



COMMUNITY

UNITY

CONSERVATION

CONSERVATION

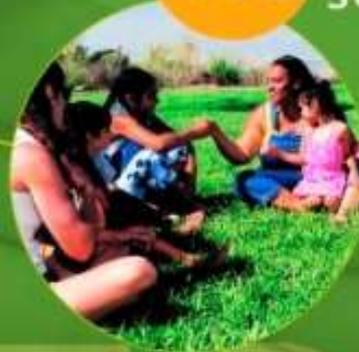
SOL

SOLUTIONS

*Solving Problems where
People and Nature Intersect*

Where some see
conflict

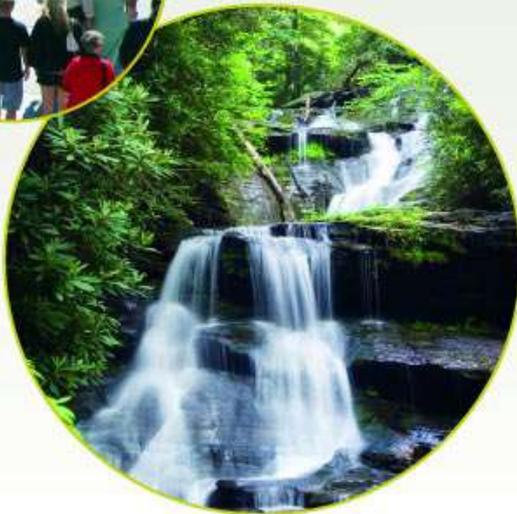
We see compatibility



PEOPLE

NATURE

WE ARE PROBLEM SOLVERS



- Community collaboration
- Project direction and management
- Scientific, technical and engineering expertise
- Sustained leadership
- Fundraising

CCI believes in crafting innovative solutions that combine long-range vision with the focused plans needed to translate ideas into reality.



GREEN SOLUTION PROJECT

GREEN SOLUTION

**Transforming our Water Runoff Problem
into a Sustainable Source of Clean Water**



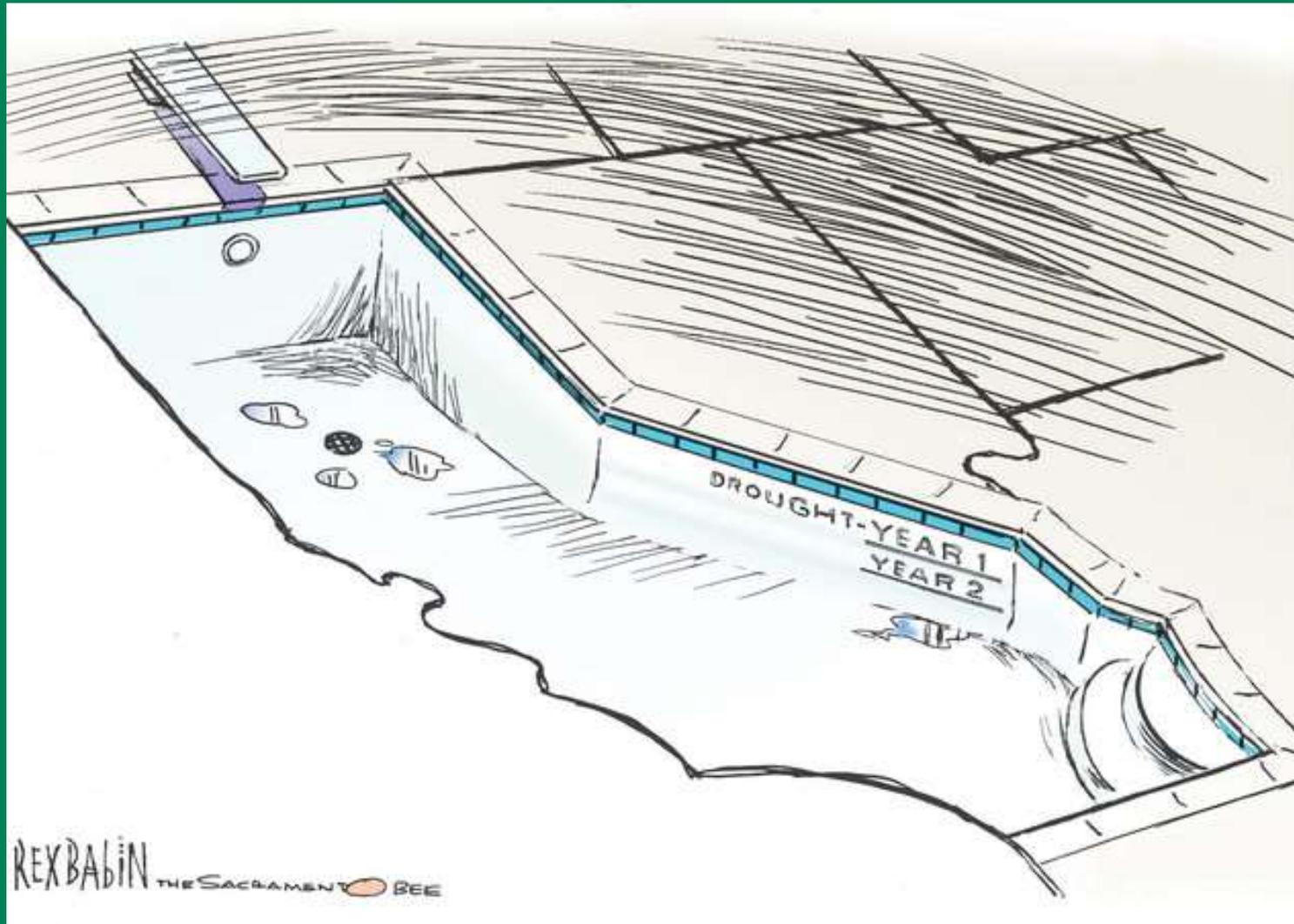


Is There a Problem?





Is There a Problem?





Is There a Problem?





THE PROBLEM

When it rains, the volume of stormwater increases exponentially





THE OPPORTUNITY

Billions of gallons of potential new water supplies





GREEN SOLUTION PROJECT

Green Solutions to Water Pollution & Water Supply

Where Does Runoff Come From?





