

Growing Urban Tree Canopy and Youth Leadership in Watsonville

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Wetlands Watch



Watsonville Wetlands Watch: our work and community



















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Watsonville Community Forest Project

Launched 2018 with a CalFire Urban and Community Forestry Grant

Initial Project Goals

- Take the first steps toward increasing tree canopy cover from 7.8% to 30%
- Achieve equitable environmental benefits throughout the City
- Develop youth and community leadership
- Modify existing policy instruments & practices to protect existing canopy and incentivize long-term tree planting & care
- Integrate urban forestry into existing watershed and environmental education programs



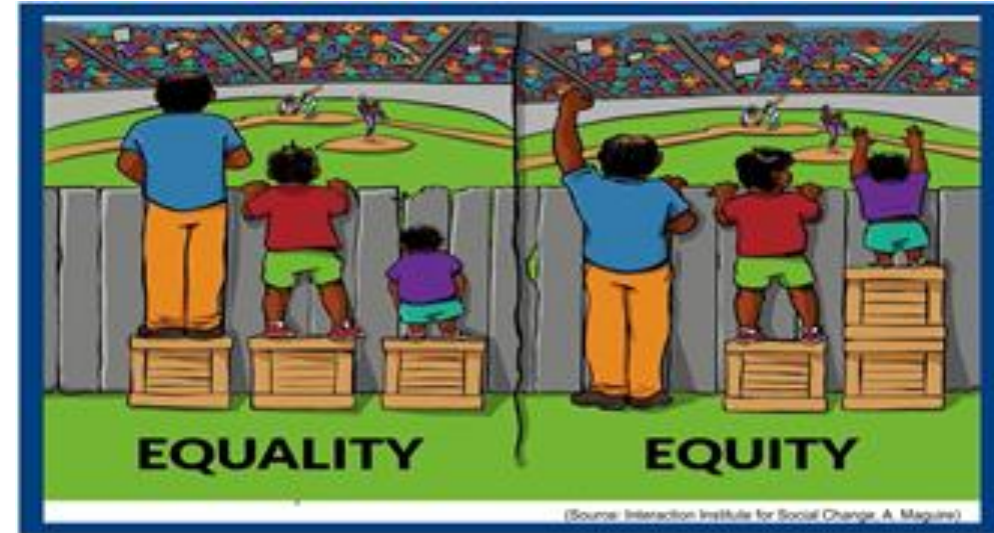
Focus on Equity and Inclusion in Implementation

Planning:

- equity analysis
- incentivizing and compensating under-represented community members to participate
- bi-lingual outreach staff and translated materials

Implementation:

- prioritization of equity driven projects, such as schools and neighborhoods where tree canopy is lowest and other pollution and vulnerability is highest
- robust community engagement
- compensation for youth in paid job training programs
- family friendly and multicultural events to engender broad community-wide participation



Current Watsonville Tree Canopy

- 9.4% tree canopy
- 58.8% impervious land cover (2,583 acres)
- 23.3% pervious including bare soils
- 3.4% open water

