

California Department of Food and Agriculture | Office of Environmental Farming and Innovation

# 2024 Dairy and Livestock Manure Methane Reduction Programs

Application Assistance Workshop 1

August 7, 2024



# Workshop Format

**1:05 – 2:00 PM:** Alternative Manure Management Program

**2:00 – 2:10 PM:** Online Application Portal Demo

**2:10 – 3:05 PM:** Dairy Plus Program

**3:05 – 4:00 PM:** Dairy Digester Research and Development Program

Agenda for Workshop 1 and 2 on program webpages.



## 2024 Alternative Manure Management Program (AMMP), Dairy Plus Program, Dairy Digester Research and Development Program (DDRDP)

### Application Assistance Workshop 1

CDFA will host two webinars to provide information on its dairy and livestock methane reduction incentive programs requirements and application processes. Interested stakeholders and members of the public are encouraged to register in advance. After registering, you will receive a confirmation email containing information about joining the webinar.

Wednesday, August 7, 2024

1:00 PM – 4:00 PM PT

Registration Link:

[https://us02web.zoom.us/webinar/register/WN\\_A6Ga6nETRUmIu28pAqj-Lg](https://us02web.zoom.us/webinar/register/WN_A6Ga6nETRUmIu28pAqj-Lg)

#### Agenda:

**1:00 – 1:05 PM: Welcome and Introductions**

**1:05 – 2:00 PM: Alternative Manure Management Program**

1. Program Overview
2. 2024 Request for Grant Applications
  - Funding and Duration
  - Solicitation Process and Timeline
  - Eligibility, Incentivized Practices, and Exclusions
  - Program Requirements
  - How to Apply and Application Sections
  - Review and Scoring
3. Benefits Calculator Tool
4. Applicant Tools and Resources
5. Q&A

**2:00 – 2:10 PM: Online Application Portal Demo**

**2:10 – 3:05 PM: Dairy Plus Program**

1. Program Overview
2. 2024 Request for Grant Applications
  - Funding and Duration
  - Eligibility and Exclusions

California Department of Food and Agriculture | Office of Environmental Farming and Innovation

# 2024 Alternative Manure Management Program

Application Assistance Workshop

August 7, 2024



**Alternative Manure Management Program**

CDFA OFFICE OF ENVIRONMENTAL FARMING & INNOVATION



# Outline

- About the program
- Current solicitation
  - Funding and duration
  - Timeline
  - Solicitation process
  - Eligibility and exclusions
  - Program requirements
  - How to apply and application sections
  - Review and Scoring
- Benefits Calculator Tool
- Tools and resources
- Questions



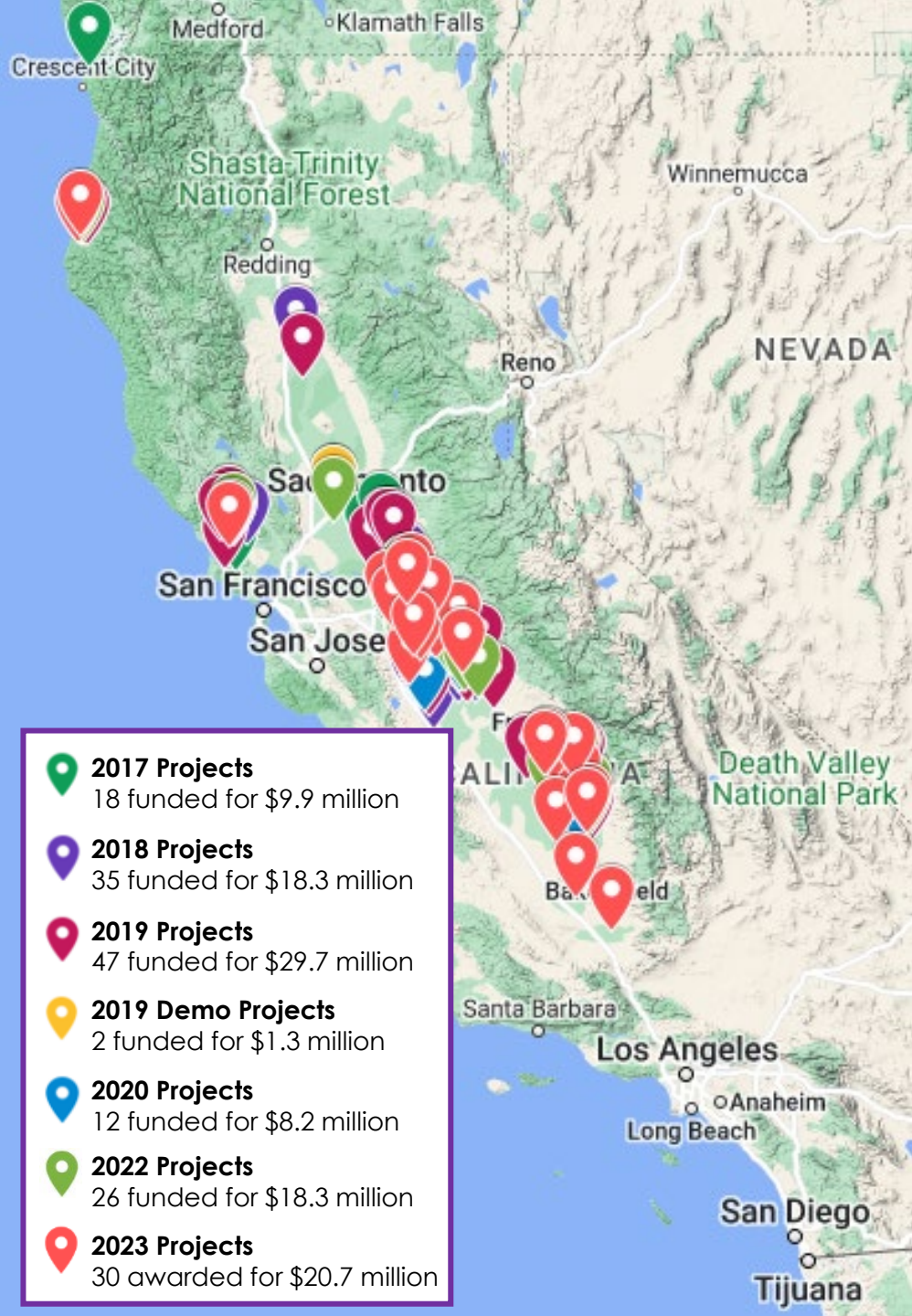


# Program Overview



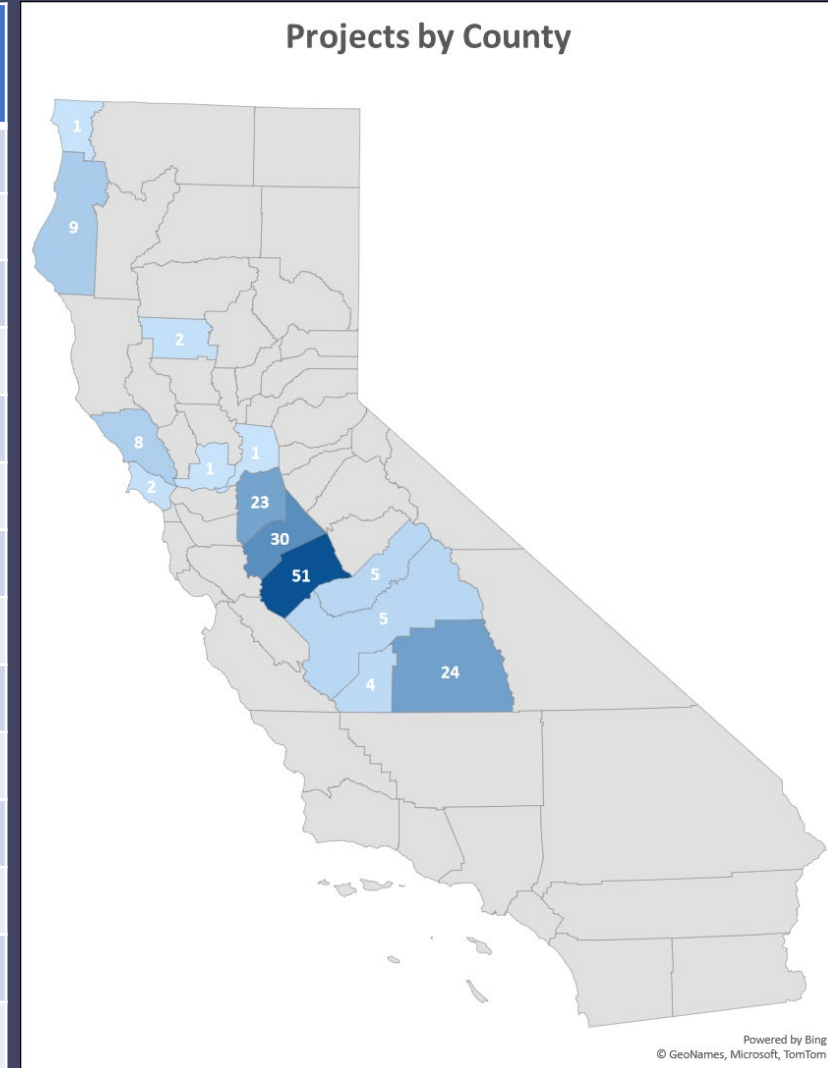
- What is the Alternative Manure Management Program (AMMP)?
  - Competitive grant program administered by CDFA
  - Provide financial assistance to CA dairy and livestock operators for the implementation of non-digester manure management practices that result in methane emission reductions
- Since 2017, 6 rounds completed
  - 168 incentive and 2 demonstration projects
  - \$106 million
  - 1.44 MMTCO<sub>2</sub>e over 5 years

# AMMP Projects 2017-2023



- 📍 **2017 Projects**  
18 funded for \$9.9 million
- 📍 **2018 Projects**  
35 funded for \$18.3 million
- 📍 **2019 Projects**  
47 funded for \$29.7 million
- 📍 **2019 Demo Projects**  
2 funded for \$1.3 million
- 📍 **2020 Projects**  
12 funded for \$8.2 million
- 📍 **2022 Projects**  
26 funded for \$18.3 million
- 📍 **2023 Projects**  
30 awarded for \$20.7 million

County	Number of Incentive Projects
Del Norte	1
Fresno	5
Glenn	2
Humboldt	9
Kings	4
Madera	5
Marin	2
Merced	51
Sacramento	1
San Joaquin	23
Solano	1
Sonoma	8
Stanislaus	30
Tulare	24





# Current Solicitation



## FUNDING

- Current AMMP funding from two appropriations
  - FY 22-23 GGRF Funds (\$20 million, split between 2023 and 2024 grant rounds)
  - FY 24-25 GGRF Funds (not “new” – \$17 million transferred from FY 22-23 General Funds for livestock methane reduction, split by AMMP and DDRDP)
- Award amount: **\$17.4 million available in 2024 for awards**
- Contingent: remaining \$7 million of transferred FY 22-23 funds allocated next summer; **additional ~\$3.5 million** to be applied to 2024 AMMP
- Up to \$750,000 per project, matching funds encouraged but not required



# Current Solicitation

## DURATION AND TIMELINE

- Maximum project duration 30 months

Event	Time Frame*
Application Period Opens	July 23, 2024
CDFA Application Assistance Workshops	August 7 and August 13, 2024
Q&A Period 1 Q&A Period 2 Q&A Period 3	Posting August 22, 2024 Posting September 12, 2024 Posting October 3, 2024
Grant Applications Due	<b>October 18, 2024</b>
Review Process	October 2024 – January 2025
Award Announcement	February – March 2025
Anticipated Project Start	June 1, 2025

\*Subject to change

**Project and application prep: recommend starting early!**

- Explore which eligible practice type works best for an operation
- Talk to potential contractors or vendors and getting bids/quotes
- Talk to your local county, air and/or water agencies about potential permit requirements



Application Period  
July 23 – October 18, 2024



Applications Submitted (Online Platform)



Administrative Review



Financial and Technical Review



Project begins



Grant agreement executed



Pre-project consultations



Successful Applicants Notified

Unsuccessful Applicants Notified, Feedback Provided (within 90 days)

# Solicitation and Review Process



# Summary of Changes from 2023

## RGA/Solicitation

- Pasture-based management set-aside
- First-time applicant additional points
- Notification & feedback – 60 → 90 days
- CEQA & applicable permitting – 6 → 18 mo

## Benefits Calculator

- Minor updates only to incorporate impacts for natural-gas fueled dryer use selection

## Online Application

- More questions on applicant name/organization
- Updated file naming convention recommendation

## Related Opportunities

- Availability of Dairy Plus (2<sup>nd</sup> round) - eligible applicants/project types now include in-progress AMMP in addition to past completed AMMP
- Past AMMP can apply for DDRDP



# Eligibility

- California farmers, ranchers and California Native American Tribes are eligible to apply.
- The project site must be located on a commercial California dairy or livestock operation.
- Current baseline manure management practice must include the anaerobic decomposition of volatile solids stored in lagoon or other predominantly liquid anaerobic environment.
- A group of dairy or livestock operations can propose to develop a centralized or cluster-type project (e.g., a centralized composting facility).
- Applicant may submit more than one grant application, but each must represent a unique project site (i.e., dairy or livestock operation)
- Operations with existing dairy digesters NOT funded by CDFA's Dairy Digester Research & Development Program (DDRDP) may apply to reduce methane emissions from manure NOT being treated in the digester system.
- Projects must include **at least one eligible practice** that reduces baseline emissions.

