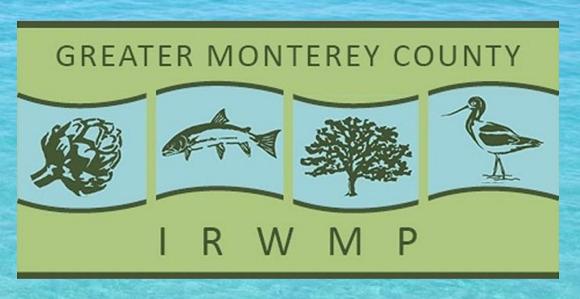
# The Regional Water Management Group: Planning and Funding Water Projects in Monterey County

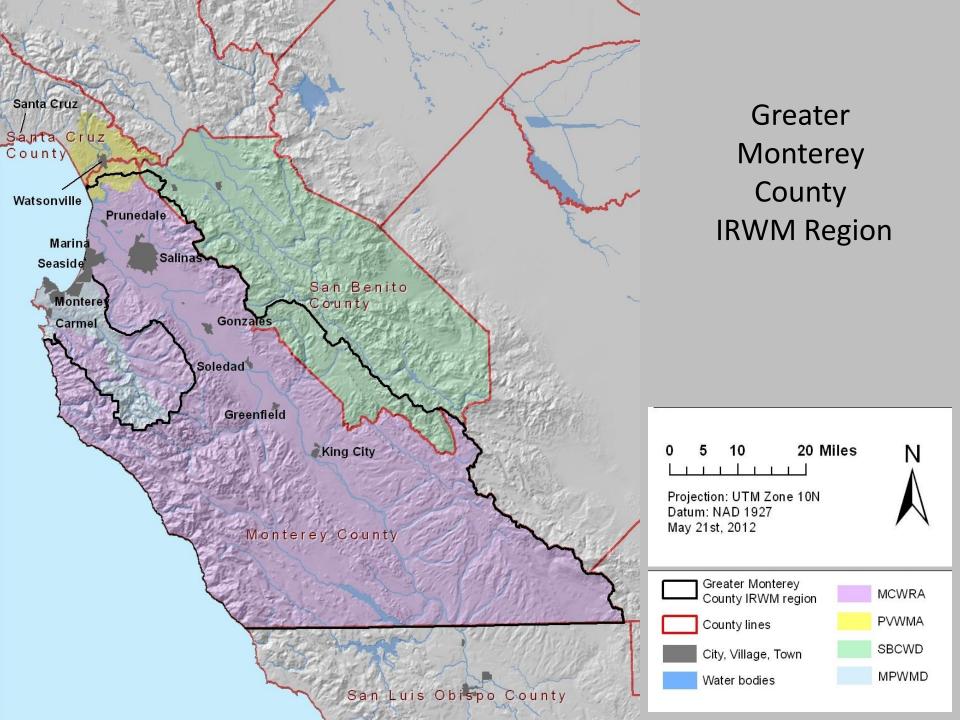


The 2019 Storm Water Resource Plan

### What is IRWM?

Integrated Regional Water Management (IRWM)

encourages local water resource managers to take a proactive, leadership role in solving water management problems on a local level through collaborative regional planning.



#### **Regional Water Management Group**

- Big Sur Land Trust
- California State University Monterey Bay
- California Water Service
- Castroville Community Services District
- City of Salinas
- City of Soledad
- Elkhorn Slough National Estuarine Research Reserve
- Environmental Justice Coalition for Water
- Marina Coast Water District
- Monterey Bay National Marine Sanctuary
- Monterey County Agricultural Commissioner's Office
- Monterey County Resource Management Agency
- Monterey County Water Resources Agency
- Monterey One Water
- Moss Landing Marine Labs
- Resource Conservation District of Monterey County
- Rural Community Assistance Corporation
- San Jerardo Cooperative, Inc.

