Payment Rates, Implementation Guidelines and Verification Requirements for 2018 HSP Incentives Program

HSP Agricultural Management Practice Name	Practice Implementation Name* (COMET –Planner)	Scenario Name*	Implementation Guidelines	Verification Requirements	Payment Rate ($/Unit)	Years of Payment
Conservation Crop Rotation (USDA NRCS CPS 328)	Decrease Fallow Frequency **OR** Add Perennial Crop to Rotations	Basic rotation	Effective implementation of a conservation crop rotation to provide high residue and/or perennial crops.	(1) check if rotation practices followed the plan and (2) the acreage	$19.62/Ac	3

		Specialty crops	Effective implementation of a rotation of organic or non-organic specialty crops (fruits & vegetables).	(1) check if rotation practices followed the plan and (2) the acreage	$52.34/Ac	3
Residue and Tillage Management, No-Till (USDA NRCS CPS 329)	Intensive Till to No Till or Strip Till on Irrigated Cropland **OR** Non-Irrigated Cropland	No-Till or Strip-Till	(1) No tillage; (2) Planting method is no-till drilling or hand planting.	Any time of the year to look evidence of no soil disturbance	$30.18/Ac	3
Cover Crop (USDA NRCS CPS 340)	Add Non-Legume Seasonal Cover Crop to Irrigated Cropland **OR** Non-Irrigated Cropland Add Legume Seasonal Cover	Cover Crop: Basic	Cover crop should be allowed to grow to produce as much biomass as possible without delaying planting of the following crop.	(1) Cover crop is visible in the field at verification. (2) Receipts of cover crop seeds purchased.	$126.44/Ac	3

	Crop to Irrigated Cropland **OR** Non-Irrigated Cropland	Cover Crop: multiple species	Planting multi-species cover crop (two or more species) mix includes a small grain, a legume, and may include other species such as forage sorghum, radishes, buckwheat, etc..	(1) Mixed cover crop species are visible in the field at verification. (2) Receipts of cover crop seeds purchased.	$147.00/Ac	3
Residue and Tillage Management, Reduced Till (USDA NRCS CPS 345)	Intensive Till to Reduced-Till on Irrigated Cropland **OR** Non-Irrigated Cropland	Reduced-Till	(1) Mulch or vertical tillage, chiseling or disking to limit soil disturbance, or (2) Fewer tillage operations.	Must meet depth, frequency or percent area of soil disturbance.	$32.06/Ac	3
Residue and Tillage Management, Reduced Till (USDA NRCS CPS 345)	Intensive Till to Reduced-Till on Irrigated Cropland **OR** Non- Irrigated Cropland	Reduced-Till	(1) Mulch tillage, vertical tillage, chiseling or disking; (2) Fewer tillage operations.	Must meet depth, frequency or percent area of soil disturbance.	$32.06/Ac	3

Mulching (USDA NRCS CPS 484)	Add High Carbon Mulch to Croplands	Natural Materials	1-3 inches thickness of straw or other natural materials	(1) ≥ 60% soil surface covered; (2) Receipts of materials purchased.	$385.70/Ac	3
		Wood Chips	2-3 inches thickness of wood chips	(1) Tree rows (≥ 4' radius) covered; (2) Receipts of wood chips purchased.	$1712.14/Ac	3
Strip Cropping (USDA NRCS CPS 585)	Add Perennial Cover Grown in Strips with Irrigated Annual Crops **OR** Non-Irrigated Annual Crops	Wind and water erosion control	(1) Two or more strips are required; (2) ≥ 50% vegetation cover must be perennial and erosion resistant crops.	(1) Number, width & length of strips; (2) species (perennial and erosion resistant)	$2.64/Ac	1

