SWCD offices.

A web-based system was designed and implemented after an extensive analysis and reengineering of the business processes associated with education and financial assistance programs. The application process was simplified and automated, reducing the amount of paper by 99% and totally eliminated the need for district offices to report program information to IDALS. Information in the system was immediately available to the primary stakeholders (i.e. landowners, SWCD Officer, IDALS, and the federal Department of Agriculture) and to academics and researchers monitoring and supporting such programs. FARMS began its pilot October 26, 2006 and will be fully operational July 1, 2007.

Significance of the Project to the Improvement of the Operation of Government:

FARMS has resulted in increased efficiency at both the state and local level. IDALS now has a central database to assist them in accurately assessing financial incentive needs for each SWCD office and the funding allocations can be inserted into the SWCD ledger from the central office. This dynamic database / ledger enables the real-time management of program funds and provides real-time financial reporting. Any number of governmental agencies and research organizations can track environmental benefits. Reports can be extracted and displayed on GIS mapping programs currently in use by IDALS. FARMS supports the dynamic tracking and reporting of current SWCD allocations and individual applications for financial assistance. The reengineering of associated business processes streamlined the creation of approved vendor credentials and the financial incentive payment process. FARMS automatically generates the federal reports required by the federal funding agreement, freeing up state and local staff time for other duties. Additionally, state law requires public access to all information related to IDALS programs. FARMS complies with this requirement in a very accurate and timely manner.

FARMS has improved district office operations substantially. District offices can immediately determine the status of outstanding applications through a classification system that labels the application as "denied," "pending," "approved," or "claim paid." The district ledger, now maintained in electronic form, dynamically shows all pending applications, obligated funds, spent funds, and funds not obligated, with each separate program area having a unique ledger. This

dynamic tracking and reporting capability eliminates the need to send quarterly reports to IDALS, as was required under the paper-based system.

By providing accurate, timely program information, the public, state agencies and legislature can more appropriately assess conservation needs throughout the state and formulate relevant current and future program policy. By establishing policy based on conservation needs, the stakeholders expect to be able to track water quality and soil productivity improvement over time. Water quality and soil productivity are essential to quality of life in Iowa.

Public Value of the Project (benefits realized by service recipients, taxpayers, agencies or the state – also include documented outcomes such as realized return on investment, short-term/long-term payback with summary calculations, or cost avoidance data):

The web availability and reporting functionality has significantly improved communication with landowners. There are approximately 5,750 requests submitted for financial assistance annually. Approximately 3,250 are approved for program funds. FARMS allows for each request to be prioritized in the system and can be kept indefinitely or until it becomes a high enough priority to be eligible for program funding. Another benefit is the tracking of maintenance agreements on lands that receive program funds. Realtors, farmers, and others are able to search land by legal description to determine whether or not conservation practices on a specific section of land are bound to a maintenance agreement.

Public access to program information facilitates government accountability and encourages a participatory democracy. Reports available from FARMS show program allocations, expenditures, and the environmental benefits for each program.

FARMS eliminated the need for the landowners to physically visit a local SWCD office to learn what programs are available, complete financial incentive applications, or to request technical assistance. Most SWCD offices are only open from 8 a.m. to 4:30 p.m. Monday through Friday. It was common for the public to make several trips to an SWCD office before all of their needs were met. Landowners can now educate themselves on the various financial incentive programs available for soil and water conservation at their convenience and make requests for technical assistance electronically. The simplified application process takes less time to complete. Once approved projects are complete, the financial incentive payment is received, usually by electronic funds transfer, in a matter of a few days as opposed to several weeks when payments were processed manually.

FARMS Project Cost and Savings Calculations:

Costs

FARMS development and deployment: \$295,000

Annual hosting: \$4,305.

FARMS Total Five-Year Costs = \$295,000 + (5 x \$4,305) = **\$316,525**

Personnel Savings

There are on average 100 district secretaries, each receiving salary and benefits totaling \$43,750.00. Prior to FARMS, each district secretary spent approximately 30% of their time on cost-share or related programs.

With FARMS, each district secretary spent approximately 20% of their time on cost-share or related programs. Net annual personnel savings: **\$437,500.**

$43,750 \times 100 \times 30\% = \$1,312,500$ prior to FARMS

$43,750 \times 100 \times 20\% = \$ 875,000$ using FARMS

Citizen Benefit

FARMS allows the public to conduct business with SWCD offices at their leisure. An estimated 5,750 requests for assistance are received each year and each request involves at least one trip to the SWCD office. The public can avoid the transportation costs and other expenses associated with doing business at the SWCD during regular business hours. If the citizen's time and expenses are conservatively estimated at \$10 per hour and one hour saved per application, the annual citizen savings would total **\$57,500**.

5,750 transactions x 1 hour x \$10.00/hour = \$57,500 annual citizen savings

Total Five Year Savings = (\$437,500 x 5) + (\$57,500 x 5) = **\$2,187,500**

Projected Net Five-year Savings = (\$2,187,500 five-year savings - \$316,525 five-year costs) = **\$1,870,975**