HEALTHY SOILS PROGRAM 2026 PRACTICE GUIDELINES

The Healthy Soils Program has developed this document to replace the former "Appendix A" in its RGAs, aiming for a more accessible reference and planning resource. The Program has revised the Guidelines, simplifying some elements, or allowing greater flexibility, relying upon the provision of close technical assistance by block grant recipients and their partners. Although references are listed to NRCS CPSs, HSP will not expect projects to conform to any practice rules that are not found in this document.

Interpreting planting-practice guidelines, it is important to bear in mind that the HSP RePlan Tool automatically lists species options that are appropriate to the project's ecological region per the USDA's eVegGuide. The RePlan Tool allows write-in species as well, but write-ins require TAP discussion and BGR approval before project implementation.

Lastly, the Guidelines contain some notable practice-list changes, highlighted here:

1. **Re-saturating Delta Peat Soils for Rice Cultivation** is a new HSP Practice. Research in the Sacramento-San Joaquin Delta has found it to halt and even reverse the loss of high-organic matter (>20%) soils. In California >20% OM soils are almost entirely found in the Delta. CDFA and CARB are developing a white paper describing the evidence that has allowed the introduction of this practice into HSP.

2. **Biochar** is a new HSP Practice. In order to allow biochar application on a farm's soil, a certified TAP will have to develop a plan for each project, following the Guidelines. The U.S. Biochar Initiative and CDFA are cooperating to develop a training for that certification. Because of the wide variety of prices and characteristics of biochars on the market, no flat rate will be offered. Instead, BGRs that support biochar will do so through direct purchase or invoice reimbursement, with per-ton support caps.
3. In a similar way, **Mulching - Natural Materials** will no longer be supported by a flat rate, but only by BGRs that support it through direct purchase or invoice reimbursement.
4. **Compost** will be more flexible. The HSP Replan Tool will be updated to accept any C:N and application rate within program limits. These parameters will not have to be binding in the agreements between BGRs and Beneficiaries.
5. **Nutrient Management** (15% nitrogen application reduction) will no longer be supported. There have been consistent difficulties in the documentation and expectations of this practice. In general, organic amendments and cover crops allow reduced nitrogen fertilizer applications, so this effect can be regarded as built into many of HSP's other practices.

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ALLEY CROPPING

<table>
<tr><td>Definition</td><td colspan="3">Trees or shrubs are planted in sets of single rows with annual crops produced in the alleys between the sets of woody plants.</td></tr>
<tr><td>Eligibility</td><td colspan="3">Annual Cropland</td></tr>
<tr><td>Purpose</td><td colspan="3">Increase carbon storage in plant biomass and soils; Improve soil health by increasing utilization and cycling of nutrients • Improve crop diversity by growing mixed but compatible crops on the same area; Provide forage, shade, and/or shelter for livestock • Reduce soil erosion by wind and/or water • Alter subsurface water quantity or water table depths • Increase or maintain food and cover for pollinators and other beneficial organisms by increasing crop diversity</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/Acre)</td><td>Years Supported</td></tr>
<tr><td></td><td>Tree- planting, single row</td><td>$2,447.20</td><td>1yr</td></tr>
<tr><td>Guidelines</td><td colspan="3">The names of suitable tree species must be provided during on-farm application. Tree plantings will replace 20% of annual cropland. Trees will be planting in a single row with a density of ≥40 trees/acre, using seedling with potting size of ≥ 2 gallons. Tree protection, including fencing and irrigation, is required. Maintain plant growth during the project term and beyond.</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photos taken at both ends & middle of tree rows to demonstrate tree establishment; (2) Receipts of seedlings purchased; (3) Species names and number of live plants established; (4) Geotagged photos and number of live plants at the end of the grant term to verify program requirements are met.</td></tr>
<tr><td>Species Selection</td><td colspan="3">Provide tree crop names at time of project application using the write-in option on the RePlan tool.</td></tr>
<tr><td>Reference</td><td colspan="3">Alley Cropping (NRCS CPS 311)</td></tr>
</table>

BIOCHAR

Definition	Biochar produced off-site is incorporated into the soil.
Eligibility	Cropland; Orchard and Vineyard
Purpose	Maintain or increase soil health and organic matter content; enhance soil carbon stocks over the medium- to long-term; Maintain or improve soil aggregate stability; Maintain or improve habitat for soil organisms; Improve plant productivity and health; Increase ion exchange capacity and thus plant available nutrients; Improve or conserve soil moisture content, plant-available water retention, and infiltration rate; Improve air quality by reducing emissions of GHGs; Improve water quality by reducing excess nutrients in runoff and entering groundwater.
Payment Scenarios	Implementation: 1-6 tons / acre; Payment Rate ($/Ton): $0-$250; Years Supported: 1-3 yrs
Guidelines	Biochar Source, description, and application rate must be provided during on-farm project application. Biochar must be produced off-site and incorporated into the soil at a total rate of 1-6 tons/acre applied over 1-3 years. Biochar mixed with compost, or treated biochar could also be eligible to use in this practice. Plans must be prepared by Technical Assistance Providers who have received USBI training to use the Web Soil Survey, National Biochar Selection tool, and other related tools. Biochar will only be supported where BGRs engage in direct invoice payment or bulk purchases. Not all soils and biochar types will be supported. American National Standards for biochar recently developed by American Society of Agricultural and Biological Engineers will be used to define biochar quality. Only soils that show good/excellent response to biochar using dynamic soil properties response to biochar as estimated in the Web Soil Survey will be eligible for this practice.
Verification Requirements	Verification standards will be designed in consultation with CDFA according to site conditions and project design. Required documents will include (1) TAP-approved implementation plan; (2) Records from the compost spreading contractor showing location and tonnage implemented will be required; (3) Photos demonstrating the practice was implemented; (4) Biochar analysis report. If appropriate product seals become available in 2026, these may be required as well.
Species Selection	NA
Reference	American Society of Agricultural and Biological Engineers X668, Methods for Measurement and testing of Biochar; USDA Web Soil Survey; National Biochar Selection Tool; United States Biochar Initiative

COMPOST APPLICATION

<table>
<tr><td>Definition</td><td colspan="3">Application of finished compost made from a variety of feedstocks.</td></tr>
<tr><td>Eligibility</td><td colspan="3">Cropland, Orchard or Vineyard, Grazing Land</td></tr>
<tr><td>Purpose</td><td colspan="3">Maintain or increase soil health and organic matter content, soil aggregate stability • Maintain or improve habitat for soil organisms • Improve plant productivity and health • Improve or conserve soil moisture content, plant-available water retention, and infiltration rate • Improve air quality by reducing emissions of particulate matter, GHGs • Improve water quality by reducing excess nutrients in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td colspan="3"><table>
<tr><th>Implementation</th><th>Payment Rate ($/ton)</th><th>Years Supported</th></tr>
<tr><td>Scenario 1a. 3-8 tons/Ac Purchased compost</td><td>$64.32</td><td>3yrs</td></tr>
<tr><td>Scenario 1b. 3-8 tons/Ac Purchased through BGR with transport and optional spreading</td><td>$0-80</td><td>3yrs</td></tr>
<tr><td>Scenario 2. 3-8 tons/Ac On-farm Produced compost</td><td>$64.32</td><td>3yrs</td></tr>
</table></td></tr>
<tr><td>Guidelines</td><td colspan="3">All Scenarios: The compost application rate, C:N ratio must be discussed with and approved by a Technical Assistance Provider prior to application. Applied compost should have a C:N ≤ 25. Further considerations for planning of compost applications will be discussed in a separate document to be completed in 2026.
Scenario 1. Compost must be purchased from a certified facility by the Beneficiary (Scenario 1a); OR by a Block Grant Recipient organization, with transport and spreading services made available to the Beneficiary (Scenario 1b).
Scenario 2. On-farm produced compost - Compost materials, method and Composting process must be documented; Feedstocks may include green materials, food materials, wood waste, yard trimmings, agricultural materials or biosolids as defined in 14 CCR Section 17852 (https://www.law.cornell.edu/regulations/california/14-CCR-17852).</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">All Scenarios: (1) Geotagged photos from different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage; (2) Compost analysis report on C:N ratio.
Scenario 1a. (3) A copy of receipt for compost including date and amount purchased; (4) A certificate of the compost facility if facility is not listed on applicable websites specified in the RGA.
Scenario 1b. (3) If compost is directly purchased or provided by the Block Grant Recipient for a Beneficiary, records from the compost spreading contractor showing location and tonnage implemented will be required; (4) Reduced verification requirements may be designed in consultation with CDFA to avoid repetitive filings.
Scenario 2. (3) A composting log including feedstock, method and temperatures during composting process; (4) Estimated total tonnage of compost applied.</td></tr>
<tr><td>Species Selection</td><td colspan="3">NA</td></tr>
<tr><td>Reference</td><td colspan="3">Compost Application (NRCS CPS 336)</td></tr>
</table>