Nutrient Management (USDA NRCS CPS 590)	Improved N Fertilizer Management on Irrigated Cropland **OR** Non-Irrigated Cropland – Reduce Fertilizer Application Rate by 15%	Basic NM	A nutrient management budget will be developed for each field(s) based on soil test analysis and university of California recommendation rates or crop removal rates.	Receipts and farm log of nitrogen fertilizers showing application rates is 15% less than what was used in the past 3 years or UC recommended rates.	$14.26/Ac	3
Conservation Cover ((USDA NRCS CPS 327)	Convert Irrigated Cropland to Permanent Unfertilized Grass Cover or Grass/Legume Cover **OR** Convert Non-Irrigated Cropland to Permanent Unfertilized Grass Cover or Grass/Legume Cover	Introduced species	Introduced cool season perennial grass to reduce soil erosion, runoff and dust emissions.	(1) Receipts of seeds purchased; (2) species; (3) good growth	$203.16/Ac	1
		Introduced species with foregone income	Introduced, cool season perennial grass for organically managed lands.	(1) Receipts of seeds purchased; (2) species; (3) good growth; (4) Previous cropland used	$607.74/Ac	1

		Monarch species - mix	(1) Mix of native grass and forbs for specialized purposes (wildlife, pollinators or ecosystem restoration); (2) Species not readily available and/or difficult to produce.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	$2,222.26/Ac	1
		Monarch species - mix with foregone income	A mix of native grass and forbs for specialized purposes; Species not readily available and/or difficult to produce.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	$2,465.00/Ac	1
		Native species	Mixture of native and warm season perennial grass to reduce soil erosion, water/sediment runoff and dust emissions.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	$280.74/Ac	1

		Native species with foregone income	Mixture of native & warm season perennial grass.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	$701.98/Ac	1
		Pollinator species	Permanent vegetation, including a mix of native grasses, legumes, and forbs to provide habitat for pollinators.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	$1,571.88/Ac	1
		Pollinator species with foregone income	Permanent vegetation, including a mix of native grasses, legumes, and forbs to provide habitat for pollinators.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	$1,993.12/Ac	1

Contour Buffer Strips (USDA NRCS CPS 332)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover **OR** Unfertilized Grass/Legume Cover	Introduced Species, Forgone Income	(1) Introduced cool season perennial grass; (2) Area of strips is taken out of production.	(1) Visible: cool season perennial grass in previous cropland. (2) Receipts of seeds purchased.	$620.10/Ac	1
		Native Species, Foregone Income	(1) Native warm season perennial grass; (2) Area of strips is taken out of production.	(1) Visible: warm season perennial grass in previous cropland. (2) Receipts of seeds purchased.	$615.08/Ac	1
		Wildlife Pollinator, Foregone Income	(1) Three or more native warm season perennial that are pollinator friendly species; (2) Area of strips is taken out of production.	(1) Visible: ≥ 3 species of native, warm season, pollinator friendly, perennials species. (2) Receipts of seeds purchased.	$832.26/Ac	1

Field Border (USDA NRCS CPS 386)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover **OR** Permanent Unfertilized Grass/Legume Cover	Field Border, Introduced Species	(1) Introduced, cool season perennial grass; (2) Around the perimeter of a crop/rangeland.	(1) Visible: cool season perennial grass. (2) Receipts of seeds purchased.	$136.64/Ac	1
		Field Border, Native Species	Untreated, warm season, native perennial around the perimeter of an agricultural land.	(1) Visible: warm season, native perennials. (2) Receipts of seeds purchased.	$184.88/Ac	1
		Field Border, Pollinator	Mixed species, native Forb around perimeter of agricultural lands.	(1) Visible: mixed, native forbs. (2) Receipts of seeds purchased.	$1,510.22/Ac	1

Filter Strip (USDA NRCS CPS 393)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover **OR** to Permanent Unfertilized Grass/Legume Cover	Filter Strip, Native species	Native, warm season perennial grass	(1) Visible: perennial species planted in area of previous cropland. (2) Receipts of seeds purchased.	$248.54/Ac	1
		Filter Strip, Introduced species	Introduced, cool season perennial grass and/or legume mix		$268.16/Ac	1
Forage and Biomass Planting (USDA NRCS CPS 512)	Conversion of Annual Cropland to Irrigated Grass/Legume Forage/Biomass Crops **OR** Conversion of	Nonnative high seeding rate, no lime	(1) Seeding rate: ≥ 30 lb/acre PLS (pure live seed); (2) Planting method: No-Till/grass drill.	(1) Receipts of seeds purchased; (2) species; (3) good growth	$313.28/Ac	1

