

# PRWFPA

## Board of Directors Meeting

### September 8, 2021



# Item #1: Call to Order

Pajaro River Watershed

Flood Prevention Authority

# Item #2: Roll Call

# Item #3: Oral Communications from the Public on Items Not on the Agenda

(A maximum of three minutes on any  
subject not on the agenda)

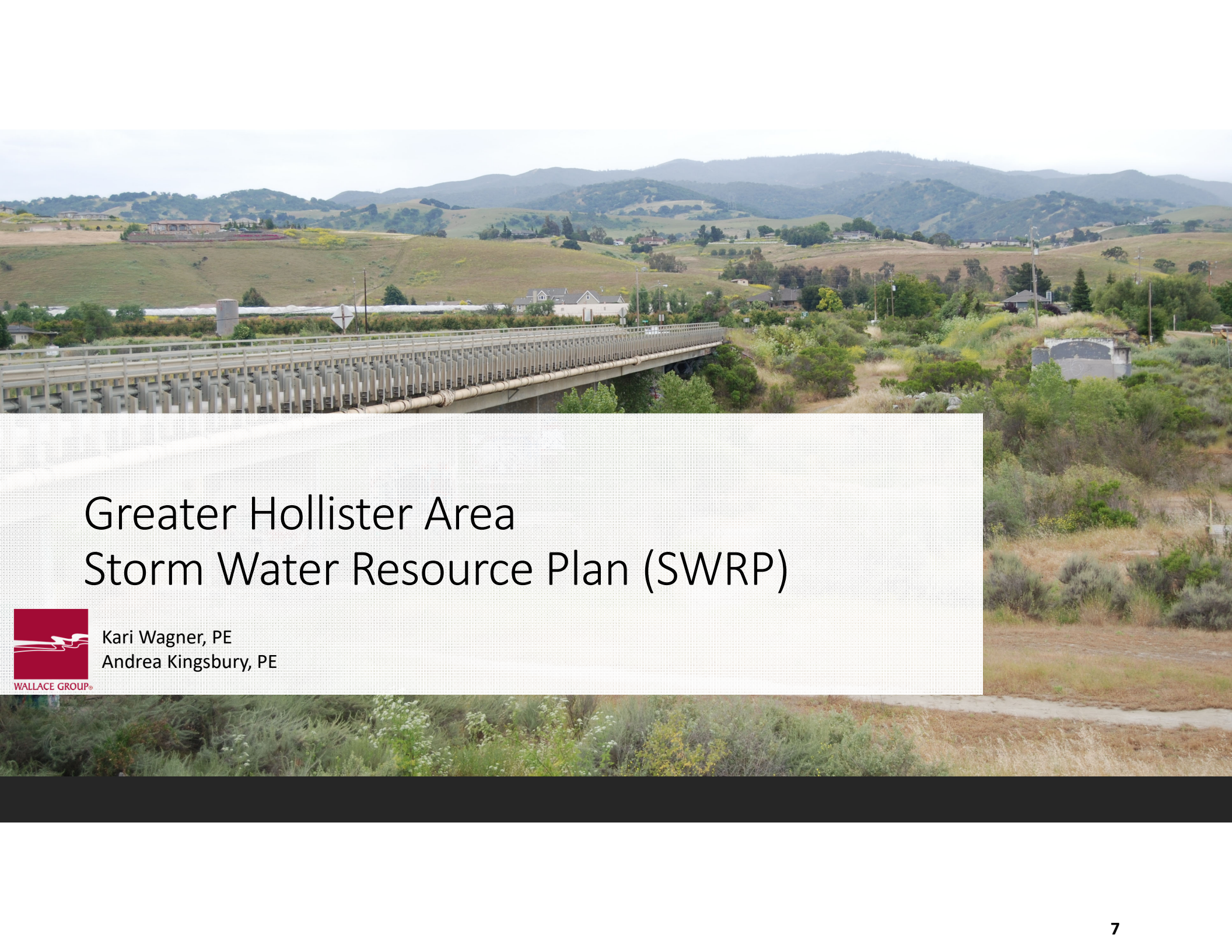
# Item #4: Oral Communications from the Board on Items Not on the Agenda