CONSERVATION COVER

<table>
<tr><td>Definition</td><td>Establishing and maintaining permanent vegetative cover</td></tr>
<tr><td>Eligibility</td><td>Annual Cropland</td></tr>
<tr><td>Purpose</td><td>Maintain or increase soil health and total carbon storage in biomass and soils • Reduce soil erosion by wind and/or water • Improve or conserve soil moisture and infiltration rate • Increase biodiversity of plant community; restore or maintain native plant communities; Provide food and cover for pollinators and other beneficial organisms • Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>
<table>
<tr><th>Implementation</th><th>Payment Rate ($/Acre)</th><th>Years Supported</th></tr>
<tr><td>Scenario 1. Introduced species</td><td>$403.70</td><td>1yr</td></tr>
<tr><td>Scenario 2. Native species</td><td>$350.34</td><td>1yr</td></tr>
<tr><td>Scenario 3. Monarch species – mix species</td><td>$1,404.68</td><td>1yr</td></tr>
<tr><td>Scenario 4. Pollinator species</td><td>$1,138.96</td><td>1yr</td></tr>
</table>
</td></tr>
<tr><td>Guidelines</td><td><u>All Scenarios:</u> The names of planting species must be provided during on-farm application. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Seeds should be planted at a rate of 21-40 pure live seeds per sq ft for all scenarios. Inoculate legumes at planting time. Plant protection from animal damage is required. Maintain plant growth during the project term and beyond.
<u>Scenario 1.</u> Introduced perennial species selected.
<u>Scenario 2</u>. Native perennial species selected.
<u>Scenario 3.</u> Native perennial species (grasses and forbs) selected to provide habitat for wildlife and/or ecosystem restoration; composition of seed mix uses at least 4% native milkweeds (Asclepias spp.) and less than 50% grasses.
<u>Scenario 4.</u> Native perennial species (native perennial grasses, legumes, and forbs) selected to provide habitat for pollinators; Composition of seed mix should have less than 50% grasses.</td></tr>
<tr><td>Verification Requirements</td><td>(1) Geotagged photos taken from different locations of the field to demonstrate that the practice is fully implemented and established plants cover more than60% of the implementation acreage; (2) Receipts of seeds purchased including species names; (3) Good plant growth during the project term; (4) At the end of grant term, geotagged photos showing ≥60% ground cover by live plants to demonstrate program requirements are met.</td></tr>
<tr><td>Species Selection</td><td>Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td>Conservation Cover (NRCS CPS 327)</td></tr>
</table>

CONSERVATION COVER IN ORCHARD OR VINEYARD ALLEYS/ PERENNIAL COVER CROP

<table>
<tr><td>Definition</td><td colspan="3">Establishing and maintaining permanent vegetative cover in orchard or vineyard alleys</td></tr>
<tr><td>Eligibility</td><td colspan="3">Orchard and Vineyard (Alleys or Whole field)</td></tr>
<tr><td>Purpose</td><td colspan="3">Maintain or increase soil health and total carbon storage in biomass and soils • Reduce soil erosion by wind and/or water • Increase water infiltration rate and soil water storage • Improve air quality by reducing emissions of particulate matter, GHGs • Improve ground and surface water quality by reducing nutrient leaching and/or sediment contamination • Increase below- and above-ground biodiversity • Provide food and cover for pollinators and other beneficial organisms • Reduce pesticide and herbicide inputs</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/Acre)</td><td>Years Supported</td></tr>
<tr><td></td><td>Scenario 5. Orchard or Vineyard Alleys</td><td>$271.80</td><td>1yr</td></tr>
<tr><td>Guidelines</td><td colspan="3">The names of planting species must be provided during on-farm application. Perennial grasses, legumes and/or forbs with a small percentage (≤10%) of annual species should be selected. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. No-till drill seeding is recommended with a seeding rate of 21-40 pure live seeds per sq ft. Inoculate legumes at planting time. Irrigation may be needed for plant germination and establishment. No field tillage should be used after plant establishment, but periodic mowing or animal grazing may be allowed for maintenance throughout the grant term.</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photos from different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage and show established plants (>60% plant cover); (2) Receipts of seeds purchased including species names; (3) Method of alley plants maintenance; (4) Good plant growth during the project term; (5) At the end of grant term, geotagged photos showing ≥60% ground cover by live plants to demonstrate program requirements are met.</td></tr>
<tr><td>Species Selection</td><td colspan="3">Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td colspan="3">Conservation Cover (NRCS CPS 327)</td></tr>
</table>

CONSERVATION CROP ROTATION

<table>
<tr><td>Definition</td><td>A planned sequence of crops grown on the same ground over a period of time (i.e. the rotation cycle).</td></tr>
<tr><td>Eligibility</td><td>Annual Cropland. Perennial hayfields are not eligible.</td></tr>
<tr><td>Purpose</td><td>Maintain or increase soil health and organic matter content • Improve crop diversity by growing mixed but compatible crops on the same area; Provide forage for livestock; Suppress weeds • Reduce soil erosion by wind and/or water • Provide food and cover for terrestrial wildlife, Pollinators, and/or other beneficial organisms• Improve water quality by reducing excess nutrients and other pollutants in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>
<table>
<tr><th>Implementation</th><th>Payment Rate ($/Acre)</th><th>Years Supported</th></tr>
<tr><td>Scenario 1. Basic rotation</td><td>$23.34</td><td>3yrs</td></tr>
<tr><td>Scenario 2. Specialty crops</td><td>$62.24</td><td>3yrs</td></tr>
</table>
</td></tr>
<tr><td>Guidelines</td><td><u>All Scenarios</u>: A rotation plan is required at the time of on-farm project application, including all crops in the sequence with at least one annual crop. Effective implementation of the rotation plan should add higher residue and/or perennial crops to reduce erosion and increase other soil health or conservation benefits.</td></tr>
<tr><td>Verification Requirements</td><td>(1) Geotagged photographs from different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage and show crops in the rotation (2) A farming log recording rotation implementation.</td></tr>
<tr><td>Species Selection</td><td>NA</td></tr>
<tr><td>Reference</td><td>Conservation Crop Rotation (USDA NRCS CPS 328)</td></tr>
</table>

CONTOUR BUFFER STRIPS

<table>
<tr><td>Definition</td><td colspan="3">Narrow strips of permanent, herbaceous vegetative cover established around the hill slope, and alternated down the slope with wider cropped strips that are farmed on the contour</td></tr>
<tr><td>Eligibility</td><td colspan="3">Cropland on hillslope(s) where there is a significant amount of sheet/rill erosion and/or sediment potentially delivered to the downslope edge of the field.</td></tr>
<tr><td>Purpose</td><td colspan="3">Maintain or increase soil health and total carbon storage in biomass and soils • Reduce soil erosion by wind and/or water • Increase biodiversity of plant community • restore or maintain native plant communities • Provide food and cover for pollinators and other beneficial organisms • Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/Acre)</td><td>Years Supported</td></tr>
<tr><td></td><td>Scenario 1. Introduced species, foregone income</td><td>$587.10</td><td>1yr</td></tr>
<tr><td></td><td>Scenario 2a. Native species, foregone income</td><td>$563.08</td><td>1yr</td></tr>
<tr><td></td><td>Scenario 2b. Wildlife Pollinator, foregone income</td><td>$563.08</td><td>1yr</td></tr>
<tr><td>Guidelines</td><td colspan="3">All Scenarios: Provide species names at time of application; Width of strips: ≥15 feet wide if ≥50% grass species OR ≥30 feet wide if ≥50% legume species OR ≥30 feet wide if legume/forbs are used alone; Inoculate legumes at planting time if legume species is used; Maintain plant growth during the project term.
Scenario 1. Introduced perennial species; Seeding rate at 41-60 pure live seeds per sqft.
Scenario 2. Native perennial species; Seeding rate at 21-40 pure live seeds per sqft. For scenario 2b, the native perennial species mix must include at least 3 pollinator friendly species.</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photos should be taken at different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage and established strips with >60% plant cover; (2) Receipts of seeds purchased; (3) Plant species name and seeding rate; (4) Good plant growth during the project term; (5) At the end of grant term, geotagged photos showing ≥60% strip cover by live plants to demonstrate program requirements are met.</td></tr>
<tr><td>Species Selection</td><td colspan="3">Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td colspan="3">Contour Buffer Strips (USDA NRCS CPS 332)</td></tr>
</table>

