



CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE

Karen Ross, Secretary

TO: Greenhouse Gas Reduction Fund Program

FROM: Karen Ross, Secretary
California Department of Food and Agriculture

Tawny Mata, Ph.D., Director
Office of Environmental Farming and Innovation

DATE: January 18, 2024

SUBJECT: GREENHOUSE GAS REDUCTION FUND:
CDFA

EXPENDITURE RECORD FOR FISCAL YEAR 2023-24
Healthy Soils Program

This Attestation Memorandum documents that CDFA completed the attached Expenditure Record on January 18, 2024, for the Healthy Soils Program. The Expenditure Record is consistent with the statutory requirements of Government Code Section 16428.9 to support expenditures from the Greenhouse Gas Reduction Fund.

This Attestation Memorandum and Expenditure Record will be submitted to CARB for public posting on the CARB website at: www.arb.ca.gov/caclimateinvestments.

Questions on this Attestation Memorandum or Expenditure Record may be directed to Tawny Mata, Director of the Office of Environmental Farming and Innovation, Tawny.Mata@cdfa.ca.gov, (916) 654-0433.

Karen Ross
Secretary

Tawny Mata, Ph.D
Director

Attachment



Greenhouse Gas Reduction Fund: Expenditure Record

California Department of Food and Agriculture (CDFA)
Healthy Soils Program (HSP)

Authorizing legislation: Item 8570-101-3228 of Assembly Bill 102 (Budget Act of 2023) appropriates to California Department of Food and Agriculture \$50 million for the Healthy Soils Program from the Greenhouse Gas Reduction Fund.

Element (1) A description of each expenditure proposed to be made by the administering agency pursuant to the appropriation.

Agency that will administer funding:

- California Department of Food and Agriculture

Amount of proposed expenditure and appropriation reference:

- AB 102 (Ting, Section 240) (Chapter 38, Statutes of 2023) Item 8570-101-3228, amends the Budget Act of 2023 (Skinner, SB 101, Chapter 12, Statutes of 2023), and appropriates \$50,000,000 to the Department of Food and Agriculture (CDFA) for the Healthy Soils Program (HSP) from the Greenhouse Gas Reduction Fund.
- AB 2377 (Irwin, Chapter 868, Statutes of 2018) requires CDFA to develop and implement a technical assistance grant program to assist the applicants of HSP in application submission and project implementation. AB 102 (Ting, Budget Act of 2023, Section 240) Item 8570-101-3228 requires that no less than 5 percent and no more than \$5 million of this appropriation be utilized to develop this program.
- The total expenditure is \$50 million. This is divided between \$4 million for CDFA administration, \$1.024 million for technical assistance contracts, and \$44.976 million for grants.

Estimated amount of expenditures for administering agency administrative costs

- Administering agency administrative costs are estimated to be, and will not exceed, \$4 million, or 8 percent of the total appropriation in Item 8570-101-3228.

If applicable, identify laws or regulations that govern how funds will be used:

- AB 1532 (Pérez, Chapter 807, Statutes of 2012), Senate Bill (SB) 535 (de León, Chapter 830, Statutes of 2012), SB 1018 (Budget and Fiscal Review Committee, Chapter 39, Statutes of 2012), SB 862 (Budget and Fiscal Review Committee, Chapter 36, Statutes of 2014), and AB 1550 (Gomez, Chapter 369, Statutes of 2016) provide the general framework for how the auction proceeds will be administered to further the purposes of AB 32 (N??ez, Chapter 488, Statutes of 2006).
- The Budget Act of 2023 does not provide direction on the types of projects that should be funded in the Healthy Soils Program; nor does AB 102 (Ting, 2023).