### Greater Monterey County Regional Water Stakeholders

IRWM email list: 150 agencies and organizations, representing all major water management authorities:

- water supply
- wastewater
- flood control
- watershed management
- environmental

- water quality
- stormwater
- municipal
- agricultural
- regulatory interests

## \$20 million in IRWM grant funds have been awarded to the region since 2007

Prop 50 (2007): \$13,497,000 (awarded to Salinas Valley IRWM region)

- Marina Coast Water District:
   Eastern Distribution System
- <u>City of Soledad</u>:
   Water Recycling/Reclamation Project
- Monterey County Water Resources Agency:
   Salinas Valley Water Project
- Monterey County Water Resources Agency:
   Fish Habitat and Monitoring

## \$20 million in IRWM grant funds have been awarded to the region since 2007

Prop 84 (2010): \$4,894,264

- City of Soledad: Soledad Water Recycling/Reclamation Project
- <u>Castroville Community Services District</u>:
   Castroville CSD Well 2B Treatment Project
- San Jerardo Cooperative, Inc.: San Jerardo Wastewater Project
- <u>Elkhorn Slough Foundation</u>:
   Integrated Ecosystem Restoration in Elkhorn Slough
- <u>Central Coast Wetlands Group</u>: Water Quality Enhancement of the
   Tembladero Slough and Coastal Access for the Community of Castroville
- Monterey Bay National Marine Sanctuary, Central Coast Wetlands Group, and RCD of Monterey County:
   Watershed Approach to Water Quality Solutions
- UC Davis Granite Canyon Marine Pollution Studies Laboratory:
   Evaluation of Stormwater Toxicity Reduction by LID Treatment Systems

## \$20 million in IRWM grant funds have been awarded to the region since 2007

Prop 1 IRWM: \$1,433,757

**Prop 1 IRWM** 

- \$76,935 in Planning Grants
- \$887,517 for Disadvantaged Community Involvement in Planning and Implementation Projects

**Prop 1 SWRP via IRWM** 

\$469,305 Storm Water Planning Grant

## \$3,462,861 in Additional Applications for Prop 1 Implementation Projects

- <u>Castroville Community Services District</u>:
   Emergency Deep Aquifer Supply and Tank Project
- Monterey One Water/Central Coast Wetlands Group/Salinas: Improving Storm Water Management in Salinas: Increasing Capture, Improving Treatment, Reducing Energy Use
- Monterey County Water Resources Agency:
   Reoperation of Reservoirs: Decision-support Tool to Increase Water Supply Reliability in Salinas Valley
- RCD of Monterey County: Farm Nutrient Management and Water Quality Assistance Program
- Salinas River Management Assoc and RCD Monterey County: Salinas River Multi-Benefit Stream Maintenance and Habitat Stewardship Program

### Plans Produced by the Greater Monterey County IRWM Region

- IRWM Plan (2013 with updates through 2018)
- Integrated Plan to Address Drinking Water and Wastewater Needs of Disadvantaged Communities in the Salinas Valley and Greater Monterey County IRWM Region (2017)
- Storm Water Resource Plan (2019)

Website: GMC IRWM / Documents

## The 2019 Storm Water Resource Plan for the Greater Monterey County IRWM Region

#### STORM WATER RESOURCE PLAN

FOR THE GREATER MONTEREY COUNTY
INTEGRATED REGIONAL WATER MANAGEMENT REGION

June 27, 2019



Prepared by:

Coastal Conservation and Research, Inc.

on behalf of the

Greater Monterey County Integrated Regional Water Management Region

With Funding Support from: State Water Resources Control Board Proposition 1 Storm Water Planning Grant Grant Agreement No. D1612608



## A Regionally Integrated Evaluation of Projects to Manage Storm Water for:

- Water Quality
- Water Supply
- Flood Control
- Environmental and
- Community Benefits



#### **Projects and Opportunities**

Quantitatively evaluate submitted projects

Use GIS and hydrologic modeling to identify opportunities for storm water management



## Make regional projects eligible for Prop 1 storm water grant funding

Grants funds requested by Plan projects: \$ 35,840,943

Anticipated matching funds (from non-State sources): \$ 37,485,943



## The 2019 Storm Water Resource Plan for the Greater Monterey County IRWM Region

#### STORM WATER RESOURCE PLAN

FOR THE GREATER MONTEREY COUNTY
INTEGRATED REGIONAL WATER MANAGEMENT REGION

June 27, 2019



Prepared by:

Coastal Conservation and Research, Inc.
on behalf of the

Greater Monterey County Integrated Regional Water Management Region

With Funding Support from: State Water Resources Control Board Proposition 1 Storm Water Planning Gran Grant Agreement No. D1612608 **Introductory Chapters:** 