COVER CROP

<table>
<tr><td>Definition</td><td colspan="3">Crops including grasses, legumes, and forbs for seasonal cover and other conservation purposes.</td></tr>
<tr><td>Eligibility</td><td colspan="3">Cropland; Orchard and Vineyard (Alleys)</td></tr>
<tr><td>Purpose</td><td colspan="3">Maintain or increase soil health and organic matter content; Improve soil aggregate stability; Minimize and reduce soil compaction; Promote biological nitrogen fixation to capture and recycle or redistribute nutrients in the soil profile; Suppress Weeds; Reduce sheet, rill and wind erosion; Improve or conserve soil moisture content, plant-available water retention, and infiltration rate; Increase biodiversity of plant community; Provide food and cover for pollinators and other beneficial organisms; Improve habitat for pollinators, beneficial organisms, or natural enemies of crop pests; Improve air quality by reducing emissions of particulate matter; Improve water quality by reducing excess nutrients in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/Acre)</td><td>Years Supported</td></tr>
<tr><td></td><td>Scenario 1. One species</td><td>$122.46</td><td>3yrs</td></tr>
<tr><td></td><td>Scenario 2. Multiple species</td><td>$153.32</td><td>3yrs</td></tr>
<tr><td>Guidelines</td><td colspan="3">All Scenarios: The names of planting species must be provided during on-farm application. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool.
Single or multiple species cover crop is planted without fertilizer; Cover crop is allowed to grow to produce as much biomass as possible; Cover crop biomass/residue should not be removed to other places. For improving aggregate stability and reducing erosion, recommended to add at least one fibrous rooted grass. Add legumes (with appropriate inoculants where necessary) if aiming to supply nitrogen to subsequent crop in crop rotation. In areas of limited soil moisture, terminate growth of the cover crop sufficiently to conserve soil moisture for the cash crop.
If a field or an area of a field fails the verification standards in Year 1 and Year 2, it is not eligible for the practice in Year 3. After Year 1 or Year 2, TAPs may investigate the field surface to recommend reductions to the surface area planted.</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photos from different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage: photos should show cover crop seeding as well as established cover crops in the field (≥60% coverage), (2) Receipts of cover crop seeds purchased, (3) Cover crop species names; (4) seeding rate.</td></tr>
<tr><td>Species Selection</td><td colspan="3">Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td colspan="3">Cover Crop (USDA NRCS CPS 340)</td></tr>
</table>

FIELD BORDER

<table>
<tr><td>Definition</td><td>A strip of permanent vegetation established at the edge or around the perimeter of a field.</td></tr>
<tr><td>Eligibility</td><td>Idle strip or borders of cropland</td></tr>
<tr><td>Purpose</td><td>Maintain or increase soil health and total carbon storage in biomass and soils • Improve plant productivity and health by protecting plants from wind-related damage • Reduce soil erosion by wind and/or water • Increase biodiversity of plant community • Provide food and cover for terrestrial wildlife, Pollinators, and/or other beneficial organisms • Improve air quality by reducing emissions of GHG and particulate matter • Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>
<table>
<tr><th>Implementation</th><th>Payment Rate ($/Acre)</th><th>Years Supported</th></tr>
<tr><td>Scenario 1. Introduced species</td><td>$247.90</td><td>1yr</td></tr>
<tr><td>Scenario 2. Native Species</td><td>$282.78</td><td>1yr</td></tr>
<tr><td>Scenario 3. Pollinator Species</td><td>$756.74</td><td>1yr</td></tr>
</table>
</td></tr>
<tr><td>Guidelines</td><td><u>All Scenarios:</u> The names of planting species must be provided during on-farm application. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Maintain plant growth during the project term.
<u>Scenario 1.</u> Introduced perennial species; Seeding rate at 41-60 pure live seeds per sqft.
<u>Scenario 2.</u> Native perennial species; Seeding rate at 21-40 pure live seeds per sqft.
<u>Scenario 3</u>. Diverse mix of native perennial grasses, legumes and forbs that are pollinator friendly and flower throughout the growing season; seed mixture should contain ≤50% grass species; Seeding rate at 21-40 pure live seeds per sq ft.</td></tr>
<tr><td>Verification Requirements</td><td>(1) Geotagged photos taken at both ends & middle of established field borders to demonstrate establishment; (2) Receipts of seeds purchased; (3) Plant species name and seeding rate; (4) Geotagged photos at the end of the grant term to verify maintained plant growth.</td></tr>
<tr><td>Species Selection</td><td>Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td>Field Border (USDA NRCS CPS 386)</td></tr>
</table>

FILTER STRIP

<table>
<tr><td>Definition</td><td colspan="3">A strip or area of herbaceous vegetation that removes contaminants from overland flow.</td></tr>
<tr><td>Eligibility</td><td colspan="3">Idle strip or borders of cropland, orchards/vineyards</td></tr>
<tr><td>Purpose</td><td colspan="3">Reduce suspended solids and associated contaminants in runoff and excessive sediment in surface waters • Maintain or increase soil health and total carbon storage in biomass and soils • Reduce soil erosion by wind and/or water • Increase biodiversity of plant community • Provide food and cover for terrestrial wildlife, Pollinators, and/or other beneficial organisms • Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/Acre)</td><td>Years Supported</td></tr>
<tr><td></td><td>Scenario 1. Introduced species</td><td>$371.66</td><td>1yr</td></tr>
<tr><td></td><td>Scenario 2. Native species</td><td>$407.92</td><td>1yr</td></tr>
<tr><td>Guidelines</td><td colspan="3"><u>All scenarios:</u> The names of planting species must be provided during on-farm application. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Maintain plant growth during the project term and beyond.
<u>Scenario 1.</u> Introduced perennial species, Seeding rate at ≥60 pure live seeds per sqft.
<u>Scenario 2.</u> Native perennial species; Seeding rate at 41-60 pure live seeds per sqft.</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photographs of fields showing established filter strip (>60% plant coverage); (2) Receipts of seeds purchased; (3) Plant species name and seeding rate; (4) At the end of grant term, provide geotagged photos demonstrate ≥60% ground cover by live plants to verify program requirements are met.</td></tr>
<tr><td>Species Selection</td><td colspan="3">Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td colspan="3">Filter Strip (USDA NRCS CPS 393)</td></tr>
</table>