- AB 398 (E. Garcia, Chapter 135, Statutes of 2017) prioritized “Sustainable agricultural practices that promote the transitions to clean technology, water efficiency, and improved air quality” and “Climate adaptation and resiliency” for expenditures from the Greenhouse Gas Reduction Fund, which are directly served by the Healthy Soils Program.
- AB 1613 (Committee on Budget, Budget Act of 2016, Chapter 370, Statutes of 2016) identified no-till and compost applications as eligible practices under the Healthy Soils Program.
- SB 859, Committee on Budget and Fiscal Review, Public Resources: Greenhouse Gas Emissions and Biomass (Chapter 368, Statutes of 2016) provides direction on how the program will be administered and the activities that it will support.
- AB 2377 (Irwin, Chapter 868, Statutes of 2018) requires that at least 25 percent of the technical assistance grant program funds will be used to provide technical assistance to socially disadvantaged farmers or ranchers, as defined in Section 512 of the Food and Agriculture Code. CARB and CDFA will work together to update the benefit criteria table.
- AB 991 (Statutes of 2019, Ch. 497, Sec. 121) created Section 570 of the Food and Agricultural Code defining technical assistance grants and their activities.

Continuation of existing Expenditure Record

- This is an update to an existing Expenditure Record. The Expenditure Record elements being updated include the amount of proposed expenditure and appropriation reference.

Project Type(s)

- Soil conservation practices
- Technical assistance

Describe the projects and/or measures that will be eligible for funding:

- The program provides financial incentives to implement on-farm management practices that will build soil carbon and provide net GHG benefits through direct incentives to farmers and ranchers, as well as demonstration projects.
- Eligible practices are implemented according to three agricultural systems (croplands; orchards or vineyards; and grazing lands) and may include:
 - Soil management practices (including, but not limited to, compost application and reduced tillage)
 - Establishment of herbaceous cover practice (including, but not limited to, conservation covers and cover crops; they can be perennial, such as buffer strips or wind barriers)
 - Establishment of woody cover practices (including, but not limited to, windbreaks, riparian buffers, and hedgerows)
 - Practices exclusive to grazing lands (including, but not limited to, prescribed grazing and range planting, and silvopasture)

- The Climate Smart Agriculture Technical Assistance grant program will help increase the adoption of HSP practices through outreach, application submission assistance and project implementation assistance, complementing GHG reductions achieved by HSP described above.

Intended Recipients

The Healthy Soils program includes incentives, block grant, and demonstration projects. Block grant organizations disburse incentives that are approved by CDFA, and provide administration and technical assistance services, retaining a portion of the grant for their costs:

- Incentive Projects: Farmers, ranchers, and Native American Indian Tribes.
- Block Grant Projects: Resource Conservation Districts (RCDs); University of California (UC), California Community Colleges, or California State Universities (CSU); Federally-and California Recognized Native American Indian Tribes; Local or regional government agencies such as air pollution control districts; California Commodity Groups; Nonprofit organizations including, but not limited to: Groundwater Sustainability Agencies, Irrigation districts, and land trusts
- Demonstration Projects: Academic researchers, University of California Cooperative Extension (UCCE) specialists, farm advisors, Resource Conservation District (RCD) experts, or other not-for profit entities in partnership with farmers, ranchers, and Native American Indian Tribes.

The Technical Assistance Program has the following intended recipients:

- RCDs, UCCE, and non-profit organizations with demonstrated expertise in designing and assisting in the implementation of HSP agricultural management practices.

Program structure and process for selecting projects for funding

- The Healthy Soils Program will fund grants to applicants through a competitive application process for incentive, demonstration, and block grant projects that result in net GHG benefits.
- Solicitation, evaluation, and selection of block grant projects follow guidelines in the HSP Block Grant Pilot Request for Grant Applications (RGA). Block Grant Recipient organizations are awarded according to points-based evaluation by an external Technical Review Committee. They are responsible for identifying applicants with projects that conform to the program's standards, including 25% of funding to SDFRs, through transparent award processes. CDFA must certify the on-farm projects which they propose, before those projects can commence.
- Solicitation, evaluation, and selection of direct incentive projects follow guidelines in the HSP Incentive Grants Preview RGA. Applicants apply during a window of 3 weeks and are awarded based on whether their applications meet requirements, as assessed by HSP staff, then according to their priority group (1. SDFR; 2. First-time applicant; 3. Multiple-practice project; 4. Other), and lastly, within the lowest priority group awarded, by date of application.

