

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

2023 Dairy and Livestock Manure Methane Reduction Programs

Application Assistance Workshop 1

July 11, 2023



Workshop Format

1:00 – 1:50 PM: Alternative Manure Management Program

1:50 – 2:40 PM: Dairy Digester Research and Development Program

2:40 – 3:30 PM: Dairy Plus Program

Agenda for Workshop 1 and 2 on program webpages.

2023 Alternative Manure Management Program (AMMP), Dairy Digester Research and Development Program (DDRDP), Dairy Plus Program

Application Assistance Workshop 1 – July 11, 2023

CDFA will host two no-cost webinar-based workshops to provide information on its dairy and livestock methane reduction incentive program requirements and application processes. The workshops will be conducted as webinars with remote participation. 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.

Tuesday, July 11, 2023

1:00 PM – 3:30 PM PT

Registration: https://us02web.zoom.us/webinar/register/WN_lhzj1i5KTRmf2frh9ar_NQ

Agenda:

Welcome and Introductions

1:00 – 1:50 PM: Alternative Manure Management Program

1. CDFA's Alternative Manure Management Program
 - Program Overview
2. 2023 Request for Grant Applications
 - Grant Funding and Duration
 - Solicitation Process and Timeline
 - Eligibility and Exclusions
 - Program Requirements
 - How to Apply and Application Sections
 - Scoring
 - AMMP Quantification Methodology and Benefits Calculator Tool
3. Applicant Tools and Resources
4. Q&A

1:50 – 2:40 PM: Dairy Digester Research and Development Program

1. CDFA's Dairy Digester Research and Development Program
 - Program Overview
2. 2023 Request for Grant Applications
 - Grant Funding and Duration
 - Solicitation Process and Timeline

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

2023 Alternative Manure Management Program

Application Assistance Workshop

July 11, 2023



**Alternative Manure
Management Program**

CDFA OFFICE OF ENVIRONMENTAL FARMING & INNOVATION

Outline

- About the program
- Solicitation process and timeline
- Eligibility and exclusions
- Program requirements
- How to apply
- Benefits Calculator Tool
- Tools and resources
- Questions

