11380647 **City of Riverside** **$59,035.62**

Project Title: Northside Heritage Meadows Urban Farm

Project Description: The Healthy Soils Program will provide funding for the Northside Heritage Meadow (NHM) Urban Farm's implementation of soil conservation practices to improve soil health, sequester carbon and mitigate GHG emissions, and provide many ecosystem benefits. The City of Riverside's proposal seeks funding to implement five management practices at the Northside farm site, including mulching on cropland, compost applications to row crops, trees and shrubs establishment, and hedgerow plantings. The goals and expected outcomes in implementing these soil conservation practices include conservation of water, controlling pests in non-toxic ways, fostering pollination, use of composted greenwaste to build soil fertility, preservation of natural resources, improving soil health, reducing erosion and runoff, building soil fertility, providing habitat for wildlife, increasing biomass and soil carbon sequestration capacity, reducing GHG emissions, and producing high quality food. HSP funding will facilitate these healthy soil outcomes by funding conservation practices in the establishment of the Northside Heritage Meadows Urban Farm. Additionally, the farm site will not only grow food to serve the local community, but be a training ground for workforce development programs (including apprenticeships and new farmer incubation) for priority populations. Annual soil analysis and technical assistance from the local Resource Conservation District and USDA NRCS conservationist will evaluate the success of the project's management practices.

I. Farm Organization information

Organization Name	City of Riverside
Mailing Street Address	3900 Main Street
City, Zip Code	Riverside, 92522
County:	Riverside
Total Farm Size in Acres	8.80

II. Project Cost Share: $28,640.00

III. Previously Funded Project: No

HSP Grant ID:	

IV. Estimated Greenhouse Gas Emission Reductions

CO_2 Reductions (MT CO_2 eq /year) (COMET-Planner Carbon Sequestration and GHG Estimation Report):	73.7

V. Project Site Location

APN#	Address	Latitude	Longitude
246-230-020	895 Clark Street, Riverside, CA, 3.76 ac	34.007477	-117.352637
246-242-011	900 Clark Street, Riverside, CA, 3.82ac	34.007229	-117.351366
246-230-013	No street address for APN, 0.84ac	34.0071980	-117.353183
246-220-011	No street address for APN, 0.41	34.0084999	-117.352943

VI. Practices to Be Implemented

Practice Name	Fields / APN(s) to Be Implemented	Acres to Be Implemented
Compost Application toAnnual Crops	246-230-020; 246-242-011	4.5

Practice Name	Fields / APN(s) to Be Implemented	Acres to Be Implemented
Compost Application to Perennial Crops	All four APNs	3.5
Mulching	All four APNs	6
Tree/Shrub Establishment*	All four APNs	3
Hedgerow Planting	246-230-020; 246-242-011	0.301

* HSP funds cannot be used for establishment of orchards under practice of Tree/Shrub Establishment.

VII. Baseline Practices (December 2015 – November 2018)

Cropping History

The four APNs proposed for the grant have been blighted, vacant land in the past three years. Historically, two of the parcels (APNs 246-230-020 and 246-242-011) were in row crops (vegetable varieties) and tree crops (citrus, persimmon, pomegranate) from the early 1900s to the late 1980s.

Management Practice History

Because there have not been any active agricultural activities on the four APNs in the past three years, with weed abatement as the only land management practice in the past three years.

VIII. Work Plan

Project Year 1	Project Year 2	Project Year 3
August 1, 2019 – June 30, 2020	July 1, 2020 – June 30, 2021	July 1, 2021 – March 31, 2022

Management Practice Name	APN	Field #	Acres to be Implemented	Time to Implement *(Months/Dates in each project year)*	Activities *(to support implementation of the identified management practice(s))*	Performed by
Soil samples for soil organic matter content analysis	246-230-020 246-242-011 246-023-013 246-220-011	n/a	8	**Prior to practice implementation** **Aug -Oct 2019** **1-year after implementation** **Aug 2020** **2-year after implementation** **Aug 2021** **3-year after implementation** **Aug 2022**	Conduct annual soil analysis for row crops, tree and shrub plantings, and hedgerow plantings. 12 soil organic matter testing results will be submitted to CDFA. Cost of soil sampling in 2022 will be covered by cost share.	City of Riverside
Mulching	246-230-020 246-242-011 246-023-013 246-220-011	n/a	6	**Project Year 1** **Aug 2019** **Project Year 2** **July 1 – June 30** **Project Year 3** **July 1 – June 30**	Project Year 1 – initial application of mulch to tree/shrub plantings, hedgerow plantings, Project Years 2 & 3 – annual mulch reapplications	FIELD's Cesar Chavez Environmental Corp