	Annual Cropland to Non-Irrigated Grass/Legume Forage/Biomass Crops	Nonnative standard seeding rate, no fertilizer	(1) Seeding rate: ≥ 9 lb/acre PLS (pure live seed); (2) Planting method: No-Till/grass drill	(1) Receipts of seeds purchased; (2) species; (3) good growth	$152.00/Ac	1
		Nonnative standard seeding rate with fertilizer	(1) Seeding rate: ≥ 9 lb/acre PLS (pure live seed); (2) Planting method: No-Till/grass drill	(1) Receipts of seeds purchased; (2) species; (3) good growth	$218.50/Ac	1
		Non-native high seeding rate, lime	(1) Seeding rate is ≥ 30 lb/acre PLS (pure live seed); (2) No-Till/grass drill is used to seed.	(1) Receipts of seeds purchased (2) species; (3) good growth	$428.20/Ac	1

Grassed Waterway (USDA NRCS CPS 412)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover **OR** Convert Strips of Non-Irrigated Cropland to Permanent Unfertilized Grass /Legume Cover	Base Waterway	Waterways area measured from top of bank to top of bank. Typical practice is 1200' long, 12' bottom, 8:1 side slopes, and 1.5' depth.	(1) Success of grassed waterway with suitable vegetation; (2) Receipts of materials purchased.	$2,164.42/Ac	1
		Base waterway with checks	Area measured from top of bank to top of bank. Fabric or stone checks 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 are installed 18" deep with 12"	(1) Success of grassed waterway with suitable vegetation; (2) Receipts of materials purchased.	$3,372.00/Ac	1

			laid over on the surface.			
Herbaceous Wind Barriers (USDA NRCS CPS 603)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover **OR** to Permanent Unfertilized Grass/Legume Cover	Cool Season Perennial Species	Width of the Herbaceous Wind Barrier must be at least 2 feet.	(1) Visible: perennial species planted in area of previous cropland. (2) Receipts of seeds purchased.	$0.14/Ft	1
Riparian Herbaceous Cover (USDA NRCS CPS 390)	Convert Irrigated Cropland to Permanent Unfertilized Grass Cover Near Aquatic Habitats; **OR** Convert Irrigated	Broadcast Seeding with Foregone Income	(1) Area is removed from crop production; (2) Six species mix, native Forb; (3) Existing plant community is disturbed.	(1) Visible: six or more native, pollinator friendly perennial species planted; (2) Receipts of seeds purchased.	$3,481.40/Ac	1

	Cropland to Permanent Unfertilized Grass/Legume Cover Near Aquatic Habitats	Plug Planting with Foregone income	(1) Area is removed from crop production; (2) Native aquatic plants, emergent or submerged.	(1) Visible: native, aquatic perennial species plug planted; (2) Receipts of seedlings purchased.	$40,689.76/Ac	1
		Combination Broadcast Seeding and Plug Planting with Foregone Income	(1) Area is removed from crop production; (2) One species native forb and native aquatic plants, emergent or submerged.	(1) Visible: native, aquatic perennial species planted; (2) Receipts of seedlings & seeds purchased.	$21,662.22/Ac	1
		Pollinator Cover with Foregone Income	(1) Area is removed from crop production; (2) 2-12 native forbs that bloom sequentially during the growing season and at least 2 species in bloom at any given time during the growing season.	(1) Visible: ≥ 4 native forbs bloom at different times in growing season planted in area of previous cropland. (2) Receipts of seedlings & seeds purchased.	$4,764.60/Ac	1