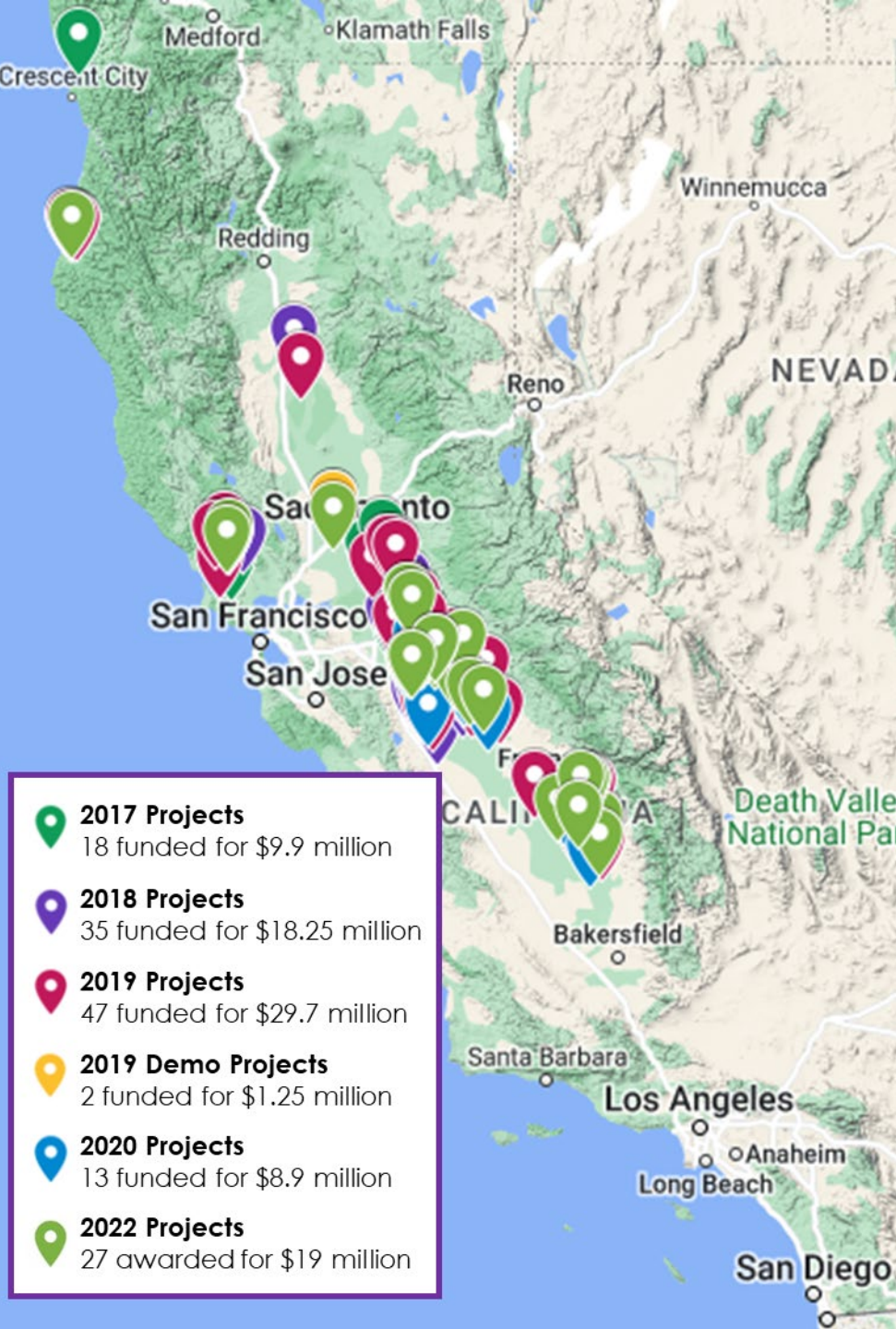


Program Overview

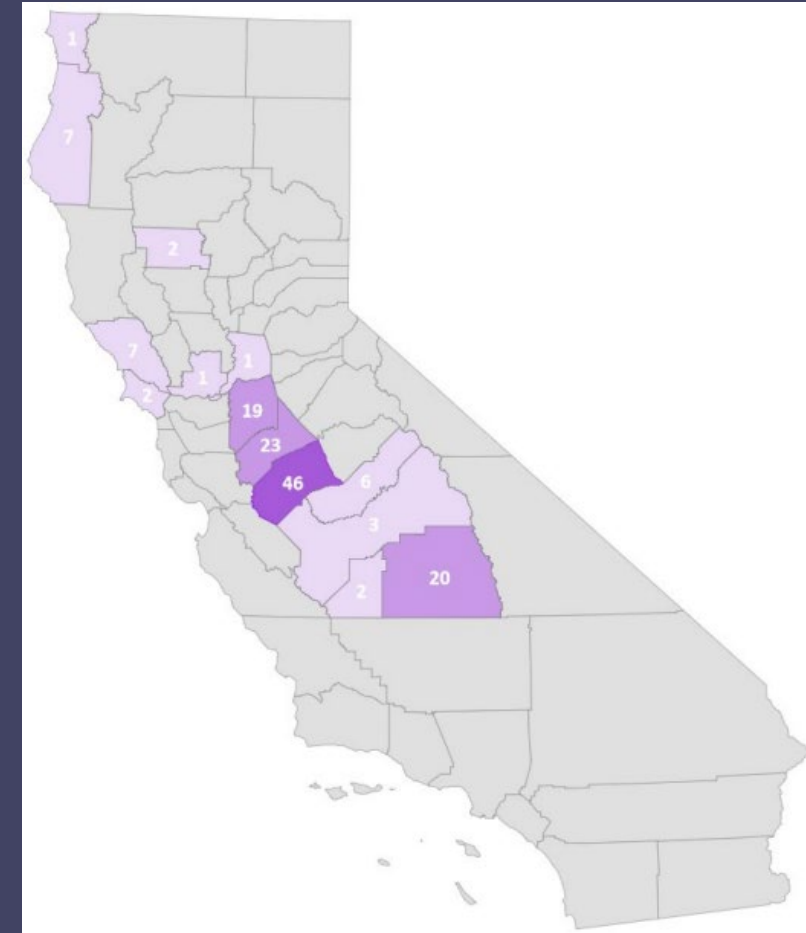
- What is AMMP?
 - Competitive grant program administered by CDFA to provide financial assistance to CA dairy and livestock operators for the implementation of non-digester manure management practices that result in methane emission reductions
- Since 2017, 5 rounds completed
 - 140 incentive and 2 demonstration projects
 - \$87 million
 - 1.3 MMTCO₂e over 5 years



AMMP Projects 2017-2022



County	Number of Incentive Projects
Del Norte	1
Fresno	3
Glenn	2
Humboldt	7
Kings	2
Madera	6
Marin	2
Merced	46
Sacramento	1
San Joaquin	19
Solano	1
Sonoma	7
Stanislaus	23
Tulare	20



Changes from 2022

- Project duration increase
 - 24 -> 30 months
- Updates to Benefits Calculator
 - Pasture time clarification
 - Lactose % not requested for ECM calc
- New online application platform
 - Wizehive -> Amplifund
- Related: availability of Dairy Plus for past AMMP or additional funding along with new AMMP; past AMMP can apply for DDRDP



Current Solicitation

- 2023 AMMP funding authorized by the Budget Act of 2022, SB 154 (\$48 million for livestock methane reduction) and AB 179 (\$20 million for AMMP)
 - Shared AMMP/DDRDP funding going ~50/50
 - Splitting appropriations in half across 2 grant rounds (half 2023, half 2024)
- AMMP – **\$20.9 million** available in 2023 for award funds and technical assistance
- Up to \$750,000 per project, matching funds encouraged but not required
- Maximum project duration **30 months** (anticipated start March 2024)

2023 AMMP Timeline (subject to change)

Invitation to Submit Grant Applications	June 28, 2023
CDFA Application Assistance Workshops	July 11 and July 20, 2023
Grant Applications Due	August 28, 2023, 5 PM PT
Review Process	August – November 2023
Award Announcement	December 2023

Project and application prep: recommend starting early!

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



Application Period
June 28 – August 28, 2023



Applications
Submitted
(Online Platform)



Administrative
Review



Financial and
Technical
Review



Solicitation and Review Process

Eligibility

- 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 project (e.g., a centralized composting facility).
- Operations with existing dairy digesters NOT funded by CDFA's Dairy Digester Research & Development Program may apply to reduce methane emissions from manure NOT being treated in the digester system.
- Applicant may submit more than one grant application, but each must represent a unique project site (i.e., dairy or livestock operation)
- Projects must include **at least one eligible practice** that reduces baseline emissions.

Eligible Practices

1. Pasture-based management

2. Alternative manure treatment and storage

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

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

Manure treatment, drying and/or storage

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

Includes:

- compost bedded pack barn that composts manure in situ
- Slatted floor pit storage, cleaned out at least monthly

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*

- Full or partial scrape system
- Full or partial vacuum

- 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

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

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
- Operations that have already installed an anaerobic digester system funded by DDRDP, or operations that previously received AMMP funding
- Treatment of manure digestate, i.e., digested manure material resulting from an anaerobic digestion process

Other Requirements

- Grant recipients expected to comply with all applicable permitting within six 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 available on AMMP webpage:

<https://www.gotomygrants.com/Public/Opportunities/Details/9331197c-897e-4c6c-88cc-d616582176b2>

Log In


2023 Alternative Manure Management Program

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

Opportunity Information

Title	2023 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_ammmp_tech@cdfa.ca.gov
Fund Activity Categories	Agriculture
Departments	Office of Environmental Farming and Innovation
Public Link	https://www.gotomygrants.com/Public/Opportunities/Details/9331197c-897e-4c6c-88cc-d616582176b2
Is Published	Yes

Funding Information



Login


Email

Password

show

☐ Remember my email

[Forgot your password?](#)

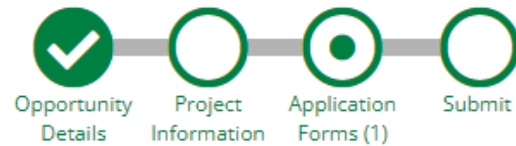
 Log in with SSO

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

Application Elements

☒ Online application

2023 Alternative Manure Management Program



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 common to all applicants
 - 5 main AMMP sections to complete – includes within-application questions and places for attachments; 1 optional section for additional info if needed

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

Application Sections and Attachments

☒ 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.

1.2 – Letter of agreement from landowner

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:

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 and in the Request for Grant Applications.**

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

NEW

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 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

2023 Alternative Manure Management Program
Attachment 2: Work Plan Template

OPERATION NAME:

Instructions: List all tasks used to complete project implementation. Clearly and concisely describe the activities (e.g., procuring permits, site preparation, construction, equipment installation, field supervision, etc.) required to accomplish the goals/objectives proposed in the Project Narrative. Identify who will perform each task/activity, including project partners, contractors/consultants, etc. Provide a timeline in chronological order for all proposed tasks with estimated start and end dates for each task. The start and end dates should not be outside of the project term as identified in the Request for Grant Applications. As needed, add rows to the table below, not exceeding 5 pages.

