

## 2017 Alternative Manure Management Program: Projects Selected for Award

Updated: March 27, 2018

#	Organization Name	Project Title	Project Description	County	*Requested Funds	Matching Funds	**GHG Reduction 5 Years
1	Barcellos Farms	T-Bar Dairy AMMP	The proposed project for the 2017 Alternative Manure Management Program at T-Bar Dairy is a combination of a Solid Separation project through Open Solar Drying and a Conversion from Flush to Scrape project. Currently, all milk cows onsite are housed in open lot corrals that utilize recycled flush water to clean the lanes. The flush system uses water to move manure into the retention pond, which causes the release of methane into the atmosphere. T-Bar Dairy is proposing to move those milk cows onto scraped lanes to eliminate the need for the flush water and reduce methane production. Additionally, the project proposes to collect all animal waste output in a collection pit and pump it over a proposed two-stage mechanical separator. Solids collected out of the separator will then be spread over a manure drying and stacking pad to be dried. Dry manure will then be used both as bedding in the proposed freestall barns as well as applied to agricultural fields as fertilizer.	Tulare	\$ 750,000	\$ 496,252	7,915
1	Lafranchi Ranch	Lafranchi Dairy Dry Scrape Conversion	The project will convert an existing flush system on a third generation Marin County dairy to dry scrape. The dairy hosts an on-farm compost facility that meets the needs of the local community for organics recycling and is affiliated with the Marin Carbon Project and the Marin Resource Conservation District. The compost operation composts solids collected from the weeping wall separator with other organic feedstocks. A proposed screw press will increase separation efficiency. A proposed pond liner will further protect water quality. The dairy and compost facility offer regular tours and workshops. UC Berkeley is conducting research at the site to measure GHG fluxes from the composting process under various conditions and feedstocks.	Marin	\$ 744,000	\$ 231,420	5,774
2	Sierra View Dairy	Sierra View Dairy AMMP Grant	Remodel Existing Dairy, with both Open Lot corrals and Covered milk cow Feed Lanes flushed facility to a bed-pack compost barn (pasture based management) and collect manure from feed lanes through scraping with mobile equipment with scraper (conversion of flush to scrape). All scraped material will be dried utilizing open solar drying.	Tulare	\$ 750,000	\$ 877,520	35,051
3	Alexandre EcoDairy Farms	Alexandre EcoDairy Farms Heifer Barn Project	Alexandre EcoDairy Farms proposes to reduce the amount of liquid waste generated and flushed into our Dairy lagoons by constructing a compost bedded pack barn. Proposed compost bedded pack barn will reduce flushed volatile solids into the Dairy's lagoons, subsequently reducing methane gas emissions. Dairy young stock are reared in a combination of hutches and concreted alley-ways that are flushed several times a day into a manure separation system, by where liquids and solids are separated. Solids are stored and composted while liquids are gravity fed into three lagoons that are aerated. Aerated liquids are applied to pastures over time, outside rainy periods, which can be infrequent do to high annual rainfall in Del Norte County.	Del Norte	\$ 749,746	\$ 518,475	9,572
4	De Snayer Dairy	Solids separator in conjunction with open solar drying of solids and storage of manure solids.	We would like to apply for a solid separator from US Farm systems. Currently we have two settling ponds where we separate the solids from the manure water which flow into the in the lagoon. The solids separator would allow us to bypass the two settling ponds and use those as waste water storage. We would like to add a pad of cement for manure storage and for open solar drying.	San Joaquin	\$ 536,448	\$ 2,250	36,494

\*Funds requested by applicant. Awarded amount subject to change based upon CDFR evaluation of project budget.

\*\*GHG reduction listed as submitted by recipient are estimates only. Subject to change.

## 2017 Alternative Manure Management Program: Projects Selected for Award

Updated: March 27, 2018

#	Organization Name	Project Title	Project Description	County	*Requested Funds	Matching Funds	**GHG Reduction 5 Years
5	Double D Dairy	Installation of a Mechanical Manure Separator and Concrete Storage Pad	Double D Dairy #2 would like to install a mechanical manure separator and build a concrete wall and storage pad which would allow the dairy to collect solids year around. The solids would be dried in passive windrows and when dried down then used for bedding for lactating cows. Currently, Double D Dairy#2 only source of manure separation is a settling basin. The solids collected there are exported by diesel trucks for field use only and not used for bedding.	Stanislaus	\$ 397,650	\$ 62,000	11,080
6	Milk River	Milk River GHG Reduction Project	We will reduce our greenhouse gas emissions by 72% by introducing a vacuum scraping system into our previously flushed lanes to collect lactating cow manure. This scraped product will be run through screw presses to reduce the moisture content. This manure will then be solar dried for future use as bedding or field nutrient/amendments. This process will prevent the manure from entering the anaerobic conditions present in the manure lagoons.	Tulare	\$ 395,358	\$ -	16,012
8	Dykstra Dairy	Dykstra Dairy GHG Reduction Project	<del>We will reduce our greenhouse gas emissions by 68% by introducing a vacuum scraping system into our previously flushed lanes to collect lactating cow manure. This scraped product will be run through screw presses to reduce the moisture content. This manure will then be solar dried for future use as bedding or field nutrient/amendments. This process will prevent the manure from entering the anaerobic conditions present in the manure lagoons.</del>	Tulare	<del>\$ 658,511</del>	<del>\$ 80,000</del>	71,778
7	Regli Jerseys	Regli Jerseys Dairy CH <sub>4</sub> Gas Busters Project	Regli Jerseys CH <sub>4</sub> Gas Busters Project is an upgrade to the manure management system focused on reducing methane emissions, improving water quality and soil health. It consists of converting from a fully scraped manure system to incorporating a solid separation and composting system. The Project will also develop a compost bedded pack barn. The Project will install new infrastructure, including concrete foundations and curbing for manure separation, storage and compost production, roof structures, decommissioning one manure pond, and also construct a compost bedded pack. The Project will develop composting practices to better utilize manure and shavings used on the dairy. Compost will be applied to pastures as a soil amendment. This Project will reduce solid manure stored in the current pond system. This project will help Regli Jerseys remain sustainable, help contribute to reducing GHG emissions in California, and contribute to the economic strength of the dairy industry in California.	Humboldt	\$ 533,141	\$ 200,073	460
8	DaSilva Dairy Farms Lp	Dairy #1- Manure Separator	Manure separator and concrete pad.	San Joaquin	\$ 375,000	\$ 90,935	37,517

