



Sustainable & Resilient Communities / Natural & Farm Lands Conservation Joint Working Group Meeting

May 7, 2024
10:00am – 12:00pm

WWW.SCAG.CA.GOV

Land Acknowledgment

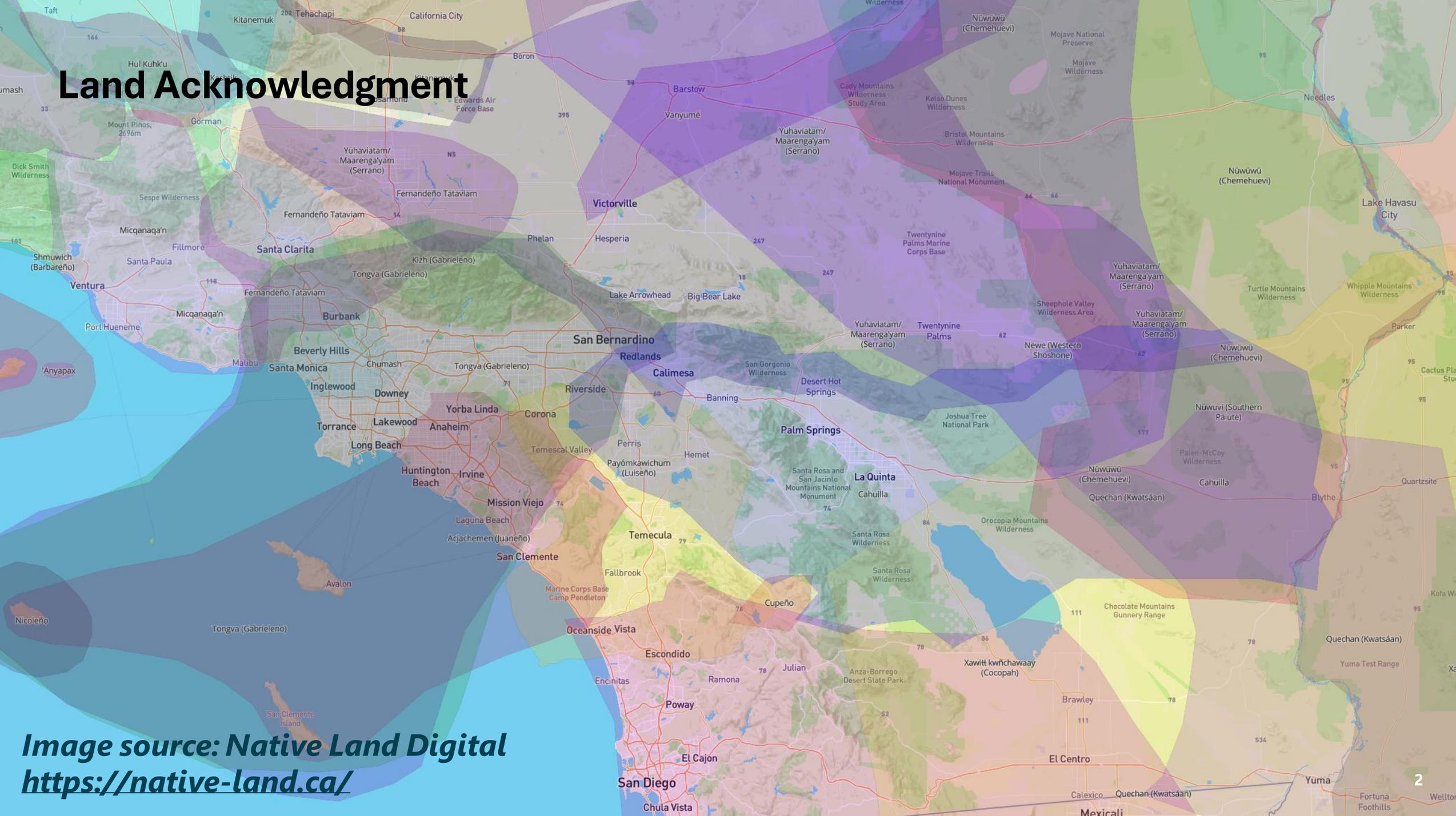


Image source: Native Land Digital
<https://native-land.ca/>

Housekeeping

- Meeting length: 2 hours
- This meeting is being recorded
- All participant lines will be muted
- Closed captions are available
- There will be a Q&A session at the end of each presentation.
- Please use the "raise hand" function or type your question(s) into the chat to be answered during each Q&A segment.
- Materials will be posted to SCAG's Regional Planning Working Group webpage: <https://scag.ca.gov/regional-planning-working-groups>