Task No.	Description/Activity	Performed By (Title)	Start Date (Month/Year)	End Date (Month/Year)

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Application Sections and Attachments

☒ Budget & Financials

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

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!)*

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)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T																			
1	2023 ALTERNATIVE MANURE MANAGEMENT PROGRAM																																						
	Instructions: Enter the amount of grant funds requested for each budget category identified in blue, which includes supplies, equipment, labor, and any other allowable costs necessary to complete the proposed project. Itemize the costs for supplies, equipment, and any other allowable expenses by providing a description and quantity to be purchased. Also, itemize labor costs for work on the project by providing a brief description of services and the cost/hour necessary for installation.																																						
	Contractor labor costs cannot exceed 25% of the total grant request amount. Design, engineering, consulting, and permit costs cannot exceed 5% of the total grant amount requested. Project costs must be reasonable and consistent with costs paid for equivalent work on non-grant funded activities or for comparable work in the labor market.																																						
	*For cost share, provide a brief description of the types of costs, including the quantity, activity, or service needed to complete the project, along with their source (e.g. applicant, NRCS, etc.). Cost share can include cash and/or in-kind contributions. Cash contributions are the amount of funds, including supplies, equipment, and any other allowable costs, that will be contributed by the applicant organization or other funding source for the proposed project. In-kind contributions are estimated dollar values of any time, property, or supplies donated to a project, including costs associated with labor for any work involved with the implementation of the proposed project.																																						
	Note that the "Total Grant Request" amount will automatically calculate the amounts for each budget category (supplies, equipment, labor, and other costs). This amount is the total AMMP grant funding requested to complete the proposed project. The "Total Grant Request" cannot exceed \$750,000 . As needed, you may add rows to the table below.																																						
2																																							
3	Operation Name:																																						
4	Total Grant Request:		\$0.00																																				
5	Total Matching Funds:		\$0.00																																				
6	Total Project Costs:		\$0.00																																				
7	SUPPLIES: Materials/items with an acquisition cost under \$5,000 per unit.			\$0.00			EQUIPMENT: An article of nonexpendable, tangible personal property which equals or exceeds \$5,000 per unit.			\$0.00			LABOR: Costs for any work on the project that will be performed by individuals associated with a contractor. Contractor labor costs cannot exceed 25% of the total grant request amount.			\$0.00			LABOR: Costs for project design, engineering, consulting, and permits. Costs in this category cannot exceed 5% of the total grant amount requested.			\$0.00			OTHER: Allowable expenses not covered in the previous budget categories necessary for project implementation.			\$0.00			COST SHARE*: Project costs not borne by the funding source, including cash and/or in-kind contributions.			\$0.00			\$0.00		
8																																							
9	Description		QTY	Total	Description		QTY	Total	Description of Services		Cost/hour	Hours	Total	Description of Services		Cost/hour	Hours	Total	Description		QTY	Total	Description		Cash	In-kind													
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Application Sections and Attachments

☒ 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 dated 6-21-23; posted on CCI Quantification page (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

Agency	Project Type	Quantification Methodology (QM) and Calculator Tool	Priority Population Benefit Criteria Table	Reporting Template
California Air Resources Board	Smoke Monitoring	–	–	Smoke Monitoring
California Conservation Corps	Riparian Restoration Projects	Riparian Restoration QM Calculator Tool	Job Training and Workforce Development	Conservation Corps
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 Conservation	Wetland and Watershed Restoration Projects
California Department of Food and Agriculture	Alternative Manure Management Practices	Alternative Manure Management Program QM Draft Calculator Tool	Waste Diversion and Utilization	Alternative Manure Management Program
California Department of	Dairy Digesters	Draft Dairy Digester Research and Development Program QM	Waste Diversion and Utilization	Dairy Digesters Research and



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

*See "Documentation" tab for additional information

2023 Alternative Manure Management Program Attachment 6: Environmental Co-Benefits Template

Operation Name:

Please respond to the following questions. Limit document to 2 pages.

- 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.
- 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?
- 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 transportation miles (associated with compost production or use)

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Application Sections and Attachments

Project Readiness

Questions: none, but all were exported to Attachment 7

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

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



NEW

Operation Name:

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).¹ 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, but **within ½-mile of a disadvantaged community and within a low-income community census tract**?
- ☐ D. Is the project located within the boundaries of 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 needed. If the project meets at least one criterion, it counts toward 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 ½-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.

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Scoring

SCORING OVERVIEW – 100 POINTS TOTAL

Section	Available Points
Project Plan & Long-Term Viability	25
Budget & Financials	15
Estimated GHG Reduction	35
Environmental Co-Benefits	10
Project Readiness	10
Benefits to Priority Populations	5

Details on criteria considered within each scoring section and point breakdown can be found in the **RGA: Appendix E: Detailed Scoring Criteria**



Appendix E: Detailed Scoring Criteria


SCORING CRITERIA	MAXIMUM POINTS
PROJECT PLAN AND LONG-TERM VIABILITY	25
Addressed all requirements of Project Plan section and Work Plan including, but not limited to: <ul style="list-style-type: none">a. Current and proposed manure management are clear and well described. Description included tons of material handled through the proposed management practice.b. Proposed technologies have a track record of success and are commercially available in California.c. The proposed practice appears appropriate for the operation's facilities and manure management and feasible to implement successfully.d. Documentation that demonstrates control of the dairy/livestock operation site provided (if applicable).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).f. Specific list of all tasks needed to complete 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 project within the grant timeline, with specific dates for each target.k. Included an evaluation component to measure success of the project and to determine whether the goals/objectives were accomplished and build in measurable milestones and a timeline to complete the evaluation before the grant term expires.	

Successful Elements

- **Consistency** through and across application and attachments
- **Detail and clarity** describing existing operation and management, and proposed project in Project Narrative
- **Supporting documentation, information, justification** for values used in calculator tool, responses on applicable permits, project costs in budget
- **Operation-specific, unique, concrete examples** for how the implemented project is expected to impact the operation or the community

Benefits Calculator Tool

- Applicants must use the California Air Resource Board's 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
- The Benefits Calculator Tool is available at: www.arb.ca.gov/cc-resources

	A	B	C	D	E	F
1						
2	California Air Resources Board					
3	Benefits Calculator Tool for the					
4	Alternative Manure Management Program					
5	California Climate Investments					
6						
7						
8	Note to applicants:					
9	A step-by-step user guide, including project examples, for this Benefits Calculator Tool is available here.					
10						
11						
12	Project location (county)		Required			
13						
14			Livestock Category		Animal Population	
15	Livestock population by category. Note: Only livestock categories for which manure management will be affected in some way by the AMMP project 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		Required	
16			Optional		Optional	
17			Optional		Optional	
18			Optional		Optional	
19						
20	Dairy Applicant Information					
21	Milk Fat (%)		Required			
22	Milk True Protein (%)		Required			
23	Milk Produced (lbs/cow/day)		Required			
24						
25			Baseline manure management practices (current practices on the dairy or livestock operation)		Manure management practices after implementation of proposed AMMP project	
26	New practice to be adopted				Required	
27	Manure collection system		Required		Required	
28	For partial scrape systems, enter the percentage of manure that is flushed on annual basis					
29	Number of months per year livestock spend at pasture (if any)		Optional		Optional	
30	Number of hours per day livestock spend at pasture (if any)		Optional		Optional	
31	Primary Stage Solid Separation		Required		Required	
32	Second Stage Solid Separation (if any)		Optional		Optional	
33	Storage/treatment practice for separated/scraped solids		Required			
34	Is a flocculant used to increase separation efficiency?		Required		Required	
35	Electricity consumption associated with manure management (MWh/year)		Required		Required	
36	Diesel fuel consumption associated with manure					
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[Read Me](#) [Definitions](#) [Project Info](#) [Project Data Inputs](#) [GHG Summary](#) [Co-benefits Summary](#) [Documentation](#) [For Technical Reviewers](#)