- Solicitation, evaluation, and selection of demonstration projects follow guidelines in the HSP Demonstration Grants RGA. In accordance with SB 859, CDFA establishes an external Technical Advisory Committee to review demonstration project applications for scientific validity and the extent to which the proposed project will achieve net GHG benefits. Applicants apply during a 1-month window and are awarded based on the points that they earn in review by the Technical Advisory Committee.
- In general, applicants are required to provide: a completed application; project budget; project design schematic and detailed work plan; and supporting documentation for estimating net GHG benefits.
- Additional review criteria include consideration of environmental co-benefits and project soundness.
- CDFA prioritizes projects from Socially Disadvantaged Farmers and Ranchers and projects providing benefits to Priority Populations for funding. At least 25% of HSP Incentive Grants and Block Grant Pilot on-farm funding will be awarded to projects by Socially Disadvantaged Farmers and Ranchers.
- The Climate Smart Agriculture Technical Assistance Program funds competitive grant applications, scored on the thoroughness of a work plan and budget, demonstrated expertise of applicant to assist farmers and ranchers, and demonstrated need for technical assistance in their region.

Element (2) A description of how a proposed expenditure will further the regulatory purposes of Division 25.5 (commencing with Section 38500) of the Health and Safety Code, including, but not limited to, the limit established under Part 3 (commencing with Section 38550) and other applicable requirements of law.

How the expenditure is consistent with the Investment Plan and the Scoping Plan

- AB 1532 (Chapter 807, Statutes of 2012) requires that monies from the Fund be appropriated in a manner that is consistent with the three-year Investment Plan, and that support be given to priority investment areas such as “sustainable agriculture.” AB 398 (Chapter 135, Statutes of 2017) named “sustainable agricultural practices” as a complementary funding priority. The “Cap and-Trade Auction Proceeds Fourth Investment Plan: Fiscal Years 2022-23 through 2024-25” specifically describes and recommends the types of projects that will be funded by expenditures under the Program. In its Appendix B it recommends “soil health practices” as carried out by the CDFA’s Healthy Soils Program as a “potential investment type.” Therefore, the expenditures covered by this record are consistent with the Investment Plan and align with the priorities expressed in the Plan.
- California’s 2022 Climate Change Scoping Plan identified key strategies and recommendations to continue reducing GHG emissions and achieve the goals and purposes of AB 32 and related statutes. Its recommendations include “near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our ... agricultural soils.” Its Appendix I sets targets for various practices supported by the Healthy Soils Program, which are generally higher than what has been seen in the past,

and which were modeled as part of the state's carbon neutrality (GHG emission) target-setting. In more general terms, the goal of achieving healthy soils is mentioned several times in the document. One of the key recommended actions identified in the plan is to "Establish or expand financial mechanisms that support ongoing deployment of healthy soils practices and organic agriculture." Additionally, the Scoping Plan "puts the marker down on the need for innovation to continue in non-combustion technologies ... [and] CO₂ removal options." Healthy Soils Program Demonstration projects can respond to that need for innovation, while some of them assist in determining which practices could be supported by Healthy Soils Program Incentive Grants.

- California's 2022 Climate Change Scoping Plan also recommends that the state "Leverage and support technical assistance providers... implementing agriculture ... projects."

Element (3) A description of how a proposed expenditure will contribute to achieving and maintaining greenhouse gas emission reductions pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code.