GREEN SOLUTION PROJECT

Green Solutions to Water Pollution & Water Supply

**Is What We are
Doing Now
Working?**



Green Solutions to Water Pollution & Water Supply

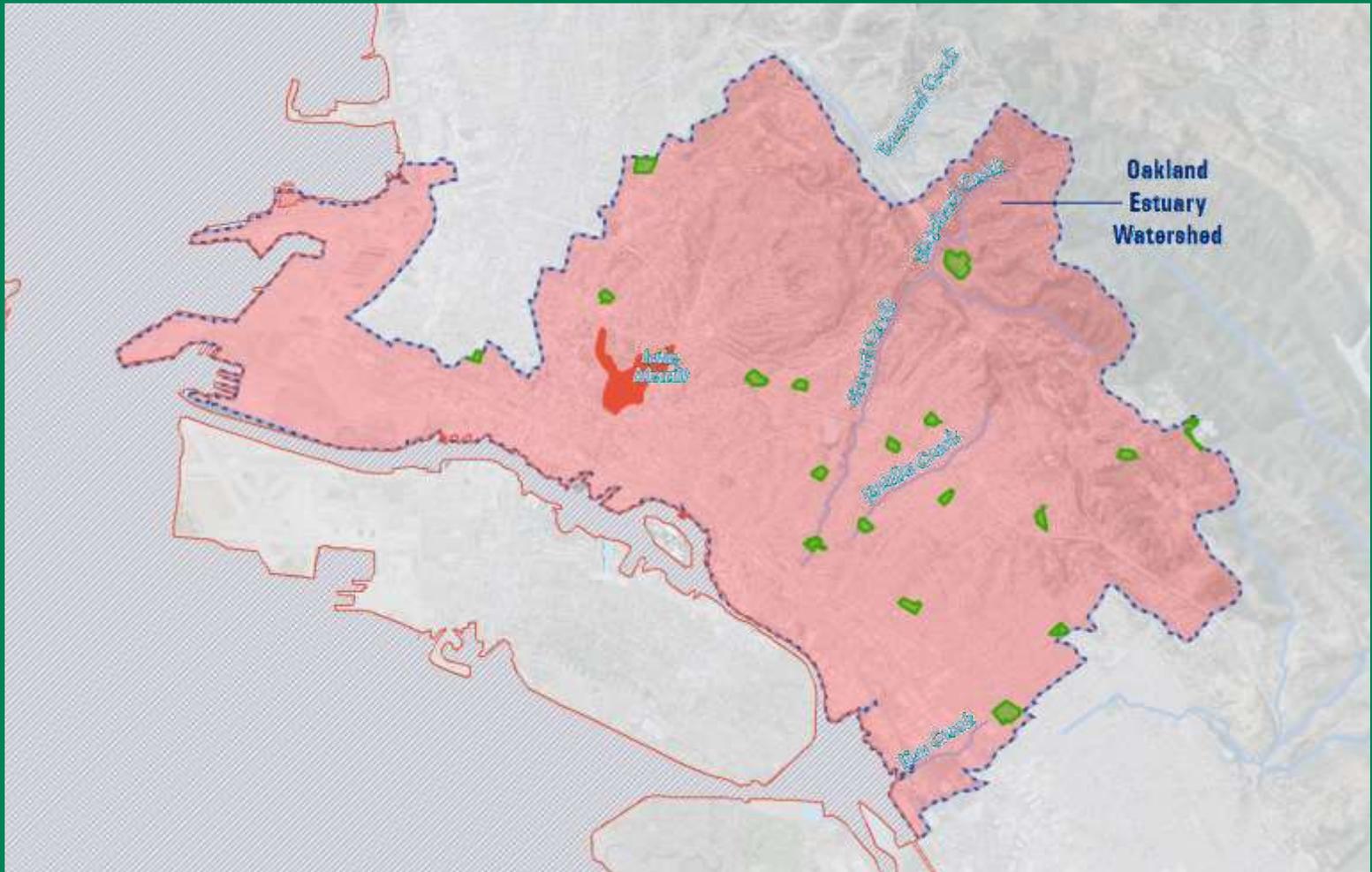
What we are doing now





Green Solutions to Water Pollution & Water Supply

LID: Why Low Impact Development is not enough





GREEN SOLUTION PROJECT

California's Outdated Water System





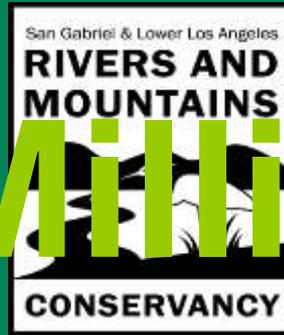
GREEN SOLUTION PROJECT

CCS' Green Solution Approach

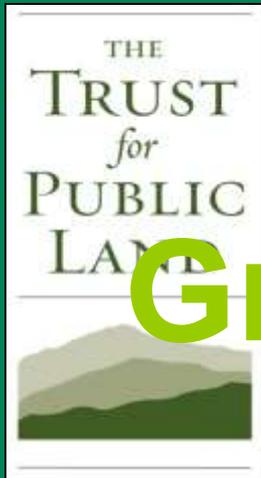


GREEN SOLUTION PROJECT

Green Solution Project Funders



\$1.5 Million



Invested in Green Solution Project





GREEN SOLUTION PROJECT

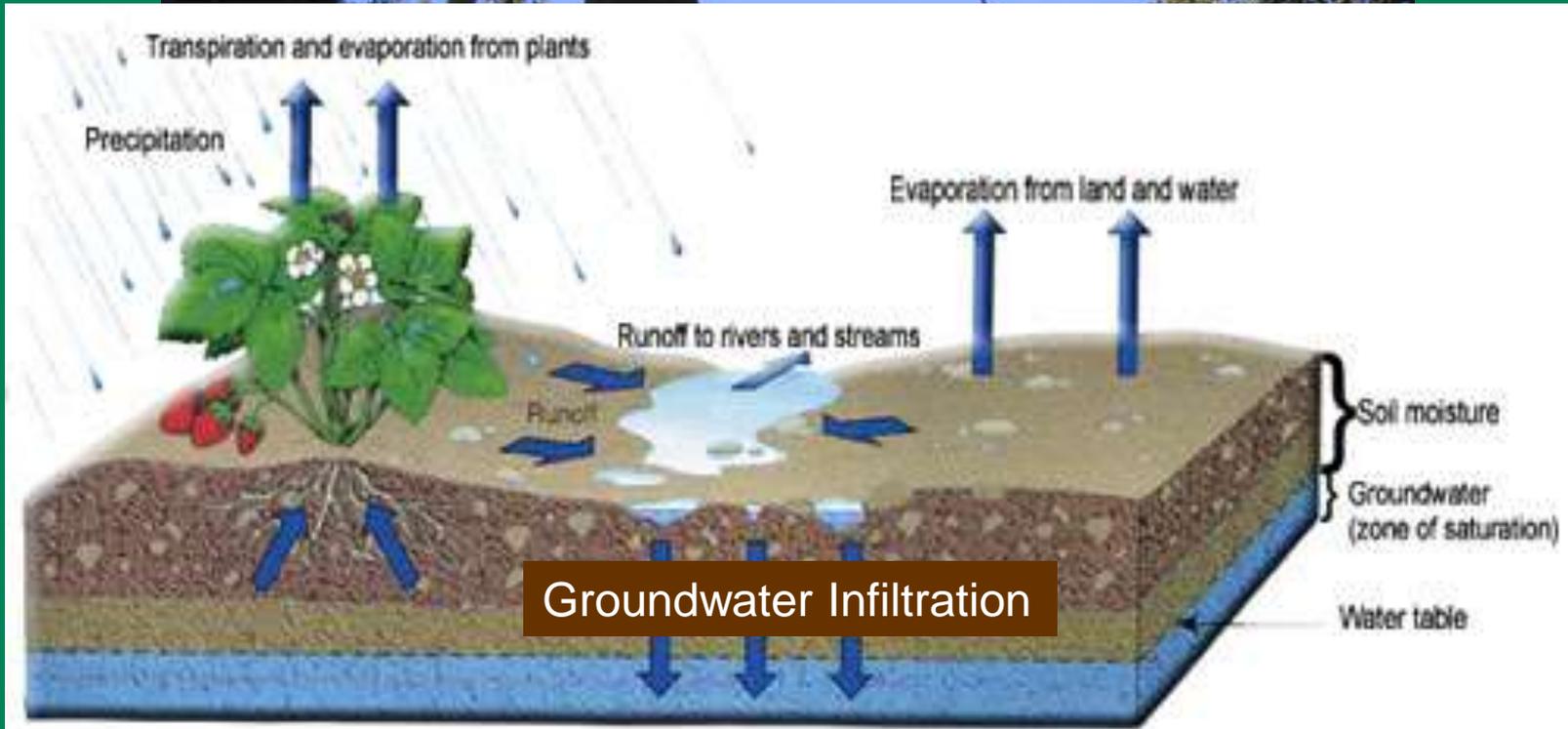
What is a Green Solution Project?

Sun Valley Watershed Project