Management Practice Name	APN	Field Number	Acres to be Implemented	Time to Implement *(Months/Dates in each project year)*	Activities *(To support implementation of the identified management practice(s))*	Performed by
Compost application – annual crops	246-230-020 246-242-011	n/a	4.5	**Project Year 1** Jan – Jun 2020 **Project Year 2** July 1 – June 30 **Project Year 3** Jul 2021 – Mar 2022	Project Year 1 – initial application of compost to row crop plantings Project Years 2 & 3 – annual compost reapplications	City Of Riverside, Field's Cesar Chavez Environmental Corps, And Riverside Food Systems Alliance
Compost application – Perennials	246-230-020 246-242-011 246-023-013 246-220-011	n/a	3.5	**Project Year 1** Jan – Jun 2020 **Project Year 2** July 1 – June 30 **Project Year 3** Jul 2021 – Mar 2022	Project Year 1 – initial application of compost to tree/shrub plantings and hedgerow plantings Project Years 2 & 3 – annual compost reapplications	City Of Riverside, Field's Cesar Chavez Environmental Corps, And Riverside Food Systems Alliance
Tree/shrub establishment	246-230-020 246-242-011 246-023-013 246-220-011	n/a	3	**Project Year 1** Aug 2019 – Jun 2020 **Project Year 2** July 1 – June 30 **Project Year 3** Jul 2021 – Mar 2022	Year 1: clear project site and plant 453 trees and shrubs Years 2 & 3: maintain trees and shrubs until established	City of Riverside, Field's Cesar Chavez Environmental Corps
Hedgerow planting	246-230-020 246-242-011	n/a	0.28	**Project Year 1** July 1 – June 30 **Project Year 2** July 1 – June 30 **Project Year 3** Jul 2021 – Mar 2022	Year 1: clear project site and plant hedgerow Years 2 & 3: maintain hedgerow until established	City Of Riverside, FIELD's Cesar Chavez Environmental Corps, Riverside Food Systems Alliance

IX. Materials or Methods Related to Practice Implementation

Source of Compost for Compost Application
Purchased from a certified facility

Source of Mulch Materials for Mulching
Purchased

Plant Species and Other Information
Species for all planting practices will be provided by the recipient by September 2019 (must prior to practice implemented). Selection of plant species for specific practice must meet program requirements using CalFlora at https://www.calflora.org/nrcs/index.html.

X. Project Sustainability

The Northside Heritage Meadows Urban Farm is a 8.8 acre project site comprised of four APNs which are currently blighted vacant parcels since the 1980s and earlier. Beginning in 2014, the City of Riverside in collaboration with community stakeholders developed the GrowRIVERSIDE Initiative (growriv.com) to revitalize agriculture across the city where there are more than 4,600 acres of preserved agricultural. One of the GrowRIVERSIDE pillars is to cultivate and support a new generation of urban farmers across the region. In November 2018, the City of Riverside was awarded a $3,000,000 grant from the Urban Greening Grant to acquire 7.6 acres (APNs 246-230-020 and 246-242-011) of agricultural land and develop 8.8 total acres (includes adjacent 1.2 city-owned acres) with multiple benefits including: 1) long-term open space preservation by establishing an urban farm consisting of row and tree crops that will be the platform for the Riverside NextGen Farmer Training Program to cultivate new and beginning farmers; 2) planting 453 trees and shrubs to produce food, sequester carbon, mitigate GHG emissions, and provide shade; 3) installation of trails to improve walkability and access to the project site; and 4) establish a 24-plot community garden and farm stand to facilitate community building and increase access to fresh produce in a food desert. $150,000 in matching funds from the City will renovate an existing structure into a Cowork Learning Center where partners will implement workforce development programs in urban agriculture, forestry and related fields. This project is named Northside Heritage Meadows (NHM).

The Healthy Soils Program will provide funding for unfunded NHM project elements to facilitate implementation of and showcase conservation practices aimed at improving soil health, sequestering carbon, and mitigating GHG emissions. A recent lab analysis revealed the soil organic matter content at the project site is 1.7 percent. The City's HSP proposal seeks funding to implement five management practices at the NHM farm site: 1) MULCHING on cropland for moisture and irrigation management, improve plant health and organic matter content, reduce erosion; 2) COMPOST APPLICATIONS to row and tree crops and shrub plantings to improve soil structure, health, and water holding capacity, increase organic matter content and nutrient cycling, and build the soil food web; 3) prepare the project site for TREE/SHRUB ESTABLISHMENT and protect planted trees/shrubs; and 4) HEDGEROW PLANTINGS along the borders of the farm fields to provide habitat for beneficial invertebrates and pollinators, increase carbon storage in biomass and soil, and serve as a living fence.