GRASSED WATERWAY

<table>
<tr><td>Definition</td><td>A shaped or graded channel that is established with suitable vegetation to convey surface water at a nonerosive velocity using a broad and shallow cross section to a stable outlet.</td></tr>
<tr><td>Eligibility</td><td>Idle strip or borders of cropland where excessive sedimentation and soil erosion as a result from ephemeral or classic gully erosion.</td></tr>
<tr><td>Purpose</td><td>Maintain or increase soil health and total carbon storage in biomass and soils • Reduce soil erosion by wind and/or water • Increase biodiversity of plant community • Provide food and cover for terrestrial wildlife, Pollinators, and/or other beneficial organisms • Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>
<table>
<tr><th>Implementation</th><th>Payment Rate ($/Acre)</th><th>Years Supported</th></tr>
<tr><td>Scenario 1. Base Waterway, Pacific Region</td><td>$2,704.02</td><td>1yr</td></tr>
<tr><td>Scenario 2. Base waterway with checks</td><td>$4,431.28</td><td>1yr</td></tr>
</table>
</td></tr>
<tr><td>Guidelines</td><td><u>All Scenarios:</u> The names of planting species must be provided during on-farm application. Perennial grasses with a small percentage (≤10%) of annual grass and/or legume should be used. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Inoculate legumes at planting time. Plant in the area from tops of the bank on both sides using a seeding rate of ≥60 pure live seeds per sq ft. Maintain plant growth during the project term. <u>Additional requirements for scenario 2:</u> Fabric or stone checks should be installed every 100 feet along the waterway perpendicular to waterflow and 2/3 the waterway top width to reduce maintenance and provide temporary protection until vegetation is established. Fabric Checks should be installed 18" deep with 12" laid over on the surface.</td></tr>
<tr><td>Verification Requirements</td><td>(1) Geotagged photos from different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage and show established grassed waterway (>60% plant coverage); (2) Receipts of seeds purchased; (3) Plant species name and seeding rate; (4) Maintain plant growth during the project term; (5) At the end of grant term, geotagged photos showing ≥60% ground cover by live plants to demonstrate program requirements are met.</td></tr>
<tr><td>Species Selection</td><td>Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td>Grassed Waterway (USDA NRCS CPS 412)</td></tr>
</table>

HEDGEROW PLANTING

Definition	Establishment of dense vegetation in a linear design to achieve natural resource conservation purposes.
Eligibility	Idle strip or borders of cropland, orchards/vineyards, grazing land
Purpose	Maintain or increase soil health and total carbon storage in biomass and soils; Improve plant productivity and health by protecting plants from wind-related damage; Provide shade, and/or shelter for livestock; Reduce soil erosion by wind and/or water; Improve or conserve soil moisture content, plant-available water retention, and infiltration rate; Reduce transpiration and evaporation losses; Increase biodiversity of plant community; Provide food and cover for terrestrial wildlife, pollinators, and/or other beneficial organisms; Improve air quality by screening airborne particulate matter, chemicals, and odors; Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater; Act as living fences; Provide substrate for predaceous and beneficial invertebrates as a component of integrated pest management
Payment Scenarios	Implementation: Single Row; Payment Rate ($/Ft): $11.82; Years Supported: 1yr
Guidelines	The names of planting species must be provided during on-farm application. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Hedgerows shall be established using at least three different species of pollinator-friendly and/or native species (trees, shrubs, perennial wildflowers) that, at maturity, reach an average height of ≥ 3 feet and width of 15 feet. Hedgerow should be planting at a density of ≥200 live plants/acre (≥100 plants per acre must be trees or shrubs). Provide Tree protection and irrigation; Maintain plant growth during the project term and beyond.
Verification Requirements	(1) Geotagged photos taken at both ends & middle of rows that demonstrate the initial establishment of plantings; (2) Receipts of plants purchased; (3) Names of plant species; (4) Number of live plants/ Seeding rates; (5) At the end of grant term, provide geotagged photos and live plant count to demonstrate good plant growth and maintenance.
Species Selection	Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations. Species that are not listed on the eVegGuide can be permitted as write-ins as long as they are suitable for hedgerows (native and/or pollinator friendly perennials). No more than 10% of plants may be harvestable species (i.e. fruits, nuts, berries).
Reference	Hedgerow Planting (USDA NRCS CPS 422)

HERBACEOUS WIND BARRIERS

<table>
<tr><td>Definition</td><td colspan="3">Herbaceous vegetation established in narrow strips within the field to reduce wind speed and wind erosion.</td></tr>
<tr><td>Eligibility</td><td colspan="3">Idle strip or borders of cropland</td></tr>
<tr><td>Purpose</td><td colspan="3">Maintain or increase soil health and total carbon storage in biomass and soils• Improve plant productivity and health by protecting plants from wind-related damage• Reduce soil erosion by wind and/or water• Increase biodiversity of plant community; Provide food and cover for terrestrial wildlife, Pollinators, and/or other beneficial organisms• Improve air quality by reducing emissions of particulate matter; Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/LnFt)</td><td>Years Supported</td></tr>
<tr><td></td><td>Cool Season Perennial Species</td><td>$0.16</td><td>1yr</td></tr>
<tr><td>Guidelines</td><td colspan="3">The names of planting species must be provided during on-farm application. Plant species must be tolerant to soil deposition and stiff. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Width of the Herbaceous Wind Barrier must be at least 1.5 feet. Maintain plant growth during the project term and beyond.</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photos taken from different locations of the field(s) that demonstrate initial establishment of plantings (≥60% ground cover); (2) Receipts of plants purchased; (3) Names of plant species; (4) Seeding rates; (5) At the end of grant term, provide geotagged photos to demonstrate plant good plant growth and maintenance (≥60% ground cover).</td></tr>
<tr><td>Species Selection</td><td colspan="3">Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td colspan="3">Herbaceous Wind Barrier (USDA NRCS CPS 603)</td></tr>
</table>

MULCHING

<table>
<tr><td>Definition</td><td colspan="3">Applying plant residues or other suitable organic materials produced offsite to the land surface</td></tr>
<tr><td>Eligibility</td><td colspan="3">Annual Cropland, Orchard or Vineyard (berms and/or alleys)</td></tr>
<tr><td>Purpose</td><td colspan="3">Maintain or increase soil health and organic matter content • Improve plant productivity and health; Suppress weeds • Reduce soil erosion by wind and/or water • Improve or conserve soil moisture content, plant-available water retention, and infiltration rate; • Improve air quality by reducing emissions of particulate matter; Improve water quality by reducing sediment runoff.</td></tr>
<tr><td>Payment Scenarios</td><td colspan="3"><table>
<tr><th>Implementation</th><th>Payment Rate ($/ Acre)</th><th>Years Supported</th></tr>
<tr><td>Scenario 1. Natural Materials purchased through BGR</td><td>$0-518.38 with Materials, Transport and optional Spreading</td><td>3yrs</td></tr>
<tr><td>Scenario 2a. Wood Chips purchased through BGR</td><td>$0- $4,385.44 with Materials, Transport and optional Spreading</td><td>1yr</td></tr>
<tr><td>Scenario 3. Wood Chips flat rate payment</td><td>$2,923.65</td><td>1yr</td></tr>
</table></td></tr>
<tr><td>Guidelines</td><td colspan="3">All Scenarios: All mulch materials must be produced off-site
Scenario 1: Natural Materials: Natural materials must come from an approved source (e.g. wood shavings, sawdust, leaves, rice hulls, grass clippings, crop residues, straw, nut hulls/shells), applied in a 1-3 inch layer (or 1-2 tons per acre if using straw), and cover at least 70% of the implementation acreage.
Scenarios 2 and 3: Wood Chips: Wood chips must be chemically untreated, woody material between ¾ -2 inches in diameter and hardy enough to last for several years. and applied in 2–4-inch layer at a rate of ≥40 cubic yards per acre or ≥10 tons per acre. Wood chips may be applied to all or portion of the field such as on the alleys or to the crop rows (berms), depending on the intended benefits (and/or crop type) such as conserving moisture, reducing weed pressure, etc. Wood chips should be maintained in the grant term and for a minimum of 3 years overall. It is not required to have 70% implementation acreage covered by wood chips, but the surface to be covered should be calculated carefully.</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photos from different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage. including thickness measured by a ruler and mulch coverage; (2) Receipts of materials if purchased or donated with proof documents including quantity, nature and source of materials.</td></tr>
<tr><td>Species Selection</td><td colspan="3">NA</td></tr>
<tr><td>Reference</td><td colspan="3">Mulching (USDA NRCS CPS 484)</td></tr>
</table>

