TO: Greenhouse Gas Reduction Fund Program

FROM: Karen Ross
Secretary
California Department of Food and Agriculture (CDFA)

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Office of Environmental Farming and Innovation

DATE: 10/25/2021

SUBJECT: GREENHOUSE GAS REDUCTION FUND: CDFA

EXPENDITURE RECORD FOR FISCAL YEAR 2021-22 Healthy Soils Program

This Attestation Memorandum documents that CDFA completed the attached Expenditure Record on October 25, 2021, for 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 Amrith Gunasekara, Manager of the Office of Environmental Farming and Innovation, Amrith.Gunasekara@cdfa.ca.gov, (916) 654-0433.

Attachment: Expenditure Record for Fiscal Year 2021-22 for Healthy Soils Program

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

<table>
<thead>
<tr>
<th>Agency that will administer funding</th>
<th>California Department of Food and Agriculture</th>
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</thead>
<tbody>
<tr>
<td>Amount of proposed expenditure and appropriation reference</td>
<td>SB 170 (Skinner, Budget Act of 2021, Section 169), Item 8570-101-3228, appropriates $25,000,000 to the Department of Food and Agriculture (CDFA) for the Healthy Soils Program (HSP).</td>
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<td>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. SB 170 (Skinner, Budget Act of 202, Section 169), Item 8570-101-3228 requires that no less than 5 percent or more than $5 million of this appropriation may be utilized to develop this program</td>
</tr>
<tr>
<td>Estimated amount of expenditures for administering agency administrative costs</td>
<td>No more than 5 percent of the amount appropriated in Item 8570-101-3228 will be used for administrative costs of the Healthy Soils Program.</td>
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</table>
If applicable, identify laws or regulations that govern how funds will be used

- 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.
- Senate Bill (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.
- AB 1532 (Pérez, Chapter 807, Statutes of 2012), SB 535 (de León, Chapter 830, Statutes of 2012), SB 1018 (Budget and Fiscal Review Committee, Chapter 39, Statutes of 2012), and SB 862 (Committee on Budget and Fiscal Review, Chapter 36, Statutes of 2014), provide the general framework for how the auction proceeds will be administered to further the purposes of AB 32 (Núñez, Chapter 488, Statutes of 2006).
- 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.

Continuation of existing Expenditure Record

- This is an update to an existing Expenditure Record. The Expenditure Record elements being updated includes the total amount of funds available for funding projects under the HSP.
- This appropriation will support Climate Smart Agriculture Technical Assistance (CSA TA) Grant Program.
### Project type(s)

- Healthy soils

### 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 agricultural systems (cropland; orchards or vineyards; and grazing lands) and include types such as:
  - Soil management practices (example including but not limited to compost application)
  - Establishment of herbaceous cover practice (example including but not limited to conservation cover)
  - Establishment of woody cover practices (example including but not limited to windbreak establishment)
  - Practices exclusive to grazing lands (example including but not limited to prescribed grazing)
- The CSA TA grant program will help provide for technical assistance to AMMP applicants during submission of applications and implementation of projects.