# Item #5.A: Presentation Greater Hollister Area Draft Storm Water Resource Plan

## Recommended Action: Approve







# Greater Hollister Area Storm Water Resource Plan (SWRP)



Kari Wagner, PE  
Andrea Kingsbury, PE





*Pajaro River*



*Trail between IWTP and San Benito River*



*Pacheco Creek*

# Overview

- Legislative Background
- Purpose of SWRP
- Agency Collaboration
- SWRP Boundary
- Identification & Prioritization of Projects
- Next Steps



# Storm Water Grant Program

*California State Water Resources Control Board*



## PURPOSE

- Promote beneficial use of storm water and dry weather runoff in California

## FUNDING

- Prop 1 (AB 1471, Rendon) authorized \$7.545 billion for water projects
- Of this, \$200 million in grant funds for multi-benefit storm water management projects

# Storm Water Resource Plan (SWRP)

## Storm Water Resource Plan Guidelines



December 15, 2015

STATE WATER RESOURCES CONTROL BOARD  
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY



### Appendix A: Checklist and Self-Certification

#### Checklist Instructions:

For each element listed below, review the applicable section in the Storm Water Resource Plan Guidelines and enter ALL of the following information.

- A. Mark the box if the Storm Water Resource Plan, or a functional equivalent Plan, meets the provision.  
B. In the provided space labeled References, enter:
1. Title of document(s) that contain the information;
  2. The chapter/section, and page number(s) where the information is located within the document(s);
  3. The entity(ies) that prepared the document(s);
  4. The date the document(s) was prepared, and subsequent updates; and
  5. Where each document can be accessed\* (website address or attached).

STORM WATER RESOURCE PLAN CHECKLIST AND SELF-CERTIFICATION		
Mandatory Required Elements per California Water Code are Shaded		
Y/N	Plan Element	Water Code Section

WATERSHED IDENTIFICATION (GUIDELINES SECTION VI.A)		
<input type="checkbox"/>	Plan identifies watershed and subwatershed(s) for storm water resource planning.	10565(c) 10562(b)(1) 10565(c)
<u>References:</u>		
<input type="checkbox"/>	Plan is developed on a watershed basis, using boundaries as delineated by USGS, CalWater, USGS Hydrologic Unit designations, or an applicable integrated regional water management group, and includes a description and boundary map of each watershed and sub-watershed applicable to the Plan.	
<u>References:</u>		

\* All documents referenced must include a website address. If a document is not accessible to the public electronically, the document must be attached in the form of an electronic file (e.g. pdf or Word 2013) on a compact disk or other electronic transmittal tool.

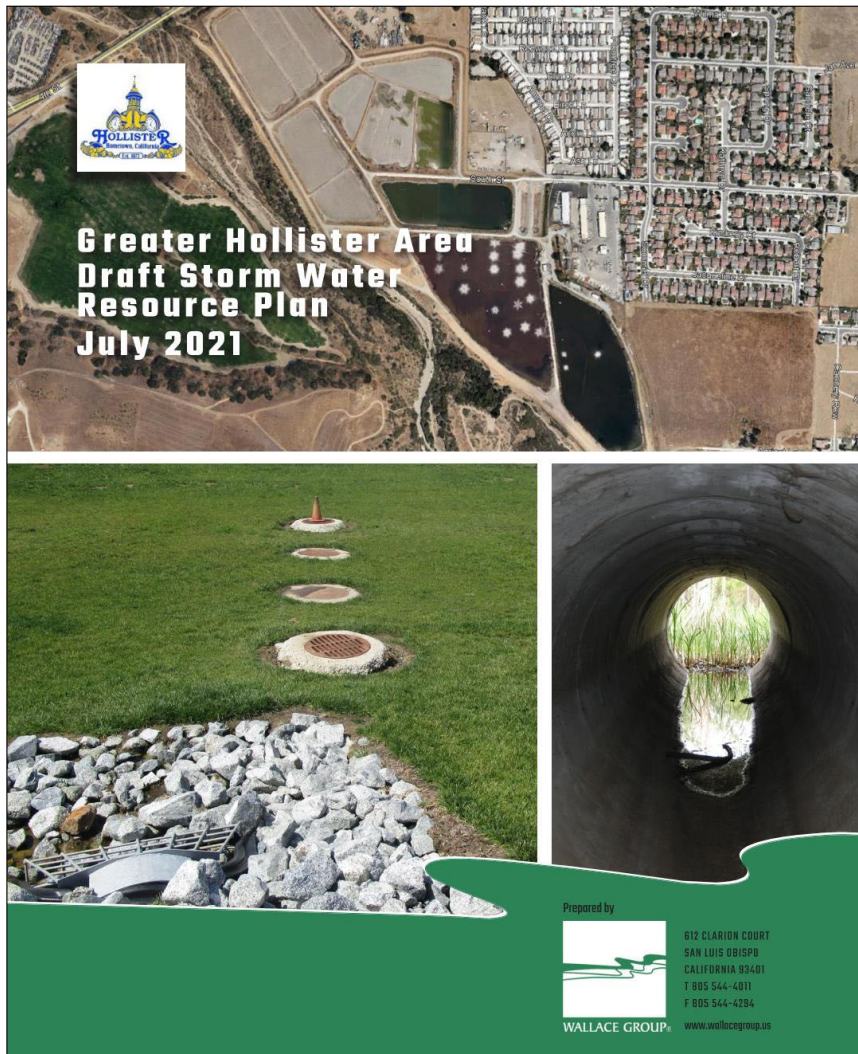
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- A SWRP is required as a condition of receiving grant funds for storm water and dry weather runoff capture projects
- Division of Water Quality developed SWRP Guidelines consistent with the Water Code provisions enacted by SB 985
- Self-Certification Checklist

