# Project Narrative

**Applicant ID:**

**Limit document to 10 pages total**. Century Gothic font size 12, 1-inch margins, and single-spaced. Do not change order of sections, margins, font size, or spacing.

 (DELETE ALL BLUE TEXT PRIOR TO SUBMITTAL)

## Project Type:

Please select one from below:

## [ ]  Type A

## [ ]  Type B

## 1. Project Justification

1.1 Describe cropping and management histories in the past 1-3 years of the farmland (fields and APNs) where the project is to be demonstrated.

Provide the history and background of the field(s)/APN(s). Explain why/if current management practices do not support production sustainability, possible impacts on environment and climate, and the need to switch to conservation management practices.

­­­­1.2 Provide a rationale for the cropping system selected for the project including crops to be grown in the coming three years if they are different from the crops that are currently grown.

Describe why demonstration of proposed eligible agricultural management practices in the selected cropping system is important. This includes but is not limited to:

1. Percent land acreage of crop production throughout the state.
2. Needs to improve soil health.
3. Impacts on greenhouse gases emissions and/or other environmental issues.

1.3 Describe the geographic location and possible scale (local, regional or statewide) at which the project anticipates influencing farmers and ranchers to adopt the demonstrated agricultural management practices.

Describe how the project location was chosen and the potential to demonstrate the practices to a broad audience to achieve wide adoption of the demonstrated practice(s).

1.4 Describe the agronomic, environmental, or other impacts the project anticipates having on a local, regional, and/or statewide basis.

## 2. Experimental Design

Table 1. Project design – detailed information

Fill information in the table below. In the column “Acres to be implemented”, enter acreage for each practice/treatment (T) field/plot and number of replicates. Clearly indicate if acreage is different for each field or plot (e.g., 1.0 ac x 3 plots, or 1.0 ac + 1.5ac + 2.0ac). Do the same for control field/plot (C).

An example of a project with cover crop treatment and control is provided in the table below. In this example, each field/plot is one acre and replicated three times.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name of Practice** | **Identified as T or C** | **Acres to be implemented** | **APN #** | **Field/Plot #** | **Location** |
| Cover Crop | T | 1.0 ac x 3 plots = 3.0 ac | 1234564100 | A, C, E | 2800 Gateway Oaks Dr., Sacramento |
| Fallow | C | 1.0 ac x 3 plots = 3.0 ac | 1234564100 | B, D, F | Same as above |

Multiple practices on the same field or plot must be identified clearly and be in separate rows in the table.

Add rows as needed.

**3. Practice Implementation**

Describe the proposed approach, procedure, or methodology on how to implement the practices in the project and how to make the implementation suitable and feasible to the cropping system.

List any potential challenges the applicant foresees to practice implementation and provide plans to avoid or overcome them. CDFA encourages a realistic and pragmatic approach to the extent feasible.

**4. Data Collection and Analysis**

Outline the methods for monitoring soil organic matter content and soil water parameters (both Type A and type B projects), GHG emission measurements along with crop yield data collection and/or data collection for economic analysis (all Type A projects), other soil health indicators, data on ecosystem impacts and co-benefits (optional for Type A and type B projects).

Provide:

* Names of parameters and field(s) where data will be collected. Be consistent with Experimental Design.
* Methodology and/or equipment for sample collection, including but not limited to field layout and tools to be used.
* Sampling time and frequency. A justification must be provided explaining the selected choices and why they are important for representative and scientifically sound data collection.
* Methods and/or equipment for sample transportation, storage, and analysis.

**5. Data analysis, Interpretation and Reporting**

Outline methods to be used for data analysis and interpretation and reasons for the methods selected. Provide a detailed schedule for data reporting to CDFA in the grant term.

Provide:

* Methods of data analysis and interpretation
* Frequency for individual data parameters to be reported to CDFA.
	+ CDFA requires grant recipients to present project data as much as possible in their annual reports which will be included in the annual meeting proceedings.
	+ All data parameters must be reported to CDFA in the final reporting documents.
	+ Additional data reporting is required for all Demo Type A projects as a part of the final reporting documents.