# Eligible Practices

## 1. Pasture-based management

- Includes:
- Conversion of a non-pasture dairy or livestock operation to pasture-based management, and/or
  - Increasing the amount of time livestock spend at pasture at an existing pasture operation

## 2. Alternative manure treatment and storage

- Includes:
- Compost bedded pack barn that composts manure in situ (*RGA has links to documents on design and maintenance*)
  - Slatted floor pit storage, cleaned out at least monthly

## 3. Solid separation (+ manure treatment and/or storage)

- Technologies include:
- Weeping wall (min 2 cells)
  - Stationary screen
  - Vibrating screen
  - Screw press
  - Centrifuge
  - Roller drum
  - Belt press/screen
  - Advanced solid-liquid separation assisted by flocculants and/or bead filters\*
  - Vermifiltration\*

## 4. Conversion from flush to scrape (+ manure treatment and/or storage)

- Full or partial scrape system
- Full or partial vacuum

\*Must be implemented in conjunction with an existing or new primary mechanical separator

## Manure treatment, drying and/or storage

- Open solar drying
- Closed solar drying
- Forced evaporation with natural-gas fueled dryers
- Daily spread
- Solid storage
- Composting in vessel
- Composting in aerated static pile
- Composting in intensive or passive windrows
- Composting in aerated vermifiltration system

# Exclusions

- Projects that propose to switch existing management practices to those that increase baseline GHG emissions (e.g., from dry scrape to flush lagoon systems)
- Repair of existing defunct or non-functioning equipment
- Duplicate equipment or activities that will receive funding from a different state or federal funding source
- Treatment of manure digestate (digested manure material resulting from an anaerobic digestion process)
- Operations that have already installed a digester system funded by DDRDP, or operations that previously received AMMP funding
- Previous AMMP recipients with expired or failed projects may not reapply for 3 years after the time the project was closed out

# Other Requirements

- Grant recipients expected to comply with all applicable permitting within 18 months of execution of the grant agreement
- Projects must use commercially available technologies
- Nutrient management technologies may be proposed as part of project, but only if in addition to AMMP-eligible methane reduction practices (not standalone)
- Must use latest Quantification Methodology and Benefits Calculator Tool to estimate GHG emissions reductions
- Adhere to allowable/unallowable cost guidance
- Post-project annual reporting



# How to Apply

Application portal link available on AMMP webpage:

<https://www.gotomygrants.com/Public/Opportunities/Details/20347287-0b03-4c3e-a755-6e0a46c44142>

Log In

## 2024 Alternative Manure Management Program

[Print](#) [Help](#) [Download](#) [Save](#) [Apply](#)

### Opportunity Information

Title	2024 Alternative Manure Management Program
Description	The California Department of Food and Agriculture's Alternative Manure Management Program (AMMP) awards competitive grants to California dairy and livestock operations for the implementation of non-digester manure management practices and technologies that result in long-term methane emission reductions and maximize environmental benefits.
Awarding Agency Name	California Department of Food and Agriculture
Agency Contact Name	Alternative Manure Management Program
Agency Contact Email	cdfa.oefi_ammp_tech@cdfa.ca.gov
Fund Activity Categories	Agriculture
Departments	Office of Environmental Farming and Innovation
Public Link	<a href="https://www.gotomygrants.com/Public/Opportunities/Details/20347287-0b03-4c3e-a755-6e0a46c44142">https://www.gotomygrants.com/Public/Opportunities/Details/20347287-0b03-4c3e-a755-6e0a46c44142</a>
Is Published	Yes

### Funding Information

AmpliFund

## Login

Email

Password  [show](#)

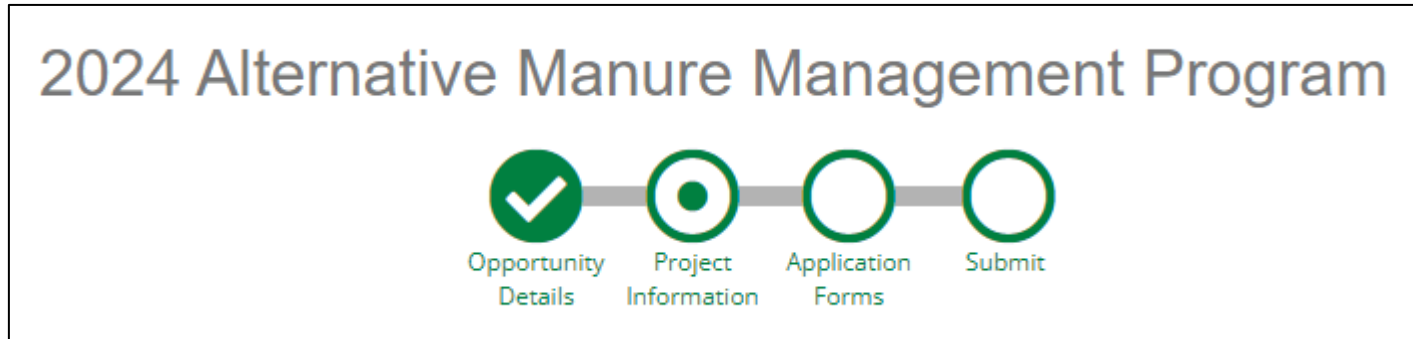
Remember my email [Forgot your password?](#)

[Log in with SSO](#)

[Register](#) [Login](#)

# Application Components

- ☑ Online application



1. Project Information: basic information page in all Amplifund grant applications
2. Application Forms: the main AMMP (+/- Dairy Plus) application
  - Applicant and Project Location information
  - 5 main AMMP sections to complete – includes both within-application question fields and places for attachments
  - 1 optional section for additional info if needed

## References!

RGA “Grant Application: Sections and Attachments” section;  
[AMMP Questionnaire Preview](#)

# Application Sections and Attachments

## Section I: Project Plan and Long-Term Viability

**Questions:** primary (and secondary if any) manure management practice being proposed, anticipated start and end dates for project

### **Attachments:**

1- Project Narrative Template (required)

- History and background of dairy, current management practices, project description, project maintenance

*1.1 – Site plan, project design documents, schematic diagrams, etc. (strongly encouraged!)*

*1.2 – Letter of agreement from landowner*

*1.3 – For centralized projects, letter(s) of commitment from participating operations*

2 – Work Plan Template (required)

- Table of tasks/activities required to accomplish objectives identified in project narrative and anticipated dates for implementation of each

Operation Name: [REDACTED]

Complete all template sections below. **Guidance for the information to include in each section is detailed in the Instructions following the template; these are also posted on the AMMP webpage.**

## I. Project Description

### Operation Background

### Project Site Location

Address or nearest cross street:	
City, Zip Code:	
County:	
Project herd size:	

Project Type (e.g., conversion to pasture, conversion from flush to scrape, etc.)

### Equipment

### Site Control

### Other

## II. Project Oversight

### General Instructions:

- Length: Please limit the Project Narrative to 10 pages (suggestion: Project Description - 6 pages max; Project Oversight - 2 pages max; Long-Term Viability of Project - 2 pages max).
- Format: Arial font size 12, 1-inch margins, single-spaced.
- Complete all sections of the template, making sure to review and address the section prompts as applicable.

### Project Description Section Guidance:

This section contains subsections for Operation Background, Project Site Location, Project Type, Equipment, Site Control, and Other.

#### Operation Background

- Provide the details of the history and background of the dairy and/or livestock operation.
- Discuss herd size and breed, including average number of lactating cows (in freestalls and in open lot corrals), dry cows, replacement calves, replacement heifers, and/or other livestock at your operation over the last 12 months.
- Within the herd, identify which livestock will be included in the project boundary (this includes only the animals for which manure management will be affected by the AMMP project).
- Explain your current management practices in detail, including a description of lagoon(s) size (depth and volume) if currently using lagoon storage, parlor water use, bedding type, method and frequency of manure collection including percent of manure collected from each production group (i.e., lactating cows, heifers etc.). If there is an existing mechanical separator on site, describe it and its use, such as age and type of separator, frequency of use, existing manure flow through the separator, and estimated efficiency of solids removal.

#### Project Site Location

- Complete the table with address, city, zip code, and County for the project site; include project herd size (only the animals for which manure management will be affected by the AMMP project).

#### Project Type

- Provide details of the type of alternative manure management project planned, and the steps needed to implement it.
- Provide details of the quantity, location, and source of manure to be managed at the operation and specifically in the proposed project. For compost bedded pack barn projects, discuss your design and management considerations for successful composting and to avoid negative animal health outcomes.
- To support this narrative, project design documents, including schematics, volatile solid removal efficacy, figures, graphics and plans, should be included as part of the grant application. Consider including a schematic diagram, including aerial images (e.g.,

Screenshots for visual only; may not represent final versions





# Application Sections and Attachments

## Section II: Project Budget & Financials

**Questions:** grant amount requested, matching funds if any; identification of primary, secondary, tertiary expense type making up budget (ex. installation of manure management equip or dairy facility improvements, procurement of separation or scrape equip)

### **Attachments:**

#### 3 – Budget Worksheet Template (required)

- Categorized spreadsheet for accounting of costs, work hours, equipment associated with activities necessary to complete project

#### 3.1 – *Bids or quotes to support budget costs (strongly encouraged!)*



Project cost planning.

#### 4 – Financials (required)

- Documents to help demonstrate the organization's financial strength (e.g., CPA Auditor's report/review/compilation, tax returns, financing letters for project)



# Application Sections and Attachments

## Section III: Estimated GHG Emissions Reduction and Environmental Benefits

**Questions:** Benefits calculator extracted info on livestock types and numbers included in project boundary, GHG reduction summary data, co-benefits summary data

### **Attachments:**

5 – Benefits Calculator Tool (required)

- Estimates project GHG reductions and co-benefits
- Make sure to use newest version (file dated 7-18-2024), posted on CCI Quantification page ([www.arb.ca.gov/cci-resources](http://www.arb.ca.gov/cci-resources))

5.1 – *Explanation of GHG calculations (strongly encouraged!)*

- Support for values input in Benefits Calculator (e.g., animal numbers, milk production/characteristics, electricity and diesel use)

6 – Environmental Co-Benefits Template (required)

# Natural Resources and Waste Diversion

[www.arb.ca.gov/cci-resources](http://www.arb.ca.gov/cci-resources)

Agency	Project Type	Quantification Methodology (QM) and Calculator Tool	Priority Population Benefit Criteria Table	Reporting Template
California Air Resources Board	Smoke Monitoring	-	-	-
California Conservation Corps	Riparian Restoration Projects	Riparian Restoration QM Calculator Tool	Job Training Workforce Development	-
California Department of Fish and Wildlife	Wetland Restoration	Final Revised Land Restoration Program 18-19 QM Final Revised Land Restoration 18-19 Tool	Land Restoration and Forest Health Draft Land Restoration Forest Health Revised Update 2024* Land Conservation Draft Land Conservation Revised Update 2024*	-
California Department of Food and Agriculture	Alternative Manure Management Practices	Alternative Manure Management Program QM Calculator Tool	Waste Diversion and Utilization Draft Waste Diversion and Utilization Revised Update 2024*	-

**California Air Resources Board**  
**Benefits Calculator Tool for the Alternative Manure Management Program**  
**California Climate Investments**

**Note to applicants:**  
 A step-by-step user guide, including project examples, for this Benefits Calculator Tool is available here.