# Prop 1 Round 2 Grant Funding

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- In July 2020, the City of Hollister applied for Round 2 of Prop 1 Grant Funding
  - Industrial Wastewater Treatment Plant Upgrades for storm water diversion
  - Bridge Road Trash Capture
- Application was not selected, but favorably reviewed and placed first on the “standby” list
- Continued preparation of the SWRP



# Greater Hollister Area Storm Water Resource Plan

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# Why is a SWRP Important?

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- Watershed-based plan
- Focuses on existing landscapes to increase storm water capture and use
- Manages storm water as a resource
- Encourages multi-benefit projects
- Incorporates broader water management goals of the Integrated Regional Water Management Plan (IRWMP)



# Organization of the SWRP

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1

Introduction  
SWRP  
Objectives

2

Watershed  
Identification

3

Water Quality  
Compliance

4

Organization,  
Coordination,  
and  
Collaboration

5

Identification  
and  
Prioritization  
of Projects

6

Implementation  
Strategy and  
Schedule

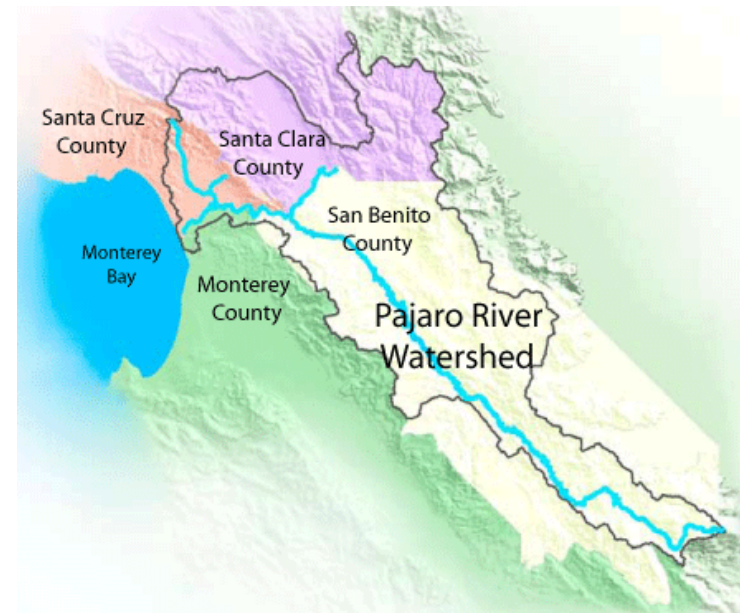
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Education,  
Outreach, and  
Public  
Participation

# Pajaro River Watershed

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- Spans four counties and four water districts
  - County of Monterey
  - County of San Benito
  - County of Santa Clara
  - County of Santa Cruz
  - Monterey County Water Resources Agency
  - San Benito County Water District
  - Santa Clara Valley Water
  - Santa Cruz County Flood Control and Water Conservation District Zone