- 3.8% tree canopy cover in street right-of-ways

- 4,504 public trees within parks and right-of-ways

- 949 acres of potential planting sites identified for tree planting



Tree Canopy Compared to Neighboring Communities

Source: Davey Resources Group

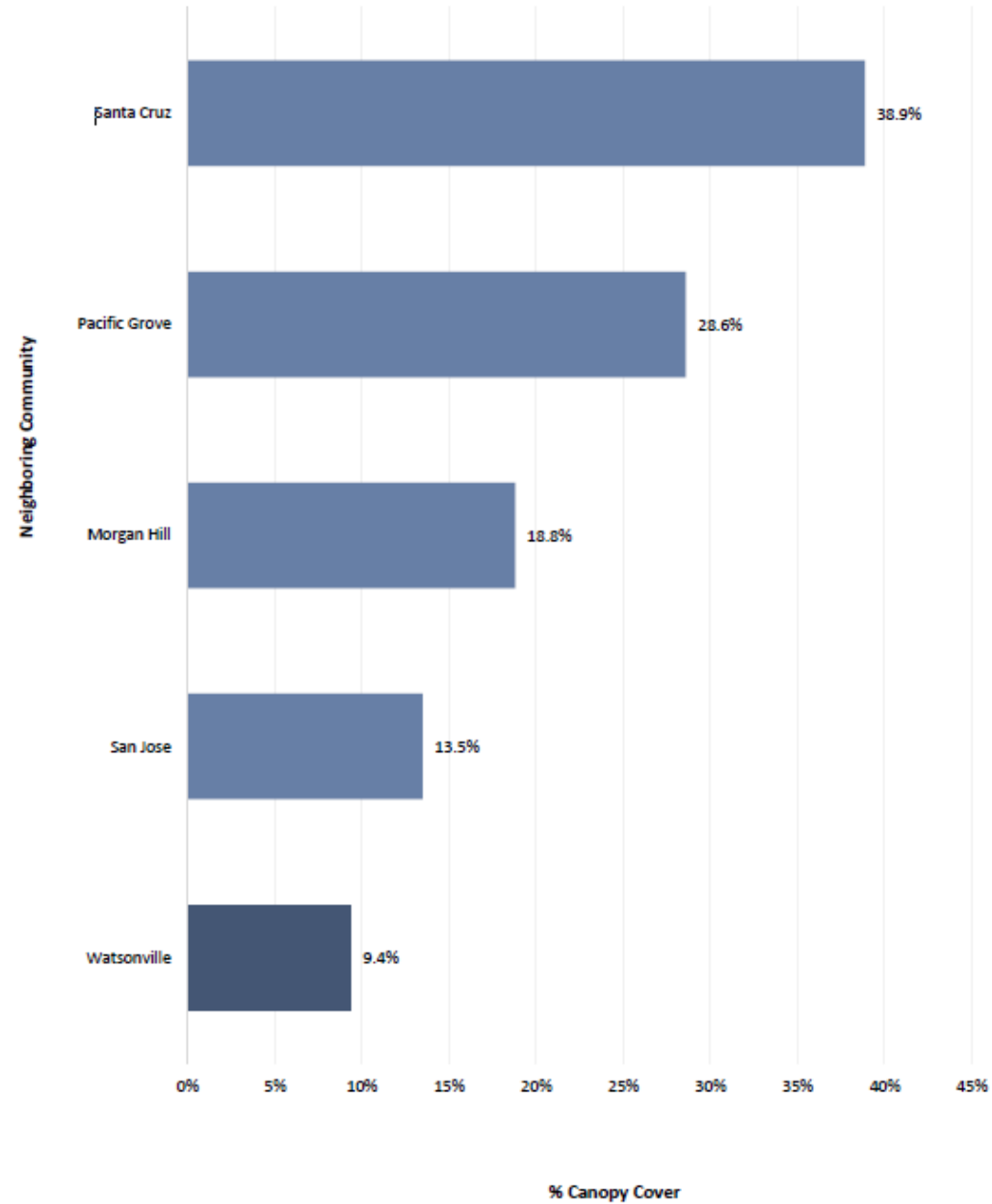


Figure 12: Neighboring Communities Canopy Cover

Leveraging Strong Partnerships



City of Watsonville Urban Greening Plan, 2012

Funded by the CA Strategic Growth Council

Called for: Increase of tree canopy cover of 7.8% in 2012 to 30%, calling for 40,000 additional trees