Vegetative Barrier (USDA NRCS CPS 601)	Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass Cover **OR** Convert Strips of Irrigated Cropland to Permanent Unfertilized Grass/Legume Cover	Seeded Barrier	A strip or strips of stiff, dense vegetation is established by seeding with width ≥ 3 feet.	(1) Visible: perennial species planted in area of previous cropland. (2) Receipts of seeds purchased.	$0.02/Ft	1
		Vegetative Planting	Permanent strips of stiff, dense vegetation established along the general contour of slopes with width ≥ 3 feet.	(1) Visible: perennial species planted in area of previous cropland. (2) Receipts of sprigs purchased.	$11.34/Ft	1
Alley Cropping (USDA NRCS CPS 311)	Replace 20% of Annual Cropland with Woody Plants	Tree-planting, single row	(1) Potted or balled and burlapped hardwood tree size: 2-3 gal.	(1) Receipts of seedlings purchased; (2) species, (3) number of live plants	$33.26/Ea	1

Hedgerow Planting (USDA NRCS CPS 422)	Replace a Strip of Cropland with 1 Row of Woody Plants	Single Row	(1) Inclusion of pollinator-friendly shrubs and perennial wildflowers; (2) Combination of cool and warm season perennial species; (3) ≥200 plants/acre; (2) Row width ≥ 8 feet; (3) Average height ≥ 3 feet at maturity; (4) Planting protection.	(1) Visible: ≥200 live tree/shrubs plants/acre. (2) Receipts of seedlings purchased.	$8.58/Ft	1
	Replace a Strip of Grassland with 1 Row of Woody Plants					
Tree/Shrub Establishment (USDA NRCS CPS 612)	Conversion of Annual Cropland **OR** Grassland to a Farm Woodlot	Conservation, hand planting, browse protection	Planting density ≥ 150 trees/acre. Bare root hardwood seedling or transplant: shrubs 6-18" tall trees 18-36" tall. Seedlings protection.	(1) Receipts of seedlings; (2) species, (3) number of live plants	$915.3/Ac	1

Windbreak/ Shelterbelt Establishment (USDA NRCS CPS 380)	Replace a Strip of Cropland with 1 Row of Woody Plants **OR** Replace a Strip of Grassland with 1 Row of Woody Plants	1-row, trees, containers, hand planted, protected	(1) Minimum width of tree row is 8 feet; (2) Plant protection is required; (3) ≥200 plants/acre.	(1) Visible: live tree/shrubs plants. (2) Receipts of seedlings purchased.	$1.22/Ft	1
		1-row, Tree or Shrub, Wind Protection Fence	(1) Minimum width 8 feet for tree row and 4 feet for shrubs; (2) Plant protection is required; (3) ≥200 plants/acre.	(1) Visible: live tree/shrubs plants. (2) Receipts of seedlings purchased.	$1.78/Ft	1
Riparian Forest Buffer (USDA NRCS CPS 391)	Replace a Strip of Cropland Near Watercourses or Water Bodies with Woody Plants **OR** Replace a Strip of Grassland Near Watercourses or Water Bodies	Bare-root, hand planted	**General:** (1) Plantings consist of hand planted bare-root shrubs and trees; (2) ≥ 35 plantings per acre; and (3) Tree protection is required. **Materials:** (1) Hardwood trees: 18-36" tall; (2)	(1) Visible: ≥35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	$2,367.00/Ac	1

	with Woody Plants		Conifer trees: 1-1 (2 years old).			
Riparian Forest Buffer (USDA NRCS CPS 391)	Replace a Strip of Cropland Near Watercourses or Water Bodies with Woody Plants **OR** Replace a Strip of Grassland Near Watercourses or Water Bodies with Woody Plants	Bare-root, machine planted	(1) Bare-root shrubs and trees; (2) ≥35 plants/acre; (3) Tree Protection. **Materials:** (1) Hardwoods: 18-36" tall; (2) Conifer: 1-1 (2 yrs old).	(1) Visible: ≥35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	$2,223.16/Ac	1
		Cuttings, Small to Medium	(1) Hand planting; (2) ≥ 35 plantings per acre; and (3) Tree protection. **Materials:** 1/4"-1" diameter and 24-48"long.	(1) Visible: ≥35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	$2,784.48/Ac	1