**San Benito County  
Water District**



# Agency Collaboration

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- City of Hollister is the submitting agency
- The Pajaro River Watershed Flood Prevention Authority was integral in establishing a regional SWRP that identifies the flood prevention and control needs of the Pajaro River Watershed

# SWRP Boundary

- Based on eight subwatersheds tributary to the Pajaro River
  - San Benito River
  - Lower Pacheco Creek
  - Lower Pajaro River
  - Upper Pajaro River
  - Lower Uvas Creek
  - San Juan Canyon
  - Santa Ana Creek
  - Tequisquita Slough



# Clean Water Act 303(d) Impaired Water Bodies

Pollutant/Stressor	Water Body
Ammonia	Tequisquita Slough
	Pajaro River
Boron	San Benito River
Chlordane	Pajaro River
Chloride	Pajaro River
Chlorophyll-a	Millers Canal
Chlorpyrifos	Pajaro River
Chromium	Pajaro River
DDD	Pajaro River
DDE	Pajaro River
DDT	Pajaro River
Diazinon	Pajaro River
Dieldrin	Pajaro River
	Millers Canal
E. Coli	Pajaro River
	San Benito River
	San Juan Creek
Electrical Conductivity	San Benito River
	Millers Canal
	Pacheco Creek
Fecal Coliform	Pajaro River
	San Benito River
	San Juan Creek
	Tequisquita Slough
	Millers Canal
Low Dissolved Oxygen	Pacheco Creek
	Pajaro River
	San Juan Creek
	Tequisquita Slough
Nitrate	Pajaro River
PCBs	Pajaro River
	Millers Canal
pH	Pajaro River
	San Benito River
	Tequisquita Slough
Sedimentation/Siltation	Pajaro River
	San Benito River
Sodium	Pajaro River
Temperature	Millers Canal
	Millers Canal
Toxicity	Pajaro River
	San Juan Creek
	Tequisquita Slough
	Millers Canal
Turbidity	Pacheco Creek
	Pajaro River
	San Juan Creek
	Tequisquita Slough



WALLACE GROUP



## Project: Soap Lake Floodplain Preservation

### Agency

Pajaro River Watershed Flood Prevention Authority

### Benefit Categories Met

Flood Management  
Environmental  
Water Quality

### Benefit Metric Value

9,100 acres of Habitat Protected

Maintains flood protection by protecting against a 35% increase (16,000 cfs) in 100-year peak flows

DAC Population= 5,003 persons

5 of the 15 points assigned for Project Location based on several of the existing conservation easements having already been acquired for the Project

### Project Description

Soap Lake is a floodplain that acts like a natural detention basin, storing water and reducing peak flows that would otherwise increase flooding in the lower Pajaro River. The proposed project would not build any structural facilities, but instead would include obtaining flood easements for the land within the Soap Lake floodplain in order to maintain the current flood protection benefits by protecting the area from changes that would impact the flood protection properties of the floodplain.

The purchase of easements would restrict development and preserve agriculture and open space in the approximately 9,100 acre floodplain. This project would maintain the current hydrologic and hydraulic conditions at the project site and adjacent properties to minimize the effects of flooding on developments both within and downstream of the study area by preventing development on the property and additional flooding downstream. By maintaining the flow conditions in the Pajaro River, proposed downstream flood improvements will not have to increase in size and capacity, saving hundreds of millions of dollars and directly benefiting the Disadvantaged Communities of Watsonville and Pajaro. Flood prone land acquisition could also help create recreational opportunities, maintain agricultural land and open space, preserve riparian habitat and enhance ground water quality.

As of February 2017, approximately 4,564 acres of conservation easements (50%) have been acquired. Based on recent acquisitions in the floodplain, the estimated project costs range from \$23 million to \$70 million. The range represents the cost of acquiring floodplain easements or purchasing the property in fee title for the remaining 4,500 acres. See Figure 5-7 for a map of the existing conservation easements.