URBAN GREENING PLAN

September 2012

CAAP 2030 Executive Summary

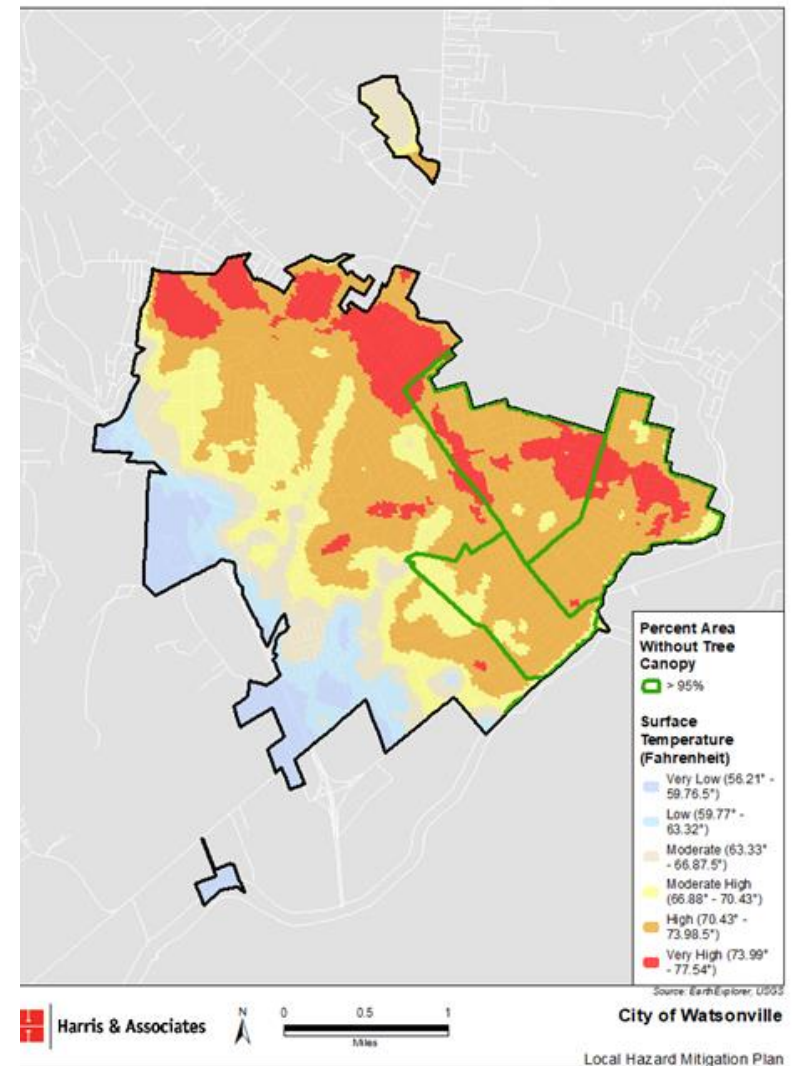
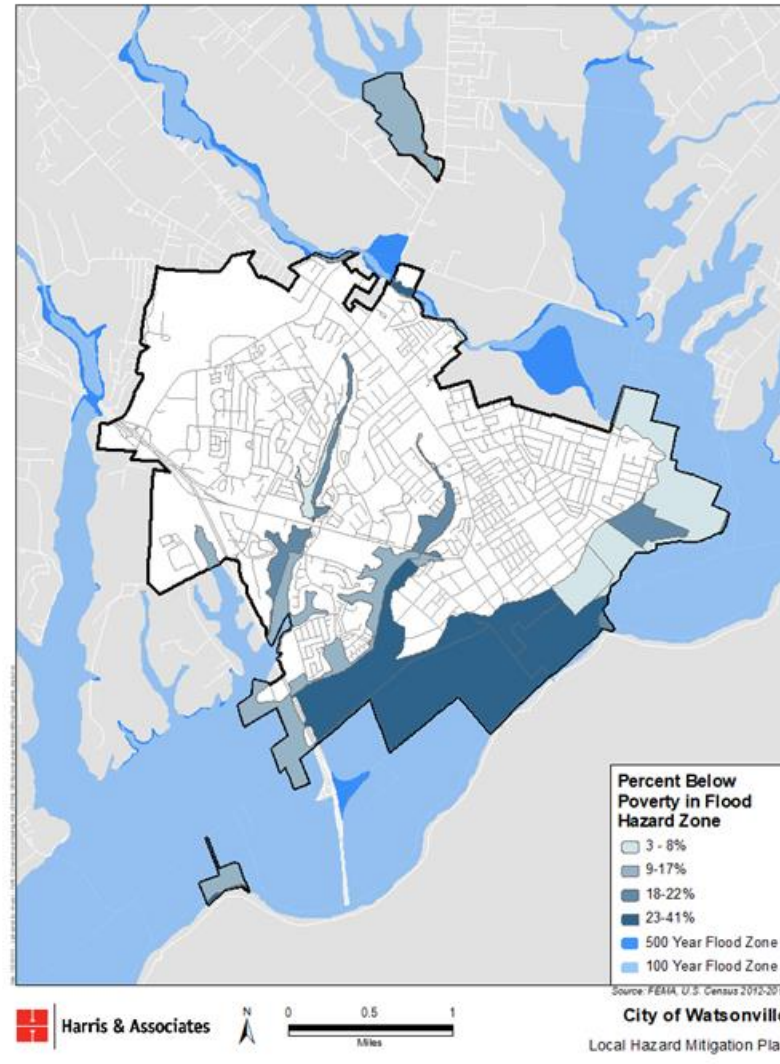
2014 and 2022 City of Watsonville Climate Action and Adaptation Plan