MULTISTORY CROPPING/ FOREST FARMING

<table>
<tr><td>Definition</td><td colspan="3">Trees or shrubs planted in stands that are managed as an overstory for annual crops.</td></tr>
<tr><td>Eligibility</td><td colspan="3">Annual Cropland</td></tr>
<tr><td>Purpose</td><td colspan="3">Increase carbon storage in plant biomass and soils; Improve soil health by increasing utilization and cycling of nutrients • Improve crop diversity by growing mixed but compatible crops on the same area• Reduce soil erosion by wind and/or water • Alter subsurface water quantity or water table depths• Increase or maintain food and cover for pollinators and other beneficial organisms by increasing crop diversity</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/Acre)</td><td>Years Supported</td></tr>
<tr><td></td><td>Scenario 1. Native Tree or shrub planting</td><td>$364.80</td><td>1yr</td></tr>
<tr><td></td><td>Scenario 2. Non- native tree or shrub planting</td><td>$429.60</td><td>1yr</td></tr>
<tr><td>Guidelines</td><td colspan="3">All Scenarios: The names of suitable tree species must be provided during on-farm application. Tree plantings will replace 20% of annual cropland. Trees will be planting with a density of ≥40 trees/acre; Provide Tree protection, including fence and irrigation; Maintain plant growth during the project term and beyond.
Scenario 1. Native tree or shrub species; medium-sized seedlings (1 quart -1 gallon pot or 10 cubic inches container) should make up 50% of plantings.
Scenario 2. Bare root tree or shrub seedlings; tree seedlings should be in a container size of ≥20 cubic inches; shrub seedling should be at 36-60 inches tall or in a container size of ≥20 cubic inches.</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photos from different locations of the fields to demonstrate tree establishment; (2) Receipts of seedlings purchased; (3) Species names and number of live plants established; (4) Geotagged photos and number of live plants at the end of the grant term to verify program requirements are met.</td></tr>
<tr><td>Species Selection</td><td colspan="3">Provide tree crop names at time of project application using the write-in option on the RePlan tool.</td></tr>
<tr><td>Reference</td><td colspan="3">Multi-story Cropping/Forest Farming (USDA NRCS CPS 379)</td></tr>
</table>

PASTURE AND HAY PLANTING

<table>
<tr><td>Definition</td><td colspan="3">Establishing adapted and compatible species, varieties, or cultivars of perennial herbaceous plants suitable for pasture or hay production.</td></tr>
<tr><td>Eligibility</td><td colspan="3">Annual Cropland changing use; irrigated or non-irrigated cropland conversion.</td></tr>
<tr><td>Purpose</td><td colspan="3">Maintain or increase soil health and total carbon storage in biomass and soils• Improve crop diversity by growing mixed but compatible crops on the same area; Provide forage for livestock• Reduce soil erosion by wind and/or water• Increase or maintain food and cover for pollinators and other beneficial organisms by increasing crop diversity• Improve water quality by reducing excess nutrients in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/Acre)</td><td>Years Supported</td></tr>
<tr><td></td><td>Scenario 1. Nonnative, high seeding rate</td><td>$509.66</td><td>1yr</td></tr>
<tr><td></td><td>Scenario 2a. Nonnative, standard seeding rate with fertilizer</td><td>$395.34</td><td>1yr</td></tr>
<tr><td></td><td>Scenario 2b. Nonnative, standard seeding rate without fertilizer</td><td>$177.92</td><td>1yr</td></tr>
<tr><td>Guidelines</td><td colspan="3">All Scenarios: The names of planting species must be provided during on-farm application (Introduced perennial grasses, legumes, and/or forbs). Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Maintain plant growth during the project term and beyond.
Scenario 1. Seeding rate of 30 lbs/acre pure live seed or 41-60 pure live seeds per sq ft
Scenario 2. Seeding rate of 9 lbs/acre pure live seed or 21-40 pure live seeds per sq ft; Fertilizer application (Scenario 2a) must be discussed with and approved by a Technical Assistance Provider or certified professional before implementation.</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photos from different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage (>60% plant coverage); (2) Receipts of seeds purchased; (3) Plant species name and seeding rate; (4) Maintain plant growth during the project term; (4) At the end of grant term, geotagged photos demonstrate ≥60% ground cover by live plants to verify program requirements are met.</td></tr>
<tr><td>Species Selection</td><td colspan="3">Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td colspan="3">Forage and Biomass Planting (NRCS CPS 512)</td></tr>
</table>

PRESCRIBED GRAZING

<table>
<tr><td>Definition</td><td>Managing the harvest of vegetation with grazing and/or browsing animals with the intent to achieve specific ecological, economic, and management objectives</td></tr>
<tr><td>Eligibility</td><td>Grazing Land (pasture and/or rangelands)</td></tr>
<tr><td>Purpose</td><td>Maintain or increase soil health and organic matter content • Improve or maintain quantity and/or quality of forage for livestock • Reduce soil erosion by wind and/or water • Increase biodiversity of plant community • Improve or maintain riparian or watershed function • Manage fire fuel loads • Improve or maintain the quantity or quality of available food and cover for pollinators and other beneficial organisms • Improve or maintain surface and/or subsurface water quality.</td></tr>
<tr><td>Payment Scenarios</td><td>
<table>
<tr><th>Implementation</th><th>Payment Rate ($/Acre)</th><th>Years Supported</th></tr>
<tr><td>Scenario 1. Pasture, basic</td><td>$81.54</td><td>3yrs</td></tr>
<tr><td>Scenario 2. Range, basic</td><td>$7.10</td><td>3ys</td></tr>
</table>
</td></tr>
<tr><td>Guidelines</td><td>All Scenarios: A prescribed grazing management plan prepared by a certified range manager or equivalent professional is required prior to starting implementation. Follow the grazing management plan during the grant term including sensitive area protection as applicable.
Scenario 1. Grazing Management to Improve Irrigated/non-irrigated Pasture Condition
Scenario 2. Grazing Management to Improve Rangeland or Non-Irrigated Pasture Condition</td></tr>
<tr><td>Verification Requirements</td><td>(1) A grazing log recording grazing dates and stubble height after grazing and monitoring; (2) Geotagged photos from different locations of the field monitoring forage before and after grazing; (3) Verification at the end of each project year or the end of the grazing season.</td></tr>
<tr><td>Species Selection</td><td>NA</td></tr>
<tr><td>Reference</td><td>Prescribed Grazing (NRCS CPS 528)</td></tr>
</table>

RANGE PLANTING

<table>
<tr><td>Definition</td><td>Establishment of adapted perennial or self- sustaining vegetation such as grasses, forbs, and legumes.</td></tr>
<tr><td>Eligibility</td><td>Rangeland</td></tr>
<tr><td>Purpose</td><td>Maintain or increase soil health and total carbon storage in biomass and soils • Improve or maintain quantity and/or quality of forage for livestock • Reduce soil erosion by wind and/or water • Improve or conserve soil moisture content and infiltration rate • Increase biodiversity of plant community; restore or maintain native plant communities; Provide food and cover for pollinators and other beneficial organisms • Improve or maintain surface and/or subsurface water quality • Suppress weeds</td></tr>
<tr><td>Payment Scenarios</td><td>
<table>
<tr><th>Implementation</th><th>Payment Rate ($/Acre)</th><th>Years Supported</th></tr>
<tr><td>Scenario 1a. Native species broadcast</td><td>$633.56</td><td>1yr</td></tr>
<tr><td>Scenario 1b. Native species high forb drilled</td><td>$552.56</td><td>1yr</td></tr>
<tr><td>Scenario 1c. Native species low forb drilled</td><td>$403.60</td><td>1yr</td></tr>
<tr><td>Scenario 2a. Nonnative species broadcast</td><td>$222.50</td><td>1yr</td></tr>
<tr><td>Scenario 2b. Nonnative species drilled</td><td>$211.82</td><td>1yr</td></tr>
<tr><td>Scenario 3. Annual mixed species</td><td>$153.32</td><td>1yr</td></tr>
</table>
</td></tr>
<tr><td>Guidelines</td><td>All Scenarios: The names of planting species and planting method must be provided during on-farm application. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Maintain plant growth during the project term. Maintaining a range planting implementation log is recommended but not required.