Describe how expenditures will facilitate the achievement of GHG emission reductions in the State

- Expenditures will achieve net GHG benefits from carbon stored in soils, and/or plant matter, and changes in GHGs (e.g., CO₂) that may result from practice implementation.
- Eligible practices are implemented according to three agricultural systems (croplands; orchards or vineyards; and grazing lands) and may include:
 - Soil management practices (including, but not limited to, compost application and reduced tillage)
 - Establishment of herbaceous cover practice (including, but not limited to, conservation covers and cover crops; they can be perennial, such as buffer strips or wind barriers)
 - Establishment of woody cover practices (including, but not limited to, windbreaks, riparian buffers, and hedgerows)
 - Practices exclusive to grazing lands (including, but not limited to, prescribed grazing and range planting, and silvopasture)
- Expenditures achieve net GHG benefits as follows. Practices should be maintained over years to retain soil carbon gains. The Healthy Soils Program aims to increase adoption of practices, and initial research has shown approximately 70% adoption of incentivized practices among past awardees of the program:
 - Soil management practices increase soil organic carbon which can store carbon in soils over long terms.
 - Herbaceous cover practices store carbon in herbaceous perennial cover biomass and help store soil carbon while preventing the erosion that can remove carbon.
 - Woody cover practices store carbon in tree biomass and help store soil carbon.
 - Grazing lands practices increase soil organic carbon and can store carbon in tree biomass.
- The Climate Smart Agriculture Technical Assistance grant program will help increase the adoption of HSP practices through outreach, application submission assistance and

project implementation assistance, complementing GHG reductions achieved by HSP described above.

Explain when GHG emission reductions and/or co-benefits are expected to occur and how they will be maintained:

- For FY 2023-24, net GHG benefits will begin upon implementation of supported practices. Practice implementation is expected to begin as early as April 2024.
- All projects will be incentivized for up to three years.
 - For soil management practices, herbaceous cover practices, and most grazing lands practices, net GHG benefits are quantified over the three-year grant period.
 - Practices may result in permanent increases in baseline levels of soil carbon.
 - Soil management practices that are voluntarily implemented beyond the incentive period are likely to deliver additional net GHG benefits.
 - For tillage practices, there is a risk that soil carbon increases may be reversed if land managers return to conventional till practices. HSP incentives help growers determine if reduced-till or no-till will allow economic yields in their soil and cropping system.
 - For woody cover practices and silvopasture in grazing lands, net GHG benefits are quantified over ten years because trees have a longer maturation period and lifetime. The incentive awardees commit to maintaining these plantings for ten years.

Element (4) A description of how the administering agency considered the applicability and feasibility of other non-greenhouse gas reduction objectives of Division 25.5 (commencing with Section 38500) of the Health and Safety Code.

Expected co-benefits, particularly environmental, economic, public health and safety, and climate resilience

- In addition to GHG benefits, Healthy Soils projects provide co-benefits which may include but are not limited to:
 - Improved crop health and lowered applications of pesticides and fungicides
 - Increased food production yields
 - Increased water infiltration and retention, assisting in drought
 - Reduced sediment erosion and dust
 - Improved air and water quality by reduced criteria air pollutant emissions and faster degradation of pesticides.
 - Improved microbial diversity and wildlife habitat.

How the project will support other objectives of AB 32 and related statutes

Other AB 32 and AB 398 objectives accompanying reduction of GHG emissions may include but are not limited to:

- Maximize additional environmental and economic co-benefits for California as enumerated above.
- Improve air quality as dust load and criteria air pollutants, as mentioned above.
- Provide opportunities for California farmers and ranchers to participate in and benefit from statewide efforts to reduce GHG emissions.
- Reduce dust load, nitrate leaching, and pesticide use, which constitute health benefits to local communities.

Percentage of total funding that will be expended for projects that are located in and benefit priority populations¹ per CARB guidance

- CARB has established a target to expend at least 35 percent of the total project funds received under this fiscal year appropriation to fund projects that provide benefits to Priority Populations. CDFA expects to meet this target through a methodology based on common identified need for air quality improvement in California per the 2018 CARB Funding Guidelines. Projects that are located in priority populations and result in net criteria pollutant reductions as quantified by the CARB Co-benefits Calculator for the HSP will be considered to provide benefits to priority populations. This determination is automated through the use of the CDFA HSP RePlan Tool, available at <https://replan-tool.org/cdfa/>.

Describe the benefits to priority populations per CARB guidance

- Consistent with the evaluation criteria in the Funding Guidelines, projects may benefit disadvantaged communities through direct air and water quality improvements, or employment opportunities.