Plants + Soil = Clean Water & Water Supplies





CCS Team Technical Analysis

Removal of Pollutants

Pollutant	Percent Removal
Total Petroleum Hydrocarbons	0%
Total Coliforms	75%
Fecal Coliforms	75%
Fecal Enterococcus	75%
Total Suspended Solids	96%
Oil & Grease	100%
Total Aluminum	40%
Total Cadmium	50%
Total Copper	50%
Total Lead	60%
Total Mercury	50%
Total Nickel	40%
Total Zinc	50%
Dissolved Copper	35%
Dissolved Lead	57%
Dissolved Zinc	51%
Nitrate as Nitrogen	41%
Total Kjeldahl Nitrogen	12%
Total Phosphorous	34%

Pollutant Load Removal Estimates

- American Society of Civil Engineers
- CalTrans Best Management Project Retrofit Pilot Program
- U.S. Environmental Protection Agency
- Center for Watershed Protection

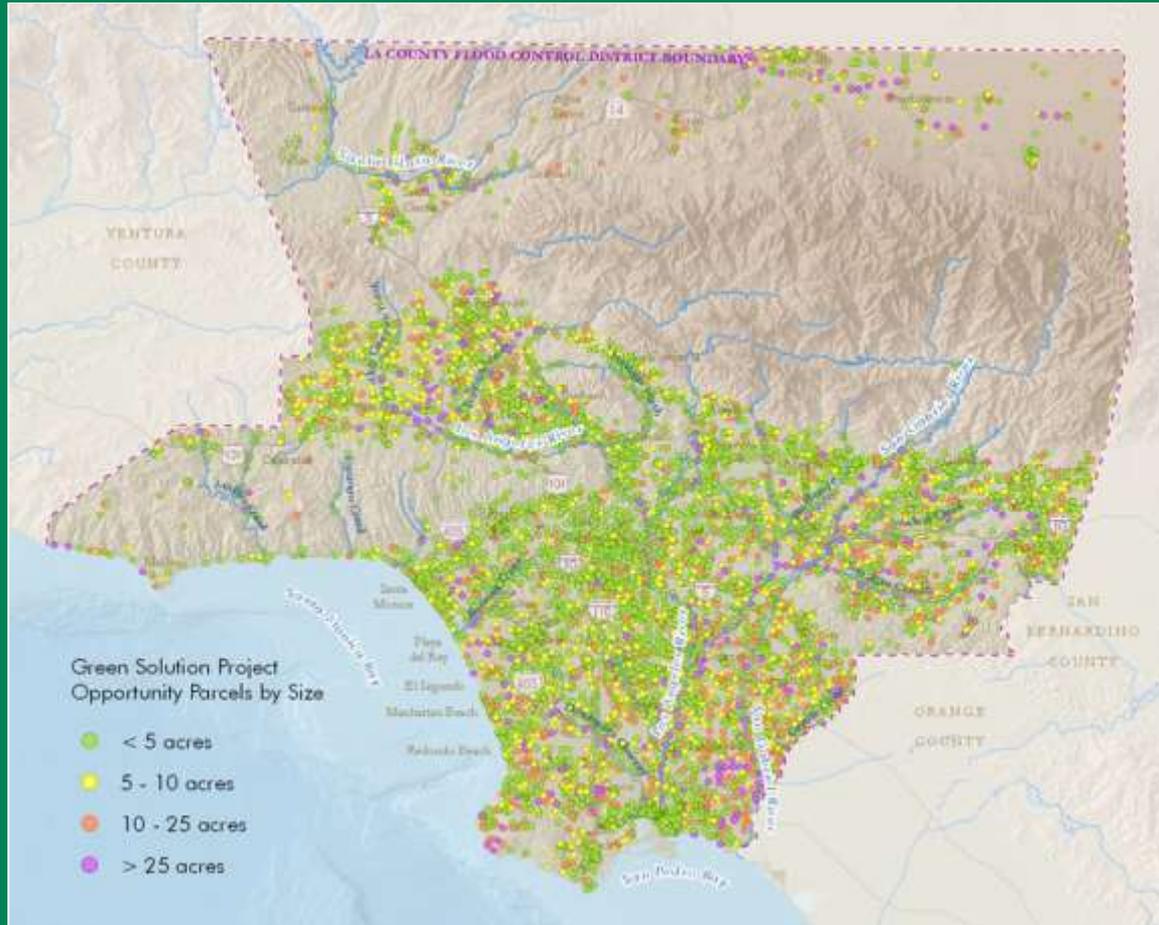
Where?