Supporting Efforts

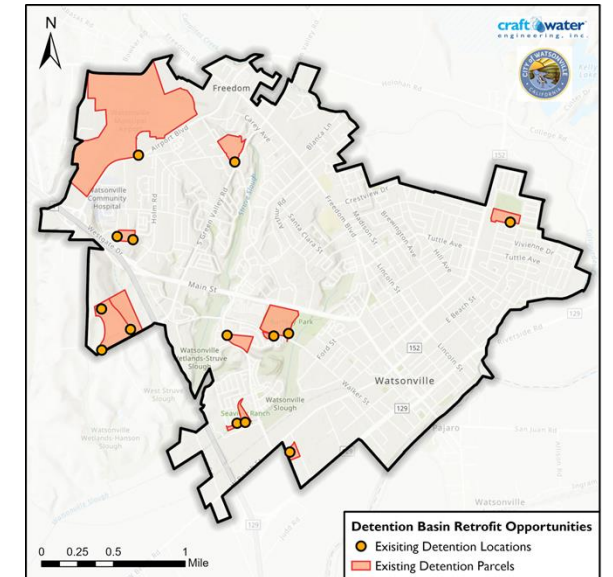
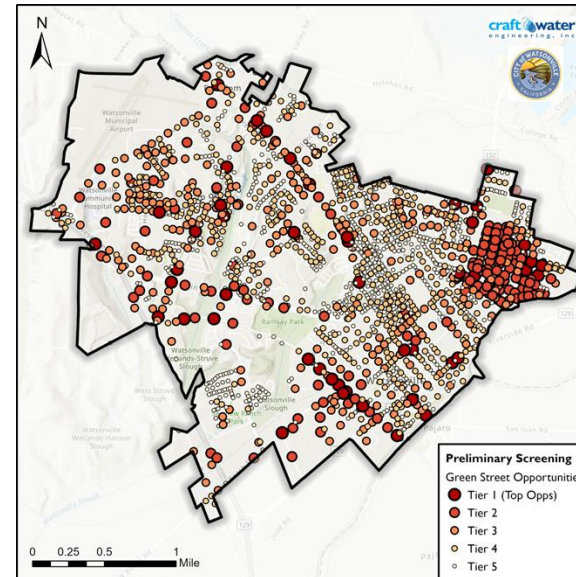
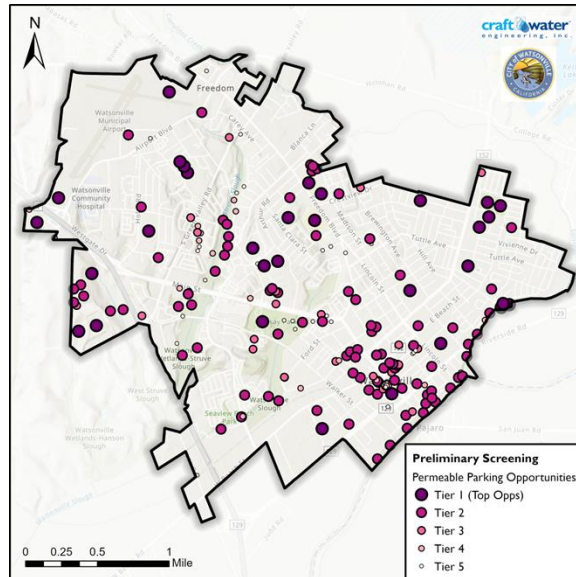
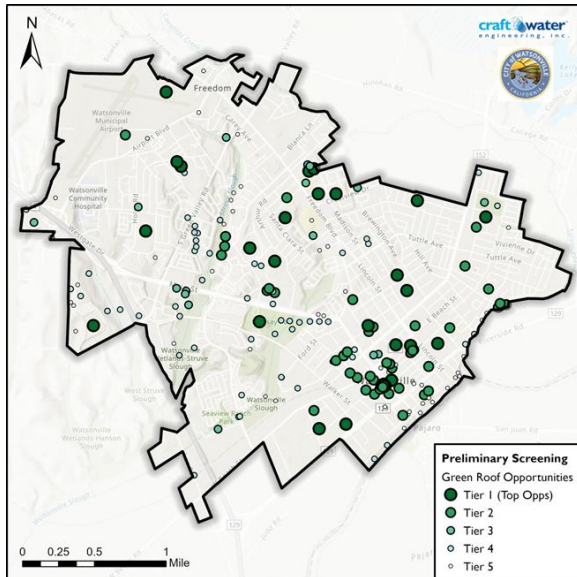
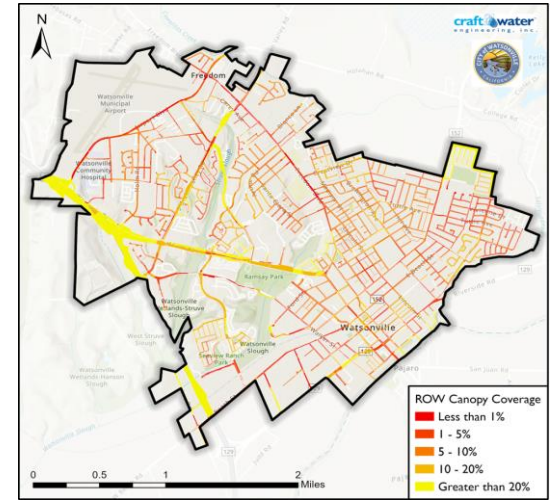
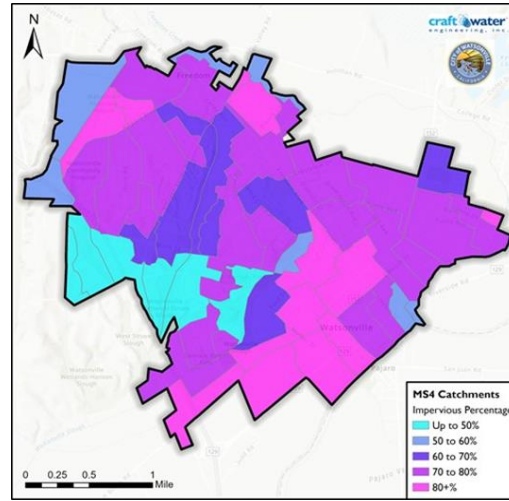
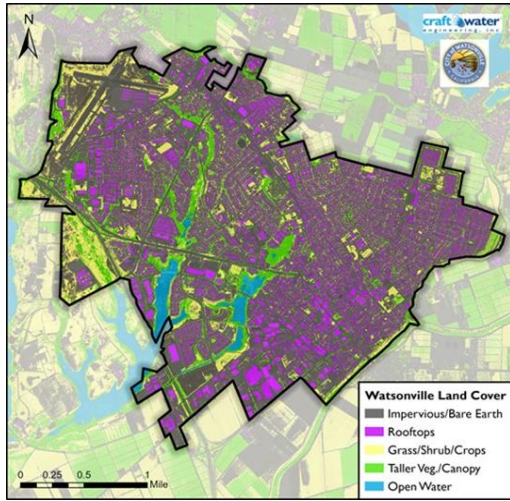
No.	Description
Supporting Effort NW1-S1	Promote eco-literacy with a focus on local agriculture.
Supporting Effort NW1-S2	Incentivize tree planting on public and private property (sequester carbon, provide shade, and restore habitat).
Supporting Effort NW1-S3	Develop a tree ordinance to protect existing trees.
Supporting Effort NW1-S4	Implement an "Adopt a Tree" program.
Supporting Effort NW1-S5	Develop and implement a Green Infrastructure Plan, including a combination of stormwater features, habitat, trees, and other greenery.
Supporting Effort NW1-S6	Identify strategies for grassroots implementation of green infrastructure and restoration by City residents.
Supporting Effort NW1-S7	Coordinate meeting series with Indigenous people, such as the Amah Mutsun Tribal Band/Pajaro Indian Council, to discuss best practices on restoration strategies and actions.
Supporting Effort NW1-S8	Promote the California Conservation Corps and similar programs for Watsonville youth.
Supporting Effort NW1-S9	Work with existing landowners to replace missing landscaping to increase green space.
Supporting Effort NW1-S10	Implement a seedling program that provides residents with free trees.
Supporting Effort NW1-S11	Modify park impact fees to support additional tree planting.