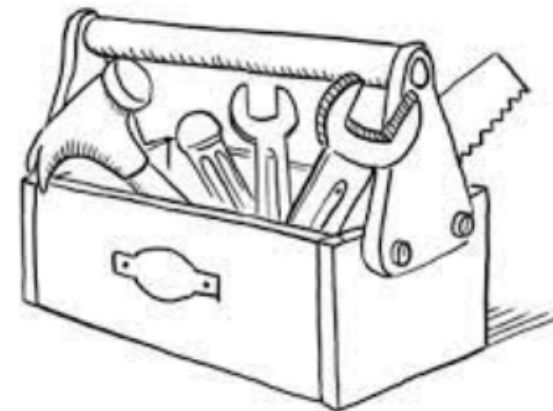
Benefits Calculator Tool

- Main updates:
 - New options to input for calculating pasture time (months/year and hours/day)
 - Energy corrected milk (ECM) equation – simplified, no longer requires lactose % as an input
 - Compost – improved accounting for vermifiltration system (vermicompost)



Tools and Resources

- Request for Grant Applications
- Application Checklist
- CDFA workshops
- FAQs and Q&A periods (3 rounds)



Questions Received by:	Responses Posted by:
July 13, 2023	July 20, 2023
July 27, 2023	August 3, 2023
August 10, 2023	August 17, 2023

- Benefits Calculator: QM, User Guide
- Project Planning/Map tool
- Technical assistance – list provided on website
- AMMP outreach project – manure management series webinars and one-pager (<https://cdqap.org/ammp-outreach-project/>)

AMMP 2023 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 application, you can work on the Project Information and Application Form. Required fields are marked with an asterisk *. All required fields must be marked as Complete)*



- ☐ Project Information – filled out all required fields, and Marked as Complete
- ☐ Application Forms (Program Application) – filled out all required fields
 - Program Application contents (detailed listing on page 2)
 - Applicant Information
 - Project Information
 - Application Category (AMMP Only; AMMP and Dairy Plus; Dairy Plus Application Sections (if applicable))
 - AMMP Application Sections (if applicable)
 - Dairy Plus Application Sections (if applicable)
- ☐ Uploaded all required and applicable attachments (detailed listing on page 2)
- ☐ Submitted application. The system should send an email confirming successful submission. Late submissions will not be accepted.

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-SG
Use of these images is not meant as an endorsement of the products pictured.

AMMP Project Planning Tool

****IMPORTANT:** parts of this tool have not been updated to align with the 2023 AMMP grant solicitation. Interested applicants may still use it fully for project design and mapping, but please be aware the associated Benefits Calculator Tool functions and online application platform instructions on the final PDF are no longer current. Instructions from the 2023 AMMP Request for Grant Applications should be followed. We apologize for the inconvenience.**

**RePlan: Regional Conservation and Development Planning Tool**Save URL

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

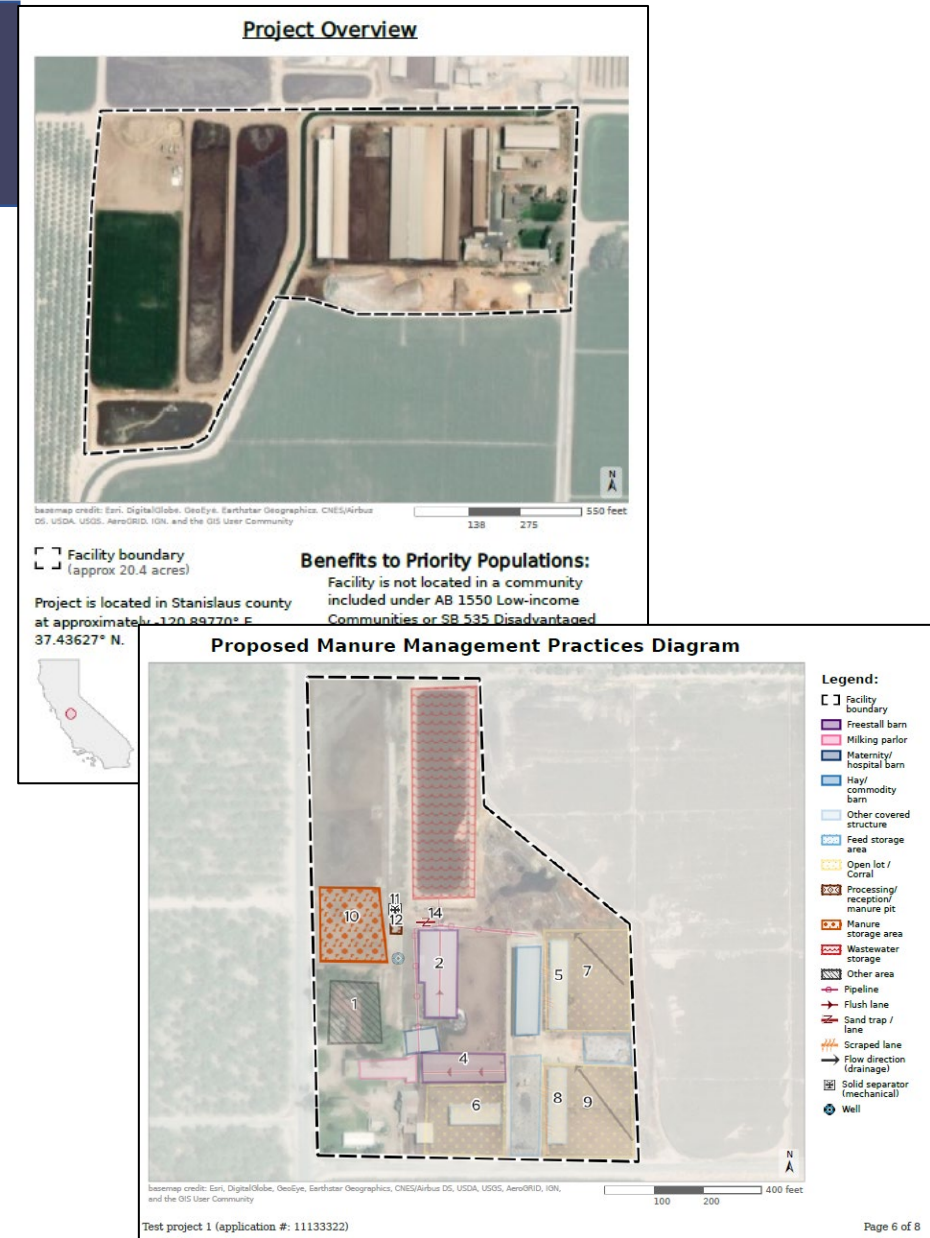
Begin



Alternative Manure Management Program

CDFA OFFICE OF ENVIRONMENTAL FARMING & INNOVATION





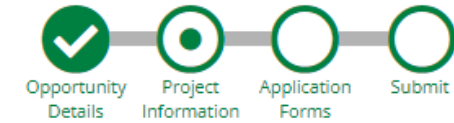
<https://replan-tool.org/ammp/>

Online Application Platform Demo

Navigation Tips:

1. SAVE OFTEN
2. Some text is a little small; zoom your browser view (Ctrl + "+") if helpful
3. Can jump between 4 buttons up top at will (do not need to complete something before viewing or working on other pages)
4. For hyperlinks in application, recommend opening in new tab (right click, "open in new tab"; or Ctrl + left click on link)
5. Can Save anytime, but "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"

2023 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*

\$0.00

Total Award Budget

\$0.00

Primary Contact Information

Name*

Alyssa Louie

Email Address*

alyssa.louie@cdfa.ca.gov

Address Line 1*

Address Line 2

City*

State/Province*

Postal Code*

Phone Number

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

Questions?