AMMP applicants must enter the applicable information in the table below before proceeding with the project-specific data on the Inputs tab.

Project Name:		Required
Application ID:		Required
Contact Name:		Required
Contact Phone Number:		Required
Contact Email:		Required
Date Calculator Completed:		Required
Total AMMP Funds Requested (\$):		Required
Matched Funds (\$):		Required
Total Funds (\$):	\$	-

**Key for color-coded fields:**

- Green: Required input field
- Blue: Optional input field\*
- Grey: Output field / not modifiable
- Yellow: Helpful hints / important tips
- Black: Not applicable

\*See "Documentation" tab for additional information

Navigation tabs: Read Me, Definitions, Project Info, Project Data Inputs, GHG Summary, Co-benefits Summary, Documentation, Fo ...

Screenshots for visual only; may not represent final versions

2024 Alternative Manure Management Program  
**Attachment 6: Environmental Co-Benefits Template**

**Operation Name:** [REDACTED]

Please respond to the following questions, and limit document length to 2 pages.

1. Describe how the project will include additional protection to air and water quality beyond requirements in the project's regional air/water quality permits. Provide a description of the environmental benefits anticipated from your project supported by appropriate evaluations and citations from published literature to support your claims. Examples include, but are not limited to water conservation measures, development of value-added products such as fertilizers and soil amendments that provide more stable forms of nitrogen/minimize nitrate leaching to groundwater, changes to operation's Nutrient Management Plan and/or Waste Diversion Plan that enhance water quality protection and pump electrification. If the project has a Comprehensive Nutrient Management Plan (CNMP) prepared in collaboration with USDA-NRCS staff, resource conservation goals discussed in the CNMP may be included in this section.
2. Projects may propose to include nutrient management technologies, such as those to help manage excess nitrogen, in addition to the eligible methane reduction technologies under the AMMP (implementation of standalone nutrient management technology is not an eligible project type). Is nutrient management technology beyond the proposed AMMP practice and manure treatment/storage approach included as part of the project? If yes, how will it improve nutrient management?
3. If compost is expected to be produced, how will it be used and what is the anticipated benefit? Will it reduce use of other fertilizers? Will it be transported/exported? Has anticipated change in transportation miles (associated with compost production or use) been considered?

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# Application Sections and Attachments

## Section IV: Project Readiness

**Questions:** none

**Attachments:**

7 – Project Readiness (required)

7.1 – *Permitting Documents*

- Supporting documentation such as permit applications, already issued permits for project or existing permit to operate, communication with agency if permit not needed

## Section V: Benefits to Priority Populations

**Questions:** direct reflection of [CCI Waste Diversion and Utilization project evaluation criteria for providing benefits to priority populations](#)

**Attachments:**

8, 8.1 – *Supporting documentation, CARB Community Engagement Questionnaire*

- Community outreach or engagement conducted, identifying needs for priority populations, job or training program agreements



Operation Name:

**Instructions:** Using any permits or supporting documentation obtained, provide answers to the following questions.

**CEQA**

1. Is the project compliant with the California Environmental Quality Act (CEQA)?

Yes  or No

If yes, upload a copy of the Notice of Determination (NOD) or correspondence from the lead agency confirming CEQA is not required for the project in Attachment 7.1: Permitting Documents. Include any notes below, if needed.

If no, please explain where the project is in the CEQA process and steps project will take to achieve compliance:

**Conditional Use Permit**

2. Is a Conditional Use Permit (CUP) required for this project?

Yes  or No

If yes, provide a copy if already obtained, or explain where the project is in the process of obtaining one and/or steps that will be taken to obtain the permit.

If no, provide a brief explanation:

**Air Quality Permits**

3. In which Air Quality Management District (AQMD) or Air Pollution Control District (APCD) is the project located?

4. Is an Authority to Construct (ATC) required for this project?

Yes  or No

**Evaluation Criteria for Providing Benefits To Priority Populations  
WASTE DIVERSION AND UTILIZATION**

**Project Type:** Projects will divert waste from landfills, forestry, or agricultural operations to other productive uses (e.g., composting operations, dairy digesters, alternative manure management, generation of biomass energy or fuel, anaerobic digestion, and recycling).

Projects must satisfy the applicable criteria through Step 3 to be considered to provide direct, meaningful, and assured benefits to priority populations and count toward statutory investment minimums.

**Step 1 – Identify the Priority Population(s).**<sup>1</sup> Evaluate the project against each of the following criteria. Check all boxes that apply.

**Note:** For this project type, the majority of the project must be located within a disadvantaged or low-income community census tract. For projects that divert waste from landfills, the project location may be determined by the source of the majority of the waste. For projects that provide food or textiles, the project location may be determined by the residence of the direct recipient.

- A. Is the project located within the boundaries of a **disadvantaged community census tract**?
- B. Is the project located within the boundaries of a **low-income community census tract**?
- C. Is the project located outside of a **disadvantaged community census tract** but within a **1/2-mile of a disadvantaged community census tract**?
- D. Is the project located within a **low-income household**?

If a project does not meet at least one of the criteria above, it does not count toward statutory investment minimums. If the project meets at least one criterion, it counts toward statutory investment minimums. **Step 2.**

**Section V - Benefits to Priority Populations**

To evaluate whether a project meets criteria for providing direct, meaningful, and assured benefits to priority populations, please select a "yes" or "no" response for the questions below. These steps and questions directly reflect the Waste Diversion and Utilization Benefit Criteria Table. For more information, please refer to CCI Quantification, Benefits, and Reporting Materials. Provide documentation to justify an affirmative answer to the questions and criteria below as Attachment 8: Supporting Documentation for Benefits to Priority Populations, if applicable.

**NOTE:** Projects are not required to provide benefits to priority populations. However, projects that are determined to be providing benefits based on the questions in this section are eligible to receive up to 5 additional points during the review process. To be eligible, you must respond to all questions completely.

**Step 1 – Identify the Priority Population(s).**

Evaluate the project against each of the following criteria. Use the map provided on the California Air Resources Board website to determine the project location. Select "yes" for all questions that apply.

Is the project located within the boundaries of a disadvantaged community census tract? \*

Select an item...

Is the project located within the boundaries of a low-income community census tract? \*

Select an item...

Is the project located outside of a disadvantaged community, but within 1/2-mile of a disadvantaged community and within a low-income community census tract? \*

Select an item...

Is the project located within the boundaries of a low-income household? \*

Select an item...

**AFTER RESPONDING TO STEP 1, PLEASE READ:** If a project does not meet at least one of the qualifying criteria in Step 1, no further evaluation is needed. Please select N/A in the questions for Step 2 and 3. If the project meets at least one Step 1 criterion (i.e., at least one Yes response was selected), continue the evaluation in Step 2.

Screenshots for visual only; may not represent final versions



# Application Sections and Attachments

## Section VI: Additional Information (Optional)

**Questions:** clear description of what additional materials/information included, which sections of application are supported

**Attachments:**

9 – Additional information

A note on attachment file naming

The preferred format for each attachment is listed by each file upload location in the application, and helps identify attachment number, attachment name, and project.

Attachment 1: Project Narrative Template (required; name file using format "Att1\_Project Narrative\_Name of Dairy or Livestock Operation"; upload as Microsoft Word File) \*

Choose File

# Scoring

## SCORING OVERVIEW – 100 POINTS TOTAL

Project Plan & Long-Term Viability	25 Points
Budget & Financials	15 Points
Estimated GHG Reduction	35 Points
Environmental Co-Benefits	10 Points
Project Readiness	10 Points
Benefits to Priority Populations	5 Points
<u>Additional considerations</u>	
First-time applicant	5 Points

## Appendix E: Detailed Scoring Criteria

SCORING CRITERIA	MAXIMUM POINTS
<b>PROJECT PLAN AND LONG-TERM VIABILITY</b>	<b>25</b>
<p>Addressed all requirements of Project Plan and Long-Term Viability section (Narrative, Work Plan, supporting materials) including, but not limited to:</p> <p><u>Project Description</u></p> <ul style="list-style-type: none"> <li>a. Current and proposed manure management practices are clear and well described. Description included tons of material handled through the proposed management practice.</li> <li>b. Proposed technologies have a track record of success and are commercially available in California.</li> <li>c. The proposed practice appears appropriate for the operation's facilities and manure management and should be feasible to implement successfully.</li> <li>d. Documentation that demonstrates control of the dairy/livestock operation site provided (if applicable).</li> <li>e. Guarantees that an adequate amount of feedstock (e.g., material to be composted) will be provided to make the project feasible by the time the project is operational (if applicable).</li> </ul> <p><u>Project Oversight and Long-Term Viability</u></p> <ul style="list-style-type: none"> <li>f. Long term operations and maintenance plan included. Ongoing costs for maintenance or consumable media use (e.g., polymer) have been considered by applicant.</li> <li>g. The system is likely to be in place and operational for at least 5 years.</li> <li>h. Demonstrated that the applicant (including its contractors) and cooperating organizations have sufficient staff resources, technical expertise, and experience to successfully complete the proposed project, and maintain its successful operation past the grant term.</li> </ul> <p><u>Project Work Plan</u></p> <ul style="list-style-type: none"> <li>i. Specific list of all tasks needed to complete project using the Work Plan template provided.</li> <li>j. Detailed Work Plan clearly and concisely described the tasks and</li> </ul>	

Details on what is considered for each section in RGA: Appendix E: Detailed Scoring Criteria

# Successful Elements and Tips

1

**Consistency** throughout application

2

**Detail and clarity** when describing existing operation and management, and what will change in proposed

3

**Supporting documentation and data**

4

**Operation-specific, unique, concrete examples**

5

**Organization** of file names and proposal documents

6

**Early submission if possible!**

# Benefits Calculator Tool

- Applicants must use the California Air Resource Board's (CARB) AMMP Benefits Calculator Tool to estimate avoided methane emissions from anaerobic manure decomposition
- For specific questions regarding the Benefits Calculator Tool, please contact [GGRFProgram@arb.ca.gov](mailto:GGRFProgram@arb.ca.gov)
- The Benefits Calculator Tool is available at: [www.arb.ca.gov/cci-resources](http://www.arb.ca.gov/cci-resources)

**California Air Resources Board**  
**Benefits Calculator Tool for the**  
**Alternative Manure Management Program**  
**California Climate Investments**

**Note to applicants:**  
 A step-by-step user guide, including project examples, for this Benefits Calculator Tool is available [here](#).

