Conservation Innovation Grants
Final Report

Agreement Number: NRCS 69-3A75-7-107
Grantee Name: Resources First Foundation (RFF)
Project Title: Online NRCS Conservation Program Database and Program Finder Search
Tool
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Period Covered by Report: September 20, 2007 to September 20, 2009
Project End Date: September 20, 2009

Summarize the work performed during the project period covered by this report:

RFF has successfully built the "Conservation Programs Decision Support System," an
online NRCS conservation program database and program finder search tool, currently
available in beta form at www.icaer.com. The application offers a means for landowners
to explore the conservation opportunities for their land and resources. A landowner that
is interested in participating in a conservation program, can go to the web-application,
answer a few brief questions, and receive a ranked list of results of possible programs that
are most appropriate for their land, resources, and objectives. The work was broken into
three distinct tasks to arrive at the finished product: research of content, design of data
tables, information and flow of logic, and programming of the web application.

The research involved examining NRCS and FSA programs from the most recent
Farmbill and their attributes, to determine the most efficient and effective method of
matching landowners to conservation programs. The classes RFF developed based on
national resource concerns include: soil erosion, soil condition, water quantity, water
quality, air quality, plants not adapted or suited, plant condition, fish and wildlife, and
domestic animals. Programs were also organized by their type including: easement,
rental/annual payments, technical assistance, and cost share. Once the classes were
defined, RFF staff had to further define the limits and condition of each program to
determine a chance of eligibility for a specific program. These limits include: type of
land, land cover, land use, location, and whether or not the landowner is socially
disadvantaged. All of these classifications were applied to the development of the data
table of conservation programs and attributes, and the data table of program resource
concerns. RFF also created a database of conservation programs including a description.

With the above information classified, RFF staff then designed and developed the
structure for the user questionnaire tree that would serve as the outer structure of the
online tool, and the interactive component of the application. From that point, RFF staff
designed algorithms and a prioritization matrix that was used to order programs based on
user input and conservation priorities. RFF staff also developed an administrative
interface for NRCS staff to input new program information, and/or change existing
program information.

The programming of the web application involved:
· Creation of the physical database model
· Population of database tables with program and supporting data
· Coding and testing of all stored procedures
· Coding of the data access tier
· Coding of the business logic tier
· Design and development of the user interface
· Debugging of web application functions and tasks
· Performance and page load speed tuning
· Compiling and deployment onto a publically available testing server at
            www.icaer.com

On October 21, 2009 Willard Dyche and Mark Mass of the Resources First Foundation (RFF) participated in a conference call to present the Program Finder Decision Support System to NRCS Staff. In attendance on the call from NRCS were Bill Boyer, Gregorio Cruz, Ed Burton, Gregory Johnson, and Lillian Woods. RFF walked the NRCS staff through the public portion of the application first, displaying all probable outcomes for different user scenarios. NRCS staff had no comments on the functionality of the client portion of the application and minimal comments on some help features, which have been addressed. Next RFF provided a tour of the administrative section, again NRCS staff understood the functionality and did not have any comments its workings.

At the conclusion of the demonstration RFF and NRCS discussed the next steps for the tool. Gregorio said that it is his responsibility to show the tool to his superiors and programs people for further approval. He also mentioned that if the agency is interested in pursuing the application for placement on the NRCS website the code of the tool will need to be reviewed by NRCS technical staff. Gregorio asked RFF if we would be willing and available to do another demonstration if necessary, which we agreed to do.

RFF is now waiting for a response from NRCS on what the next steps will be.

Describe significant results, accomplishments, and lessons learned. Compare actual accomplishments to the project goals in your proposal:

The significant result is the completion of the online application. The Program Finder Decision Support System is the end goal of the original Conservation Innovation Grant proposal. Many steps leading up to the tool had to be augmented along the way, primarily because of the long delay in the passage of the Farmbill, coupled with the final rulings that took even longer to come out. RFF had envisioned information being custom tailored down to the local NRCS office level, but the resources were not there to support such a specific system. Thus, national priorities trumped state priorities in the application's program descriptions for the simple reason that they were much more readily available, and RFF could trust that the national priorities would be guiding state-specific action. To bring local information and contacts to users, the application provides links to the user's state NRCS programs website, state NRCS offices, and county

Conservation Districts. The application also provides a link to the Private Landowner Network, a searchable online directory housing over 12,000 conservation resources, articles, and contacts.

RFF followed its basic outline of work flow and project objectives to arrive at the completed project. Based on the conference call with NRCS staff, the program works to their satisfaction as well. The call took place one month ago, and RFF has not received any negative feedback or even suggestions to change the current flow, aesthetic, or system of the current application.

One of the deliverables in the agreement was to attend a meeting hosted by NRCS and present a poster describing the project. Two RFF staff members attended the Soil and Water Conservation Society Annual Meeting in Dearborn, MI, in July, and presented their poster on the Conservation Programs Decision Support System.

In the space below, provide the following in accordance with the Environmental Quality Incentives Program (EQIP) and CIG grant agreement provisions:

1. A listing of EQIP-eligible producers involved in the project, identified by name and social security or taxpayer identification number.
   N/A

2. The dollar amount of any direct or indirect payment made to each individual producer or entity for structural, vegetative, or management practices. Both semiannual and cumulative payment amounts must be submitted.
   N/A

3. A self-certification statement indicating that each individual or entity receiving a direct or indirect payment for any structural, vegetative, or management practice through this grant is in compliance with the adjusted gross income (AGI) and highly-erodible lands and wetlands conservation (HEL/WC) compliance provisions of the Farm Bill.
   N/A