Program Contact: cdfa.oefi_ammp_tech@cdfa.ca.gov

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

Email Notifications:

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

Thank you for joining!

Up next - Dairy Digester Research and Development Program (DDRDP) Application Assistance Workshop, followed by Dairy Plus Program

2023 Dairy Digester Research and Development Program



Application Assistance Workshop 1

July 11, 2023



2023 Outline

1. CDFA's Dairy Digester Research and Development Program
 - Program Overview
2. 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
 - CARB/DDRDP Benefits Calculator Tool
3. Questions

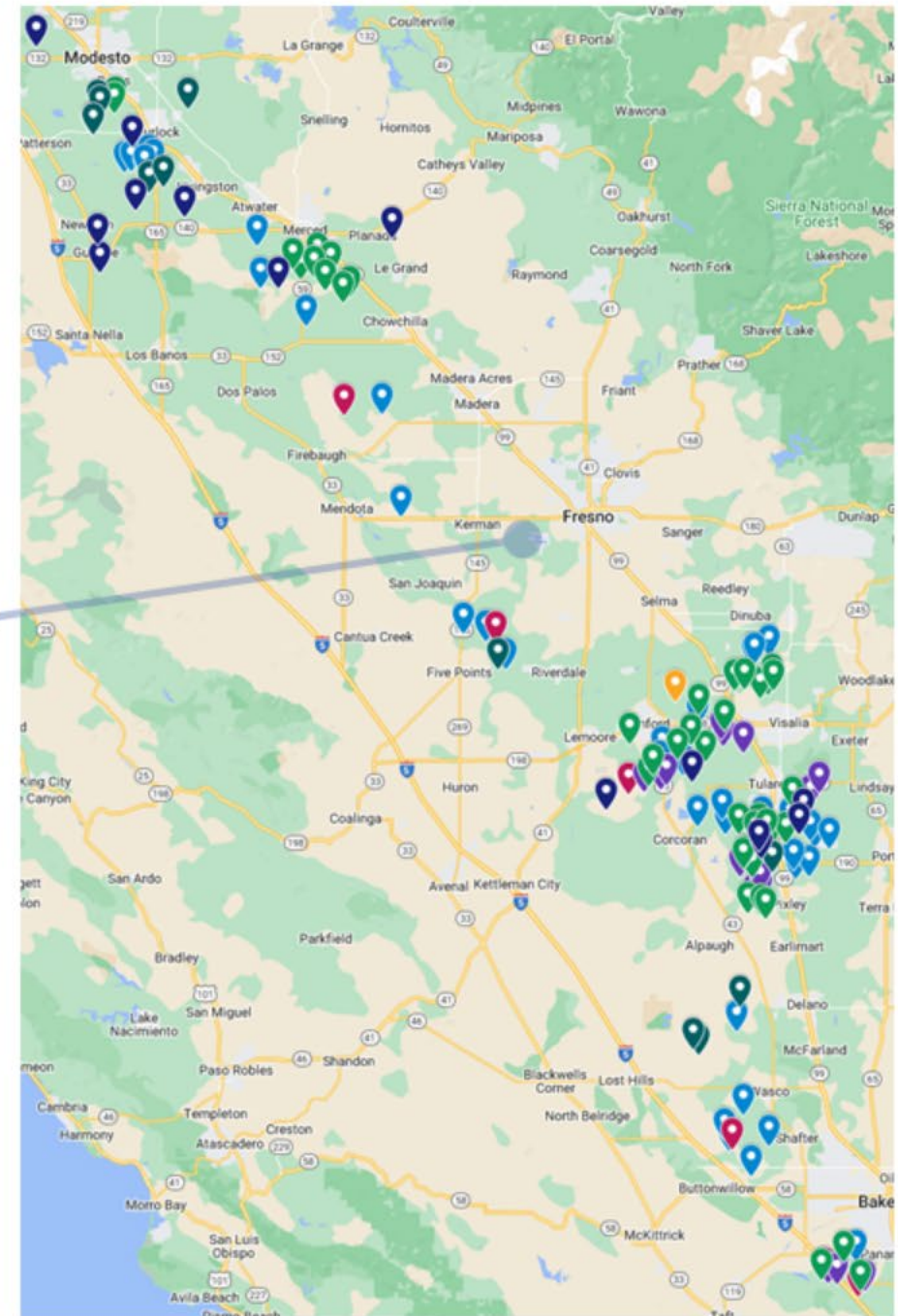
Program Overview

- **What is the DDRDP?**
 - Awards funds to **California** dairy operations and digester developers for the implementation of anaerobic dairy digesters.
 - Results in manure methane emission reductions and minimizes or mitigates criteria pollutants.
- Since 2014, 6 rounds completed
 - 130 incentive & 1 demonstration projects
 - Awarded ~\$214 million
 - 2.3 MMTCO₂e reduced/year



13 RNG Clusters + 12 Independent 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**
42 RNG fuel and electricity generating digester projects
+ 1 Demonstration Project
-  **2020 projects**
12 RNG fuel digester projects
-  **2022 projects**
14 RNG fuel digester projects



Changes from 2022

- Project duration- increase
 - 24 → 30 months
- Request for Grant Applications(RGA)- few updates
- Benefits Calculator Tool- updated
- New online application platform
 - Wizehive → Amplifund
 - Use of “Project Title” instead of application ID
 - [Amplifund User Guide](#)
- Related: availability of Dairy Plus for past DDRDP or additional funding along with new DDRDP; past AMMP can apply for DDRDP



2023 DAIRY DIGESTER RESEARCH AND DEVELOPMENT PROGRAM

Request for Grant Applications

Released Date: June 28, 2023
Applications Due: August 28, 2023, 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



Grant Funding and Duration

- 2023 DDRDP funding is authorized by the Budget Act of 2022, SB 154, Chapter 43 (\$48 million for livestock methane reduction, with priority given to AMMP)
 - Shared DDRDP/AMMP solicitation going ~50/50
 - Splitting appropriations in half across 2 grant rounds (half 2023, half 2024)
- DDRDP- \$11.4 million available for 2023
- Award Amount= **Up to \$1.6 million**
- Matching Funds= 50% matching funds are required
- Maximum Project Duration= **30 months** (anticipated start March 2024)



Grant Funding and Duration- Continuation

- **New:** Previous AMMP recipients are eligible to apply for DDRDP to further improve 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

2023 DDRDP Timeline*	
Invitation to Submit Grant Applications	June 28, 2023
CDFA Application Assistance Workshops	July 11 and July 20, 2023
Grant Applications Due	August 28, 2023 5:00 P.M. PT
Application Review Process	August - November 2023
Award Announcement	November - December 2023

*Subject to Change

Solicitation and Review Process



Application Period
June 28 – August 28, 2023

Applications
Submitted (Online Platform)

Administrative Review

Financial and Technical
Review

Project
Begins

Grant agreement
executed

Successful Applicants
Notified

Unsuccessful Applicants
Notified, Feedback
Provided





Eligibility

- 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

- 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 2023 DDRDP



Program Requirements

- 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 proven operating history for capture/destruction of methane
- CEQA compliance is anticipated within six months of the executed grant agreement.
- Project partners must not have filed for bankruptcy in last 5 years.
- Adhere to allowable/unallowable cost guidance.