2018 City of Watsonville Local Hazard Mitigation Plan



City of Watsonville Green Infrastructure Plan, 2021

Funded by the California Resiliency Challenge

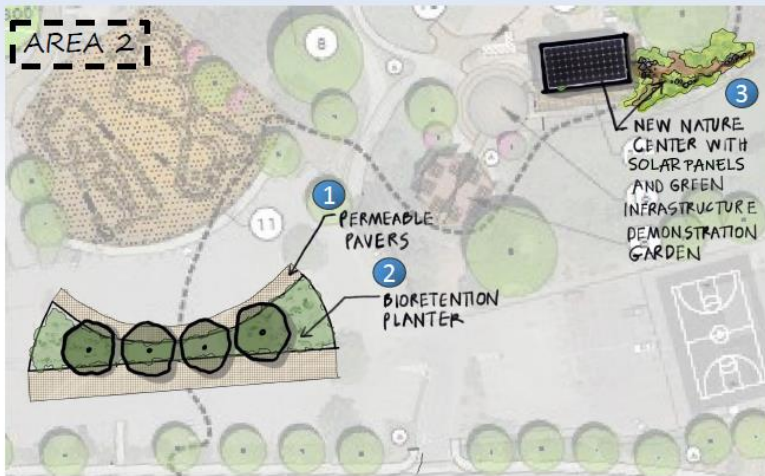


WATSONVILLE GREEN INFRASTRUCTURE IMPLEMENTATION PLAN

Project Concept Designs – Ramsay Park



Main Parking Lot & Bioretention	
Drainage Area	92,000 sq ft
Impervious Area	90,000 sq ft
Runoff Volume	4,600 cu ft
BMP Volume	5,750 cu ft



Nature Center Bioretention Garden	
Drainage Area	2,380 sq ft
Impervious Area	2,380 sq ft
Runoff volume	150 cu ft
BMP Volume	320 cu ft

Lower Parking Lot & Bioretention	
Drainage Area	97,000 sq ft
Impervious Area	64,000 sq ft
Runoff Volume	4,000 cu ft
BMP Volume	4,375 cu ft

PROJECT BENEFITS

TYPE: PERVIOUS PAVEMENT
Delivery Phase: Planning

Asset details

Asset drainage area: 26.14 acres
Impervious area treated: 7.6 acres
Assumed design capacity: 3.42 acre-ft
Trash full capture system (FCS): No

Site conditions

Land use type: Other/Open Space
Parcel APN : 018-261-23
Imperviousness: 29%
Slope: 8%
Hydrologic soil type: Group C

Multi-benefits

Catchment runoff reduction opportunity: Low
Catchment pollutant reduction opportunity: Low
Managed aquifer recharge opportunity: High
Flood hazard: Very low
Urban heat island opportunity: Very high
Greening opportunity: Low
Disadvantaged community status: Disadvantaged
CalEnviroScreen score: 84
Public exposure: High

TMDL benefits

Catchment ID: Wat 61
Receiving water: Watsonville Slough
Receiving water impaired: Yes
Runoff reduction: 11.1 acre-ft/yr
Pollutant load reduction: 0.42 ton/yr
Trash priority land use treated: 0.00 acres