Project location (county)		Required
	<b>Livestock Category</b>	<b>Animal Population</b>
Livestock population by category. Note: Only livestock categories for which manure management will be affected in some way by the AMMP projected should be included. Other livestock categories that are managed in other areas and for which manure management practices will not change may be excluded.		Required
		Optional
		Optional
		Optional
<b>Dairy Applicant Information</b>		
Milk Fat (%)		Required
Milk True Protein (%)		Required
Milk Produced (lbs/cow/day)		Required
	<b>Baseline manure management practices (current practices on the dairy or livestock operation)</b>	<b>Manure management practices after implementation of proposed AMMP project</b>
New practice to be adopted		Required
Manure collection system		Required
For partial scrape systems, enter the percentage of manure that is flushed on annual basis		
Number of months per year livestock spend at pasture (if any)		Optional
Number of hours per day livestock spend at pasture (if any)		Optional
Primary Stage Solid Separation		Required
Second Stage Solid Separation (if any)		Optional
Storage/treatment practice for separated/scraped solids		Required
Is a flocculant used to increase separation efficiency?		Required
Electricity consumption associated with manure management (MWh/year)		Required
Diesel fuel consumption associated with manure		Required

Navigation: Read Me | Definitions | Project Info | **Project Data Inputs** | GHG Summary | Co-benefits Summary | Documentation | For Technical Reviewers

# Benefits Calculator Tool

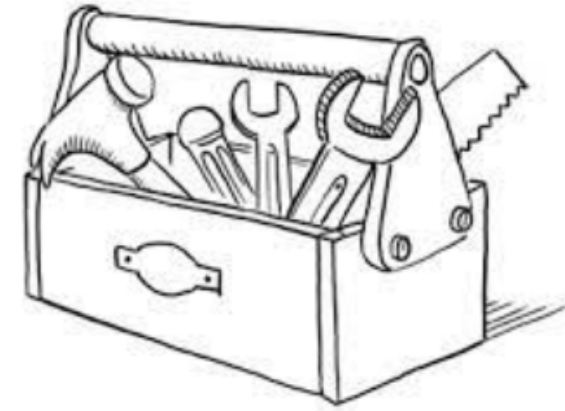
## Summary of recent updates

- 2024: Back-end data and calculations only – account for impacts of manure treatment, drying and/or storage selection “forced evaporation with natural-gas fueled dryers”; updated fuel prices





# Tools and Resources



## Solicitation/Application

- Request for Grant Applications
- Application Checklist
- FAQs document
- Q&A periods (3 rounds, general program/app process questions)

Questions Received by:	Responses Posted by:
August 15, 2024	August 22, 2024
September 5, 2024	September 12, 2024
September 26, 2024	October 3, 2024

- CDFA application workshops
- Benefits Calculator: QM, User Guide
- Project Planning/Map tool
- **Technical assistance** – links to providers on website

### AMMP 2024 Grant Application Checklist

*This checklist is designed as a tool to assist potential applicants. Use is not required, and it is not intended to take the place of any official application instruction or program guidance. Applicants will be responsible for the completeness and accuracy of their submitted application.*

#### Electronic Application

- Created account in the Online Application Platform ([Amplifund Applicant Portal User Guide](#))
- Filled out Online Application pages and “Marked as Complete”

*Helpful notes: progress may be saved in draft form; save frequently! Once you have started an application, you can work on the Project Information and Application Forms pages in any order. Required fields are marked with an asterisk \*. All required fields must be completed in order for a page to be Marked as Complete*

### Technical Assistance Resources

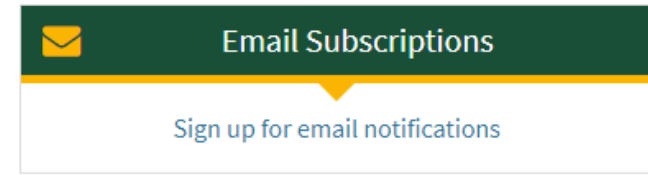
Technical assistance is available free of cost to AMMP applicants and grant awardees. Contact information for these providers can be found in the resources below.

- Technical Assistance Providers (TAPs) – CDFA has funded organizations around the state to provide free one-on-one assistance to dairy and livestock operators interested in applying for the AMMP and to assist grant awardees with project implementation.
- UC ANR Climate Smart Agriculture Community Education Specialists – CDFA has partnered with the University of California, Division of Agriculture and Natural Resources to offer Climate Smart Agriculture technical assistance to dairy and livestock operators interested in applying for the AMMP and to assist grant awardees with project implementation.

# Tools and Resources

## General/Program

- Main AMMP page: <https://www.cdffa.ca.gov/oefi/AMMP/>
- Outreach and Program Awareness
  - AMMP Flyers – new options available!
    - Farmer and Rancher facing: [https://www.cdffa.ca.gov/oefi/ammp/docs/AMMP\\_flyer\\_fr.pdf](https://www.cdffa.ca.gov/oefi/ammp/docs/AMMP_flyer_fr.pdf)
    - Policymaker facing: [https://www.cdffa.ca.gov/oefi/ammp/docs/AMMP\\_flyer\\_leg.pdf](https://www.cdffa.ca.gov/oefi/ammp/docs/AMMP_flyer_leg.pdf)
  - Email subscription list
  - CCI page and project profiles: <https://www.caclimateinvestments.ca.gov/alternative-manure>
  - AMMP demo project – manure management series webinars and one-pagers: <https://cdqap.org/ammp-outreach-project/>



**AMMP TESTIMONIAL** 



**Recipient Testimony**

This project has helped the dairy achieve several benefits including **reducing methane emissions, reducing build-up of manure solids in their pond system, reducing commercial fertilizer use, and improving their ability to evenly distribute the manure nutrients on their fields.** The Zuppan's were very happy participating in AMMP and receiving a grant, saying they "simply couldn't survive without it."

- Zuppan Dairy, 2018 AMMP Project



**Benefits of participating in AMMP**

AMMP projects have many potential co-benefits outside of reducing greenhouse gas emissions, including:

- Generation of value-added products such as compost
- Reduced odors and flies
- Increased water use efficiency
- Improved wastewater storage capacity and reduced frequency of clean out
- Improved nutrient management and manure recycling as bedding or fertilizer
- Increased operation sustainability and climate resilience from facility improvements

**Interested in applying?**



Scan the QR Code to learn about AMMP and the Office of Environmental Farming & Innovation

April 2024 [cdffa.ca.gov/oefi](https://cdffa.ca.gov/oefi)

**Scrape/Vacuum Conversion**  
Self-Propelled Tanker With Windrow Drying or Composting

**What is it?** Scrape conversion with windrow drying or composting involves switching manure collection from flush to scrape or vacuum, followed by stacking the manure in windrows to dry passively or compost intensively (with further handling including regular turning and monitoring).

There are several options for scrape/vacuum equipment—chain-pulled scrapers, pull-type scrapers and vacuum tankers, and self-propelled vacuum tankers. This brochure discusses the self-propelled vacuum tanker, which requires the strongest concrete due to its loaded weight.

**How much does it cost?** Total project and Alternative Manure Management Program funding for five individual projects and estimated operation and maintenance (O & M) costs (2017-2020) are summarized:

Total project cost	\$750,000—835,271
Total AMMP funding	\$485,271—750,000
Average vacuum equipment cost	\$276,236
Estimated annual O&M cost	\$2,000-8,250

In addition to vacuum equipment, the cost of the whole project may include solid separation equipment, concrete, etc.



Funding provided by California Department of Food and Agriculture Contract Nos. 17-0750-000-SG and 19-0930-000-SO  
Use of these images is not meant as an endorsement of the products pictured.  
© 2021, updated April 2021





# AMMP Project Planning Tool

<https://replan-tool.org/ammp/>



RePlan: Regional Conservation and Development Planning Tool



## Welcome to the CDFA AMMP Project Planning Tool

The California Department of Food and Agriculture (CDFA) Alternative Manure Management Program (AMMP) provides financial incentives for the implementation of non-digester manure management practices on dairy and livestock operations in California, which will result in reduced greenhouse gas (GHG) emissions. This web application primarily provides tools for potential applicants to map out their project site's current practices and proposed alternative manure management practices which are supported by AMMP. The tool also assesses the proposed project's estimated GHG reductions (following the AMMP Quantification Methodology and accompanying Benefits Calculator Tool developed by the California Air Resources Board).

You will find it helpful to have certain information available about the dairy or livestock operation and proposed alternative manure management project in preparation to use this tool. This will allow you to most efficiently work through a complete project scenario. [View list of information you will need.](#)

**START** a session by clicking the Begin button below. You can then zoom to your project location by typing in an Address using the finder field or panning and zooming to your area of interest. You will then be able to describe and map your current manure management practices, and explore the benefits of one or more alternative manure management practices.

**SAVING and NAVIGATING:** if at any time you'd like to save your progress, you can click "Save URL" in the upper right hand corner. This will give you a unique link that will restore your saved progress at the point that link was created. To navigate, use the Back and Next buttons at the bottom of each screen in the tool – this will not clear your previous entries and work in a given session. Note: do not use your browser's back or refresh buttons, as this will result in the loss of your information.

**IF** you will be submitting an AMMP grant application using your selected alternative manure management proposal, a PDF report containing those project diagrams can be downloaded along with a partially populated Benefits Calculator Tool spreadsheet. The PDF report provides specific directions

Begin



## Alternative Manure Management Program

CDFA OFFICE OF ENVIRONMENTAL FARMING & INNOVATION



### Project Overview

basemap credit: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Facility boundary (approx 20.4 acres)

Project is located in Stanislaus County at approximately -120.89770° E, 37.43627° N.

**Benefits to Priority Populations:**  
Facility is not located in a community included under AB 1550 Low-income Communities or SB 535 Disadvantaged Communities.

### Proposed Manure Management Practices Diagram

**Legend:**

- Facility boundary
- Freestall barn
- Milking parlor
- Maternity/hospital barn
- Hay/commodity barn
- Other covered structure
- Feed storage area
- Open lot / Corral
- Processing/reception/manure pit
- Manure storage area
- Wastewater storage
- Other area
- Flush lane
- Sand trap / lane
- Scraped lane
- Flow direction (drainage)
- Solid separator (mechanical)
- Well

basemap credit: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Test project 1 (application #: 11133322)

Page 6 of 8



# Questions?

Program Contact: [cdfa.oefi\\_ammp\\_tech@cdfa.ca.gov](mailto:cdfa.oefi_ammp_tech@cdfa.ca.gov)

AMMP Webpage: <https://www.cdfa.ca.gov/oefi/AMMP/>

Email Notifications:

<https://public.govdelivery.com/accounts/CADFA/subscriber/new>

**Thank you for joining!**

UP NEXT: Online Application Portal Demo; Dairy Plus Program; Dairy  
Digester Research and Development Program

California Department of Food and Agriculture | Office of Environmental Farming and Innovation

# Online Application Portal Demo

Application Assistance Workshop

August 7, 2024



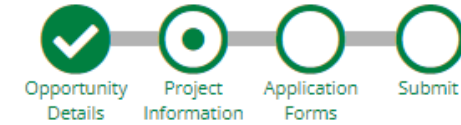


# Online Application Platform Demo

## Navigation and Use Tips

1. SAVE OFTEN
2. Default view and text small? Zoom your browser view (through settings or Ctrl + "+/-") if helpful
3. Can move between 4 buttons up top at will (always SAVE, but do not need to fully complete a page before viewing or working on other pages)
4. For reference links in application, recommend opening in new tab (right click, "open in new tab"; or Ctrl + left click on link). \*Amplifund improved function of links and we have already set them to open in a new tab automatically.
5. "Mark as Complete" will only be allowed once all required fields are filled in (can change back to edit by clicking "Mark as in progress")
6. To Submit, Project Information and Application Form must be "Marked as Complete"

## 2024 Alternative Manure Management Program



### Project Information

[Help](#)[Download](#)[Save](#)[Save & Continue](#)

#### Application Information

Application Name \*

How much are you requesting from the funder?

Award Requested \*

Total Award Budget \$0.00

#### Primary Contact Information

Name \*

Email Address \*

Address Line 1 \*

Address Line 2

City \*

State/Province \*

Postal Code \*

Phone Number

[Save](#)[✓ Mark as Complete](#)[Save & Continue](#)

California Department of Food and Agriculture | Office of Environmental Farming and Innovation

# 2024 Dairy Plus Program

Application Assistance Workshop

August 7, 2024



# 2024 Dairy Plus Program

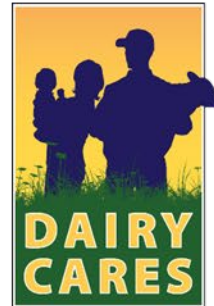
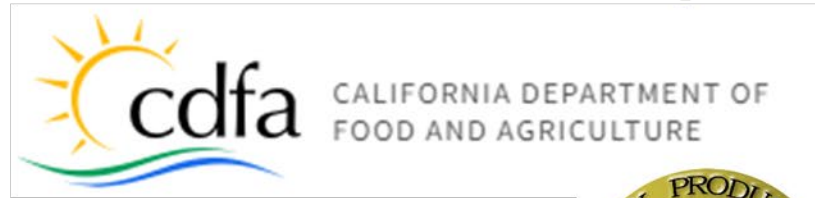


Application Assistance Workshop  
August 7, 2024



# \$85 Million for CA Dairy Sector

Partnering To Invest In and Build Markets for California's Climate-Smart Dairy Producers



# Program Overview

- **GOAL:** To award competitive grants to CA dairy farms for the implementation of advanced manure management practices that reduce methane emissions and address nitrogen and salt surplus.
- **Funding:** \$58 Million directly to project implementation – up to \$1.25 M (at a max of \$750/cow)
  - CDFA will prioritize awards to small and historically underserved producers by awarding a min of 10% of funds (~\$7.5M) throughout the program's lifetime.
- **Builds on CDFA's AMMP and DDRDP programs**
- **Eligibility:**
  - CA Producers/Dairy Farmers (can't be foreign person or entity)
  - New, in progress, or Previous (successfully completed) AMMP Project
  - New, in progress, or Previous (successfully completed) DDRDP Project
- **Duration:** 24 months
- **Reimbursement basis**