Program Requirements- continuation

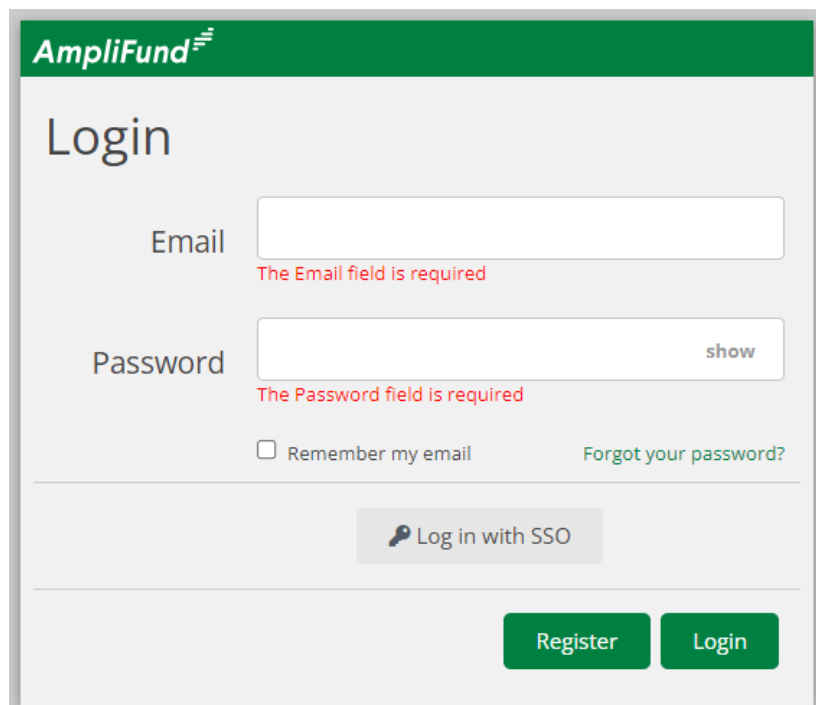

- Digester design, construction, and operation must improve air and water quality protection.
 - Use of double-lined ponds consistent with Tier 1 specification of Dairy General Order (R5-2013-0122), above-ground tanks, and below-grade tanks constructed of concrete/suitable impermeable and corrosive-resistant material.
 - For Electricity Projects= total NOx 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 annual reporting.

How to Apply

Applicant portal available on DDRDP webpage

<https://www.gotomygrants.com/Public/Opportunities/Details/f33081d9-7e90-4d3c-9a0a-43e283562884>

[Log In](#)



The image shows a screenshot of the AmpliFund login page. At the top is a green header with the AmpliFund logo. Below it, the word "Login" is displayed. There are two input fields: "Email" and "Password". The Email field has a red error message "The Email field is required". The Password field has a red error message "The Password field is required" and a "show" button. Below the password field is a checkbox for "Remember my email" and a link for "Forgot your password?". At the bottom, there is a "Log in with SSO" button and two green buttons labeled "Register" and "Login".

[Amplifund User Guide](#)

2023 Dairy Digester Research and Development Program

[Print](#)

[Help](#)

[Download](#)

[Save](#)

[Apply](#)

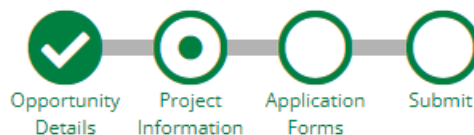
Opportunity Information

Title	2023 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
Departments	Office of Environmental Farming and Innovation
Public Link	https://www.gotomygrants.com/Public/Opportunities/Details/f33081d9-7e90-4d3c-9a0a-43e283562884
Is Published	Yes

Funding Information

How to Apply- Continuation

2023 Dairy Digester Research and Development Program



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
 - 5 main DDRDP sections to complete – includes within-application questions and places for attachments

RGAs “Grant Application Questions and Attachments” section;
[2023 DDRDP Questionnaire Preview](#)



How to Apply- Continuation

Important

- An entity can create an account and be able to submit multiple applications through one account
- Email address associated with one entity account can be used to fill up multiple applications

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

1. Applicant Information
2. Additional Applicant Information
3. Socially Disadvantaged Farmers or Ranchers
4. Project Information
5. DDRDP Application Sections
6. Project Type and Duration
7. Budget
8. Financials
9. Herd Size Information
10. GHG Reduction Co-Benefits Data
11. Evaluation of Benefits to Priority Populations



Attachments Tab

Digester Project Plan and Long-Term Viability

Attachment 1: Project Narrative Template

- 1.1: Site Plan, project design documents, cluster maps, schematic diagrams, etc.
- 1.2: Resumes, team commitment letters, etc.
- 1.3: Copy of Deed and/or Lease Agreement (if applicable).

Attachment 2: Work Plan Template



Attachments Tab

Budget Worksheet and Financials

Attachment 3: Budget Worksheet Template

- 3.1: Bids, quotes, or estimates to support budget costs

Attachment 4: Financials

Provide documentation regarding the organization's financial strength.

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



Attachments Tab

Estimated GHG Emissions Reduction

Attachment 5: DDRDP Benefits Calculator Tool

- 5.1: Explanation of assumptions of GHG calculations.

Project Readiness and Permitting Status

Attachment 6: Project Readiness Template

- 6.1: Permits
- 6.2: Status of interconnection/offtake agreements, etc.



Attachments Tab

Environmental Performance

Attachment 7: Environmental Performance Template

- 7.1: Support project's environmental performance claims.

Community Impact

Attachment 8a: Community Impact Template

- 8.1: Up to three letters of support
- 8.2: Explanation of Priority Population Benefits.

Attachment 8b: CARB Community Engagement Questionnaire

Community Outreach Requirements

- 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
<u>New Submitting Organizations</u>	+5
Total	100/105

Appendix E: Detailed Scoring Criteria

SCORING CRITERIA	MAX POINTS
DIGESTER PROJECT PLAN AND LONG-TERM VIABILITY	20
Addressed all requirements of the feasibility section and Work Plan including, but not limited to: <ul style="list-style-type: none">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
- The Benefits Calculator Tool is available at: www.arb.ca.gov/cc-resources

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.

1. Biogas Control System (BCS)
2a. Primary Biogas Destruction Device
2b. Percent of Biogas destroyed in primary destruction device (over 10 yrs)
2c. Secondary Biogas Destruction Device
2d. Percent of Biogas destroyed in secondary destruction device (over 10 yrs)

2e. If the raw biogas is trucked within a dairy cluster to a central biogas processing station as part of the project, enter the round trip mileage and vehicle fuel type.
2f. If the fuel will be trucked to an offsite fueling station as part of the project, enter the round trip mileage and vehicle fuel type.