Agenda

1. Welcome & Introductions

Kim Clark, SCAG

2. Connect SoCal 2024 Update

Leslie Cayton, SCAG

3. Connect SoCal 2024 PEIR Update

Ryan Bañuelos, SCAG

4. SoCal Greenprint Update

Kim Clark, SCAG

5. Sustainable Agricultural Lands Conservation (SALC) Grant Update

India Brookover, SCAG

6. Water Resilience Case Studies & Data Research

Maya Luong & Adrian Ponce, SCAG

7. Water Action Resolution & White Paper

Kim Clark, SCAG

8. Regional Announcements & Adjourn

Kim Clark, SCAG



CONNECT SOCIAL 2024 UPDATE

Leslie Cayton (she/they/siya), Associate Regional Planner, SCAG

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Connect SoCal 2024 Update

May 7, 2024

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Presentation Agenda

- 1 **Connect SoCal 2024 Overview**
- 2 **Regional Planning Policies**
- 3 **Implementation Strategies**

Connect SoCal 2024

Proposed Final



The Southern California Association
of Governments' 2024–2050
Regional Transportation Plan/
Sustainable Communities Strategy

A Compass for the Region



Connect SoCal



- ✓ Meets federal and state requirements
- ✓ Ensures the region receives critical transportation funding and approvals
- ✓ Creates the foundation and framework for collaboration

Continued collaboration can close the gap between local actions and achievement of our regional goals

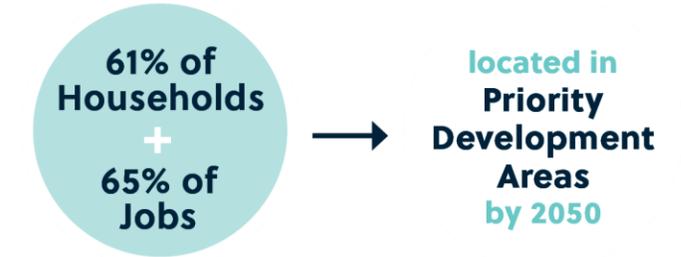
The Region in 2050



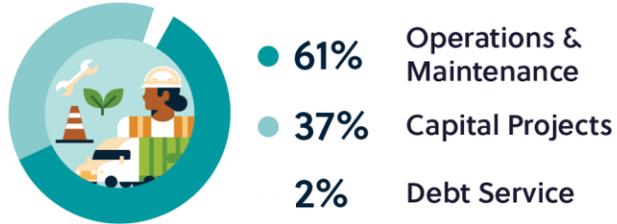
Demographic Forecast



More Efficient Development Pattern



\$751.7 Billion in Investments through 2050



Less Congestion



Reduced GHG Emissions from Passenger Vehicles



More Travel Options



Direct Economic Impacts

\$2.00 in benefits for each \$1.00 invested and 480,100 annual new jobs from transportation investments and increased competitiveness.



Vision and Goals



“A Healthy, Prosperous, Accessible and Connected Region for a More Resilient and Equitable Future”



MOBILITY

Build and maintain an integrated multimodal transportation network



ENVIRONMENT

Create a **healthy** region for the people of today and tomorrow



COMMUNITIES

Develop, connect and sustain **livable and thriving** communities



ECONOMY

Support a sustainable, efficient and productive regional environment that provides **opportunities for all** people in the region