&

In What Order?



How to Use Public Lands?





CCS Team Technical Analysis

Evaluated All Public Lands in L.A. County for Green Solution Potential





Public Land Uses Suitable for Green Solution Projects

- ◆ Element
- ◆ Senior a
- ◆ College
- ◆ Develop
- ◆ Undeve
- ◆ Regiona
- ◆ Vacant
- ◆ Comme

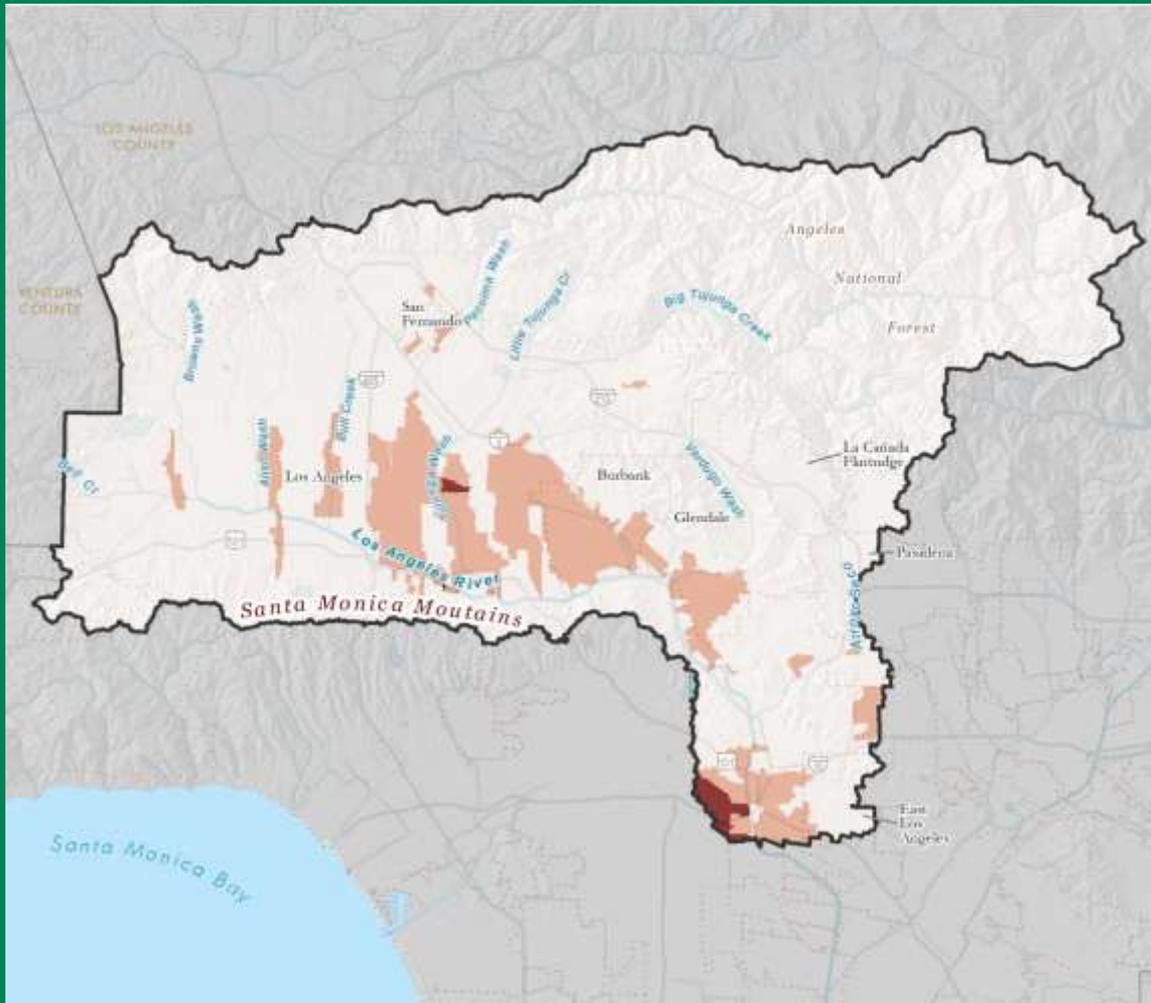
Initial Land Use List		
Abandoned Orchards and Vineyards		
Airports		
Attended Pay Public Parking Facilities		
Base (Built-up Area)		
Beach Parks		
Beaches (Vacant)		
Bus Terminals and Yards		
Cemeteries		
Chemical Processing		
Colleges and Universities		
Commercial Recreation		
Commercial Storage		
Communication Facilities		
Correctional Facilities		
Developed Local Parks and Recreation		
Developed Regional Parks and Recreation		
Duplexes, Triplexes and 2- or 3-Unit Condominiums and Townhouses		
Electrical Power Facilities		
Elementary Schools		
Fire Stations		
Freeways and Major Roads		
Golf Courses		
Government Offices		
Harbor Facilities		
Harbor Water Facilities		
High-Density Single Family Residential		
High-Rise Apartments and Condominiums		
High-Rise Major Office Use		
Horse Ranches		
Hotels and Motels		
Improved Flood Waterways and Structures		
Irrigated Cropland and Improved Pasture Land		
Junior or Intermediate High Schools		
Liquid Waste Disposal Facilities		
Low- and Medium-Rise Major Office Use		
Low-Density Single Family Residential		
Low-Rise Apartments, Condominiums, and Townhouses		