### Project Cost Breakdown

Estimated Project Cost      \$23-\$70 million

# Identification of Projects

- Project Solicitation
  - City of Hollister
  - City of San Juan Bautista
  - County of San Benito
  - San Benito County Water District
  - Pajaro River Watershed Flood Prevention Authority



# Benefits Analysis

## Quantitative Metrics

Benefit Category	Water Quality	Water Supply		Flood Management	Environmental	Community
	Pollutant Load Reduction (%)	Volume Diverted to Treatment Plant (%)	Retention Capacity (Storm Event)	Peak Flow Managed (% Difference)	Habitat Created/Maintained	Serves DAC (pop.)
Score						
5	81-100	60-100	100-year	80-100	YES	over 5,000
4	61-80	40-60	50-year	60-80	-	3,001-5,000
3	41-60	20-40	25-year	40-60	-	1,001-3,000
2	21-40	10-20	10-year	20-40	-	500-1,000
1	1-20	0-10	95 <sup>th</sup> percentile	0-20	-	1-500
0	0	0	0	0	NO	0

## Multiple Benefits

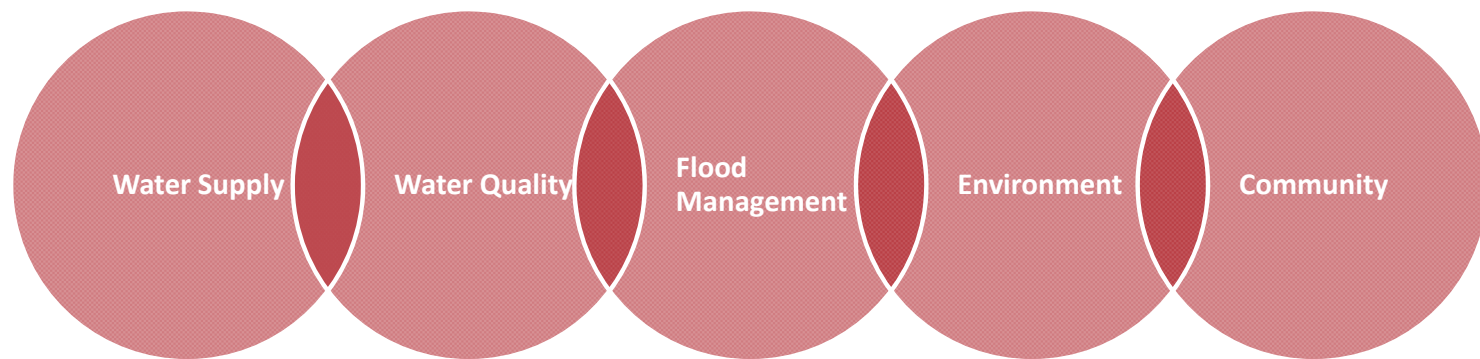
TABLE 4. STORM WATER MANAGEMENT BENEFITS		
Benefit Category	Main Benefit	Additional Benefit
<b>Water Quality</b> <i>while contributing to compliance with applicable permit and/or TMDL requirements</i>	Increased filtration and/or treatment of runoff	Nonpoint source pollution control
		Reestablished natural water drainage and treatment
<b>Water Supply</b> <i>through groundwater management and/or runoff capture and use</i>	Water supply reliability	Water conservation
	Conjunctive use	
<b>Flood Management</b>	Decreased flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows
<b>Environmental</b>	Environmental and habitat protection and improvement, including: - wetland enhancement/creation; - riparian enhancement; and/or - instream flow improvement	Reduced energy use, greenhouse gas emissions, or provides a carbon sink
	Increased urban green space	Reestablishment of the natural hydrograph
<b>Community</b>	Employment opportunities provided	Water temperature improvements
	Public education	Community involvement
		Enhance and/or create recreational and public use areas



# Prioritization of Projects

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- Project Funding
- Project Location
- Quantitative Metrics
- Multi-Benefits Analysis