**Legislative Background** 

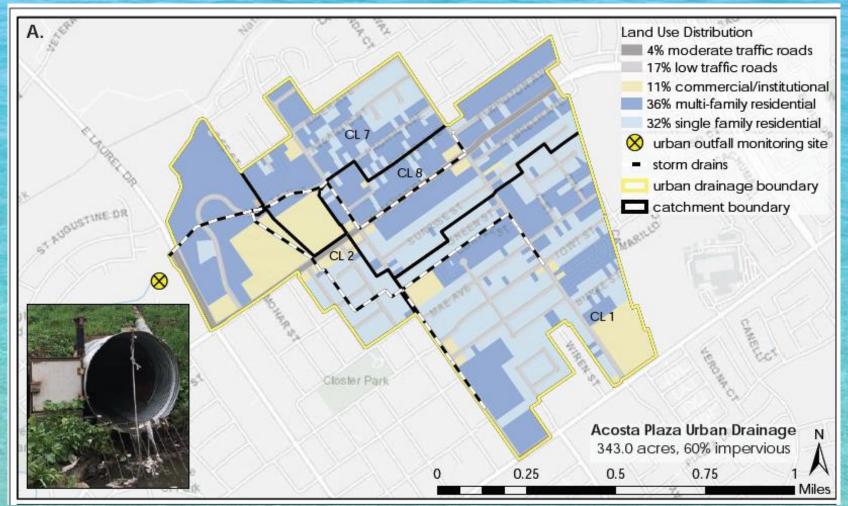
**Water Quality Compliance** 

**Watershed Information** 

**Coordination and Collaboration** 

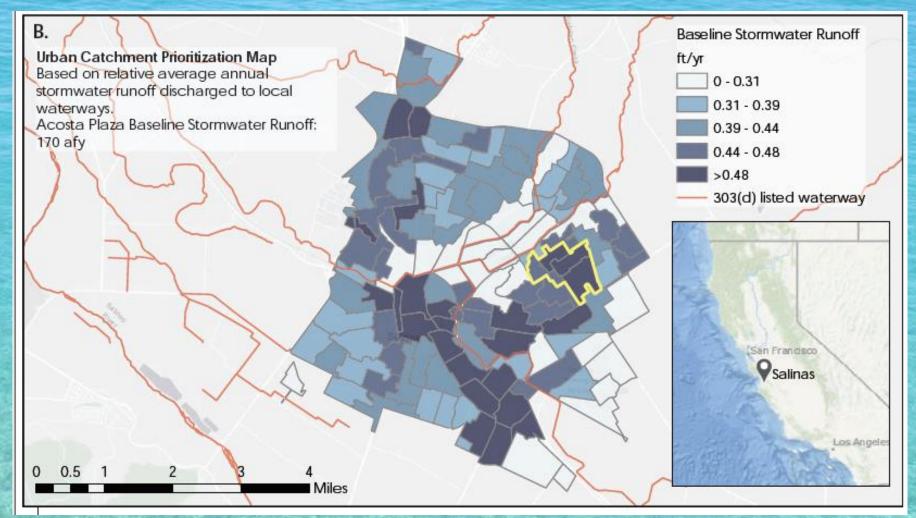
**Management Objectives** 

#### 1. Low Impact Development (Source Control) Projects



City of Salinas and 2<sup>nd</sup> Nature

#### 1. Low Impact Development (Source Control) Projects



City of Salinas and 2<sup>nd</sup> Nature

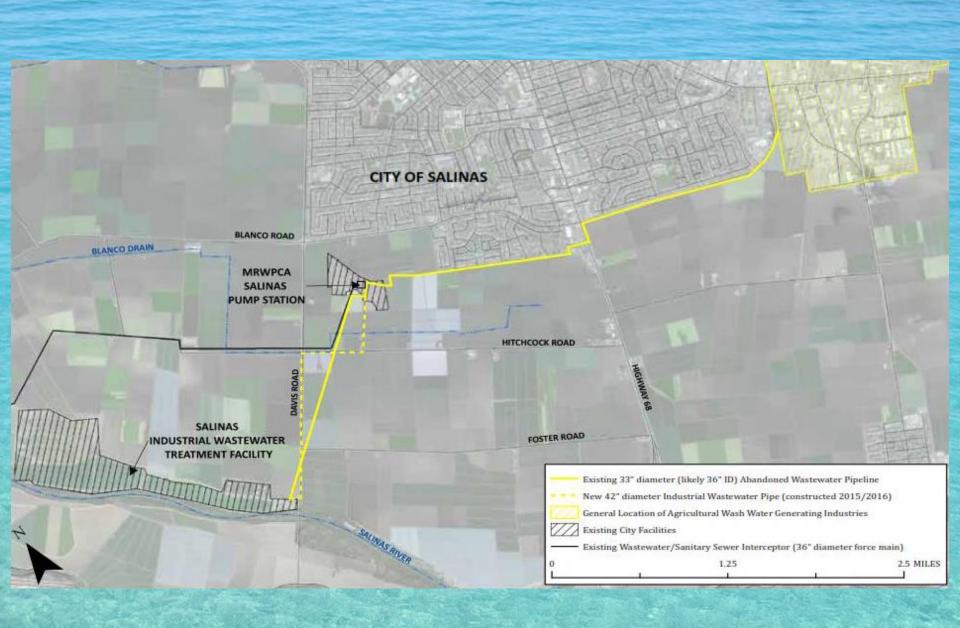
#### 2. Engineered Infrastructure Projects