### Intended recipients

- The Healthy Soils program includes incentives and demonstration projects:
  - Incentives: Farmers, ranchers, and Native American Indian Tribes.
  - Demonstration Projects: Academic researchers, cooperative extension specialists, farm advisors, Resource Conservation District (RCD) experts, or other not-for-profit entities in partnership with farmers, ranchers, and Native American Indian Tribes.
- Technical Assistance Program:
  - The intended recipients of this program are RCDs, the University of California Cooperative Extension, and non-profit organizations with demonstrated expertise in designing and implementing 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 both incentive and demonstration projects that result in net GHG benefits.
  - HSP Incentives Program will follow a rolling, first-come, first-served process to review applications and require a minimum qualifying score by technical reviewers to be selected for award.
  - HSP Demonstration Projects will have a 4–6-week application submission period. All applications will be reviewed by a Technical Advisory Committee and ranked by their total score to be selected for award.
- Applicants will be 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 will include consideration of environmental co-benefits and project soundness.
- CDFA will prioritize projects from Socially Disadvantaged Farmers and Ranchers and projects providing benefits to Priority Populations for funding. At least 25% of HSP Incentives Program funding will be awarded to projects by Socially Disadvantaged Farmers and Ranchers.
- In accordance with SB 859, CDFA established a Technical Advisory Committee to review demonstration project applications for scientific validity and the extent to which the proposed project will achieve net GHG benefits.
- The CSA TA Program will fund competitive grant applications, scored on the thoroughness of a work plan and budget, demonstrated expertise of applicant in specific management practices 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 GGRF moneys be appropriated in a manner that is consistent with the three-year Investment Plan. The “Cap-and-Trade Auction Proceeds Third Investment Plan” supports projects for sustainable agricultural practices and climate adaptation and resiliency.
- California’s 2017 Climate Change Scoping Plan identifies sequestration of carbon in natural and working lands as an important goal and supports projects for healthy soils. One of the key recommended actions identified in the plan is “supporting healthy soils as a critical element to land and waste management”.
- California’s 2017 Climate Change Scoping Plan also identifies technical assistance across communities to further the goals of various programs funded through the CCI.
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 may include but are not limited to:
  - Soil management practices (compost application, establishment of cover crops, reduced/no-till).
  - Herbaceous cover practices that establish perennial herbaceous plantings (including but not limited to wind barriers, vegetative barriers, riparian cover, buffer strips, field border/strip); or
  - Woody cover practices that establish tree plantings (including but not limited to windbreak/shelterbelt establishment; riparian buffer; or hedgerow planting).
  - Grazing lands practices (including but not limited to compost application, prescribed grazing, range planting, silvopasture).
- Expenditures achieve net GHG benefits as follows:
  - Soil management practices increase soil organic carbon and/or store carbon in soils.
  - Herbaceous cover practices store carbon in herbaceous perennial cover, help store soil carbon and decrease atmospheric CO₂ emissions.
  - Woody cover practices store carbon in trees, help store soil carbon and decrease CO₂ emissions.
  - Grazing lands practices increase soil organic carbon and store carbon in trees.
- CSA TA programs 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 2021-22, net GHG benefits will begin upon implementation of eligible management practices. Project implementation is expected to begin as early as January 2022.
- Projects will be incentivized for three years.
  - For soil management practices and grazing lands practices (except silvopasture), net GHG benefits are quantified over the grant period and may result in permanent increases in baseline levels of soil carbon.
  - For tillage practices, there is a risk that soil carbon increases may be reversed if land managers return to conventional till practices. To address this issue, CDFA strongly encourages farmers and ranchers to continue the practice post-incentive funding period, and projects planning to implement practices for a longer term will be given additional consideration during project review.
    - Soil management 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 herbaceous cover practices, net GHG benefits are quantified over the grant term (3 years).
  - For woody cover practices and silvopasture in grazing land practices, net GHG benefits are quantified over ten years because trees have a longer maturation period and lifetime.

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CDFA Expenditure Record for the Healthy Soils Program
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 resiliency**

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

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

- Other AB 32 objectives may include but are not limited to:
  - Maximizing additional environmental and economic co-benefits for California by improving crop health, reducing sediment erosion and dust, improving air and water quality by reducing criteria air pollutant emissions and persistence of pesticides, and improving wildlife habitat.
  - Provide opportunities for California farmers and ranchers to participate in and benefit from statewide efforts to reduce GHG emissions.
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 CDFA HSP RePlan Tool available at https://replan-tool.org/cdfa/.

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 for more information on the definitions of priority populations.
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.
- 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) and 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.

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<thead>
<tr>
<th>How the administering agency will track / report progress to make sure projects are implemented per requirements in statute and CARB guidance</th>
<th>For demonstration projects:</th>
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<td>▪ Grantees will, at a minimum, track project progress through annual reporting over three years.</td>
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<td>▪ 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.</td>
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<td>For incentives projects:</td>
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<td>▪ 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.</td>
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<td>▪ For both demonstration and incentives projects</td>
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<td>▪ Progress will be reported in accordance with the Funding Guidelines Supplement and forthcoming update to the Funding Guidelines.</td>
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<tr>
<th>Describe the approach that will be used to document GHG emission reductions and/or other benefits before and after project completion</th>
<th>CDFA will require 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: <a href="https://ww2.arb.ca.gov/resources/documents/ccq-quantification-benefits-and-reporting-materials">https://ww2.arb.ca.gov/resources/documents/ccq-quantification-benefits-and-reporting-materials</a> and <a href="http://comet-planner-cdfahsp.com/">http://comet-planner-cdfahsp.com/</a>.</th>
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<td>▪ A technical review component will ensure all projects result in net GHG benefits as described in the approved project contracts.</td>
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<td>▪ CDFA will conduct a post-project review to ensure that practices are implemented as proposed.</td>
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| **Type of information that will be collected to document results, consistent with CARB guidance** | CDFA will collect data that meets the requirements established in CARB’s Proposed 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. |