BIORETENTION GARDEN



BIORETENTION PLANTER



PERMEABLE PAVEMENT

PARKING LOTS



Before



After

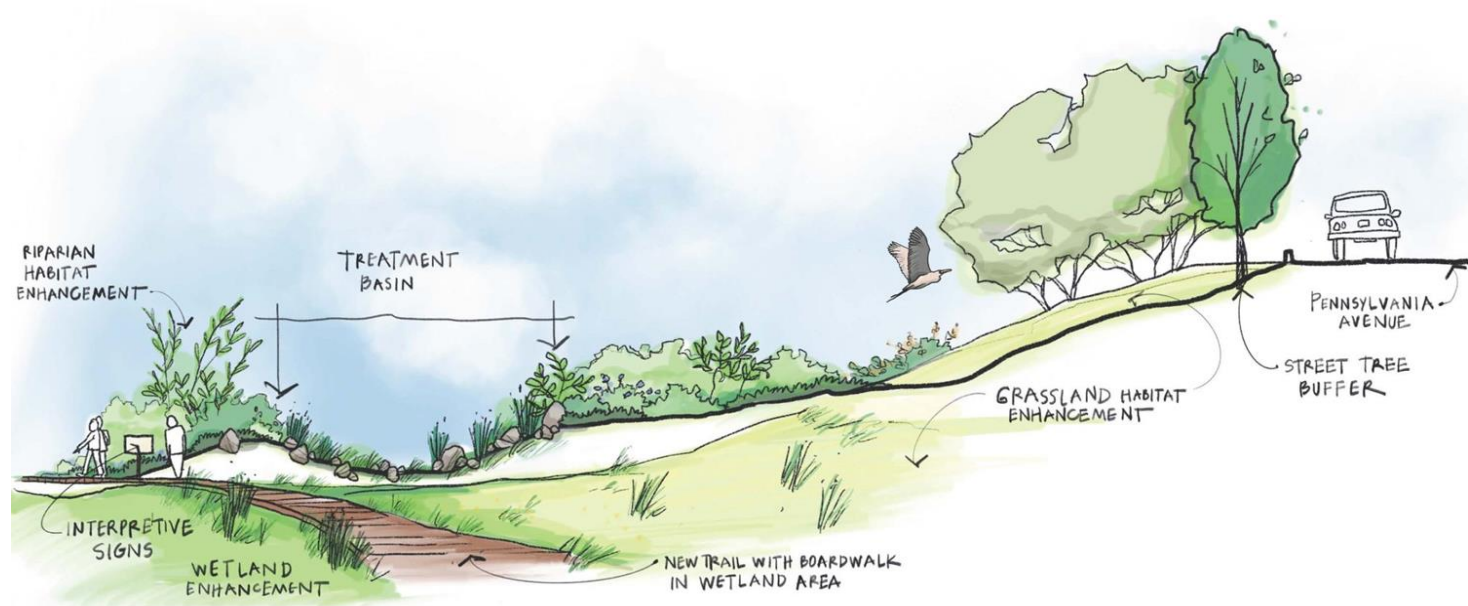


STREETS



Photos and Drawings courtesy of Amy West and 196 Architects

Middle Struve Slough Water Quality and Habitat Enhancement Project, funded by the Ocean Protection Council and DAC Engagement Planning Grant from Department of Water Resources, IRWM Program, 2022



Illustrative Section - Elevation Looking Through Treatment Basin

Not to Scale

Prepared by: Amy West - Consulting Landscape Architect www.amy-west.com

Middle Struve Slough
Water Quality and Habitat Enhancement Project



Watsonville Wetlands Watch



City of Watsonville

Tree Planting Programs



Parks, Neighborhoods, and Community
Volunteers

Pilot Residential and Commercial Tree Program

- Free Trees, Stakes, Ties, and Mulch for City Residents
- Support for tree selection, placement, consultation, and identification of potential conflicts
- 3 years of Support for Structural Pruning and Establishment Maintenance
- Initially intended to focus on neighborhoods with the highest needs, however tree canopy analysis showed there isn't strong segregation



Elizabeth Allen (from left), Athena Lynch and Yesenia Jimenez team up to plant one of several trees in Pajaro Village in Watsonville.
—Tarmo Hannula/The Pajaronian



Fruit Tree Distribution

Community Voices and Connections



"Me encanta el
sonido del viento a
través de las hojas
de los árboles."