- Soledad Regional Recharge
- Salinas and Monterey One Water
   Salinas Area Flood Enhancements and Reuse
- Salinas, M1W and Central Coast Wetlands Group Salinas Water Quality and Agricultural Reuse
- M1W Ocean Outfall Beach Structure

### **Soledad Regional Recharge**



#### Salinas Area Flood Enhancements and Reuse



### Salinas Water Quality and Agricultural Reuse



#### **M1W Ocean Outfall Beach Structure**

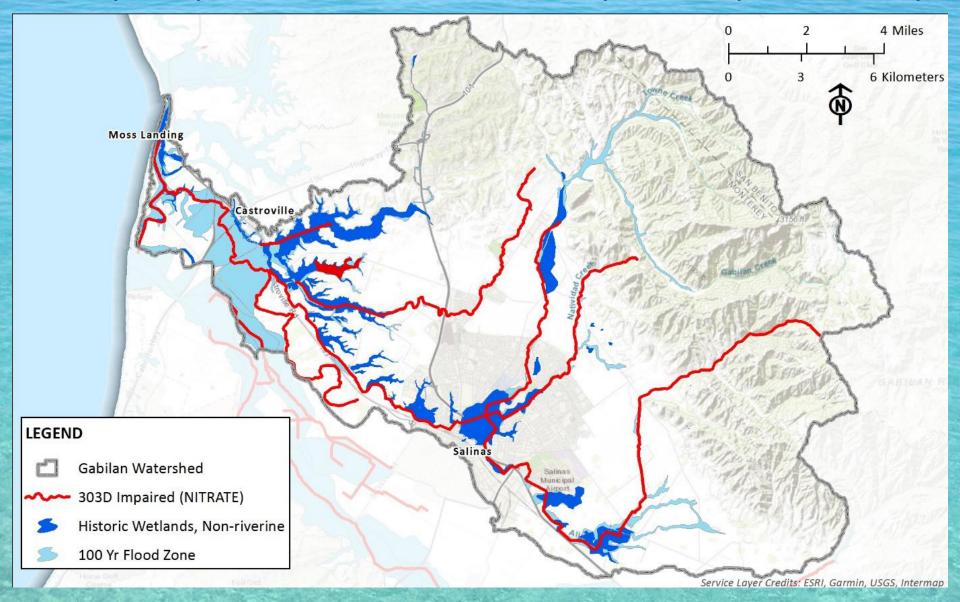


#### 3. Landscape-Based Watershed Function Projects

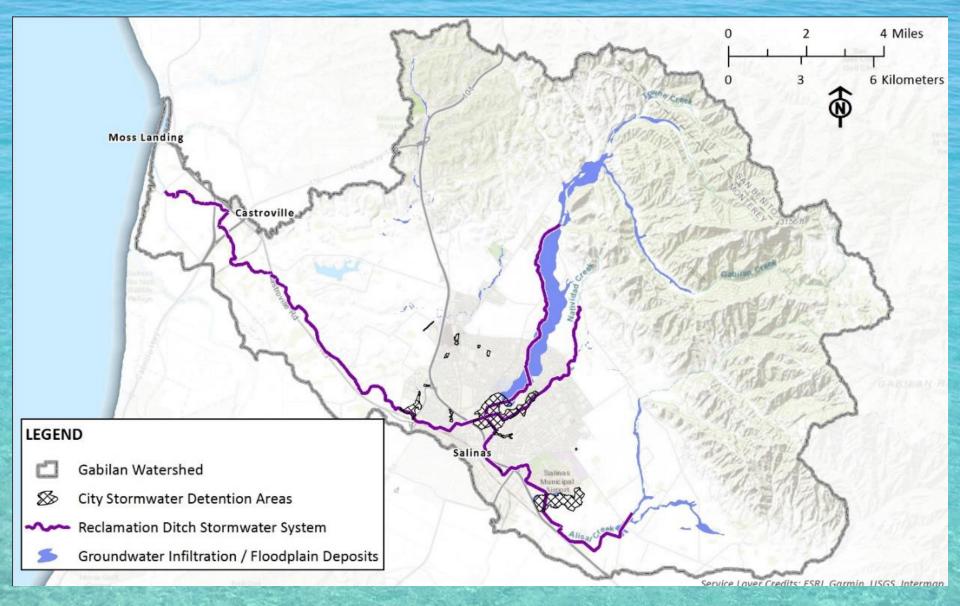
Use geographic information systems and hydrologic modeling to identify locations and timing for multi-benefit projects:

- Water Quality
- Water Supply
- Flood Control
- Environmental and
- Community Benefits

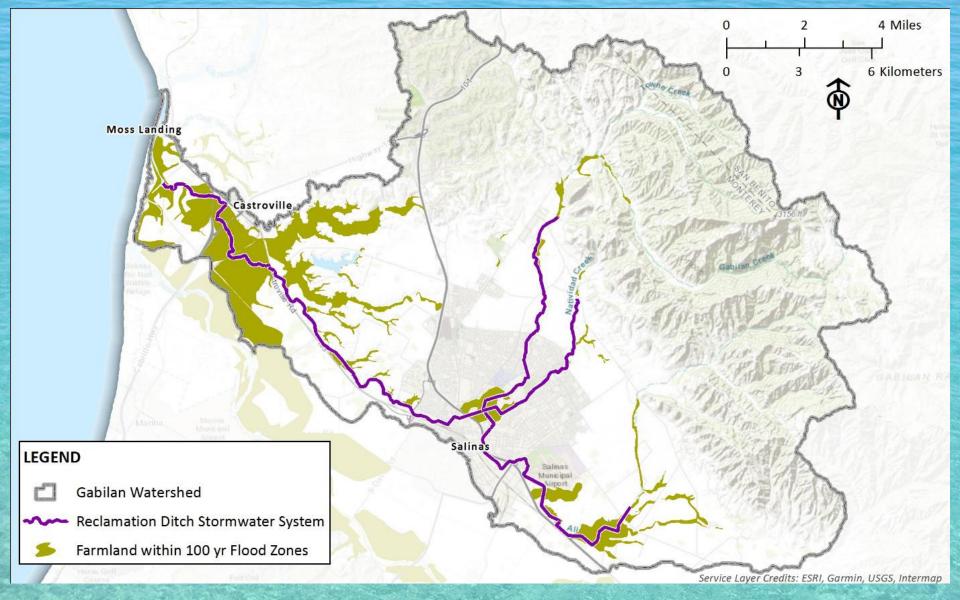
**Geomorphic Depressions and Historical Wetlands Adjacent to Impaired Waterways** 



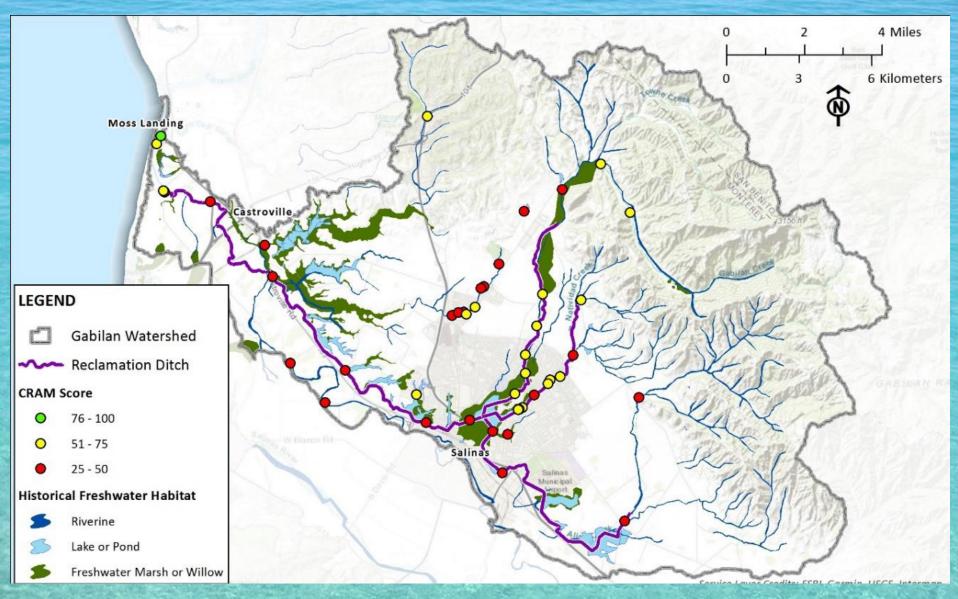
#### **Suitable Areas for Storm Water Infiltration**