Scenario 1. Native perennial species (must be mixture of grasses, legumes, and/or forbs);
Scenario 1a. Seeding rate at 41-60 pure live seeds/ sqft
Scenario 1b. No-till or range drill seeding at 41-60 pure live seeds/ sqft
Scenario 1c. No-till or range drill seeding at 21-40 pure live seeds/ sqft

Scenario 2. Non-native adapted perennial species (must be mixture of grasses, legumes, and/or forbs); Scenario 2a. Seedbed preparation; Seeding rate at 41-60 pure live seeds/ sqft.
Scenario 2b. No-till or range drill seeding at 21-40 pure live seeds/ sqft

Scenario 3. Annual mixed species broadcast or drill seeding at 21-60 pure live seeds/ sqft as applicable.</td></tr>
<tr><td>Verification Requirements</td><td>(1) Geotagged photos from different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage (>60% plant coverage); (2) Receipts of seeds purchased; (3) Species, seeding rate; (4) Documentation of planting method (farming log and photos); (5) At the end of grant term, geotagged photos demonstrated ≥60% ground cover by live plants to verify program requirements are met.</td></tr>
<tr><td>Species Selection</td><td>Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td>Range Planting (NRCS CPS 550)</td></tr>
</table>

RE-SATURATING DELTA PEAT SOILS THROUGH RICE CULTIVATION

<table>
<tr><td>Definition</td><td colspan="3">Convert annual cropland or pastureland (including alfalfa) on peat soils into Rice cultivation</td></tr>
<tr><td>Eligibility</td><td colspan="3">Cropland on the highly organic and/or mineral-organic soils in the Sacramento–San Joaquin Delta Region</td></tr>
<tr><td>Purpose</td><td colspan="3">Reduce oxidation and degradation of organic matter in the region; Reduce subsidence of peat soils; Reduce greenhouse gas (GHG) emissions; Provide wildlife habitat</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/Acre)</td><td>Years Supported</td></tr>
<tr><td></td><td>Convert annual cropland or pastureland into Rice cultivation</td><td>$800.00</td><td>1yr</td></tr>
<tr><td>Guidelines</td><td colspan="3">Land use documentation for the past 3 years is required at the time of on-farm project application. Field is flooded for about 8 months of the year and allowed to drain for 2 months in the spring for land preparation and planting and 2 months in the fall for harvest and residue management; Rice straw should be chopped, rolled and crimped, or stomped down flat, with no tillage or discing; Field should be flooded no later than December 15 and remain flooded until March 1; Rice cultivation must be maintained for a minimum of 5 years</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">An operation log recording all steps for land conversion to ensure the finished field meets requirements for rice production; Verification time is during the first-year rice cultivation when the field is flooded. Geotagged photos from different locations of the field to demonstrate that the land conversion is fully implemented. A farming log recording rice production activity including field flooding & draining periods and straw management will be submitted each year in the grant term.</td></tr>
<tr><td>Species Selection</td><td colspan="3">NR</td></tr>
<tr><td>Reference</td><td colspan="3">Re-saturating Delta Peat Soils Through Rice Cultivation White Paper (To be posted at HSP website later)</td></tr>
</table>

RESIDUE AND TILLAGE MANAGEMENT – NO-TILL

<table>
<tr><td>Definition</td><td>Limiting soil disturbance to manage the amount, orientation, and distribution of crop and plant residue on the soil surface year-round.</td></tr>
<tr><td>Eligibility'</td><td>Annual Cropland, Orchard and Vineyard Alleys. Only fields that have received conventional tillage prior to on-farm project application are eligible for this practice.</td></tr>
<tr><td>Purpose</td><td>Maintain or increase soil health and organic matter content • Reduce soil erosion by wind and/or water • Improve or conserve soil moisture content, plant-available water retention, and infiltration rate • Improve air quality by reducing emissions of particulate matter from tillage • Improve or maintain surface and/or subsurface water quality by reducing excessive sediment from tillage •Reduce energy use.</td></tr>
<tr><td>Payment Scenarios</td><td>
<table>
<tr><th>Implementation</th><th>Payment Rate ($/Acre)</th><th>Years Supported</th></tr>
<tr><td>No-Till or Strip-Till</td><td>$32.96</td><td>3yrs</td></tr>
</table>
</td></tr>
<tr><td>Guidelines</td><td>During the project term, crop residues or living plants should be kept on soil surface, not burned or removed.
No-Till: No soil disturbance will be performed. All planting methods must no-till drill or broadcast as applicable.
Strip-Till: Tillage is only performed along the rows of seed bed (≤8 inches width). Planting method may be no-till drill or strip-till planting.</td></tr>
<tr><td>Verification Requirements</td><td>(1) Geotagged photos from different locations of each field showing field operations (including equipment used), field floor and overview of the whole field at end of each project year; (2) A farming log recording field activities related to soil disturbance for the entire grant year. This should include the dates, methods, and equipment used during farm operations (i.e. harvest and termination, subsurface fertilizer injection, or planting), as well as periods where soil remained undisturbed (i.e., fallow, covered with crop residues, or living cover crop/ volunteer grasses were allowed to grow); (3) Practice implementation is considered complete and ready to verify at the end of each project year.</td></tr>
<tr><td>Species Selection</td><td>NA</td></tr>
<tr><td>Reference</td><td>Residue and Tillage Management – No-Till (USDA NRCS CPS 329)</td></tr>
</table>

RESIDUE AND TILLAGE MANAGEMENT – REDUCED TILL

<table>
<tr><td>Definition</td><td>Managing the amount, orientation, and distribution of crop and other plant residue on the soil surface year-round while limiting soil-disturbing activities used to grow and harvest crops.</td></tr>
<tr><td>Eligibility</td><td>Annual Cropland. Only fields that have received conventional tillage prior to on-farm project application are eligible for this practice.</td></tr>
<tr><td>Purpose</td><td>Maintain or increase soil health and organic matter content• Reduce soil erosion by wind and/or water • Improve or conserve soil moisture content, plant-available water retention, and infiltration rate• Improve air quality by reducing emissions of particulate matter from tillage• Improve or maintain surface and/or subsurface water quality by reducing excessive sediment from tillage • Reduce energy use.</td></tr>
<tr><td>Payment Scenarios</td><td>
<table>
<tr><th>Implementation</th><th>Payment Rate ($/Acre)</th><th>Years Supported</th></tr>
<tr><td>Reduced- Till</td><td>$40.74</td><td>3yrs</td></tr>
</table>
</td></tr>
<tr><td>Guidelines</td><td>For the full project term, use tillage methods that limit soil disturbance, such as chisel plowing, field cultivating, tandem disking, or vertical tillage. This also includes the use of planting/tillage systems with fewer tillage operations (e.g. ridge tillage). Crop residues or living plants should cover the soil surface during winter-spring period, not burned or removed.</td></tr>
<tr><td>Verification Requirements</td><td>(1) Geotagged photos from different locations of each field showing field operations (including equipment used), field floor and overview of the whole field at end of each project year. (2) A farming log recording field activities related to soil disturbance for the entire grant year. This should include the dates, methods, and equipment used during farm operations (i.e. harvest and termination, subsurface fertilizer injection, or planting), as well as periods where soil remained undisturbed (i.e., fallow, covered with crop residues, or living cover crop/ volunteer grasses were allowed to grow). (3) Practice implementation is considered complete and ready to verify at the end of each project year.</td></tr>
<tr><td>Species Selection</td><td>NA</td></tr>
<tr><td>Reference</td><td>Residue and Tillage Management – Reduced Till (USDA NRCS CPS 345)</td></tr>
</table>