Buildings
Industrial



CCS Team Technical Analysis

Pollutant Loading



Low to Moderate

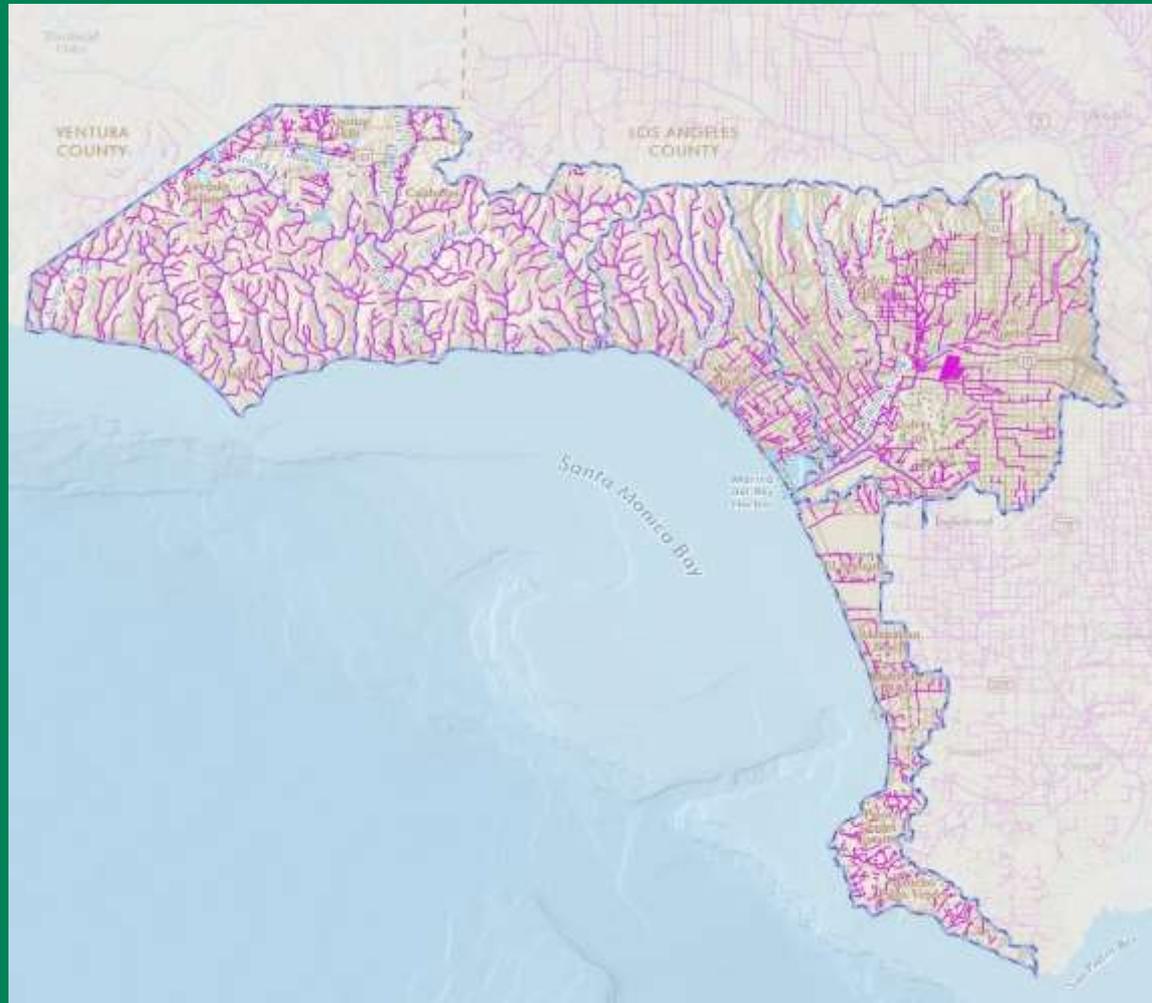
High

Very High



CCS Team Technical Analysis

Storm Drains: Carrying Runoff to Ocean





Green Solution

Quantify Multiple Benefit Factors

