



Public Works Agency

# Ventura Countywide Stormwater Quality Management Program

Presentation to  
Ventura Watershed Committee  
January 8, 2016



# Overview

---

- Who we are
- Why we are interested in developing a Stormwater Resource Plan
- Stormwater Resource Plan Guidelines
- Prop 1 Stormwater Grant Funding Overview
- Our Project
- Opportunities for Input



# Ventura Countywide Stormwater Quality Management Program



*Ventura Countywide  
Stormwater Quality  
Management Program*



- Coalition of Municipal Stormwater Permittees
  - Ventura County Water Protection District
  - County of Ventura
  - Cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, Santa Paula, Simi Valley, Thousand Oaks, and Ventura



# Ventura Countywide Stormwater Quality Management Program

---

- Permittee Responsibilities
  - NPDES Countywide MS4 Stormwater Permit
    - Programmatic requirements (control measures)
    - Receiving Water Limits (RWL)
    - Total Maximum Daily Loads (TMDLs)
      - Ventura River and Estuary
        - Trash
        - (Algae & Nutrients not in Permit)
    - New Permit Likely in 2016



# Next NPDES Permit

- Watershed Management Planning Options
  - Voluntary; may be developed collaboratively or individually
  - Vehicle for addressing TMDLs and Water Quality Standards
  - Allows for customization of control measures
  - Requires MS4 discharges:
    - Achieve applicable WQBELs in TMDL provisions
    - Do not cause or contribute to exceedances of RWL
    - Do not include non-stormwater discharges that are a source of pollutants
  - Reasonable Assurance Analysis



# Next NPDES Permit

- Enhanced WMP Option
  - Comprehensively evaluates opportunities with emphasis on multi-benefit regional projects
  - Collaboration among permittees and other partners on multi-benefit regional projects
  - Wherever feasible retain:
    - 1) All non-stormwater runoff and dry weather runoff
    - 2) All stormwater runoff from the 85<sup>th</sup> percentile, 24 hour storm event
    - For all drainage areas tributary to projects
  - Where retention of the 85th percentile is not feasible, include other watershed control measures that ensure compliance



# SB-985 Stormwater Resource Planning

- Authorizes a city, county, or special district to develop a SRP to list and prioritize multi-benefit projects geared towards capturing stormwater and dry weather runoff.
- Requires public agencies to develop a **storm water resource plan (SRP)** to apply and receive funding for storm water and dry weather runoff capture project funded partially or entirely with state funds



# SB-985 Stormwater Resource Planning

---

No SRP = No Grant Funding





# SB-985 Stormwater Resource Planning

- Recognizes storm water as a resource
- Emphasizes multiple benefit projects
- Emphasizes use of publicly owned lands to capture and reuse storm water





# Storm Water Resource Plans Guidelines

---

- Watershed-based approach to stormwater management – SRP developed on a watershed scale
- Coordinate and collaborate during plan development with local government agencies, nonprofits organizations, water utilities, and public
- Plans must be submitted to local IRWMP



# Storm Water Resource Plans Guidelines

- Existing planning documents may be functionally equivalent (if meets guidelines), including but not limited to:
  - Ventura River Watershed Management Plan,
  - integrated resource plans,
  - urban water management plans,
  - or similar plans that include storm water and dry weather runoff capture and use as a component of their goals and objectives (TMDL Implementation Plans)



# Storm Water Resource Plan Guidelines

- All projects must be multiple benefit
- Projects designed to achieve watershed-based storm water management objectives
- Include metrics-based analysis of multiple benefits of each project to maximize:
  - water supply, water quality, flood management, environmental, and other community benefits within the watershed
- Prioritization of projects in the Plan  
(high, medium and low)



# Storm Water Resource Plan Guidelines

## Metrics-Based Analysis of Multiple Benefits

### ■ Example Metrics

Benefit	Example	Metric Unit(s)
Water Quality Benefits	Increased filtration or pollution load reduction	Pollution Load Reduction lbs/day or mg/L
	Reestablishment of natural water drainage and treatment	Volume Treated million gallons per day (mgd) or acre-feet per year (afy)
Water Supply Benefits	Potable water offset	million gallons per day (mgd) or acre-feet per year (afy)
Flood Control Benefits	Decreased flood risk	Rate or Volume Cubic feet per second (cfs) or acre-feet (af)
	Reduced sanitary sewer overflows	Number of events
Environmental Benefits	Restoration benefits	Restoration of Stream Flow or Wetlands Acres or cubic feet per second (cfs)
	Reduced Energy Use	Reduction of Greenhouse Gases – Amount of carbon sequestration
Community Benefits	Increased Urban Green Space	Size and/or economic value
	Enhanced recreational or public use areas	Population served or acres



# Storm Water Resource Plan Guidelines

---

## Prioritization of Projects in the Plan

- High, Medium, Low
- Projects should be prioritized on the following minimum elements
  - Financial support for ongoing operation and maintenance
  - Use of metrics-based geospatial (GIS) analysis of multiple benefits
  - Use of public lands
  - Creation of habitat and watershed processes