Explain strategies the administering agency will use to maximize benefits to disadvantaged communities

- CDFA will prioritize projects that meet the criteria established in the Funding Guidelines during review.

Explain how the administering agency will avoid potential substantial burdens to disadvantaged communities and low-income communities or, if unknown, explain the process for identifying and avoiding potential substantial burdens

HSP funded projects are implemented by farmers and ranchers on private agricultural lands and are not expected to result in burdens to disadvantaged or low-income communities.

¹ Priority populations include residents of: (1) census tracts identified as disadvantaged by California Environmental Protection Agency per SB 535; (2) census tracts identified as low-income per AB 1550; or (3) a low-income household per AB 1550. See Section VII.B Funding Guidelines for more information on the definitions of priority populations.

- Several of the practices funded through the HSP provide environmental benefits to communities related to establishment of trees and permanent herbaceous cover.
- Incentivizing compost application can potentially result in community benefits such as reduction of waste materials from landfills (i.e., compost sourced from commercial facilities) or GHG emissions, criteria air pollutants or odors associated with biomass burning or direct manure application (i.e., on-farm produced compost).
- Incentivizing whole orchard recycling prevents burning of old orchards, thus reducing air quality impacts from combustion by-products.

Element (5) A description of how the administering agency will document the result achieved from the expenditure to comply with Division 25.5 (commencing with Section 35800) of the Health and Safety Code.

How the administering agency will track / report progress to make sure projects are implemented per requirements in statute and CARB guidance

For demonstration projects:

- Grantees will, at a minimum, track project progress through annual reporting over three years.
- Grantees will be required to submit a final report that includes supporting documentation, geo-tagged photographs and description of project outcomes and results to ensure project was implemented according to the approved contract.

For incentive projects administered by CDFA:

- CDFA will track and verify, by in-person or remotely conducted field visits, implementation of practices and record project progress. Verification includes the review of farm logs, on-farm expense receipts and geo-tagged photographs of management practice implemented.

For block grant projects:

- CDFA will track and verify incentive projects supported by the block grant organizations, including implementation of practices and project progress. Block grant organizations will supply verification documents such as farm logs, on-farm expense receipts and geo-tagged photographs of management practices implemented, which will be spot-checked by CDFA.

For demonstration, incentive, and block grant projects:

- Progress will be reported in accordance with the Funding Guidelines Supplement and forthcoming update to the Funding Guidelines.

For Technical Assistance, including that carried out through block grant recipients and Climate Smart Agriculture Technical Assistance Providers:

- Assistance provided will be recorded on an hourly basis. Assistance is usually specific to HSP on-farm projects, and their IDs are reported.
- Progress will be reported in accordance with the Funding Guidelines.

Describe the approach that will be used to document GHG emission reductions and/or other benefits before and after project completion

- CDFA requires applicants to quantify net GHG benefits using a quantification methodology developed by CARB, "Greenhouse Gas Quantification Methodology for the

California Department of Food and Agriculture Healthy Soils Incentive Program,” available at <https://ww2.arb.ca.gov/resources/documents/cci-quantification-benefits-and-reporting-materials> and <http://comet-planner-cdfahsp.com/>.

- Technical review of proposed projects ensures that all projects result in net GHG benefits, which are described in the approved project contracts.
- CDFA conducts post-project reviews to ensure that practices are implemented as proposed.

Type of information that will be collected to document results, consistent with CARB guidance

- CDFA will collect data that meet the requirements established in CARB’s 2018 Funding Guidelines.
- Reporting requirements include but are not limited to project type, description, location, total GGRF dollars, total project cost, anticipated start, and end dates, estimated net GHG benefits, estimated co-benefits, and benefits to priority populations.

How the administering agency will report on program status

- Program status, including project location and expenditure amounts, net GHG benefits, and co-benefits will be reported in accordance with CARB’s Funding Guidelines, also reported in the Department of Finance’s Annual Report to the Legislature on Greenhouse Gas Reduction Fund expenditures, as required by Health and Safety Code Section 39720.