3a. Baseline Solid Separation
3b. Project Solid Separation
4. What percentage of time is the effluent stored in a covered lagoon or empty after project installation?
5. Project Location (county)
6a. Milk Fat (%)
6b. Milk true Protein (%)
6c. Milk Lactose (%)
6d. Milk Produced (lbs/cow/day)
ECM (kg/cow/day)
10 yr ECM (MT)

Baseline Manure Management - Enter data regarding management practices using averages of preceding 12 months

7. Enter number of livestock by category	8a. Percent of manure volatile solids (VS) deposited on land and not entering wetland/anaerobic environment	8b. Percent of VS from solid separation prior to wetland/anaerobic environment and sent to other treatment/storage practice	8c. (if applicable) Enter % VS sent to any other non-anaerobic treatment/storage practice	8d. Enter % VS entering wetland/anaerobic system (e.g., lagoon, storage pond) by livestock category
Dairy Cows (freestall)	20.0%	0.0%		80.0%
Dairy Cows (open lot corrals)	70.0%	0.0%		30.0%
Dry cows	70.0%	0.0%		30.0%
Heifers	70.0%	0.0%		30.0%

Pasture / Dirt

Identify current practice for separated solids

Identify other current treatment/storage practice

California Department of Food and Agriculture	Dairy Digesters	Dairy Digester Research and Development Program QM Calculator Tool	Waste Diversion and Utilization	Dairy Digesters Research and Development
-----------------------------------------------	-----------------	-----------------------------------------------------------------------	---------------------------------	------------------------------------------



Questions and Answers (Q & A)

Questions Received by:	Responses Posted by:
July 13, 2023	July 20, 2023
July 27, 2023	August 3, 2023
August 10, 2023	August 17, 2023

- Email questions to: **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/>

Thank you!

Email questions to:
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>

**Thanks for Joining. Up next- Dairy Plus Program
Application Assistance Workshop**



2023 Dairy Plus Program



Application Assistance Workshop

July 11, 2023

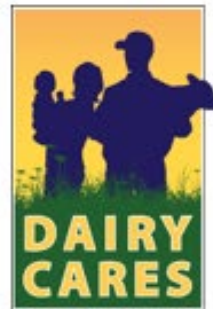


\$85 Million for CA Dairy Sector

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



CALIFORNIA DEPARTMENT OF
FOOD AND AGRICULTURE



WESTERN UNITED DAIRIES



Because the environment is everyone's business



Four Major Components



1 Implementation of Climate-Smart Dairy Practices

2 Measure, Quantify and Verify Carbon, GHG & Nitrogen Benefit

3 Outreach & Education

4 Develop Climate-Smart Product Markets

What is the Dairy Plus Program?



Program Overview

- **GOAL:** To award competitive grants to CA dairy farms for the implementation of advanced manure management practices that address **both** methane emissions and nutrient surplus.
- **Funding:** \$75 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 or Previous (successfully completed) AMMP Project
 - New or Previous (successfully completed) DDRDP Project
- **Duration:** 24 months
- **Reimbursement basis**



Eligible Practices



For new 2023 or previous **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. Practices above (A, B, or C) AND **Subsurface drip irrigation (SDI)** using liquid manure.
- E. Practices above (A, B, or C)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 2023 or previous **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. Practices above (A or B) 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
AMMP Dairy Plus a) Vermifiltration b) Weeping wall (min of 2 cells) c) Advanced solid-liquid separation assisted by flocculants and/or bead filters d) Practices above (a, b, or c) AND subsurface drip irrigation (SDI) using liquid manure e) Practices above (a, b, or c) AND aerated composting	Up to \$750,000	Up to \$1.25 M (\$750 cow)	Up to \$2 M	NA
DDRDP Dairy Plus a) Post-digester vermifiltration b) Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters c) Above practices (a or b) 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
DDRDP Dairy Plus for Previous AMMP a) Post-digester vermifiltration b) Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters c) Above practices (a or b) 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
Dairy Plus for Previous AMMP** a) Vermifiltration b) Weeping wall (min of 2 cells) c) Advanced solid-liquid separation assisted by flocculants and/or bead filters d) Practices above (a, b, or c) AND subsurface drip irrigation (SDI) using liquid manure e) Practices above (a, b, or c) AND aerated composting	NA	Up to \$1.25 M (\$750 cow)	Up to \$1.25 M	50/50 match – up to \$750k
Dairy Plus for Previous DDRDP a) Post-digester vermifiltration b) Post-digester advanced solid-liquid separation assisted by flocculants and/or bead filters c) Above practices (a or b) 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

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 or OLD
AMMP**




If you are applying for a 2023 AMMP grant AND a Dairy Plus grant, or you are a past AMMP recipient applying only for a Dairy Plus grant, you will use the 2023 AMMP application submission portal.

2023 AMMP Application Submission Portal 

**NEW or OLD
DDRDP**



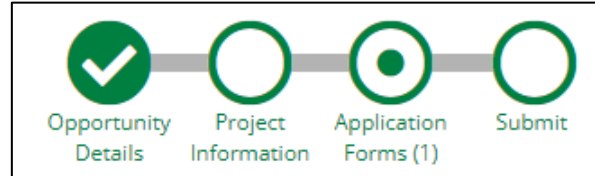
If you are applying for a 2023 DDRDP grant AND a Dairy Plus grant, or you are a past DDRDP recipient applying only for a Dairy Plus grant, you will use the 2023 DDRDP application submission portal.

2023 DDRDP Application Submission Portal 



Includes old 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 2023 AMMP AND
Dairy Plus, select “Yes”
for 2023 AMMP and
“Yes” for Dairy Plus; if a
previous AMMP
recipient only applying
for Dairy Plus, select
“No” for 2023 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 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 current proposed project is for the operation where the past project was implemented; the past funded project must be successfully completed and closed out by CDFA by time of application for Dairy Plus): select No for “Are you applying for AMMP?” and Yes for “Are you applying for Dairy Plus?”

Are you applying for 2023 AMMP? *

Select an item...

Are you applying for 2023 Dairy Plus? *

Select an item...

Save

✓ Mark as Complete

Save & Continue

How to Apply



Are you applying for 2023 AMMP? *

No



Are you applying for 2023 Dairy Plus? *

Yes



Application Category section: "Yes", applying for 2023 Dairy Plus

Dairy Plus Application Sections

Is this application for a new project in conjunction with a 2023 AMMP application, or for a project at a dairy operation that has already been awarded (and completed) a CDFA AMMP project? *

- ☐ New project in conjunction with a 2023 AMMP application
- ☐ Dairy Plus application only for a past AMMP operation
- ☐ No (you are not eligible to apply for Dairy Plus)

Producer Name (awardees for Dairy Plus Program funds must be an individual dairy producer) *

Fill in or drop-down type questions to answer

*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? *

Select an item...



Section I - Project Description

Using the completed [Project Description Template](#) and [Work Plan Template](#), provide the following information.

Project Title for the Dairy Plus Program Project *

Section II - Nutrient Management and Water Quality Improvements

Complete the [Nutrient Management and Water Quality Improvements Template](#).