RIPARIAN FOREST BUFFER

Definition	An area predominantly covered by trees and/or shrubs located adjacent to and up-gradient from a watercourse or water body.
Eligibility	Idle strip or borders of cropland, grazing land along perennial and intermittent streams and/or creeks.
Purpose	Maintain or increase soil health and total carbon storage in biomass and soils• Reduce soil erosion by wind and/or water; Improve stability to stream banks and shorelines• Increase biodiversity of plant community; restore or maintain native plant communities; Improve or maintain riparian or watershed function and water quality; Provide food and cover for terrestrial/aquatic wildlife, pollinators and other beneficial organisms• Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater
Payment Scenarios	Implementation: Scenario 1. Bare-root, hand planted — Payment Rate ($/Acre): $3,862.26 — Years Supported: 1yr Scenario 2. Cuttings, Small to Medium Size — $4,516.20 — 1yr Scenario 3. Cuttings, Medium to Large Size — $8,254.12 — 1yr Scenario 4. Container - Small, hand planted — $6,980.70 — 1yr Scenario 5. Container - Large, hand planted — $12,925.20 — 1yr
Guidelines	All Scenarios: The names of planting species must be provided during on-farm application. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. The Area of practice implementation must be upgradient from and adjacent to a stream or creek. Establish plantings with a density of ≥35 live plants/acre. Plant protection, including fencing and irrigation, are required. Maintain plant growth during the project term and beyond. Scenario 1. Seedling size: 18-36 inches tall or 10-20 cubic inches container for shrubs and hardwood; 1-year old seedlings or 4-6 cubic inches container for conifer; Scenario 2. Cutting size: small to medium (0.25-1 inch in diameter and 2-4 feet long); Scenario 3. Cutting size: medium (0.25-1 inch in diameter and 2-4 feet long) to large (2-6 inch in diameter and 6 ft long); Scenario 4. Potted seedling size: 1 quart to 1 gallon; Scenario 5. Potted seedling size: 2 gallons or larger;
Verification Requirements	(1) Geotagged photos taken from different locations of the field(s) that demonstrate initial establishment of plantings; (2) Receipts for number and sizes of seedlings/cuttings purchased; (3) Names of plant species; (4) Number of live plants; (5) At the end of grant term, provide geotagged photos and live plant count to demonstrate good plant growth and maintenance.
Species Selection	Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.
Reference	Riparian Forest Buffer (USDA NRCS CPS 391)

RIPARIAN HERBACEOUS COVER

<table>
<tr><td>Definition</td><td>Grasses, sedges, rushes, ferns, legumes, and forbs tolerant of intermittent flooding or saturated soils, established or managed as the dominant vegetation in the transitional zone between upland and aquatic habitats. Planting converts irrigated or non-irrigated cropland to permanent unfertilized grass, or grass/legume cover near aquatic habitats.</td></tr>
<tr><td>Eligibility</td><td>Cropland</td></tr>
<tr><td>Purpose</td><td>Maintain or increase soil health and total carbon storage in biomass and soils• Reduce soil erosion by wind and/or water; Improve stability to stream banks and shorelines• Increase water storage on floodplains• Increase biodiversity of plant community; restore or maintain native plant communities; Improve or maintain riparian or watershed function and water quality; Provide food and cover for terrestrial/aquatic wildlife, pollinators and other beneficial organisms• Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>
<table>
<tr><th>Implementation</th><th>Payment Rate ($/Acre)</th><th>Years Supported</th></tr>
<tr><td>Scenario 1a. Broadcast Seeding</td><td>$1,404.16</td><td>1yr</td></tr>
<tr><td>Scenario 2. Plug Planting</td><td>$30,420.90</td><td>1yr</td></tr>
<tr><td>Scenario 3. Combination Broadcast Seeding and Plug Planting</td><td>$15,571.50</td><td>1yr</td></tr>
<tr><td>Scenario 4. Pollinator Cover</td><td>$2,474.26</td><td>1yr</td></tr>
</table>
</td></tr>
<tr><td>Guidelines</td><td>All Scenarios: Area of practice implementation must be upgradient from and adjacent to a stream; The names of planting species must be provided during on-farm application; species must be native perennials; Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Provide maintenance of plant growth during the project term as well as maintenance of established riparian zone - an adapted, diverse vegetative plant community that is under close management to ensure long term survival & ecological succession.
Scenario 1. Native perennial grasses, legumes and forbs with ≤50% grasses; Broadcast planting and/or no-till drill seeded at rate of 41-60 pure live seeds/sq ft;
Scenario 2. Native aquatic plants plug-planted; Plant density at 19,360 plants per acre
Scenario 3. Native perennial grasses, legumes and forbs with ≥50% grasses; Plug planting at density of 9,680 plants/acre and broadcast planting and/or no-till drill seeded at rate of 41-60 pure live seeds/sq ft;
Scenario 4. Native perennial species with ≤50% grasses; 2-12 species to ensure ≥2 species in bloom at any given time of the growing season; Broadcast or no-till drill seeded at rate of 41-60 pure live seeds/sq ft.</td></tr>
<tr><td>Verification Requirements</td><td>(1) Geotagged photos from different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage (>60% plant cover); (2) Receipts for materials purchased; (3) Planting method and seeding rate; (4) At the end of grant term, geotagged photos demonstrate ≥60% ground cover by live plants to verify program requirements are met.</td></tr>
<tr><td>Species Selection</td><td>Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td>Riparian Herbaceous Cover (USDA NRCS CPS 390)</td></tr>
</table>

SILVOPASTURE

<table>
<tr><td>Definition</td><td colspan="3">Establishment and/or management of desired trees and forages on the same land unit.</td></tr>
<tr><td>Eligibility</td><td colspan="3">Grazing Land</td></tr>
<tr><td>Purpose</td><td colspan="3">Maintain or increase soil health and total carbon storage in biomass and soils• Provide forage, shade, and/or shelter for livestock• Reduce soil erosion by wind and/or water• Improve or conserve soil moisture content and infiltration rate; Reduce transpiration and evaporation losses • Increase biodiversity of plant community; Provide food and cover for terrestrial wildlife, pollinators, and other beneficial organisms• Improve or maintain surface and/or subsurface water quality</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/Acre)</td><td>Years Supported</td></tr>
<tr><td></td><td>Establish trees, existing grasses</td><td>$313.50</td><td>1yr</td></tr>
<tr><td>Guidelines</td><td colspan="3">The names of planting species must be provided during on-farm application. Species selection must be discussed with and approved by a Technical Assistance Provider or certified professional before implementation. Containerized seedings at 4-6 cubic inches or bare root seedlings at one year old should be planted at a density at ≥20 live plants per acre. Provide Tree protection, including fence and irrigation; Maintain plant growth during the project term and beyond.</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photos from different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage; (2) Receipts showing sizes & number of seedlings purchased; (3) Species and number of live trees/shrubs; (5) At the end of grant term, geotagged photos and number of live plants to verify program requirements are met.</td></tr>
<tr><td>Species Selection</td><td colspan="3">Recommended species for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions, conservation purposes, and may be toxic to certain livestock. Species selection must be discussed with and approved by a Technical Assistance Provider or certified professional before implementation.</td></tr>
<tr><td>Reference</td><td colspan="3">Silvopasture (USDA NRCS CPS 381)</td></tr>
</table>

STRIP CROPPING

<table>
<tr><td>Definition</td><td colspan="3">Growing strips of erosion-resistant crops next to erosion-susceptible crops, in a systematic arrangement across a field.</td></tr>
<tr><td>Eligibility</td><td colspan="3">Annual Cropland – irrigated or non-irrigated</td></tr>
<tr><td>Purpose</td><td colspan="3">Maintain or increase soil health and total carbon storage in biomass and soils• Improve crop diversity by growing mixed but compatible crops on the same area• Reduce soil erosion by wind and/or water• Increase or maintain food and cover for pollinators and other beneficial organisms by increasing crop diversity• Improve water quality by reducing excess nutrients and other pollutants in runoff and entering groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/Acre)</td><td>Years Supported</td></tr>
<tr><td></td><td>Wind and water erosion control</td><td>$3.30</td><td>1yr</td></tr>
<tr><td>Guidelines</td><td colspan="3">The names of planting species must be provided during on-farm application; ≥ 50% vegetation cover must be perennial erosion resistant species; Do not include erosion- susceptible crops in adjacent strips at the same time during the year. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Two or more strips are required. Maintain plant growth during the project term and beyond;</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photos from different locations of the field to demonstrate established strips (>60% plant coverage); (2) receipts of seeds purchased; (3) Number, width & length of strips; (4) At the end of grant term, provide geotagged photos that demonstrate ≥60% ground cover by live plants to verify program requirements are met</td></tr>
<tr><td>Species Selection</td><td colspan="3">Not in California eVegGuide (Cash Crops), RePlan write in required. Must enter species that are perennial erosion resistant species.</td></tr>
<tr><td>Reference</td><td colspan="3">Strip Cropping (USDA NRCS CPS 585)</td></tr>
</table>