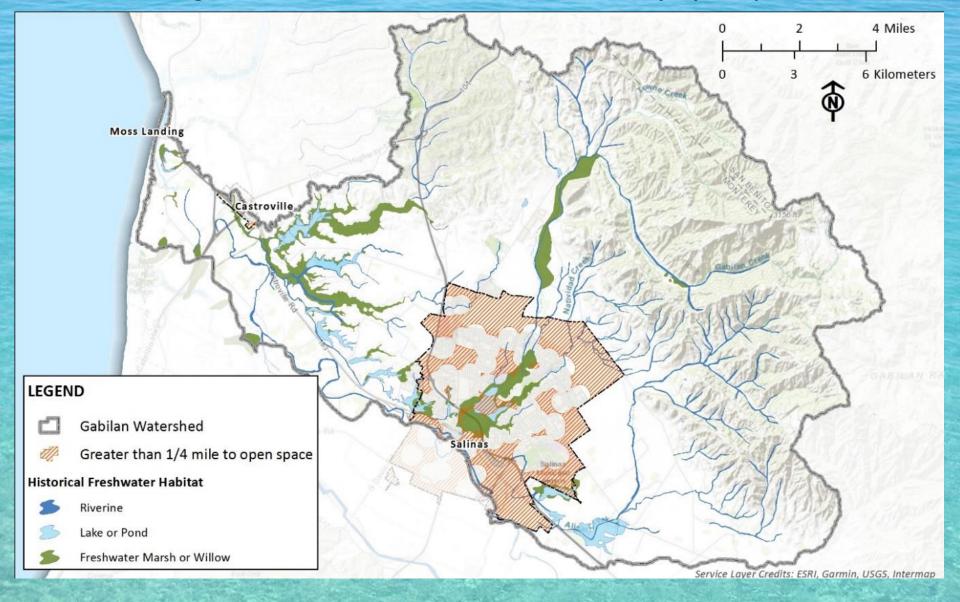
#### **Opportunity Areas for Flood Management**



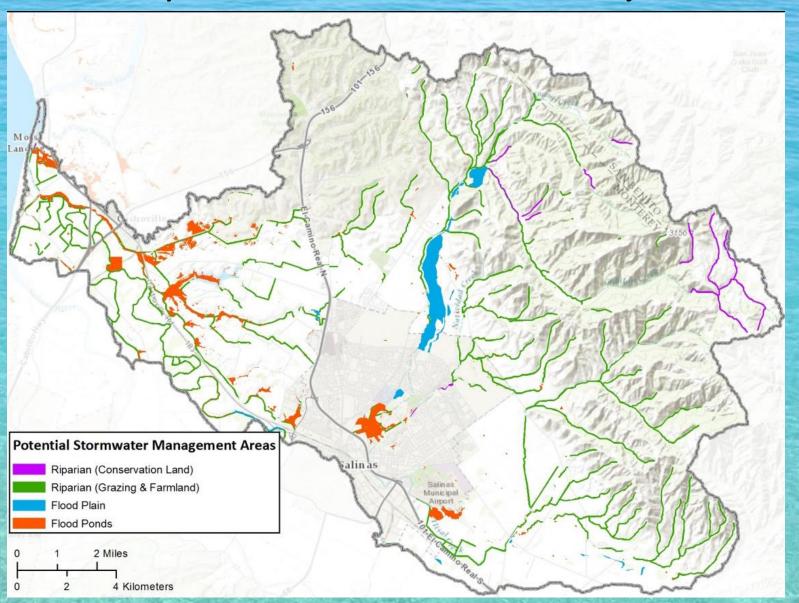
#### **Suitable Areas for Habitat and Treatment Wetlands**



