

Conservation Innovation Grants (CIG) Final Project Reports Guidance

The information associated with funded grant proposals to address conservation technology innovation is of interest to numerous and diverse interest groups including Natural Resource Conservation Service (NRCS) employees, other government agencies, and non-governmental organizations. The display of information associated with the grant proposal reports was developed for these principal users and corresponding roles in the technology transfer process. The following is in hopes to clarify the information and format in an effort to make CIG information available to NRCS.

Final Project Reports are a permanent record of project accomplishments. Reports will be used to assess the success of grant program, as an important element in ensuring accountability and good management of public funds. Reports will also be used to transfer appropriate technology to State and Federal agencies for use with agricultural producers. Follow the format below to describe the methodology or procedures used to evaluate the project, determine the technical feasibility, and quantify the results of the project for a final report.

Final Project Reports

Grantees are required to submit a Final Project Report of project accomplishments at the conclusion of the grant (due 90 days after the expiration of the agreement). Reports are recommended to be submitted electronically as PDF or Word via e-mail or CD.

The Final Project Report will summarize the project and describe methods, quality control, findings, and recommendations. Final Project Reports are to be prepared by or under the supervision of the project's principle investigator. Preparing thorough interim reports as the project progresses will make the Final Project Report easier to develop.

The Final Project Report should contain the following parts:

- Cover Page
 - ✓ Title of the grant or project
 - ✓ Name of the principal investigator or project manager
 - ✓ Timeframe covered by the report
 - ✓ Grant number, if any
 - ✓ Date of submission
 - ✓ Deliverables identified on the grant agreement
- Table of Contents
- Executive Summary
- Introduction
- Background
- Review of methods
- Discussion of quality assurance
- Findings
- Conclusions and recommendations
- Appendices
- Technology Review Criteria

Executive Summary: A summary of the activities carried out during the project, difficulties encountered, major findings, and conclusions and recommendations. The Executive Summary should answer these questions:

- What NRCS designated priorities were met with this grant?
- What were the goals and objectives for this project?
- What were the accomplishments?
- Were the goals and objectives met? If not, what were the barriers to completion?
- Was the project completed on time? If not, what were the reasons for extending the timeframe?
- Who are the customers that benefit from this grant?
- Were project funds spent as anticipated? If not, describe major changes in the budget.
- What methods were employed to demonstrate alternative technology in this project?
- What were the quantifiable physical results from this project?
- What were the economic results?
- Are there Federal, State and local programs that may be used to implement this project?
- What are the major recommendations resulting from this project?

Introduction: The Introduction should set the stage for the discussion that follows. The Introduction and some of the following sections will expand on material that was condensed in the Executive Summary. At a minimum, include the following items:

- A brief overview of the project: who, what, where, when and how (key personnel and a description of their qualifications)
- Project goals and objectives (including those designated in the NRCS grant request).
- The scope of project tasks.
- Business or academic relationships that facilitated the project, including leveraging (both direct and in-kind support).
- How the project was funded.

Background: Describe the factors that lead to the development of this project. Include:

- What is the problem the project was intended to address?
- A brief account of previous attempts to solve the problem.
- How the problem is usually dealt with today.
- What agriculture or environmental sector could benefit by this project?
- What natural resource issues are addressed?
- The negative effects of the problem on the environment, the community, or the producer's economic welfare.

Review of methods: Describe the physical and analytic activities of the project. Include:

- Explain what is innovative about the project, in terms of the equipment used, the management process employed, changes in timing, or anything about the project that makes it different from standard practice.
- Compare the innovative portions of the project to existing practices to show differences in labor input, materials input, economic input and return, changes in production, or changes in the fate and transport of pollutants.