Koelreuteria paniculata

Golden Raintree
Jabonero de China

310-KP-PV

Cartas de amor para los
árboles, de parte de:
Watsonville

www.WatsonvilleCommunityForest.org
Planted by the 2020 Climate
Corps Leadership Institute

Developing Youth Leaders, Climate Corps Leadership Institute



Evolved from a Regional Occupational Program into a hybrid Program during 2020

Offers a paid internship for high school students in urban forestry, watershed restoration, and climate action

Focuses on skill building, green jobs and academic pathways, leadership training, climate action and communication

2-3 Weeks of Summer Training, followed by a year of learning and weekly work projects

New Second Year Program for Non-graduating seniors



Tree planting on Watsonville wetland trails and city streets

School Tree Planting Programs, funded by California ReLeaf



Leading Tree Plantings at Businesses, in Parks, and Neighborhoods



"THESE PROGRAMS HAVE CREATED AND FORMED ME INTO THE LEADER I AM TODAY. THEY GAVE ME A PLATFORM TO CONNECT WITH MY COMMUNITY AND REVEALED TO ME THE POWER OF MY VOICE ... IT SPARKED MY SELF-CONFIDENCE."
-SOFIA FERNANDEZ, CCLI 2022-23 COHORT

Building Leadership Skills

- Leadership at Community Events
- Career readiness
- Ladder of Experiences: Second Year Self-directed Climate Action Projects and paid post high school internships
- From Student to Board Member
- Community Recognition



"WE DON'T HAVE TO WAIT FOR THE FUTURE TO CREATE CHANGE, WE CAN DO THIS THROUGHOUT OUR LIVES."

"ALMA LEONOR-SANCHEZ

CLIMATE CORPS LEADERSHIP INSTITUTE, 2020-2021 COHORT



Responding to Crises and Building Community Resilience



Photo by Frans Lanting  BAY OF LIFE

Understanding the Connections between Fire and Climate Change



Supported by California ReLeaf and others

Pajaro Middle School Planting, November 2022

Pajaro Middle School
Pajaro Valley Unified School District



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Pajaro River Levee Breach, March 2023

Crises Compounded





CLIMATE CHANGE IS CURRENTLY A HUGE PROBLEM IN OUR WORLD, BUT WE CAN MAKE A CHANGE; IF I CAN MAKE MORE TEENAGERS MY AGE CARE, THEN WE CAN SAVE OUR PLANET. I WANT TEENAGERS MY AGE AND THOSE WHO ARE YOUNGER TO KNOW THAT THEY CAN BE A LEADER, THAT THEIR VOICES ARE HEARD, THAT EVEN SMALL ACTIONS MAKE A DIFFERENCE.
-ALAN RUIZ, AGE 18, PVHS CLASS OF 2022





Implementation to Date, since 2018

- 48 Climate Corps Leadership Participants
- 656 trees established on 58 different streets, schools, neighborhood parks
- 837 Fruit Trees Distributed
- Increase of canopy cover of 7.8% in 2012 to 9.4% in 2022
- 10% of current City of right-of-ways during the 2022 inventory = trees planted since 2018
- Draft tree protection ordinance in new canopy requirements for new construction, incentive and revenue streams for tree planting
- 40 Year Management Plan in development, working with Davey Resources Group



Integrated Watershed and Youth and Community Education Programs with Urban and Community Forestry Work

Coast Live Oak, *Quercus agrifolia*, Street Tree Planting, April 2023



Main Street, Watsonville, 2019



Same View: Establishing row of Quercus frainetto, 2023

Building Momentum

Thank you and Q + A

Funders and Partners

City of Watsonville

Pajaro Valley Unified School District

California Department of Forestry
and Fire Protection's Urban and
Community Forestry Program

California ReLeaf

California Natural Resources Agency
Youth and Community Access
Program

David and Lucille Packard
Foundation

Many private individuals and family
foundations