# Eligible Practices



For new 2024, in-progress, or previously completed **AMMP projects**:

- A. **Vermifiltration** - must be implemented in conjunction with an existing or new primary mechanical separator.
- B. Solid separation of manure solids through **Weeping Wall** – the system must have a minimum of at least two cells.
- C. Advanced solid-liquid separation assisted by **flocculants and/or bead filters** - must be implemented in conjunction with an existing or new primary mechanical separator.
- D. **Centrifuge** solid-liquid separation - must be implemented in conjunction with an existing or new primary mechanical separator.
- E. Practices above (A, B, C, or D) AND **Subsurface drip irrigation (SDI)** using liquid manure.
- F. Practices above (A, B, C, or D) AND **Aerated Composting**, as follows:
  - i. Composting in vessel (composting in an enclosed vessel, with forced aeration and continuous mixing);
  - ii. Composting in aerated static pile (composting in piles with forced aeration but no mixing);
  - iii. Composting in intensive windrows (with regular turning for mixing and aeration);
  - iv. Composting in passive windrows (with infrequent turning for mixing and aeration).
  - v. Composting in aerated vermifiltration system (solids separated by the vermifilter are also processed by worms within the vermifilter)

# Eligible Practices



For new 2024, in-progress, or previously completed **DDRDP projects**:

- A. Post-digester Vermifiltration** - must be implemented after the anaerobic digestion of manure.
- B. Post-digester Advanced solid-liquid separation assisted by flocculants and/or bead filters** - must be implemented after the anaerobic digestion of manure.
- C. Post-digester Centrifuge solid-liquid separation** - must be implemented after the anaerobic digestion of manure.
- D. Practices above (A, B, or C) AND Subsurface drip irrigation (SDI)** using liquid manure digestate.

## **IMPORTANT!**

Dairy Plus Program funds **cannot** be used to fund the implementation or maintenance of, including but not limited to, anaerobic digesters, biogas cleanup equipment, biogas upgrading equipment, pipelines, electricity generators, and all systems related to anaerobic digestion and biogas end-use.

# Funding Scenarios

Up to \$1.25 M per project  
(max of \$750/cow)

Program/System	State Funding (CDFA)	Federal Funding (USDA)*	Total Funding	Matching Funds Required
<b>For Dairies That <b>Have Not</b> Previously Received AMMP or DDRDP Funds</b>				
<b>AMMP Dairy Plus</b> a) Vermifiltration b) Weeping wall (min of 2 cells) c) Advanced solid-liquid separation assisted by flocculants and/or bead filters d) Advanced solid-liquid separation through centrifuge e) Practices above (a, b, c, or d) AND subsurface drip irrigation (SDI) using liquid manure f) Practices above (a, b, c, or d) AND aerated composting	Up to \$750,000	Up to \$1.25 M (\$750 cow)	Up to \$2 M	NA
<b>DDRDP Dairy Plus</b> a) Post-digester vermifiltration b) Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters c) Post-digester Advanced solid-liquid separation through centrifuge d) Above practices (a, b, or c) AND subsurface drip irrigation (SDI) using liquid manure digestate	Up to \$1.6 M	Up to \$1.25 M (\$750 cow)	Up to \$2.85 M	50/50 match – up to \$1.6M (part of DDRDP requirement)
<b>For Dairies That are <b>Currently Receiving</b>, or have <b>Previously Received</b>, AMMP or DDRDP Funds</b>				
<b>DDRDP Dairy Plus for In Progress or Previous AMMP</b> a) Post-digester vermifiltration b) Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters c) Post-digester advanced solid-liquid separation through centrifuge d) Above practices (a, b, or c) AND subsurface drip irrigation (SDI) using liquid manure digestate	Up to \$1.0 M	Up to \$1.25 M (\$750 cow)	Up to \$2.25 M	50/50 match – up to \$1.0M (part of DDRDP requirement)
<b>Dairy Plus for In Progress or Previous AMMP**</b> a) Vermifiltration b) Weeping wall (min of 2 cells) c) Advanced solid-liquid separation assisted by flocculants and/or bead filters d) Advanced solid-liquid separation through centrifuge e) Practices above (a, b, c, or d) AND subsurface drip irrigation (SDI) using liquid manure f) Practices above (a, b, c, or d) AND aerated composting	NA	Up to \$1.25 M (\$750 cow)	Up to \$1.25 M	50/50 match – up to \$750k <sup>€</sup>
<b>Dairy Plus for In Progress or Previous DDRDP</b> a) Post-digester vermifiltration b) Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters c) Post-digester Advanced solid-liquid separation through centrifuge d) Above practices (a, b, or c) AND subsurface drip irrigation (SDI) using liquid manure digestate	NA	Up to \$1.25 M (\$750 cow)	Up to \$1.25 M	50/50 match – up to \$1.0M <sup>€</sup>

# How to Apply



Applicants will be required to complete and submit their grant applications online using an electronic application submission platform. The application can be accessed at the Dairy Plus Program webpage (<https://www.cdfa.ca.gov/oefi/dairyplus/>).

**NEW, IN  
PROGRESS,  
or OLD  
AMMP**



If you are applying for a new 2024 AMMP grant and a Dairy Plus Program grant, or you are a previous AMMP recipient with an in-progress or completed project applying only for a Dairy Plus Program grant, you will use the 2024 AMMP application submission portal.

[2024 AMMP Application Submission Portal ▶](#)

**NEW, IN  
PROGRESS,  
or OLD  
DDRDP**



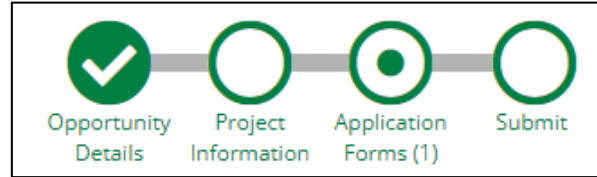
If you are applying for a new 2024 DDRDP grant and a Dairy Plus Program grant, or you are a previous DDRDP recipient with an in-progress or complete project applying only for a Dairy Plus Program grant, you will use the 2024 DDRDP application submission portal.

[2024 DDRDP Application Submission Portal ▶](#)



Includes closeout AMMP projects that want to join DDRDP

# How to Apply



Application Forms: general applicant fields, AMMP/DDRDP (if applicable) questions, and Dairy Plus questions - what appears is conditional.

Example: If applying for a new 2024 AMMP AND Dairy Plus, select “Yes” for 2024 AMMP and “Yes” for Dairy Plus; if a previous AMMP recipient only applying for Dairy Plus, select “No” for 2024 AMMP and “Yes” for Dairy Plus

## Application Category

Please select "Yes" or "No" for the questions below based on your application type, which will populate the remaining sections for you to complete.

- If you are applying for **AMMP Only**: select **Yes** for “Are you applying for AMMP?” and **No** for “Are you applying for Dairy Plus?”
- If you are applying for **AMMP AND Dairy Plus**: select **Yes** for “Are you applying for AMMP?” and **Yes** for “Are you applying for Dairy Plus?”
- If you are applying for **Dairy Plus Only** (this option is only for past AMMP recipients, where the Dairy Plus Program proposal is for the operation where the an AMMP project is currently in progress or has been successfully completed and closed out): select **No** for “Are you applying for AMMP?” and **Yes** for “Are you applying for Dairy Plus?”

Are you applying for 2024 AMMP? \* This field is required.

Select an item... ▼

Are you applying for 2024 Dairy Plus? \* This field is required.

Select an item... ▼

Save

✓ Mark as Complete

Save & Continue



# How to Apply



Are you applying for 2024 AMMP? \*

No

Are you applying for 2024 Dairy Plus? \*

Yes

Application Category section: "Yes", applying for 2024 Dairy Plus

## Dairy Plus Application Sections

Please identify your Dairy Plus Program application type \*

- New project in conjunction with a 2024 AMMP application
- Dairy Plus application only, for an operation with an in-progress AMMP project
- Dairy Plus application only, for an operation with a past completed AMMP project

Producer Name (awardee of Dairy Plus Program funds must be an individual dairy producer as registered currently or in the future with the U.S. Department of Agriculture Field Service Agency - FSA) \*

Fill in or drop-down type questions to answer

*Note: only one 2024 Dairy Plus Program award per FSA registered entity/producer name. If multiple dairy operations under one FSA-registered entity/producer name are selected, only one dairy operation will be awarded.*

*The USDA Partnerships for Climate Smart Commodities grant is committed to prioritizing at least 10% (\$7.5 million) of the producer incentive funding to serve small and historically underserved producers, including farmers or ranchers who are: Beginning; Socially Disadvantaged; Veterans, and Limited Resource. Small farms are generally those with less than \$350,000 in annual gross cash farm income. Demographic information is used by USDA for statistical purposes only and will not be used to determine an applicant's eligibility for programs or services for which they apply. Definitions for small and historically underserved producers can also be found in the Dairy Plus Program Request for Grant Applications.*

Does the applicant identify as a small and/or historically underserved producer? \* This field is required.

Select an item...

### Section I - Project Description

Using the completed Project Description Template, Work Plan Template, and FSA Permission Form provide the following information:

Project Title for the Dairy Plus Program Project \*

### Section II - Nitrogen and Salt Management and Water Quality Improvements

Complete the Nitrogen and Salt Management and Water Quality Improvements Template.

Attachment C: Nitrogen and Salt Management and Water Quality Improvements Template (required; as PDF file) \*

Choose File

Places for attachment upload

# Attachment Tab



**Dairy Plus Program = 7 required attachments + 3 optional**

- **Attachment A (required):** Project Description Template
  - **Attachment A.1 (required):** Site Plan, project design documents, schematic diagrams, permitting, maintenance plans, etc.
  - **Attachment A.2 (required):** Signed FSA Permission Form
- **Attachment B (required):** Work Plan Template
- **Attachment C (required):** Nitrogen and Salt Management and Water Quality Improvements Template

# Attachment Tab



- **Attachment D (required):** Budget Worksheet Template
  - Attachment D.1 (optional): Bids, quotes, or estimates to support budget costs
- **Attachment E (required):** Estimated GHG Emissions Reduction
  - Attachment E.1 (optional): Explanation of Assumptions for GHG Calculations
  - Attachment E.2 (optional): Description of how proposed project will reduce GHGs beyond AMMP and DDRDP

# Attachment E: Estimated GHG Emissions Reduction



➤ For **new 2024, in-progress, or previously completed AMMP projects** = Applicants must use the Calculator Tool for “Alternative Manure Management Program”.



➤ For **new 2024, in-progress, or previously completed DDRDP projects** = Applicants must use the Calculator Tool for the “Dairy Digesters”.

## IMPORTANT:

- Apps applying under the “**Dairy Plus for Previous or In Progress AMMP**” category must add the information of the previous or in progress AMMP grant in the baseline.
- Apps applying under the “**Dairy Plus for Previous or In Progress DDRDP**” category are required to submit **two separate** DDRDP Benefits Calculator Tools.
  - 1) The first one illustrates the current status and performance of the already implemented/operational dairy digester.
  - 2) The second DDRDP Benefits Calculator Tool should provide a comprehensive overview of their advanced manure management system, for the Dairy Plus project.