HSP funding will provide for healthy soil practices in the establishment of the Northside Heritage Meadows Urban Farm. The farm site will not only grow food to serve the local community, but be a training ground for workforce development programs (including apprenticeships and new farmer incubation) for priority populations in addition to the environmental and ecosystem benefits described. HSP funding for soil conservation practices will provide unfunded start up funding for soil management practices in the establishment of the Northside Heritage Meadows Urban Farm. Sustainable soil management practices will to incorporated in the establishment of the urban farm, as well as planting of trees, shrubs, the riparian buffer, and row crops. HSP grant funding for three years of soil conservation practices will facilitate sustainable practices. Produce grown at the farm will generate sales revenues, and will sustain the farm operation and management beyond the grant project term.

The Northside Heritage Meadows Urban Farm will function as a farm that not only grows a variety of specialty crops to meet local demand, but also serve as an education center where visitors will have exposure to a broader, holistic approach to land management practices that conserve land and natural resources. Sustainable agricultural practices are proven to conserve water, control pests in non-toxic ways, foster pollination, use on-farm wastes to build soil fertility, preserve natural resources, improve soil health, reduce erosion and runoff, build soil fertility, provide habitat for wildlife, increase biomass and soil carbon sequestration capacity, reduce GHG emissions, and produce high quality food. These are the expected learning outcomes and successes of implementing sustainable practices at the Northside Heritage Meadows Urban Farm project site.

The City of Riverside and project partners are committed to sustainable practices and have designed the Northside Heritage Meadows Urban Farm to adopt and promulgate this commitment. Additionally the project partners will provide workforce training at the project site to priority populations in urban agriculture, urban forestry and related fields, thus individuals participating in these training programs will be educated in and gain hands-on experiences in soil conservation management practices. The program envisions graduates adopting these practices in their next endeavor.
Prior to the start of the project, soil samples will be taken to measure soil characteristics (e.g. pH, structure, nutrient content, organic matter content, soil biological activity, etc.). The results of lab analysis will provide a comprehensive benchmark as well as inform implementation of soil conservation management practices. Annual soil samples will be taken to quantify soil characteristics and measure how soil conservation practices are progressing. Additionally, the City of Riverside is currently working with project partners Riverside-Corona Resource Conservation District and the local USDA NRCS Conservationist to develop and adopt a Northside Heritage Meadows Conservation Plan that incorporates many of the soil management practices described in this grant application. Agents from RCRCD and NRCS will assist the city and program partners to evaluate and adjust conservation practices as needed upon review of annual soil analysis and management practices.

XI. Environmental Co-benefits

Sustainable agricultural practices are proven to conserve water, control pests in non-toxic ways, foster pollination, use on-farm wastes to build soil fertility, preserve natural resources, improve soil health, reduce erosion and runoff, build soil fertility, provide habitat for wildlife, increase biomass and soil carbon sequestration capacity, reduce GHG emissions, and produce high quality food. The soil conservation practices to be implemented at the Northside Heritage Meadows project aim to result in many of these benefits:
1. Air quality improvements - planting of trees and shrubs to increase biomass to sequester carbon and the projectâ€™s large tree species will serve to absorb pollution (the project site is Â¼ mile from a major freeway interchange) and provide shade for adjacent buildings to reduce energy consumption.
2. Water quality improvements - turning current vacant land into productive green spaces with conservation practices will improve soil conditions to filter water while also conserving water use. Installation of a riparian habitat at the southeastern portion of the project site will reduce runoff and filter water that may enter an adjacent waterway.
3. Ecosystem services - hedgerow plantings and the plantings of a variety of trees, shrubs, row crops and riparian habitat will facilitate ecosystem services such as providing for wildlife habitat, urban heat island mitigation, and trail systems allowing for people to enjoy physically and mentally.
4. Economic benefits - project partners will engage paid conservation corp members to construct the siteâ€™s trails, plant trees and shrubs, and prepare the farmland for planting as part of their training. The projectâ€™s farm site is also intended to serve as a new farmer apprenticeship site to host on-the-job training in urban agriculture, urban forestry and related fields.
5. Cultural benefits - the project site has been a farm owned and operated by a Japanese-American family since the early 1900s; transitioning the current vacant land back to an active farm will honor the history of the site.
6. Health and wellness benefits - the projectâ€™s community garden and farm stand will enable the surrounding community to access to locally grown produce, health and wellness amenities, and opportunities to engage in physical activities.

XII. Budget

Attached Budget Worksheet

XIII. Project Design Schematic

Attached project design schematic map

XIV. List of Attachments

Attachment 1a – Budget
Attachment 1b – Design Schematic *
Attachment 1c – Estimated Greenhouse Gas Emission Reductions Report(s)

** Note that the listed attachments are incorporated by reference to this Agreement as submitted in the grant application in the WizeHive online submission system.*