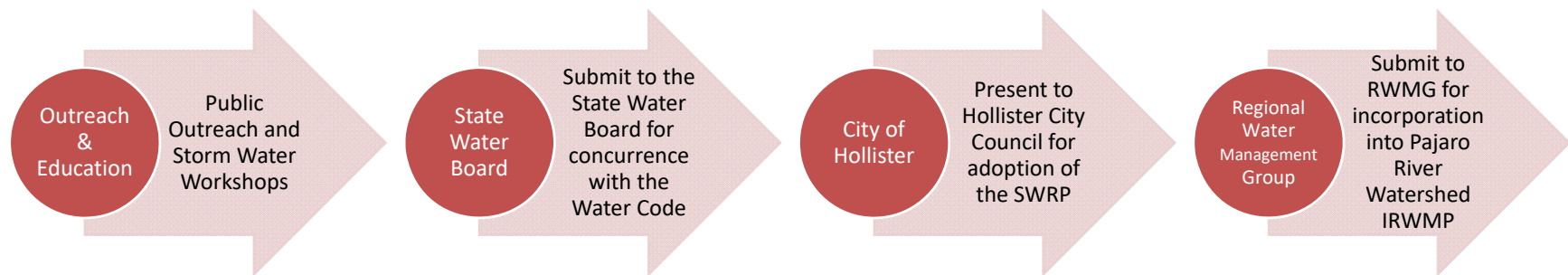
	Project Funding	Project Location	Quantitative Metrics			Multiple Benefits Analysis																		
						Water Quality			Water Supply		Flood Management		Environmental					Community						
						Increased infiltration and/or treatment of runoff (4 pts)	Nonpoint source pollution control (2 pts)	Reestablished natural water drainage and treatment (2 pts)	Water supply reliability (4 pts)	Conjunctive use (4 pts)	Water conservation (2 pts)	Decreased flood risk by reducing runoff rate and/or volume (4 pts)	Reduced sanitary sewer overflows (2 pts)	Environmental and habitat protection and improvement (4 pts)	Increased urban green space (4 pts)	Reduced energy use, greenhouse gas emissions, or provides a carbon sink (2 pts)	Reestablishment of the natural hydrograph (2 pts)	Water temperature improvements (2 pts)	Employment opportunities provided (4 pts)	Community Involvement (2 pts)	Public Education (4 pts)	Enhance and/or create recreational and public use areas (2 pts)	Points Assigned	Project Scoring
Project Title	Permanent Funding? (10 points)	Project located on Public Lands? (15 points)	Quantitative Benefit Analysis Type	Quantitative Benefit Metrics Value	Points Assigned																			
IWTP Upgrade: South Street Diversion Structure Pond 2 Outlet Structure and Emergency Spillway Apricot Lane Trash Capture & Emergency Spillway Re-purpose Sewer PS to Stormwater PS Floating Islands & Decorative Fountains Percolation Pond Spillway	0	15	Storage Capacity Volume Diverted Environment DAC Population	10-year storm event (54 acre-feet) 11.4% of San Benito River tributary (10.5 acre-feet) Habitat Created 2,039 persons	12	x	x		x					x		x						x	18	45
Soap Lake Floodplain Preservation Project	0	5	Peak Flow Managed Environment DAC Population	35% Difference Habitat Managed 5,003 persons	12	x		x	x			x		x		x	x					x	24	41
Pacheco Reservoir Expansion	0	15	Peak Flow Managed	60% Difference	4	x			x			x		x			x				x		22	41
San Juan Bautista WWTP Regionalization with Hollister WWTP	0	15	Volume Diverted Pollutant Load Reduction	100% of San Juan Bautista WW Flows 69%	9	x			x		x												10	34
Nash Road Diversion	0	15	Volume Diverted Pollutant Load Reduction DAC Population	8.2% of San Benito River tributary (7.5 acre-feet) 44% 2,464 persons	7	x	x		x														10	32
Bridge Road Trash Capture	0	15	Pollutant Load Reduction DAC Population	76% 1,793 persons	7	x	x							x									10	32
San Benito Street Diversion	0	15	Volume Diverted Pollutant Load Reduction	11.0% of San Benito River tributary (10.1 acre-feet) 68%	6	x	x		x														10	31
Powell Street Underground Detention	0	15	Storage Capacity	25-year Storm Event (5.2 acre-feet)	3	x						x											8	26

SWRP Project Prioritization Table



# Next Steps

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# Thank you

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Questions?

# Item #6: Consent Agenda (Items #6A-6G)

Recommended Action: Approve

# Item #7: Items Removed from Consent Calendar for Discussion and Possible Action

# Item #8A: Pajaro River Flood Risk Reduction Project Update

## Recommended Action: Information