# Estimated GHG Emissions Reduction



Benefits Calculator Tool available at  
<http://www.arb.ca.gov/cci-resources>

Email Benefits Calculator Tool questions to:  
[GGRFProgram@arb.ca.gov](mailto:GGRFProgram@arb.ca.gov)





# Scoring Criteria



Categories	Max Points
Project Description and Work Plan	20
Nitrogen and Salt Management and Water Quality Improvements	10
Budget Worksheet	10
Estimated GHG Emission Reduction	10
<b>Total</b>	<b>50</b>

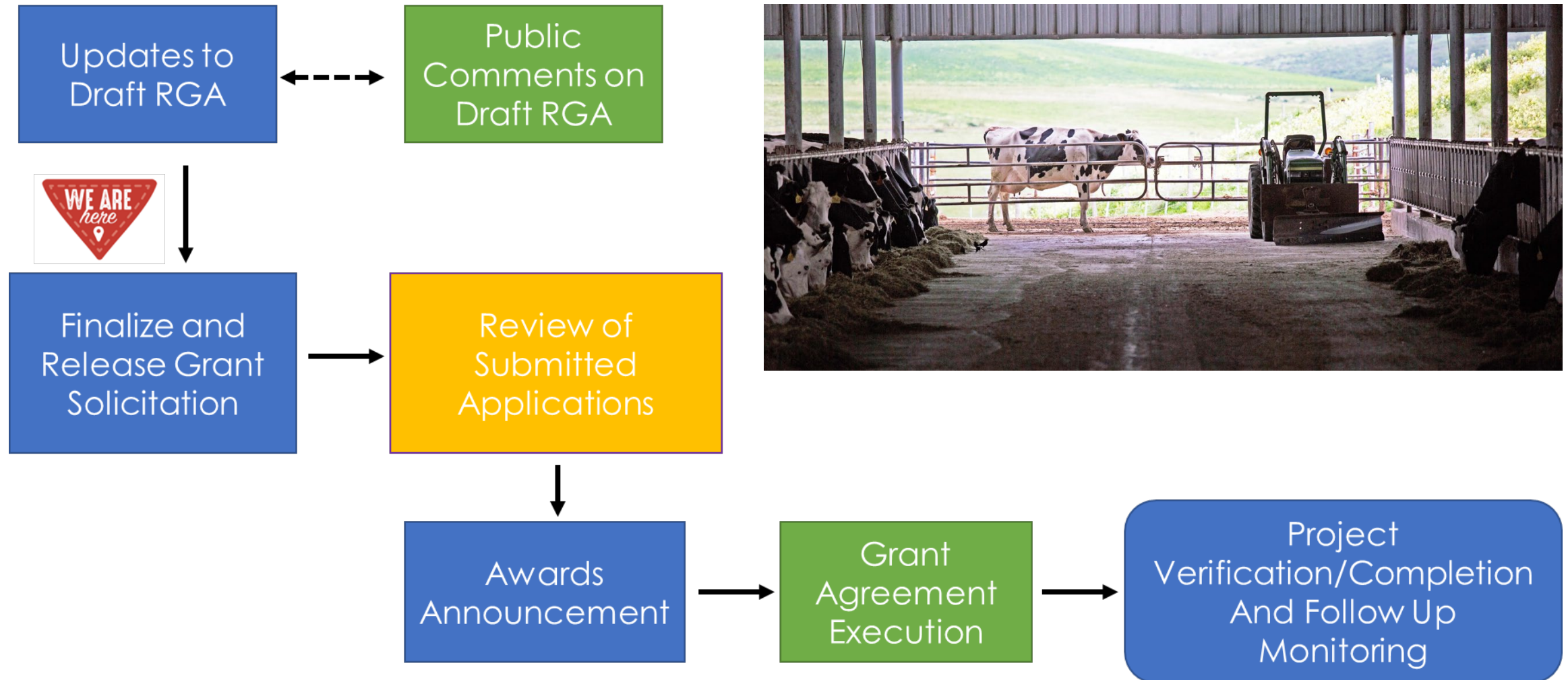
# Helpful Tips



Some helpful tips for submitting Dairy Plus application:

- 1) Read through the Request for Grant Applications (RGA)
- 2) Follow all instructions in the RGA and Amplifund Portal
- 3) Provide specific details for your operation
- 4) Save often (the Amplifund Portal will time out)
- 5) Make sure all attachments have been properly uploaded

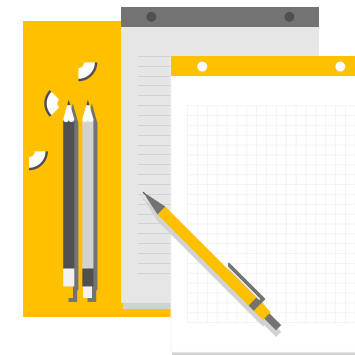
# CDFA Grant Solicitation Process



# 2024 Dairy Plus Program Timeline\*



Item	Timeframe
Release of Solicitation	July 23, 2024
CDFA Application Workshops	August 7, 2024 & August 13, 2024
CDQAP-CDRF Workshop	August 29, 2024
Grant Applications Due	October 18, 2024
Review Process	November 2024 – February 2025*
Announce Award Funding	March 2025*
Project Term Begins	September 2025*



\* Dates subject to change

# Dairy Plus Program Technical Assistance



For direction in identifying available technical assistance resources appropriate for your project type and region, please reach out to:

**Denise Mullinax**, CDRF, Executive Director – CDQAP, Assistant Director

Phone: 209-585-6744

Email: [cdqap@cdrf.org](mailto:cdqap@cdrf.org) (please include Dairy Plus TA in the subject line)



CDRF Dairy Plus Program Webpage (<https://cdrf.org/climate-smart-commodities-grant-info/>)



# Questions and Answers (Q & A)



- Email questions to: **cdfa.oefi\_DairyPlus@cdfa.ca.gov**  
(please add “2024 Dairy Plus Program Question” in the email “Subject” line for questions about this program)
- Questions & Answers will be posted to the Dairy Plus website:  
<https://www.cdfa.ca.gov/oefi/dairyplus>

# Questions and Answers (Q & A)



Questions Received by	Responses Posted by
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- Email questions to: **[cdfa.oefi\\_DairyPlus@cdfa.ca.gov](mailto:cdfa.oefi_DairyPlus@cdfa.ca.gov)**  
(please add "2024 Dairy Plus Program Question" in the email "Subject" line for questions about this program)

# Questions?



# Thank You!

**Dairy Plus Program websites:**

CDFA: <https://www.cdfa.ca.gov/oefi/dairyplus/>

CDFR: <https://cdf.org/plus-assistance/>

California Department of Food and Agriculture | Office of Environmental Farming and Innovation

# 2024 Dairy Digester Research and Development Program

Application Assistance Workshop

August 7, 2024



## **Dairy Digester Research and Development Program**

CDFA OFFICE OF ENVIRONMENTAL FARMING & INNOVATION







California Department of Food and Agriculture  
Office of Environmental Farming and Innovation

# 2024 Dairy Digester Research and Development Program



Application Assistance Workshop 1

August 7, 2024







# 2024 Outline

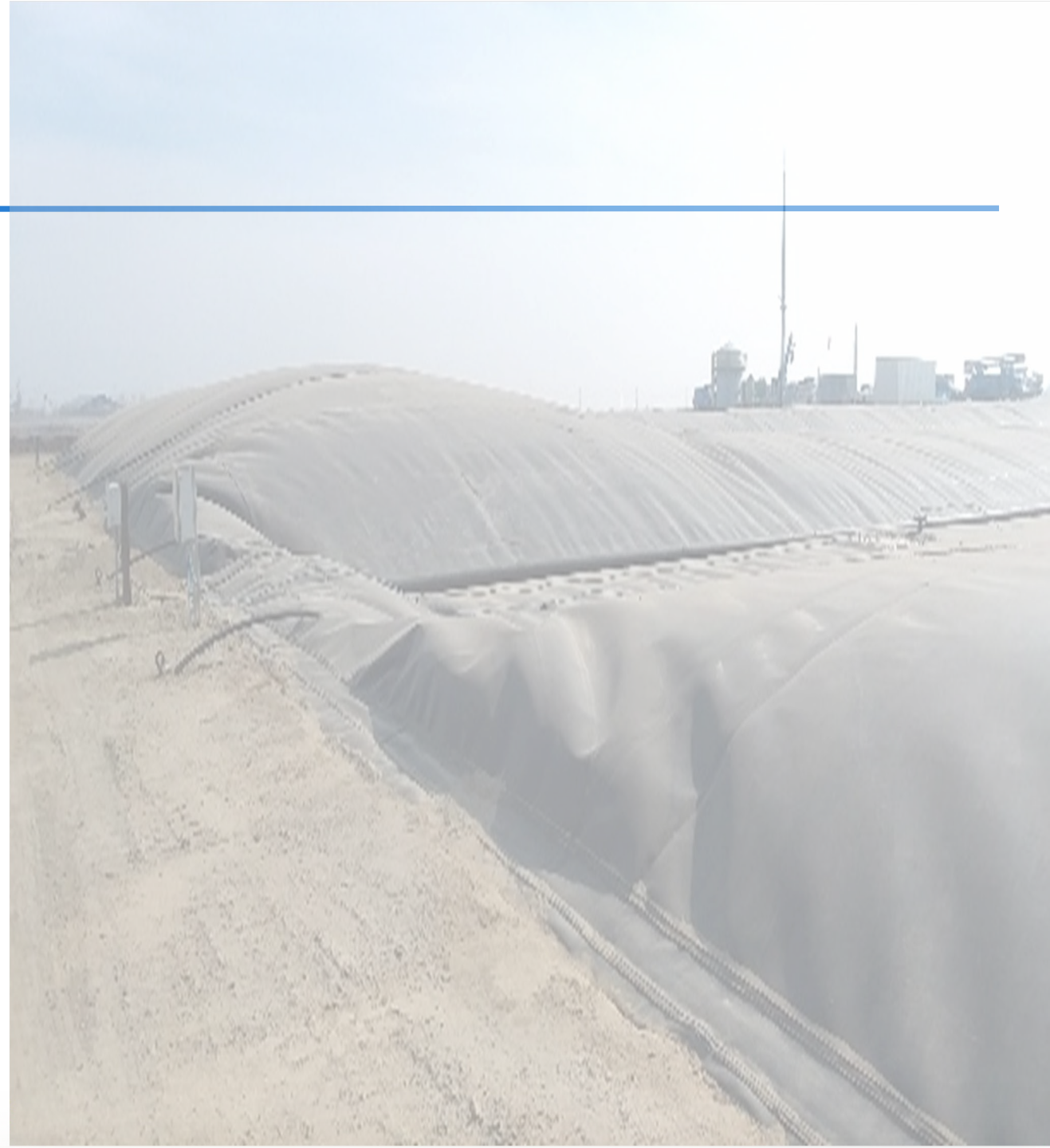
---

- CDFA's Dairy Digester Research and Development Program
  - Program Overview
- Request for Grant Applications
  - Grant Funding and Duration
  - Solicitation Process and Timeline
  - Eligibility and Exclusions
  - Program Requirements
  - How to Apply and Application Sections
  - Community Outreach Requirements
  - Scoring Criteria
- CARB/DDDRDP Benefits Calculator Tool
- Questions

# Program Overview

---

- What is the Dairy Digester Research and Development Program (DDRDP)?
  - Competitive grant program administrated by CDFA
  - Provide awards funds to **California** dairy operations and digester developers for implementing anaerobic dairy digesters
  - Results in manure methane emission reductions and minimizes or mitigates criteria pollutants
- Since 2014, 7 rounds completed
  - 138 incentive projects
  - Awarded ~\$223 million
  - Matching Funds ~\$481 million
  - GHG emission reductions- 2.43 MMTCO<sub>2</sub>e reduced/year