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

Choose File

Places for attachment upload

Attachment Tab



Dairy Plus Program = 5 required attachments + 3 optional

Attachment A: Project Description Template (required)

- Attachment A.1: Site Plan, project design documents, schematic diagrams, permitting, maintenance plans, etc. (if applicable)

Attachment B: Work Plan Template (required)

Attachment C: Nutrient Management and Water Quality Improvements Template (required)

Attachment Tab



Attachment D: Budget Worksheet Template (required)

- Attachment D.1: Bids, quotes, or estimates to support budget costs (if applicable)

Attachment E: Estimated GHG Emissions Reduction (required)

- Attachment E.1: Explanation of Assumptions for GHG Calculations (if applicable)

Attachment E: Estimated GHG Emissions Reduction



- For **new 2023 or previous AMMP projects** = Applicants must use the QM titled "GHG Quantification Methodology for the CDFA AMMP" and the associated "Benefits Calculator Tool for the AMMP".



- For **new 2023 or previous DDRDP projects** = Applicants must use the latest QM titled "GHG Quantification Methodology for the CDFA DDRDP" and the associated "Benefits Calculator Tool for the DDRDP".

IMPORTANT:

- Apps applying under the "**Dairy Plus for Previous AMMP**" category must add the information of the previous AMMP grant in the baseline.
- Apps applying under the "**Dairy Plus for Previous 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

Demonstration by Ryan Huft,
Air Resources Engineer, CARB



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

Email Benefits Calculator Tool questions to:
GGRFProgram@arb.ca.gov



Review Process



Dairy Plus Program must achieve targets set with USDA, including:

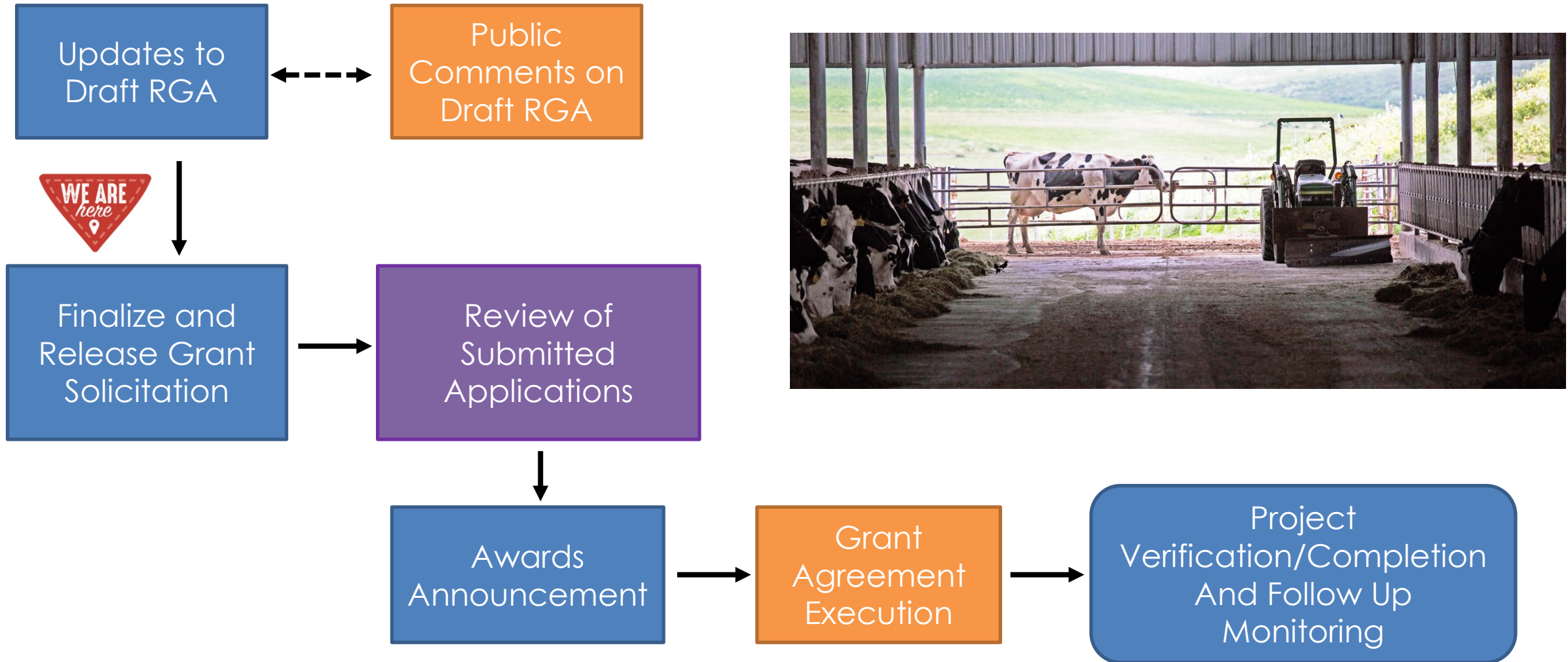
- GHG reductions of 450,000 metric tons of CO₂e annually;
 - Award at least 60 producers to adopt advanced manure management practices in their farms;
 - Mitigate the methane emissions of up to 100,000 dairy cows;
 - Contribute \$27,800,000 in matching funds from State Funding and participating producers.
-
- **Scenario 1 - Low application pressure** = There is enough funding to cover all Dairy Plus Program requests. Projects that pass admin review, meet min scoring criteria for technical review, and contribute sufficiently toward meeting USDA GHG reduction targets, will be recommended for funding. The technical review panel will set the min scoring criteria prior to commencing the review.
 - **Scenario 2 - High application pressure** = There is not enough funding to cover all Dairy Plus Program requests. The technical review panel will rank projects according to the review criteria provided in RGA. The technical review panel will make funding recommendations considering application ranking, geography, dairy size, practice diversity, underserved producer status, and program-wide requirements to meet USDA GHG reduction targets.

Scoring Criteria



Categories	Max Points
Project Description and Work Plan	20
Nutrient Management and Water Quality Improvements	10
Budget Worksheet	10
Estimated GHG Emission Reduction	10
Total	50

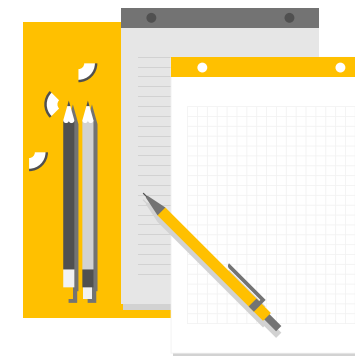
CDFA Grant Solicitation Process



2023 Dairy Plus Program Timeline*



Item	Timeframe
Release of Solicitation	June 28, 2023
CDFA Application Workshops	July 11, 2023 and July 20, 2023
CDQAP-CDRF Workshop	July 13, 2023
Grant Applications Due	August 28, 2023
Review Process	August – November 2023
Announce Award Funding	November – December 2023
Project Term Begins	March 2024



* 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 (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 “2023 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
July 13, 2023	July 20, 2023
July 27, 2023	August 3, 2023
August 10, 2023	August 17, 2023

- Email questions to: **cdfa.oefi_DairyPlus@cdfa.ca.gov**
(please add "2023 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/>

CDRF: <https://cdrf.org/plus-assistance/>