#### **Neighborhoods and Distance from Community Open Space**



#### **Priority Areas for Multi-benefit Storm Water Projects**



Aquatic vegetation and wood chips at a storm water treatment wetland



# Landscape-Based Watershed Function Projects Water storage and treatment in a restored wetland

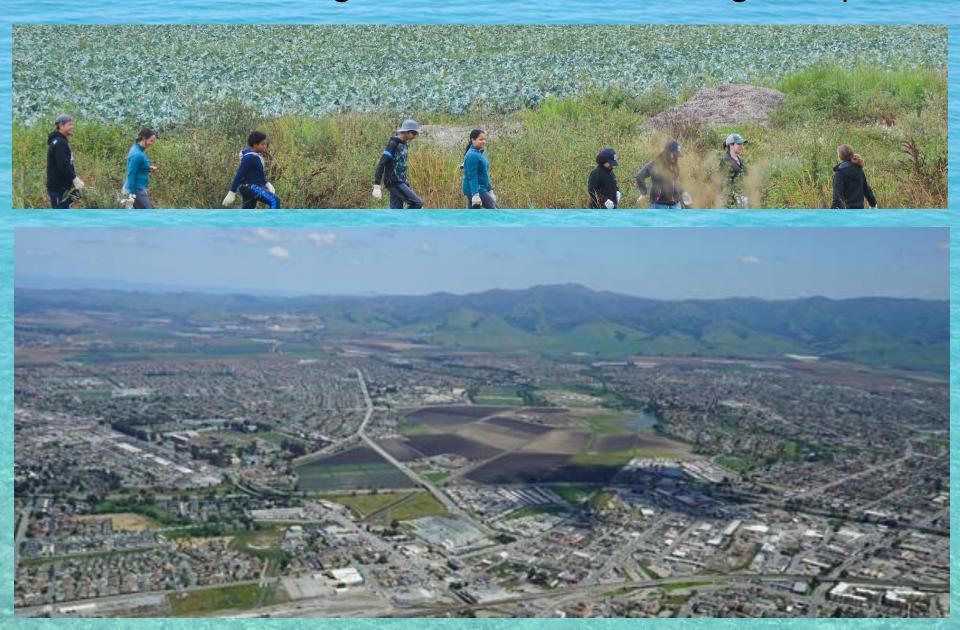


Water storage and treatment in a restored wetland



#### **Carr Lake Project**

Storm water management and multi-benefit green space



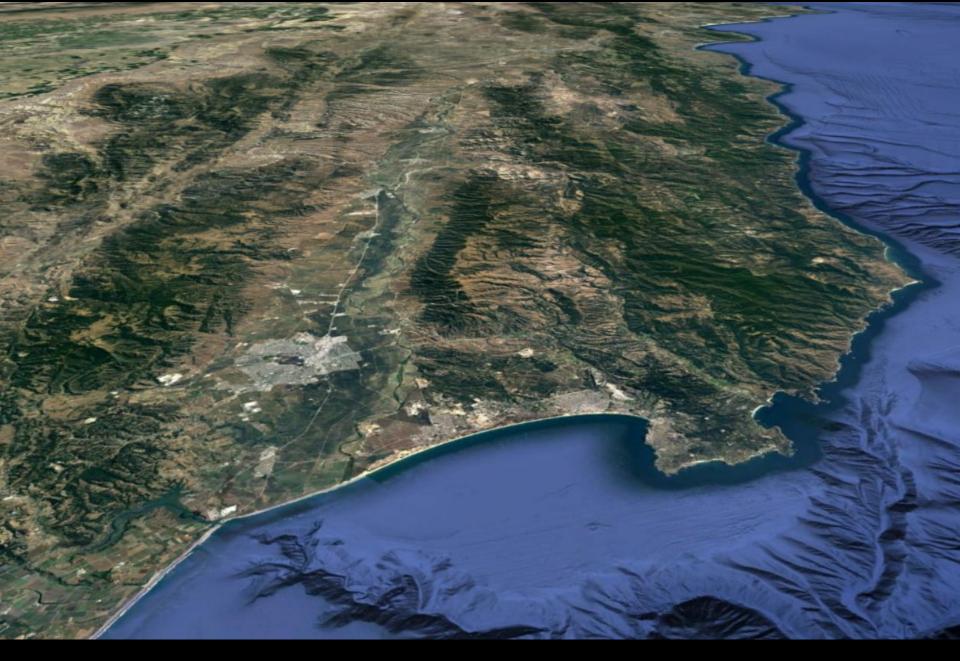
### Cumulative Benefits

Table 6.6 Benefits of the One Funded and Seventeen Proposed Implementation Projects