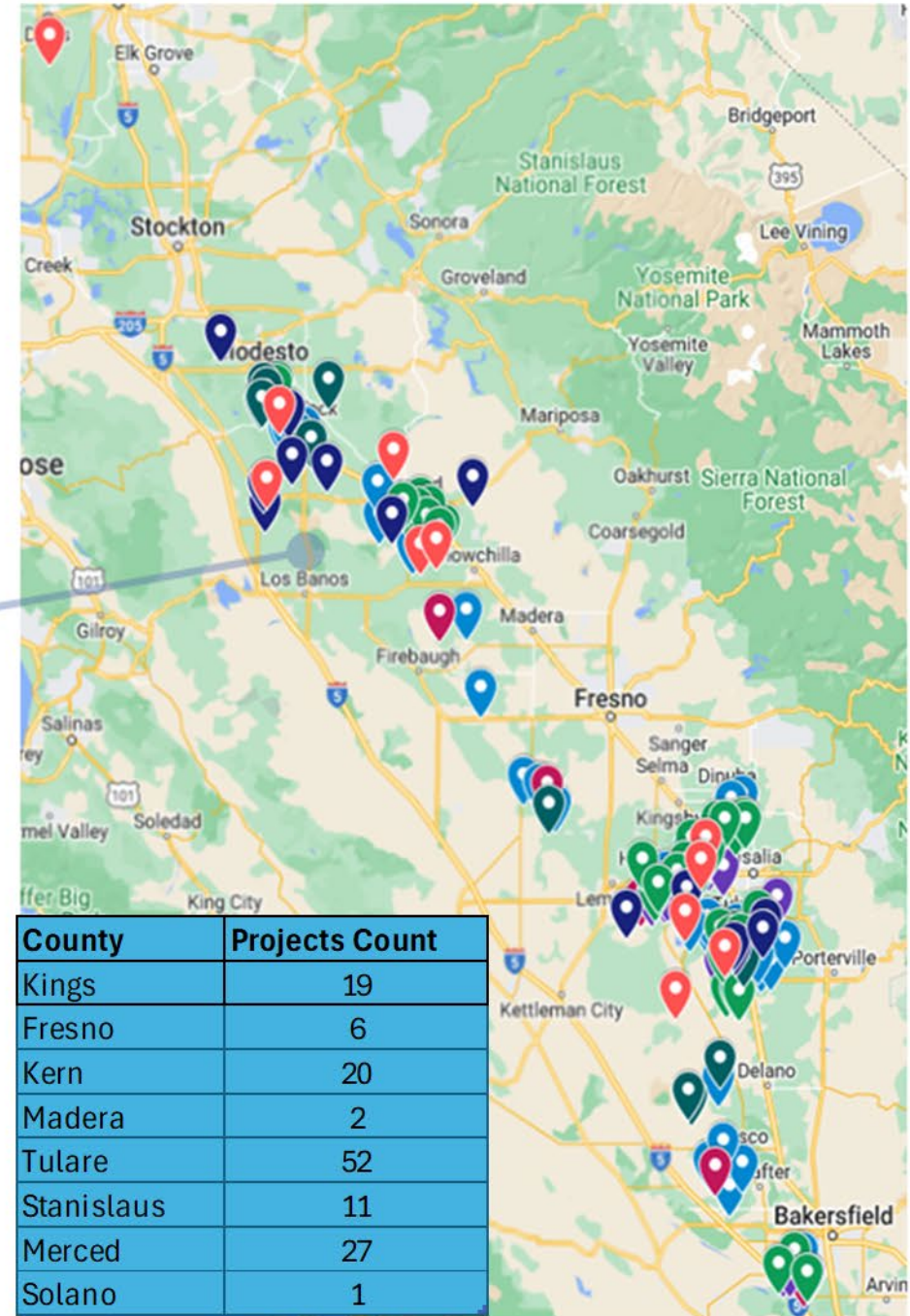
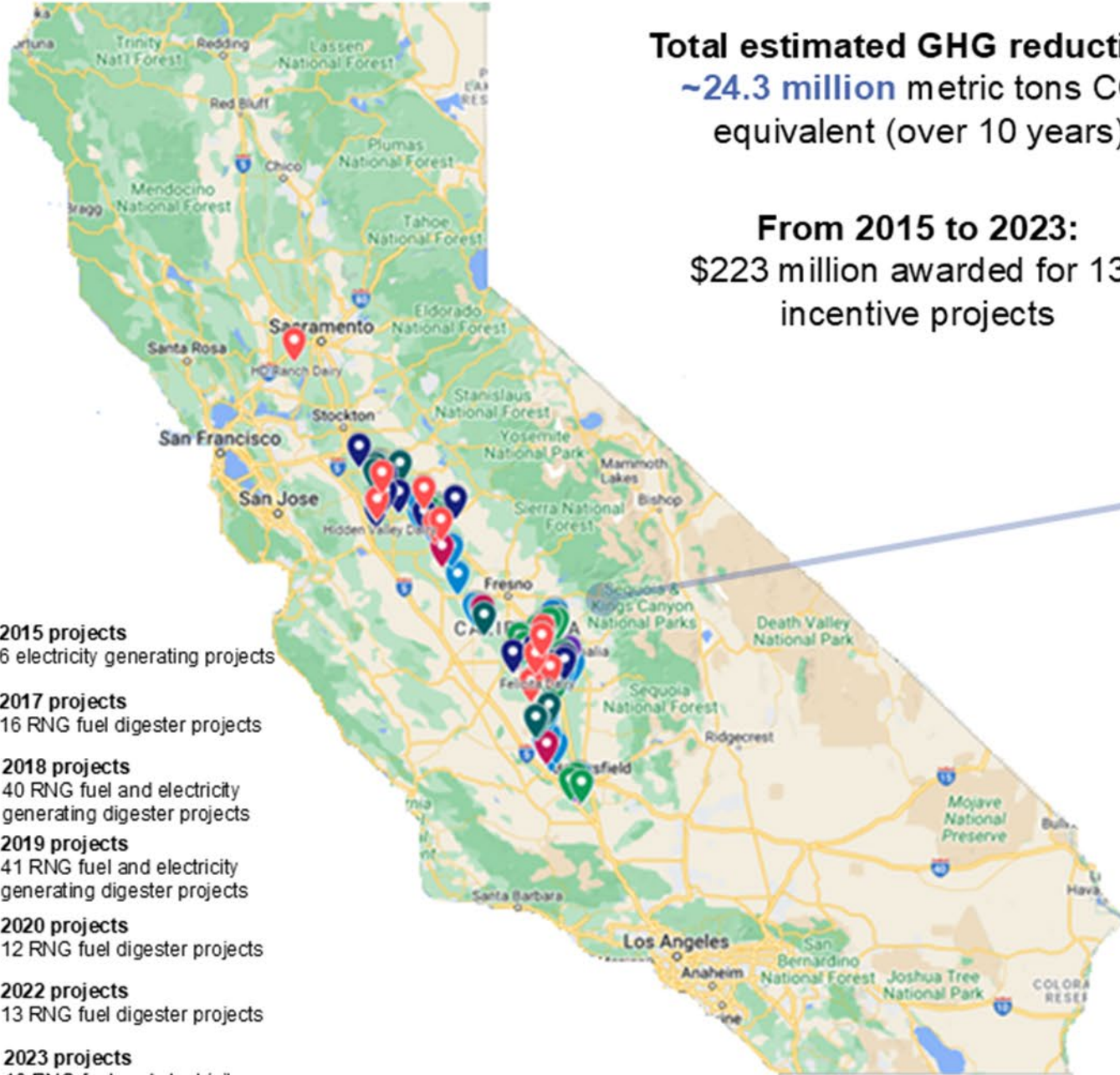




**Total estimated GHG reductions**  
 ~24.3 million metric tons CO<sub>2</sub>  
 equivalent (over 10 years)

**From 2015 to 2023:**  
 \$223 million awarded for 138  
 incentive projects

-  **2015 projects**  
6 electricity generating projects
-  **2017 projects**  
16 RNG fuel digester projects
-  **2018 projects**  
40 RNG fuel and electricity  
generating digester projects
-  **2019 projects**  
41 RNG fuel and electricity  
generating digester projects
-  **2020 projects**  
12 RNG fuel digester projects
-  **2022 projects**  
13 RNG fuel digester projects
-  **2023 projects**  
10 RNG fuel and electricity  
digester projects



# Grant Funding and Duration

- Current 2024 DDRDP funding source-
  - FY 24-25 GGRF Funds \$17 million of transferred, split by DDRDP and AMMP
- Contingent: \$7 million proposed (split between AMMP and DDRDP) funds proposed for next FY
- Award amount - **\$8 million available in 2024 for awards**
- Up to \$1.6 million, 50% of matching is required
- Maximum Project Duration - **30 months**
- Anticipated project start date- **June 1, 2025**





# Grant Funding and Duration- Continuation

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- **Note:** Previous AMMP recipients are eligible to apply for DDRDP to further boost their manure methane emission reductions
- Applicants who have previously accepted and successfully implemented an AMMP project (i.e., have a closed-out, completed, & operational) are eligible up to **\$1.0 million/project** through DDRDP
- Proposed projects cannot involve the replacement or discontinuation of the previously implemented AMMP practice/equipment
- Any previous AMMP recipient may be eligible to apply regardless of the past practice implemented, but for certain practices (i.e., compost bedded pack barn, conversion from flush to scrape, pasture-based management), the digester must be addressing the portion of the herd not already covered by the previous AMMP project



# Solicitation Timeline



2024 DDRDP Timeline*	
Events	Time Frame
Application Period Opens	July 23, 2024
CDFA Application Assistance Workshops	August 7 and August 13, 2024
Q&A Rounds x 3	Throughout application period
Grant Applications Due	October 18, 2024
Application Review Process	October 2024 – February 2025
Award Announcement	March, 2025
Anticipated Project Start	June 1, 2025

\*Subject to Change



# Summary of Changes from 2023

- **Request for Grant Applications (RGA)**
  - Notification & feedback- increase; 60 → 90 days
  - CEQA & applicable permitting increase; 6 months of grant execution → 18 months
- **DDRDP Benefits Calculator Tool**
  - Linear generator (primary and secondary Biogas Destruction Device)
  - Effluent pond with centrifuge-based solid separation
  - Transport Vehicle Fuel Type- added “Battery Electric”
- **Online Application (Amplifund)**
  - More questions on applicant name/organization, and supporting materials
- **Related Opportunities**
  - Availability of Dairy Plus- eligible applicants/project types now include in-progress DDRDP in addition to past completed DDRDP
  - Past AMMP can apply for DDRDP



## 2024 DAIRY DIGESTER RESEARCH AND DEVELOPMENT PROGRAM

**Request for Grant Applications**  
Released Date: July 23, 2024  
Applications Due: October 18, 2024, by 5:00 P.M. PT  
Late submissions will not be accepted.



California Department of Food and Agriculture  
Office of Environmental Farming and Innovation  
1220 N Street  
Sacramento, CA 95814  
cdfa.oefi\_ddrdp\_tech@cdfa.ca.gov

# Solicitation and Review Process



Application Period  
July 23 – October 18, 2024

Applications Submitted (Online Platform)

Administrative Review

Financial and Technical Review

Successful Applicants Notified

Unsuccessful Applicants Notified, Feedback Provided (within 90 days)

Grant agreement executed

Project Begins





# Eligibility

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- The project site must be located in commercial **California** dairy operations
- Multiple apps are allowed, but each app must be an individual digester at a unique site.
- New Submitting Organizations= **additional 5 points**.
- Existing defunct (minimum of 12 months) and non-functional digesters are eligible.
- Once awarded, the project **may not**:
  - Change/alter biogas end-use during the project term.
  - Change the herd size beyond the limits of existing permits **at the time of application** during the project term.
  - Change ownership and/or partnership entities of the dairy. Should the grantee sell the awarded dairy operation, all grant monies shall return to CDFA.





# Exclusions

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- Upgrades to existing, functional dairy digesters to boost emission reductions and energy production.
- Projects that propose to switch existing management practices to those that increase baseline GHG emissions (e.g., from dry scrape to flush lagoon systems).
- Duplicate equipment/activities that will receive funding from the California Public Utilities Commission (CPUC) pilot project (e.g., interconnection costs).
- Dairy operations previously received a DDRDP grant and successfully completed a project.
- Previous DDRDP recipients with incomplete, expired, or failed projects **may not reapply for 3 yrs** after the time the project was closed out.



**NOTE**

**Biogas conditioning and clean-up costs are allowable under the 2024 DDRDP**



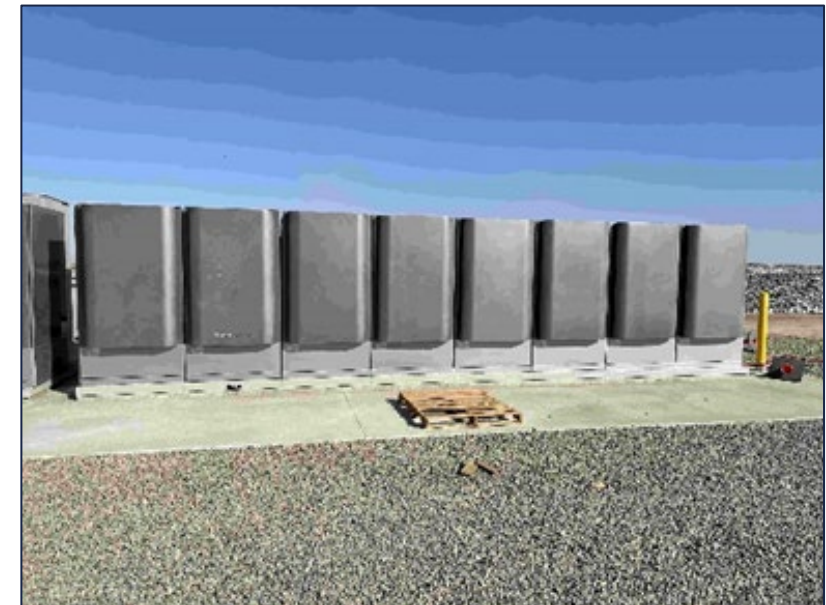
# Program Requirements

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- Methane used for energy or transportation fuel production → flaring as sole biogas end-use is not eligible
  - To be used on-site or injected into the pipeline, or for energy utilization onsite or at a neighboring facility.
- At least 80% of feedstock (dry weight) for anaerobic digestion must be manure from dairy livestock.
- Use of commercially available technology with a proven operating history for the capture/destruction of methane
- CEQA compliance is anticipated within 18 months of the executed grant agreement.
- Project partners must not have filed for bankruptcy in the last 5 years.
- Adhere to allowable/unallowable cost guidance.