- If part of the project revolves around marketing an alternative product (example: composted manure), describe how the potential market was analyzed, economic projections, and any actual marketing activity that took place.
- Describe what the producer had to do differently to accommodate the project, in terms of labor, maintenance, obtaining materials, feeding, milking, pasturage, cropping, or any other operation adjustments.
- Include a schedule of events that shows when components were built or installed, the period of time that data was collected, and any adverse events such as storms or equipment failure that affected the project.
- Include maps, diagrams, and other material that shows the location of the project, location of equipment and facilities, environmentally sensitive areas, etc.
- Summarize what worked, what didn't work, and why. It is important to know if parts failed or processes did not behave as expected, or maintenance was different than expected, in order to assess future projects.
- What would be done differently in this project if it were started today?

Discussion of quality assurance: Describe the steps taken to ensure that data from the project are valid. Include:

- Project site description: characteristics of the site, sample locations, rationale for locations, map.
- Sampling design. Include the precision level of measurements, completeness (will data be sufficient), how samples and measurements truly represent what is occurring, and comparability (can the project situation be compared to real-life situations).
- Sampling procedures: Describe collection methods, collection frequency, equipment used, volume or amounts sampled, and how samples are handled, stored, and transported.
- Custody procedures: Describe chain-of-custody procedures for samples and data.
- Calibration: What, if any, field equipment will require calibration & how will it be done.
- Sample analysis, quality control: Cite analytical procedures to be used in the field or laboratory, sub-sampling or sample preparation, units of measure to be used. Describe limits of detection. Describe quality control processes.
- Discuss data reduction, analysis, review, and reporting: How raw data is converted and presented, who reviewed it, and how the final presentation was derived.

Findings: Enumerate the physical and economic findings of the project. Show how the findings did or did not support the goals of the project.

Conclusions and recommendations: Summarize the conclusions to be drawn from the project, recommend how the technology should be studied further, how it should be brought into common usage, or why the technology is deemed not useful. If the technology is recommended for common usage, include an operation and maintenance recommendations. Identify the next steps in bringing this technology to the field.

Appendices: Place in the appendices any of the following items that the Final Project Report contains:

- Raw data;
- Laboratory reports;

- Description of testing methods;
- Specifications for manufactured equipment or parts;
- Process flow charts;
- References;
- Budget information;
- Survey results;
- Maps;
- Worksheets;
- Public meeting minutes;
- Publication lists; and
- Any other supporting information not essential to the main body of the report.

For Technology Review Criteria: If the process or methods in the project are recommended for field use, include as an appendix the following items, which will facilitate reviewing the new technology for potential field use.

Technology Review Criteria for Alternative Technologies (to be applied under Existing Practice Standards) NOTE: If the Technology Review Criteria (see below) are not appended to the Final Project Report, no recommendation for field use of new technology will be carried out unless specifically requested by an NRCS State Office, at which time the Criteria will need to be developed and submitted by the grantee.

NRCS Conservation Practice Standards (the standard) have been developed to facilitate implementation and cost sharing of conservation methods and technologies. NRCS will review technologies that have the potential to be applied under these standards. It is not the intent of NRCS to provide approval or disapproval of technology for a specific cost-share application. The decision as to whether or not to implement and provide cost share funds for measures and technologies rests with the State Conservationists and their technical and program staff members. Technology Review Criteria will be prepared by the technology provider, **not** by NRCS staff, and will contain the following:

- A description of the technology (process, method, equipment, or proprietary item) or measure.
- An explanation of how this technology or measure will accomplish one or more of the purposes of an existing standard.
- Process monitoring and control system requirements, if applicable.
- An example of warranties on all construction materials, equipment, or applied processes not covered by other NRCS Conservation Practice standards.
- An operation and maintenance plan that includes performance monitoring requirements and a replacement schedule for components that will not last for the practice lifespan.
- Estimated installation and annual operation cost.
- Contact information for individuals that have implemented this technology successfully.
- Independent, verifiable data demonstrating results for the use of the measure, equipment, facility or process in other similar situations and locations.
- The credentials of the individual collecting the data along with a disclaimer of any conflict of interest on the part of the individual.
- Contact information for the technology provider.