Project Title	Water	Water	Flood	Environ-	Commu-
	Quality	Supply	Benefits	mental	nity
				Benefits	Benefits
	NO3-N	Storm	Decrease	Wetland	New
	Load	Water	in	Habitat	Park and
	Reduction	Captured	Inundated	Created	Open
	(kg/year)	for Reuse	Area	(acres)	Space
		(af/y)	(acres)		(acres)
roject Funded in Round 1					
Storm Water Diversion	18,400	1,400	ND	ND	ND
Implementation and Water Supply					
SWRP					
Carr Lake Project	ND	419	88	73	73
Gabilan Floodplain Enhancement	ND	ND	ND	84	ND
Project					
Salinas to the Sea Storm Water	10,562	ND	ND	500	100
Management, Community					
Development, and Habitat					
Enhancement Project					
Acosta Plaza Urban Drainage	ND	ND	ND	ND	ND
Restoration					
Lincoln Green/Complete Street	ND	ND	ND	ND	ND
Ocean Outfall Beach Junction	ND	ND	ND	ND	ND
Structure Managed Retreat Project					
South Moss Landing Harbor Water	ND	ND	ND	14	ND
Quality Project					
Storm Water Management,	ND	195	ND	ND	ND
Collection, and Infiltration on					
Private and Public Lands					
	roject Funded in Round 1  Storm Water Diversion Implementation and Water Supply  SWRP  Carr Lake Project  Gabilan Floodplain Enhancement Project  Salinas to the Sea Storm Water Management, Community Development, and Habitat Enhancement Project  Acosta Plaza Urban Drainage Restoration  Lincoln Green/Complete Street Ocean Outfall Beach Junction Structure Managed Retreat Project South Moss Landing Harbor Water Quality Project  Storm Water Management, Collection, and Infiltration on	Quality  NO3-N Load Reduction (kg/year)  Toject Funded in Round 1  Storm Water Diversion Implementation and Water Supply  SWRP  Carr Lake Project Gabilan Floodplain Enhancement Project Salinas to the Sea Storm Water Management, Community Development, and Habitat Enhancement Project Acosta Plaza Urban Drainage Restoration Lincoln Green/Complete Street ND Ocean Outfall Beach Junction Structure Managed Retreat Project South Moss Landing Harbor Water Quality Project Storm Water Management, Collection, and Infiltration on	Quality  Supply  NO3-N Load Reduction (kg/year)  Roject Funded in Round 1  Storm Water Diversion Implementation and Water Supply  SWRP  Carr Lake Project Gabilan Floodplain Enhancement Project Salinas to the Sea Storm Water Management, Community Development, and Habitat Enhancement Project Acosta Plaza Urban Drainage Restoration Lincoln Green/Complete Street ND	Quality   Supply   Benefits	Quality   Supply   Benefits   Benefits   Benefits

### Cumulative Benefits

Project Applicant	Project Title	Water	Water	Flood	Environ-	Commu-			
	_	Quality	Supply	Benefits	mental	nity			
					Benefits	Benefits			
		NO3-N	Storm	Decrease	Wetland	New			
		Load	Water	in	Habitat	Park and			
		Reduction	Captured	Inundated	Created	Open			
		(kg/year)	for Reuse	Area	(acres)	Space			
			(af/y)	(acres)		(acres)			
Design Proposals, This SWRP									
Central Coast Wetlands	Blanco Drain Treatment Wetland	ND	ND	ND	11	ND			
Group									
Central Coast Wetlands	Castroville and Moss Landing	ND	66	67	7	1			
Group	Storm Water Enhancement Project								
Central Coast Wetlands	Espinosa Lake Flood Retention	7,552	12	29	185	185			
Group	Project								
Central Coast Wetlands	Old Salinas River Treatment	ND	ND	ND	5	ND			
Group	Wetland								
City of Salinas and	Salinas Area Flood Enhancements	ND	300	ND	ND	ND			
Monterey One Water	and Reuse Project								
City of Soledad	Soledad Regional Recharge Project	ND	272	7	ND	4			
County of Monterey	Bioswales for Davis Road Bridge	ND	1	ND	ND	ND			
	Replacement and Road Widening								
	Project								
Elkhorn Slough	Ridgeline to Tideline	ND	180	ND	150	ND			
Foundation									
Monterey One Water/	Salinas Water Quality and	ND	300	ND	35	ND			
Central Coast Wetlands	Agricultural Reuse Efficiency								
Group/City of Salinas	Project								
Total		36,514	3,145	191	1,064	363			



Thank you