		Cuttings, Medium to Large	(1) Hand planting; (2) ≥ 35 plants/acre; (3) Trees: from 1/4-1" diameter & 24-48" long to 2-6” diameter & 6' long. (4) protection.	(1) Visible: ≥35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	$7,183.68/Ac	1
		Small container, hand planted	(1) Shrubs and trees; (2) ≥ 35 plants/acre; (3) Tree protection. Potted shrub or tree size: 1 quart.	(1) Visible: ≥35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	$3,749.36/Ac	1
		Small container, machine planted	(1) Planting: machine planted shrubs and trees; (2) ≥ 35 plantings per acre; and (3) Tree protection. Potted shrub/tree size: 1 quart.	(1) Visible: ≥35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	$3,238.12/Ac	1

		Large container, hand planted	(1) Planting: hand planted shrubs and trees; (2) ≥ 35 plantings per acre; and (3) Tree protection. Potted or balled shrub or tree size: 2-3 gal.	(1) Visible: ≥35 live tree/shrubs plants per acre. (2) Receipts of seedlings purchased.	$9,427.38/Ac	1
Multistory Cropping (USDA NRCS CPS 379)	Replace 20% of Annual Cropland with Woody Plants	Free trees or shrubs	For enhancement of multi-story agroforests or improvement of overstory on existing cropland.	(1) species names, (2) number of live plants	$5.20/Ea	1
		Native shrub planting	Seedling size is no less than 1 qt.	(1) Receipts of seedlings purchased; (2) number of plants	$9.86/Ea	1

		Native tree planting	Seedling size is no less than 1 qt.	(1) Receipts of seedlings purchased; (2) number of plants	$9.86/Ea	1
		Non-native shrubs	(1) Bare root tree size is 6-18" tall, band pots of common species trees or shrubs, and/or (2) tree or shrub seedling size is ≥ 10 cu. in..	(1) Receipts of seedlings purchased; (2) number of e plants	$7.74/Ea	1
		Non-native tree planting	(1) Bare root tree size 6-18" tall, band pots of common species trees or shrubs, and/or (3) Seedling containerized size is ≥10 cu. in..	(1) Receipts of seedlings purchased; (2) number of live plants	$7.74/Ea	1

Prescribed Grazing (USDA NRCS CPS 528)	Grazing Management to Improve Irrigated Pasture Condition **OR** Rangeland **OR** Non-Irrigated Pasture Condition	Pasture, basic	A grazing management plan by a certified professional range manager to enhance rangeland health & ecosystem function; optimize efficiency & economic return through monitoring & record.	(1) Records of grazing dates and stubble height after grazing; (2) short term monitoring-photos and forage production; (3) sensitive area protection.	$22.06/Ac	1
		Range, basic			$5.00/Ac	1
Range Planting (USDA NRCS CPS 550)	Seeding forages to improve rangeland condition	Native species broadcast	(1) Mainly native adapted perennial species (native forb, cool season and native perennial grass); (2) Seeding rate is 18 lb/acre PLS.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	$575.56/Ac	1

		Native species high forb drilled	(1) Native adapted perennial species (native forb, cool season and perennial grass); and (2) No-till or range drill.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	$526.38/Ac	1
		Native species low forb drilled	(1) Predominately native adapted perennial species (native forb, cool season and native perennial grass); and (2) no-till drill or range drill.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	$351.22/Ac	1
		Nonnative species broadcast	(1) Three Species Mix - cool season and introduced perennial grass; (2) Seedbed preparation; and (3) Seeding rate is 18 lb/acre PLS.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	$212.90/Ac	1