WATER

Hydrology

Hydraulics

Pollutant
Loading

PEOPLE

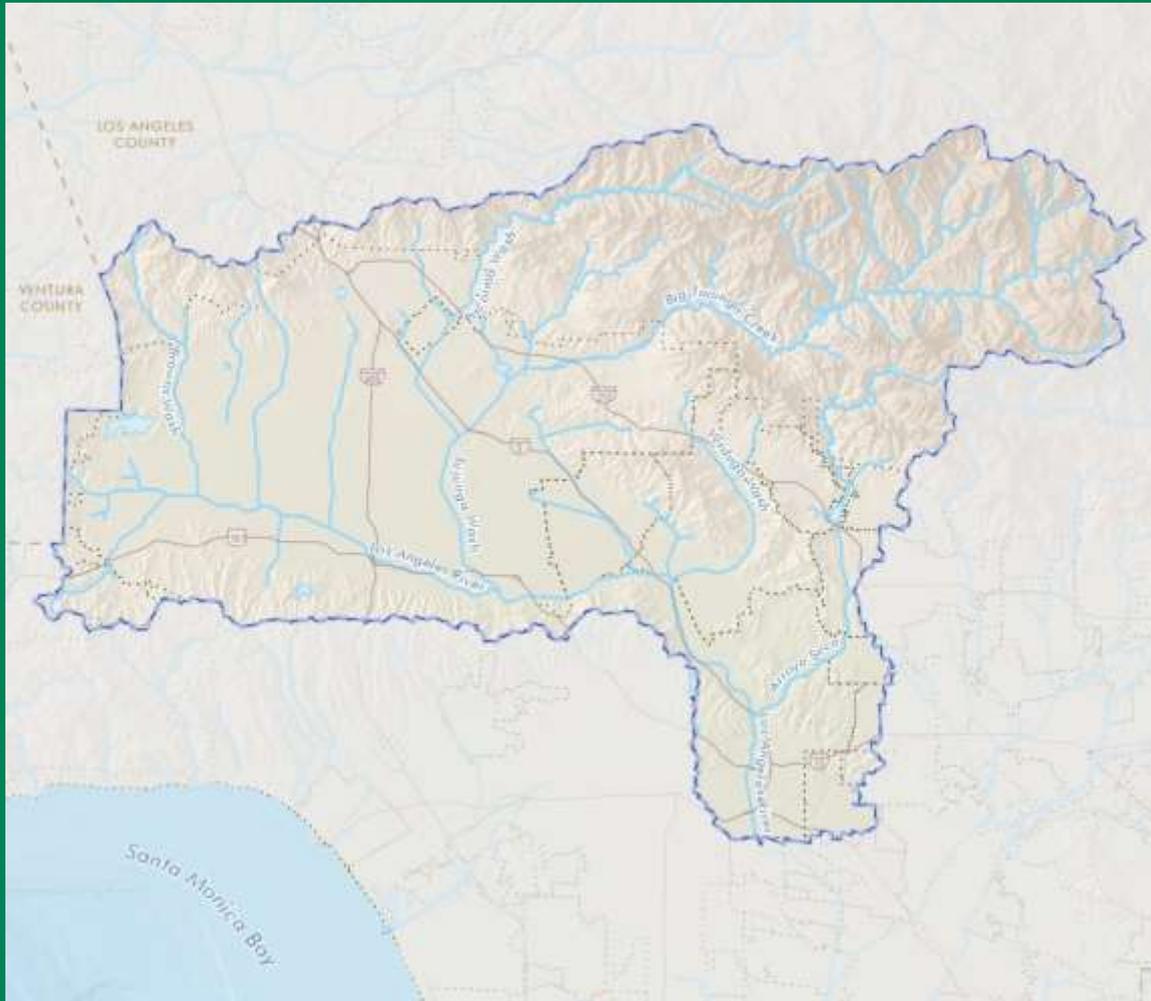
Community
Needs

Conservation
Priorities

HABITAT & TRAILS



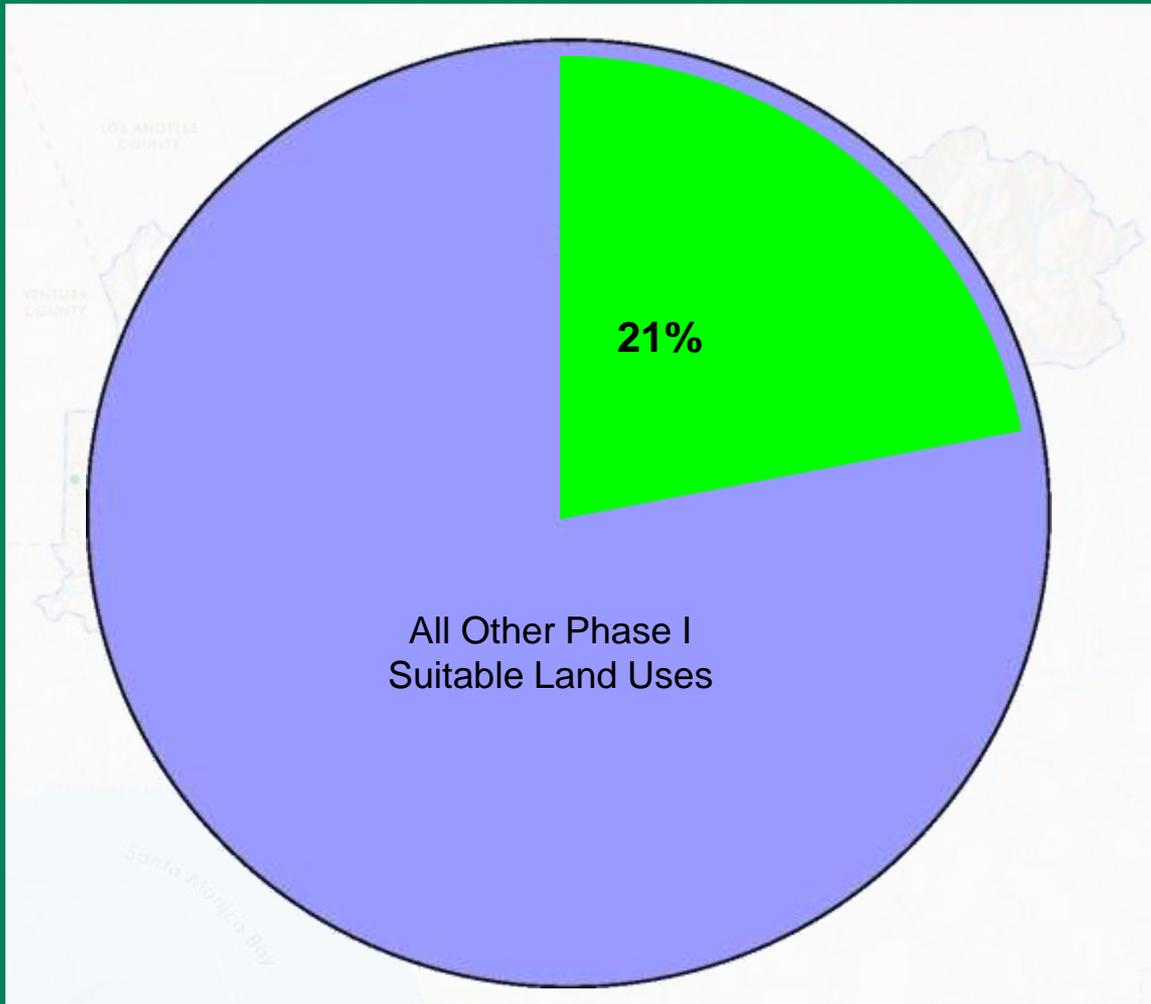
Green Solution Project Analysis Opportunity River Watershed, Phase I