TREE/SHRUB ESTABLISHMENT

<table>
<tr><td>Definition</td><td colspan="3">Establishing woody plants by planting seedlings or cuttings, by direct seeding, and/or through natural propagation.</td></tr>
<tr><td>Eligibility</td><td colspan="3">Cropland, Grassland</td></tr>
<tr><td>Purpose</td><td colspan="3">Maintain or increase soil health and total carbon storage in biomass and soils• Reduce soil erosion by wind and/or water• Improve or conserve soil moisture content, plant-available water retention, and infiltration rate; Reduce transpiration and evaporation losses • Increase biodiversity of plant community; restore or maintain native plant communities; Provide food and cover for terrestrial wildlife, pollinators, and/or other beneficial organisms• Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>Implementation</td><td>Payment Rate ($/Acre)</td><td>Years Supported</td></tr>
<tr><td></td><td>Scenario 1. Conservation, hand planted</td><td>$603.00</td><td>1yr</td></tr>
<tr><td></td><td>Scenario 2. Conservation, hand planted, browse protection</td><td>$1,526.54</td><td>1yr</td></tr>
<tr><td>Guidelines</td><td colspan="3">All Scenarios & Scenario 1: The names of planting species must be provided during on-farm application. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Plant shrub seedings at 6-18 inches tall or ≤10 cubic inches container; tree or hardwood seedlings at 18-36 inches tall or 10-20 cubic inches container. Plant at a density of ≥150 live trees per acre. Provide tree protection and irrigation as needed to maintain plant growth during the project term.
Scenario 2. Must provide additional plant protection from animal damage and wood stake to fasten plants in place.</td></tr>
<tr><td>Verification Requirements</td><td colspan="3">(1) Geotagged photos from different locations of the field to demonstrate that the practice is fully implemented in the implementation acreage; (2) Receipts (or donation documentation) of seedlings purchased, species and number of live plants; (4) At the end of grant term, provide geotagged photos and number of live plants to verify program requirements are met.</td></tr>
<tr><td>Species Selection</td><td colspan="3">Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.</td></tr>
<tr><td>Reference</td><td colspan="3">Tree/Shrub Establishment (USDA NRCS CPS 612)</td></tr>
</table>

VEGETATIVE BARRIER

Definition	Permanent strips of stiff, dense vegetation established along the general contour of slopes or across concentrated flow areas.
Eligibility	Idle strip or borders of cropland
Purpose	Maintain or increase soil health and total carbon storage in biomass and soils • Reduce soil erosion by wind and/or water • Increase biodiversity of plant community; Provide food and cover for terrestrial wildlife, Pollinators, and/or other beneficial organisms • Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater
Payment Scenarios	Implementation: Vegetative Planting; Payment Rate ($/Ft): $1.90; Years Supported: 1yr
Guidelines	Projects will be located where sheet or rill erosion is of concern. The names of planting species must be provided during on-farm application. The selected species should be perennials tolerant of soil erosion with a vegetation stiffens index (VSI) of 0.05 - 0.10. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Broadcast or drill seeds in a strip of at least 3 feet along the general contour of slopes. Maintain plant growth during the project term and beyond.
Verification Requirements	(1) Geotagged photographs taken at both ends & middle of established barrier to demonstrate established plants (>60% plant cover); (2) Receipts of seeds purchased; (3) Species names; (4) Geotagged photographs taken at the end of grant term from both ends & middle of established barrier to demonstrate >60% ground cover by live plants to verify program requirements are met.
Species Selection	Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations.
Reference	Vegetative Barriers (USDA NRCS CPS 601)

WHOLE ORCHARD RECYCLING

<table>
<tr><td>Definition</td><td>Whole Orchard Recycling (WOR) is a practice which consists of the chipping of woody perennial crops at the end of their agronomic life cycle. The wood chips are incorporated into the soil of the fields where the trees stood, which may be fallowed or continue agronomic production under minimum-tilled perennial crops.</td></tr>
<tr><td>Eligibility</td><td>Orchards. Only orchards with trees at least ten years of age at application submission are eligible.</td></tr>
<tr><td>Purpose</td><td>Maintain or increase soil health and organic matter content; Maintain or improve soil aggregate stability; Maintain or improve habitat for soil organisms• Improve plant productivity and health• Improve or conserve soil moisture content, plant-available water retention, and infiltration rate• Improve water quality by reducing excess nutrients in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>
<table>
<tr><th>Implementation</th><th>Payment Rate ($/Acre)</th><th>Years Supported</th></tr>
<tr><td>Whole Orchard Recycling</td><td>$861.42</td><td>1yr</td></tr>
</table>
</td></tr>
<tr><td>Guidelines</td><td>The on-farm project application requires the age of trees. Only orchards with trees at least ten years of age at application submission are eligible; Orchard trees should be chipped and incorporated on the field where they were grown, not to export to new fields; Chips must be evenly distributed throughout the orchard and incorporated into the soil to at least 6 inches depth.</td></tr>
<tr><td>Verification Requirements</td><td>(1) Geotagged photographs of fields showing tree removal, chipping, spreading and incorporation of wood chips; (2) A farm log including chipping details (e.g. tons of chips, size); (3) Verification is when chips are incorporated.</td></tr>
<tr><td>Species Selection</td><td>NA</td></tr>
<tr><td>Reference</td><td>Whole Orchard Recycling (NRCS CPS 336), CDFA Whole Orchard Recycling white paper (https://www.cdfa.ca.gov/oefi/healthysoils/docs/CDFA_WOR_Report.pdf)</td></tr>
</table>

WINDBREAK/ SHELTERBELT ESTABLISHMENT

<table>
<tr><td>Definition</td><td>Establishment of a single row of trees and/or shrubs that provide wind protection for cropland or livestock.</td></tr>
<tr><td>Eligibility</td><td>Idle strip or borders of cropland, orchards/vineyards, grazing land</td></tr>
<tr><td>Purpose</td><td>Maintain or increase soil health and total carbon storage in biomass and soils • Improve plant productivity and health by protecting plants from wind-related damage • Provide shade, and/or shelter for livestock • Reduce soil erosion by wind and/or water • Increase biodiversity of plant community; Provide food and cover for terrestrial wildlife, Pollinators, and/or other beneficial organisms • Improve air quality by screening airborne particulate matter, chemicals, and odors • Improve water quality by reducing excess nutrients, sediments, or other pollutants in runoff and groundwater</td></tr>
<tr><td>Payment Scenarios</td><td>
<table>
<tr><th>Implementation</th><th>Payment Rate ($/Ft)</th><th>Years Supported</th></tr>
<tr><td>Scenario 1. 1-row, trees and/or shrubs</td><td>$1.66</td><td>1yr</td></tr>
<tr><td>Scenario 2. 1-row, trees and/or shrub, with wind protection fence</td><td>$2.68</td><td>1yr</td></tr>
</table>
</td></tr>
<tr><td>Guidelines</td><td><u>All Scenarios:</u> The names of planting species must be provided during on-farm application. Approved species for the practice, payment scenario, and region can be selected using the RePlan tool. Trees or shrubs will be planting in a single row with a density of ≥200 live plants/acre, using seedling with potting size of 15-20 cubic inches or bare root seedlings at 2-3 years old before transplanting; Provide Tree protection, including fence and irrigation; Maintain plant growth during the project term and beyond.
<u>Additional guidelines for Scenario 2:</u> A wind-protection fence is required.</td></tr>
<tr><td>Verification Requirements</td><td>(1) Geotagged photographs taken at both ends & middle of established barrier to demonstrate established plants; (2) Receipts of plants purchased; (3) Species names and number of live plants; (4) Geotagged photographs taken at the end of grant term taken at both ends & middle of established barrier and number of live plants to verify program requirements are met.</td></tr>
<tr><td>Species Selection</td><td>Species approved by California eVegGuide for this practice are listed [PAGE REFERENCE]. Listed species may not be suitable for all ecoregions and conservation purposes. Use RePlan Tool to view site-specific recommendations. Establishment harvestable crops, so species such as fruit trees/shrubs should be limited. If the number of harvestable species (i.e. fruits, nuts, berries) exceeds 10% of total number of plants, the applicant must provide justification.</td></tr>
<tr><td>Reference</td><td>Windbreak/ Shelterbelt Establishment (NRCS CPS 380)</td></tr>
</table>