\*Funds requested by applicant. Awarded amount subject to change based upon CDFR evaluation of project budget.

\*\*GHG reduction listed as submitted by recipient are estimates only. Subject to change.

## 2017 Alternative Manure Management Program: Projects Selected for Award

Updated: March 27, 2018

#	Organization Name	Project Title	Project Description	County	*Requested Funds	Matching Funds	**GHG Reduction 5 Years
9	Correia Family Dairy Farms	Correia Family Dairy Farms Weeping Wall Project	Weeping wall	Merced	\$ 352,813	\$ -	20,996
10	Matos Dairy	Matos Dairy Liquid-Solid Separation System	Matos Dairy is applying for the Alternative Manure Management Program administered by the California Department of Food and Agriculture with the goal of reducing methane emissions from manure management on it dairy. The dairy is proposing to acquire a US Farm Systems dual screen separation system with a processing pit and conveyor belt, removing a significant amount of the methane forming volatile solids from the ponds. The goal is to have 55% of the solids removed from the flush water after the processing screens and conveyor. There would be multiple changes that would need to be done to the dairy facility to install this system. Including, installation of a processing pit, cemented pad for solids, installation of the separation screens, underground plumbing and other modifications would be needed. This would also remove a significant amount of the manure nutrients from the lagoon and they could be handled in the solid form allowing more of the nutrients to be exported from the dairy.	Merced	\$ 563,859	\$ 6,100	42,638
11	Magneson Dairy	Pasture based system	Increase pasture time solids removal and composting	Merced	\$ 559,703	\$ 6,140	7,690
12	Alamo Farms	Alamo Farms partial conversion to vacuum manure handling	Alamo Farms proposes to purchase a manure vacuum and handle part of its manure in a dry form while continuing to flush with the remainder of the manure.	Stanislaus	\$ 748,920	\$ 6,000	22,005
13	Robert Gioletti and Sons Dairy	Partial Conversion to Scrape Manure Handling	This project proposes to collect manure from dairy cows with a vacuum scraper 120 days per year and windrow dry that manure on a concrete pad.	Stanislaus	\$ 750,000	\$ 9,169	20,630

\*Funds requested by applicant. Awarded amount subject to change based upon CDFA evaluation of project budget.

\*\*GHG reduction listed as submitted by recipient are estimates only. Subject to change.

## 2017 Alternative Manure Management Program: Projects Selected for Award

Updated: March 27, 2018

#	Organization Name	Project Title	Project Description	County	*Requested Funds	Matching Funds	**GHG Reduction 5 Years
14	Rivercrest Cattle Co.	Converting from Freestalls to Bedded Pack Barn	Converting from freestalls to bedded pack barn. The barn will be composted daily and bedding will be added as needed.	Stanislaus	\$ 201,240	\$ 114,057	5,259
15	Manuel Da silva	Weeping Wall	Project is a weeping wall. This structure will be a manure separator. It will be a separate and store manure.	San Joaquin	\$ 575,000	\$ -	16,605
16	Cal-Denier Dairy LLC	Compost Barn Construction and Flush-to-Scrape Conversion	This project will convert current Dry Cow and Heifer pens to covered compost bedded packs. The flush lanes will become dry scraped with the collected manure deposited into intensively composted windrows. There will be two compost barns constructed and the manure which is currently being deposited into an anaerobic lagoon without any separation will be composted either by moving to intensive windrows or within the bedded packs themselves.	Sacramento	\$ 711,627	\$ -	2,133
17	Martins Farm LP	Martins Farm LP	Currently manure is flushed from all of the cow housing into a settling basin and storage lagoon. While flushing is an effective method of removing manure from cow housing, the resulting flush water contains much of the manure excreted by the animals. When this manure is stored in an anaerobic environment, such as a settling basin or lagoon, methane is produced and released into the environment. The dairy is proposing to acquire a self-propelled manure vacuum to collect manure from the flush lanes from the milking and dry cows 2 days per week removing a proportionate amount of the methane forming volatile solids from the ponds.	Stanislaus	\$ 256,353	\$ -	22,803
18	Alamo Dairy	Partial Conversion to Vacuum Manure Handling	The Alamo Dairy proposes to vacuum the lanes in the cow housing with a vacuum truck and handle the resulting manure in a dry form for 104 days per year and continue flush manure handling the remaining days of the year.	Stanislaus	\$ 735,643	\$ 4,500	15,582

\*Funds requested by applicant. Awarded amount subject to change based upon CDFA evaluation of project budget.

\*\*GHG reduction listed as submitted by recipient are estimates only. Subject to change.