# Storm Water Resource Plan Guidelines

## ■ Examples of different types of projects



Distributed Water Quality Projects



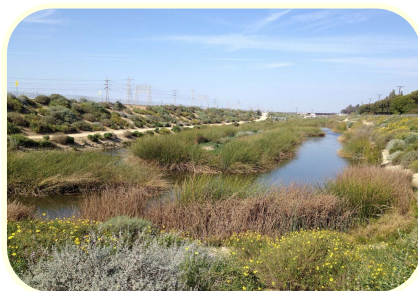
Regional Water Quality Projects



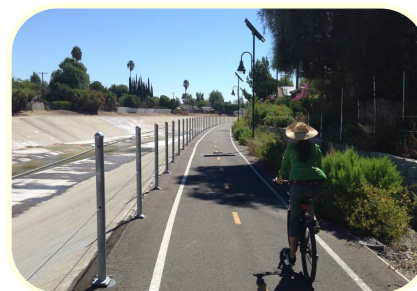
Flood Control Projects



Water Supply Projects



Environmental Benefit Projects



Community Benefit projects



# Prop 1 Stormwater Grants

*Of the funds authorized by Section 79740, \$200 million shall be available for grants for multi-benefit stormwater management projects.*

Granting Agency: Storm Water Resource Control Board

- Funding Round 1 anticipated Spring 2016
  - Up to \$100 million of funds available for FY 2015-2016
  - Minimum local funding match of 50% of total project cost
- 
- **Grant categories:**
  - Planning grants
  - Implementation grants





# Prop 1 Stormwater Grants

---

## Planning Grants

- To develop a stormwater resource plan or modify existing plans in accordance with SB 985 requirements and the Storm Water Resource Guidelines
- Funds for project specific planning and design



# Prop 1 Stormwater Grants

## Implementation Grants

- Project included in IRWMP and Storm Water Resource Plan
- Designed to infiltrate, filter, store, evaporate, treat, or retain storm water or dry weather runoff
- Respond to climate change, contribute to regional water security
- Contain a minimum of two benefits: water quality, water supply, flood management, environmental, community
- Consistent with applicable the water quality control plan (Basin Plan)
- Capable of sustained, long-term water quality benefit at minimum of 20-years
- Project may be on public or private land



# Prop 1 Stormwater Grant

## Implementation Grant Eligible Projects

- Types of eligible projects include:
  - Green infrastructure
  - Rainwater and storm water capture projects
  - Storm water treatment train facilities (includes LID)
  - Program element for a Storm Water Resource Plan; i.e. Green Streets and curb cut programs (must be designed to achieve specific quantified performance goals identified in the SRP)
- Preference given to projects that capture and “re-purpose” storm water for a variety of potential benefits including water supply, flood control, habitat enhancement/restoration, and creating green spaces.



# Prop 1 SWGP Solicitation Workshop

- **Wednesday, February 3<sup>rd</sup>: Regional Water Quality Control Board, 320 W Fourth Street, Los Angeles,**
  - Planning Workshop: 1:00 PM to 3:00 PM
  - Implementation Workshop: 3:00 PM to 5:00 PM
- **Tuesday, February 9<sup>th</sup>: WebEx**
  - Planning Workshop: 9:00 AM to 11:00 AM
  - Implementation Workshop: 11:00 AM to 1:00 PM

Must RSVP by January 20, 2016

[http://www.waterboards.ca.gov/water\\_issues/programs/grants\\_loans/swgp/prop1/](http://www.waterboards.ca.gov/water_issues/programs/grants_loans/swgp/prop1/)



# Our Project:



*Ventura Countywide  
Stormwater Quality  
Management Program*

- Create a Countywide Stormwater Resources Plan
- Identify and develop eleven new concept multi-benefit projects for publicly owned parcels to capture stormwater



# Our Project:



*Ventura Countywide  
Stormwater Quality  
Management Program*

- Task 1. Summarize existing plans and the projects capable of achieving SRP goals
- Task 2. Develop criteria to prioritize publicly owned parcels
- Task 3. Develop concept projects for priority parcels and quantify their runoff capture capability
- Task 4. Evaluate the multiple benefits of each concept project to prioritize projects for each watershed from Task 3
- Task 5. Community participation in the SRP development



# Timeline

---

- Updates at all Watershed Meetings
- Complete by June 2016
- Present at July WCVC



# Opportunities for Input

- *Storm Water Resource Plan shall provide for community participation in plan development and implementation*
  - Engage stakeholders:
    - Multi-benefits and potential conflicts
    - Project design and implementation;
    - Disadvantaged and climate vulnerable communities within the Plan





# Opportunities for Coordination and Collaboration

---

- Coordination with existing planning documents
  
- Desired Input and Coordination From
  - Water supply agencies
  - Other potential valuable partners include school districts, universities, conservancies and other public agencies that have public lands and easements for multiple benefit project
  - Nongovernmental organizations and state conservancies working on storm water and dry weather resource planning or watershed management
  - Watersheds Coalition of Ventura County



# Questions?

---



---

These next slides are extra



# Distributed Stormwater Capture Programs

Public Works Agency





# Underground infiltration chambers

Public Works Agency





# Engineered wetlands

Public Works Agency





# Greenways

Public Works Agency





# Enhanced Spreading Grounds







# Metrics-Based Analysis of Projects

Minimum level of information to be included in an integrated metrics-based analysis for different types of projects

Water quality projects

- Reduction of priority pollutant load/discharge after plan implementation

Storm water capture and use projects

- Where feasible should capture 85<sup>th</sup> percentile, 24-hour storm event

Water supply and flood control projects

- Volume of infiltration to groundwater
- Volume of Potable water offset

Environmental and community benefits projects

- In-stream flow augmentation
- Reduced greenhouse gases and heat island effect



# ~~Watershed-based approach~~

- A watershed-based approach to storm water management seeks to replicate natural hydrology and watershed processes by managing storm water and dry weather runoff onsite or within the watershed where rainfall occurs.
  - Reduces volume of runoff, thus reducing the pollutants discharged
  - Provides multi-benefits including social and community benefits