CCS Team Technical Analysis

Opportunity Public Parcels



Phase II
Four target land uses

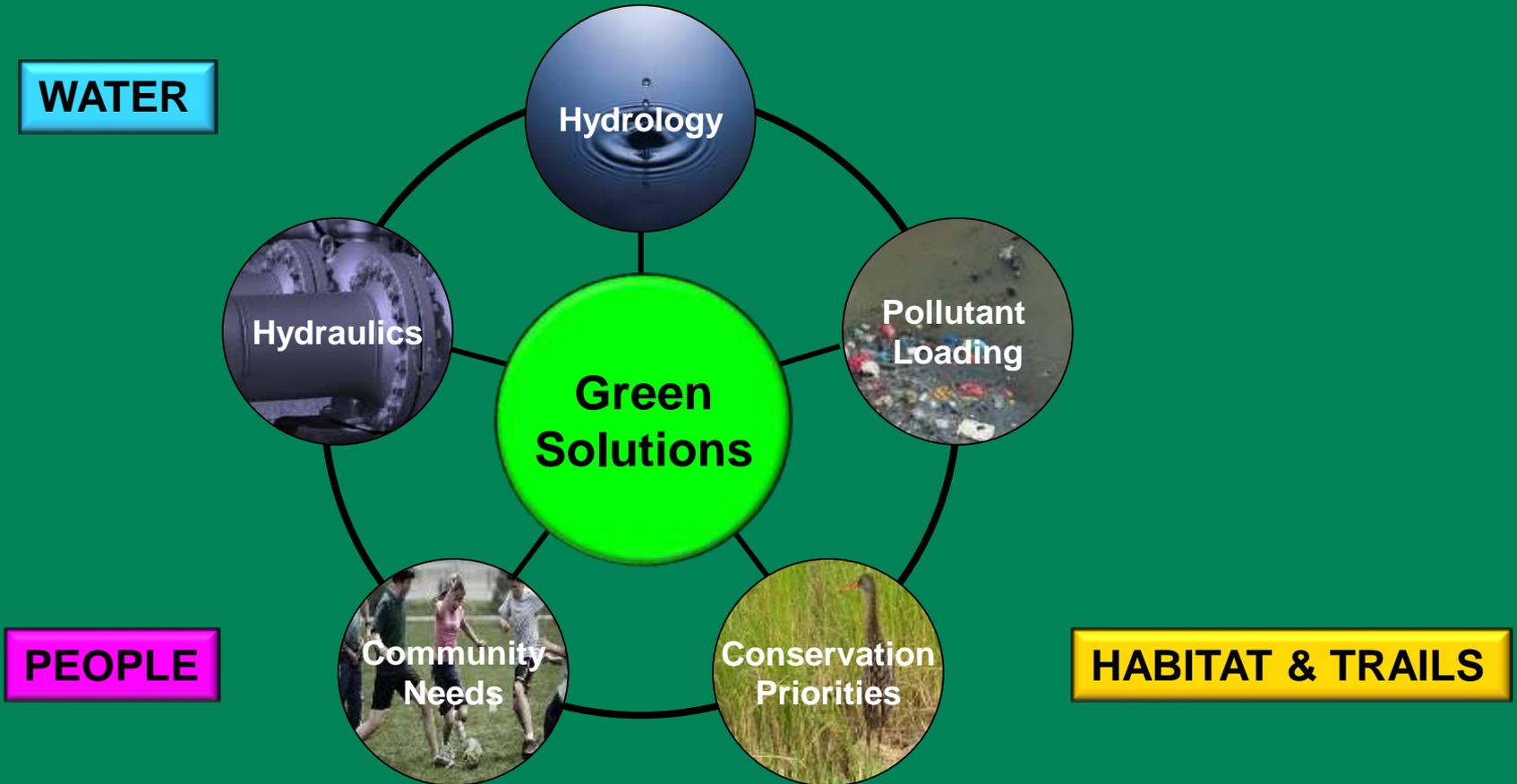
- Elementary Schools
- Middle & High Schools
- Vacant
- Colleges





Green Solution

Integrate **Multiple Benefit Factors**



Decision-Making Tool:

Project

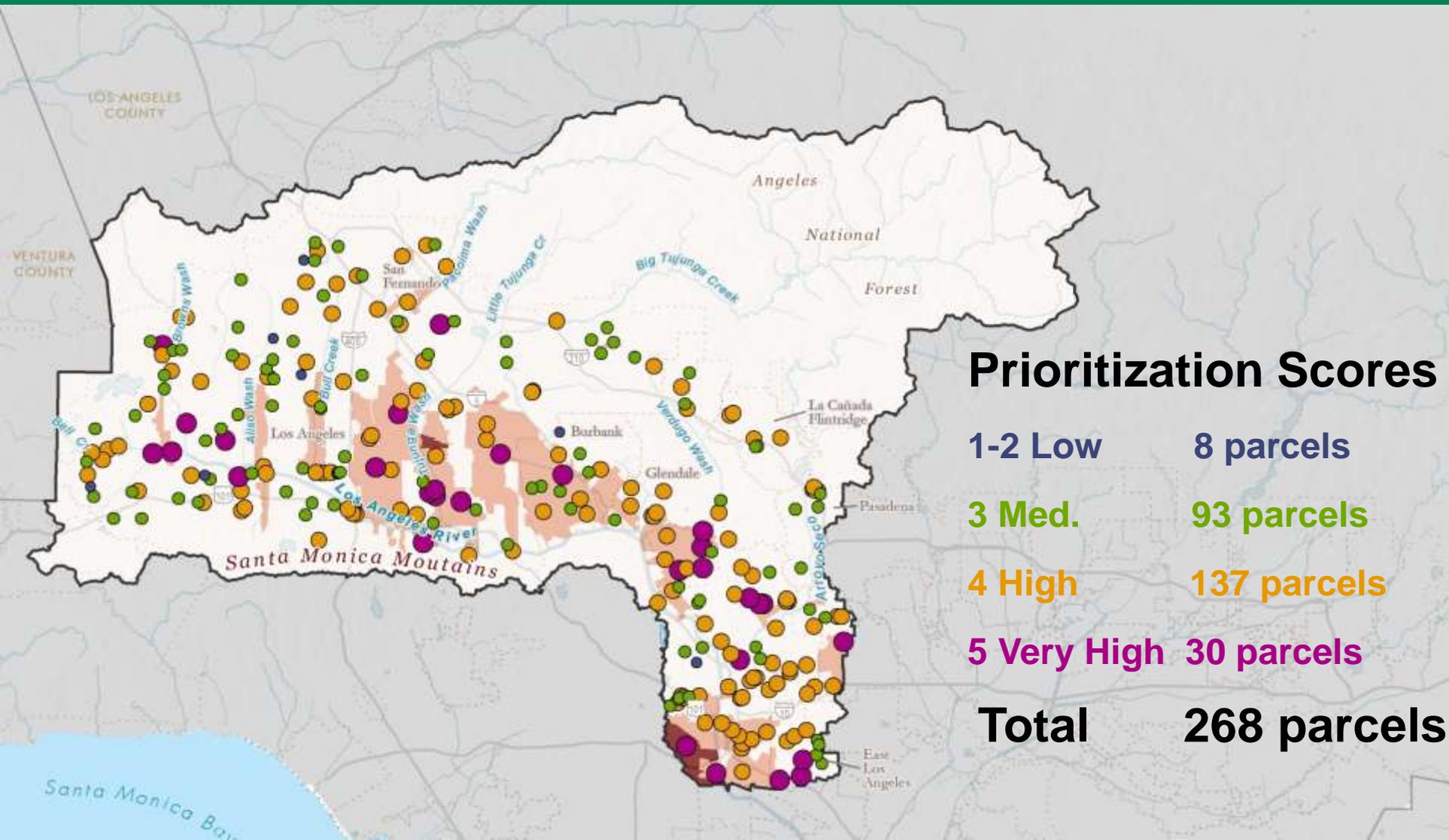
Implementation

“ROAD MAP”



CCS Team Technical Analysis

Opportunity Public Parcels





Green Solution Findings

Upper L.A. River Watershed

SUMMARY of PRIORITIZED PARCELS

268 Potential Projects on Public Lands

Create 1,000 acres of New “Smart” Green Space

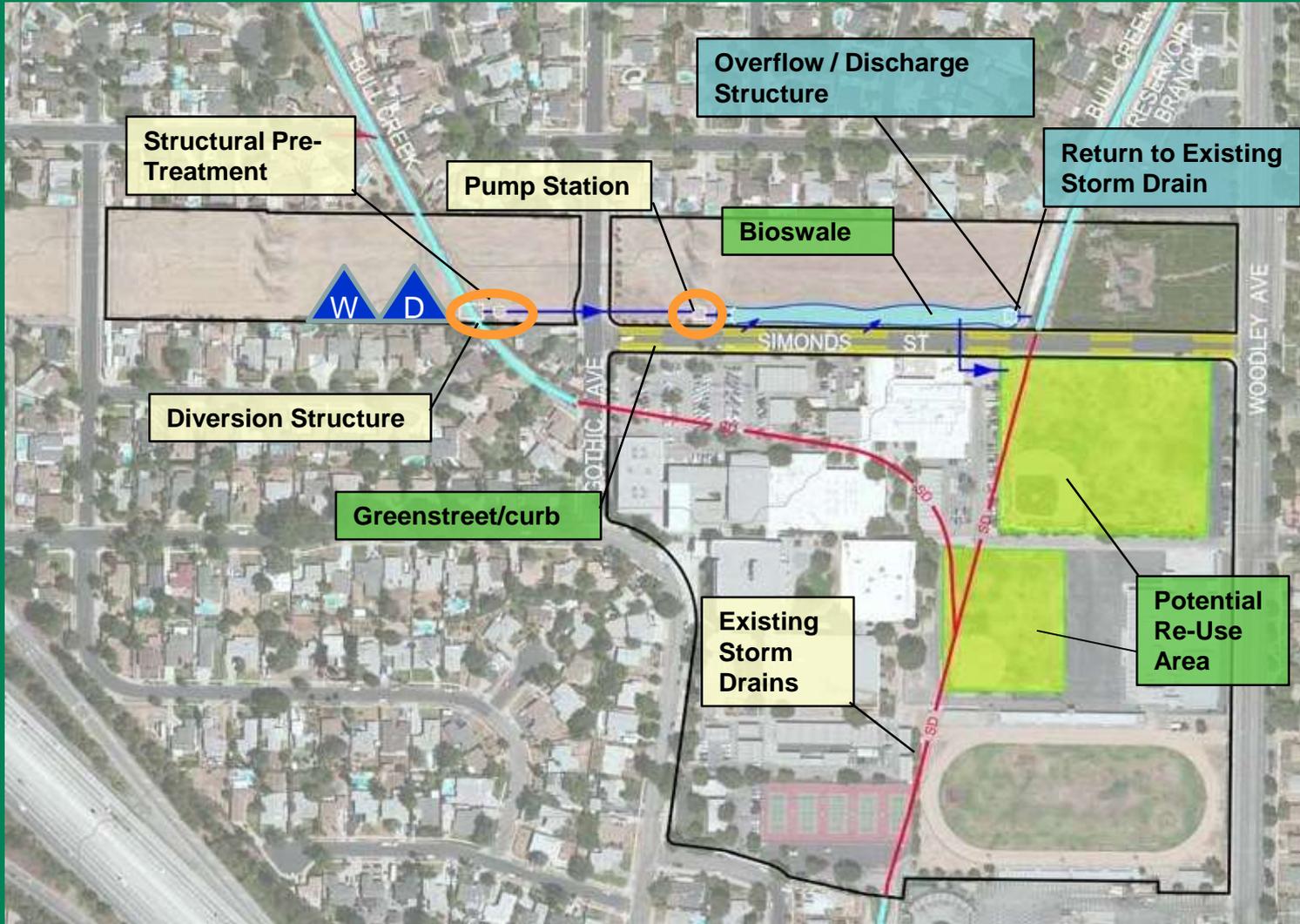
Runoff Treated from 20 square miles

Estimated 4,000 Acre-feet of New Water Supplies



Concept Site Plan

John F. Kennedy High School and L.A. Department of Water & Power Right-of-Way





Concept Site Plan

John F. Kennedy High School and L.A. Department of Water & Power Right-of-Way

Project Site Area	38.8 acres
Contributing Drainage Area	1,465 acres
Open space created	9.5 acres
Dry Weather Flow Treatment	14,650 gallons/day
Wet Weather Flow Treatment	418 million gallons/year
New Water Supplies (est.)	12 acre-feet/year



Green Solution Studies

CCS Green Solution Analyses:

- Los Angeles County
- Upper L.A. River Watershed
- Santa Monica Bay Watershed
- Monterey County
- Alameda County
- Santa Clara County
- Sonoma County

**In Nature,
everything is
partnered with
everything else.**



GREEN SOLUTION PROJECT

Joint Venture:

Soil • Water • Plants • Engineering







*Solving Problems where
People and Nature Intersect*

For More Information:

www.conservationsolutions.org/greensolution.html

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