		Nonnative species drilled	(1) Three Species Mix - cool season and introduced perennial grass; and (2) No-till drill or drill to plant.	(1) Receipts of seeds purchased; (2) species; (3) good growth.	$169.90/Ac	1
		Shrub plugs	(1) Shrub seedling or transplant, bare root shrubs 3 to 5 feet tall; (2) Planting density: 1000 plants/acre.	(1) Receipts of shrubs purchased; (2) species; (3) good growth.	$2,578.46/Ac	1
Silvopasture (USDA NRCS CPS 381)	Tree/Shrub Planting on Grazed Grasslands	Establish Trees, Existing Grasses	≥20 plants/acre is required.	(1) Visible: live tree/shrubs plants. (2) Receipts of seedlings purchased.	$193.90/Ac	

Compost Application to Annual Crop (CDFA)	Compost (C:N ≤ 11) application to annual crops	Compost from Certified Composting Facility	Application rate must be between 3-5 tons/Acres	(1) Receipts of total compost purchased from a certified composting facility; (2) conversion factor for compost measured in volume to weight; (3) Compost analysis report including carbon and nitrogen contents and moisture content; (4) Must meet the total dry tonnages in the project; (5) Compost is spread or visible on the	$50.00/ton	3
	Compost (C:N > 11) application to annual crops		Application rate must be between 6-8 tons/Acres		$50.00/ton	3
Compost Application to Perennials, Orchards and Vineyards (CDFA)	Compost (C:N ≤ 11) application to annual crops	Compost from Certified Composting Facility	Application rate must be between 2-4 tons/Acres		$50.00/ton	3

	Compost (C:N > 11) application to annual crops		Application rate must be between 6-8 tons/Acres	ground at verification.	$50.00/ton	3
Compost Application to Grassland (CDFA)	Compost (C:N > 11) application to grazed, irrigated pasture	Compost from Certified Composting Facility	Application rate must be between 6-8 tons/Acres		$50.00/ton	3
	Compost (C:N > 11) application to grazed rangeland		Application rate must be between 6-8 tons/Acres		$50.00/ton	3

Compost Application to Annual Crop (CDFA)	Compost (C:N ≤ 11) application to annual crops	On-farm produced compost	Application rate must be between 3-5 tons/Acres	(1) A farm log includes materials, method and temperatures during composting process; (2) Compost analysis report including carbon and nitrogen contents and moisture content; (3) Must meet the total dry tonnages in the project; (4) Compost is spread or visible on the ground at verification.	$50.00/ton	3
	Compost (C:N > 11) application to annual crops		Application rate must be between 6-8 tons/Acres		$50.00/ton	3
Compost Application to Perennials, Orchards and Vineyards (CDFA)	Compost (C:N ≤ 11) application to annual crops	On-farm produced compost	Application rate must be between 2-4 tons/Acres		$50.00/ton	3

	Compost (C:N > 11) application to annual crops		Application rate must be between 6-8 tons/Acres		$50.00/ton	3
Compost Application to Grassland (CDFA)	Compost (C:N > 11) application to grazed, irrigated pasture	On-farm produced compost	Application rate must be between 6-8 tons/Acres		$50.00/ton	3
	Compost (C:N > 11) application to grazed rangeland		Application rate must be between 6-8 tons/Acres		$50.00/ton	3

***Legend:**

Practice Implementation Name: This is corresponding to the quantification tool for GHG reduction benefit estimation. Access the quantification tools at: www.arb.ca.gov/cci-resources.

Scenario Name: This is the corresponding agricultural management practice scenario under which a practice may be funded, as determined by CDFA in collaboration with USDA-NRCS.

Implementation Guidelines: Some agricultural management practices have additional requirements that may not be listed by the USDA- NRCS as a requirement in the Conservation Practice Standard (e.g., compost application rates, minimum widths for establishing some herbaceous and woody practices, or minimum tree densities for woody practices). These requirements ensure alignment with the GHG estimation methods. For more detail, see: www.arb.ca.gov/cci-resources.