# Program Requirements- continuation

- Digester design, construction, and operation must improve air and water quality protection.
  - Use of double-lined ponds consistent with Tier 1 specification of Dairy General Order (R5-2013-0122), above-ground tanks, and below-grade tanks constructed of concrete/suitable impermeable and corrosive-resistant material.
  - For Electricity Projects= total NO<sub>x</sub> emissions must be < 0.50 lb/MWh.
- Projects may propose to include nutrient management technologies in conjunction with methane reduction technologies.
  - However, the implementation of standalone nutrient management technology to an existing digester→ Not eligible.
- Quarterly progress and post-project final reporting.





# How to Apply

Applicant portal link available on DDRDP webpage:

<https://www.gotomygrants.com/Public/Opportunities/Details/4d18dfc8-2364-4759-b652-cecdc7d4d44d>



Log In

2024 Dairy Digester Research and Development Program Print Help Download

**Opportunity Information**

Title	2024 Dairy Digester Research and Development Program
Description	The California Department of Food and Agriculture's (CDFA) Dairy Digester Research and Development Program (DDRDP), awards competitive grants to California dairy operations and digester developers for the implementation of dairy digesters that result in long-term methane emission reductions on California dairies and minimize or mitigate adverse environmental impacts.
Awarding Agency Name	California Department of Food and Agriculture
Agency Contact Name	Dairy Digester Research and Development Program
Agency Contact Email	cdfa.oefi_ddrdp_tech@cdfa.ca.gov
Fund Activity Categories	Agriculture, Energy
Departments	Office of Environmental Farming and Innovation
Public Link	<a href="https://www.gotomygrants.com/Public/Opportunities/Details/4d18dfc8-2364-4759-b652-cecdc7d4d44d">https://www.gotomygrants.com/Public/Opportunities/Details/4d18dfc8-2364-4759-b652-cecdc7d4d44d</a>
Is Published	Yes

**Funding Information**

Total Program Funding	\$8,000,000.00
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AmpliFund

## Login

Email   
The Email field is required

Password  show  
The Password field is required

Remember my email [Forgot your password?](#)

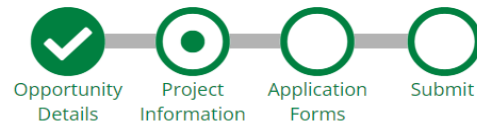
Log in with SSO

Register Login

[Amplifund User Guide](#)

# How to Apply- Continuation

## 2024 Dairy Digester Research and Development Program



**AmpliFund**

1. Project Information: basic information page in all Amplifund grant applications
2. Application Forms: the main DDRDP (+/- Dairy Plus) application
  - Applicant and project location information common to all applicants
  - Six main DDRDP sections to complete – includes both within-application questions and places for attachments

RGA “Grant Application Questions and Attachments” section;  
[2024 DDRDP Questionnaire Preview](#)

# How to Apply- Continuation

## NOTE

- One entity can create an Amplifund account (one email associated with an entity's account) and be able to submit multiple applications under one account
- Each applicant under one entity is not required to create multiple applicant email addresses for application submission.

### Multiple Applications

Your organization has the following application associated with this opportunity.

To view the application, select the Application Name. To create another application for this opportunity, select "Start New Application."

<u>Application Name</u>	<u>Status</u>
bdjshkj	Submitted

[Start New Application](#)



# Questionnaire Tab

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1. Applicant Information
2. Additional Applicant Information
3. Project Information
4. Application Category
5. DDRDP Application Sections
  - Digester Project Plan and Long-Term Viability
  - Project Budget and Financials
  - Estimated GHG Emissions Reduction
  - Project Readiness and Permitting Status
  - Environmental Performance
  - Community Impact
6. Evaluation of Benefits to Priority Populations





# Attachments Tab

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## Section I- Digester Project Plan and Long-Term Viability

Attachment 1: Project Narrative Template (required; as a Microsoft Word File)

- 1.1: Site Plan, project design documents, cluster maps, schematic diagrams, etc. (required; as a single PDF File)
- 1.2: Resumes, team commitment letters, etc. (required; as a single PDF File)
- 1.3: Copy of Deed and/or Lease Agreement (if applicable; as a single PDF File)
- 1.4: For centralized projects, letter(s) of commitment from participating operations (if applicable; as a single PDF File)

Attachment 2: Work Plan Template (required; as a Microsoft Word File )



# Attachments Tab- Continuation

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## Section II- Project Budget and Financials

Attachment 3: Budget Worksheet Template (required; as a Microsoft Excel File)

- 3.1: Bids, quotes, or estimates to support budget costs (if applicable; as a single PDF File)

Attachment 4: Financials (required; as a PDF File)

Provide documentation regarding the organization's financial strength.

**Note:** *Project partners must not have filed for bankruptcy in the past five years.*





# Attachments Tab- Continuation

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## **Section III- Estimated GHG Emissions Reduction**

Attachment 5: DDRDP Benefits Calculator Tool (required; as a locked Microsoft Excel File)

- 5.1: Explanation of assumptions of GHG calculations (if applicable; as a single PDF File)

## **Section IV- Project Readiness and Permitting Status**

Attachment 6: Project Readiness Template (required; as a Microsoft Word File)

- 6.1: Additional Permits Documents (if applicable; as a single PDF file)
- 6.2: Status of interconnection, offtake agreements; power purchase agreements etc (if applicable; as a single PDF File)



# Attachments Tab- Continuation

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## Section V- Environmental Performance

Attachment 7: Environmental Performance Template (required; as a Microsoft Word File)

- 7.1: Support the project's environmental performance claims (if applicable; as a single PDF File)

## Section VI- Community Impact

Attachment 8a: Community Impact Template (required; as a PDF File)

Attachment 8b: CARB Community Engagement Questionnaire (required; fillable form)

- 8c: Up to three letters of support (required; as a single PDF File)
- 8d: Explanation of Priority Population Benefits (required; as a single PDF File)

# Community Outreach Requirements

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- Community outreach guidelines on community engagement strategies are available on the DDRDP webpage (<https://www.cdfa.ca.gov/oefi/ddrdp/>).
- Must occur a maximum of 12 months prior to the application submission deadline.
- In-person community meetings are required.
- Additional outreach through social media is acceptable; however, applicants must provide additional metrics.
- Comprehensive records of the meetings held for individual projects or for each specific project in a cluster should be provided.
  - Method of notification, dates/times, location, attendance, meeting notes or follow-up reports, translation service, childcare, meals provided, and **video recordings**.
- **Links for accessing meeting recordings can be provided in the “Community Impact template”.**



# Scoring Criteria

- Details on what is considered for each section in RGA: **Appendix E: Detailed Scoring Criteria**
- Scoring overview- **100 Points Total**
- CDFA will select projects based on the following criteria.

Sections	Max Points
GHG Emission Reductions	35
Project Plan & Long-Term Viability	20
Environmental Performance	15
Budget and Financials	10
Project Readiness	10
Community Impact	10
<b>Total</b>	<b>100</b>
<b><u>New Submitting Organizations</u></b>	<b>+5</b>

## Appendix E: Detailed Scoring Criteria

SCORING CRITERIA	MAX POINTS
<b>DIGESTER PROJECT PLAN AND LONG-TERM VIABILITY</b>	<b>20</b>
Addressed all requirements of the feasibility section and Work Plan including, but not limited to:	
a. Provided details of the technology (or technologies) to be employed in digester facility and for subsequent utilization of captured methane, including but not limited to PPA agreement in place, or steps needed or taken to achieve PPA and plan for RNG pipeline injection or other details of utilization of captured methane.	
b. Provide tonnes of material digested and details of materials other than dairy manure if included in the project.	
c. Technologies affiliated with the digester and biogas cleanup have a track record of success and are commercially available.	
d. Documentation that demonstrates control of the dairy site provided (if applicable).	
e. Guarantees that an adequate amount of feedstock will be provided to make the project feasible through a signed contract, letter of intent, or other documentation which showed the feedstock will be available by the time the project is operational.	
f. Specific list of all tasks needed to complete the project using the Work Plan template provided.	
g. Detailed Work Plan clearly and concisely described the tasks and activities required to achieve the goals/objectives in the proposed project narrative.	
h. Included major work items (including but not limited to permitting, site planning, engineering, construction, equipment, field supervision, health and safety requirements, testing, and bonds)	
i. Reasonable estimate of projected timeline for the project to be operating at full capacity included.	
j. Demonstrated that all tasks are logical and achievable within the grant term, and with available resources. Identified measurable targets that must be met to accomplish the project within the grant timeline, with specific dates for each target.	
k. Included an evaluation component to measure the success of the	



# CARB/DDRDP Benefits Calculator Tool

- Applicants must use the California Air Resource Board's DDRDP Benefits Calculator Tool to estimate avoided methane emissions from anaerobic manure decomposition
- Email QM/DDRDP Benefits Calculator Tool questions to: [GGRFProgram@arb.ca.gov](mailto:GGRFProgram@arb.ca.gov)
- The Benefits Calculator Tool is available at: [www.arb.ca.gov/cci-resources](http://www.arb.ca.gov/cci-resources)



California Department of Food and Agriculture

Dairy Digesters

**Dairy Digester Research and Development Program QM Calculator Tool**

**California Air Resources Board**

**Benefits Calculator Tool for the Dairy Digester Research and Development Program**

**California Climate Investments**

**Note to applicants:**  
[A step-by-step user guide, including a project example, for this Benefits Calculator Tool is available here.](#)

DDRDP applicants must enter the applicable information in the table below before proceeding with the project-specific data on the Inputs tab.

Project Name:		Required
Application ID:		Required
Contact Name:		Required
Contact Phone Number:		Required
Contact Email:		Required
Date Calculator Completed:		Required
Total DDRDP Funds Requested (\$):		Required
Match Funds (\$):		Required
Total Funds (\$):	\$	-

**Key for color-coded fields:**

- Green Required input field
- Blue Optional input field\*
- Grey Output field / not modifiable
- Yellow Helpful hints / important tips
- Black Not applicable

\*See "Documentation" tab for additional information

Navigation: < > Read Me Definitions **Project Info** Project Data Inputs Boiler Worksheet





# Questions and Answers (Q & A)

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Questions Received by:	Responses Posted by:
August 15, 2024	August 22, 2024
September 5, 2024	September 12, 2024
September 26, 2024	October 3, 2024

- Email questions to: **[cdfa.oefi\\_ddrdp\\_tech@cdfa.ca.gov](mailto:cdfa.oefi_ddrdp_tech@cdfa.ca.gov)** (please add DDRDP in the email “Subject” line for questions to this program)
- Questions & Answers will be posted to DDRDP website: <https://www.cdfa.ca.gov/oefi/ddrdp/>



# Happy 10<sup>th</sup> Dairy Digester Research and Development Program (DDRDP)





# Thank you!

Program Contact:

[cdfa.oefi\\_ddrdp\\_tech@cdfa.ca.gov](mailto:cdfa.oefi_ddrdp_tech@cdfa.ca.gov)

DDRDP website:

<https://www.cdfa.ca.gov/oefi/ddrdp/>

Check the ["2020 DDRDP Expanding Access and Enhancing Competitiveness Workshop Presentation"](#)

Email Notifications:

<https://www.cdfa.ca.gov/subscriptions/MailChimp-signup.html>

Thank you for Joining!