Connect SoCal is a Vision for the Future

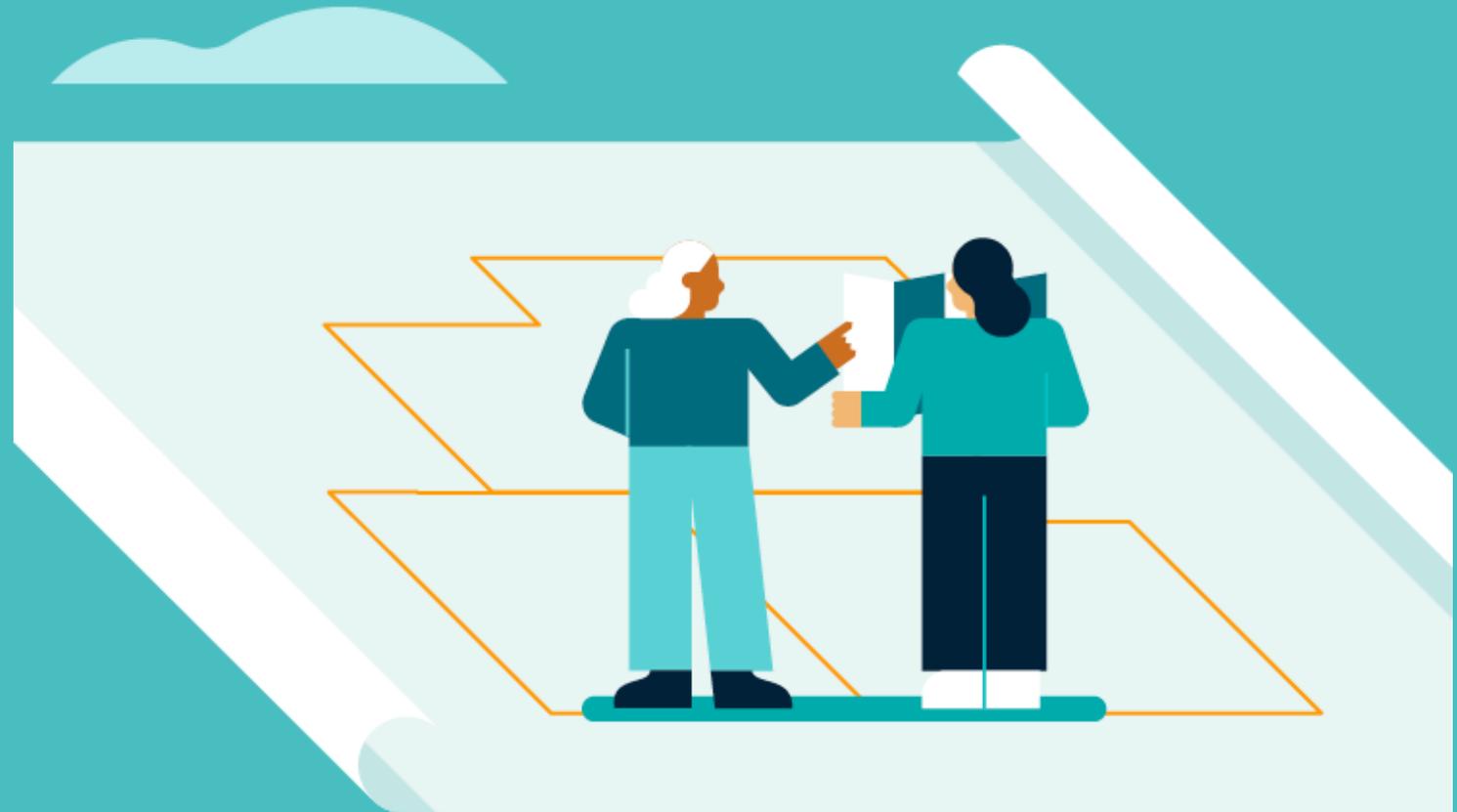


Mobility

Communities

Environment

Economy



Regional Planning Policies



Mobility

Communities

Environment

Economy

Sustainable Development

- Promote sustainable development and best practices that enhance resource conservation, reduce resource consumption and promote resilience

Air Quality

- Support investments that reduce hazardous air pollutants and greenhouse gas emissions

Natural and Agricultural Lands Preservation

- Prioritize the climate mitigation, adaptation, resilience and economic benefits of natural and agricultural lands in the region

Climate Resilience

- Support nature-based solutions to increase regional resilience of the natural and built environment

Implementation Strategies



Mobility

Communities

Environment

Economy

Sustainable Development

- Research the availability of resources that can support the development of water and energy-efficient building practices, including green infrastructure

Air Quality

- Coordinate with local, regional, state and federal partners to meet federal and state ambient air-quality standards and improve public health

Clean Transportation

- Maintain a robust Clean Technology Program that focuses on planning, research, evaluation, stakeholder support and advocacy

Climate Resilience

- Develop partnerships and programs to support local and regional climate adaptation



**HOW DO WE WORK
TOGETHER TO MAKE
THE PLAN A REALITY?**



Plan Impact: Implementation



**Regional
Leadership**

**Collaboration and Policy
Leadership**

**Federal Funding
Administration**

**Data Collection, Analysis
and Research**

**Local Technical Assistance
Resources**

THANK YOU!

For more information, please visit:

www.scag.ca.gov



The Southern California Association
of Governments' 2024–2050
Regional Transportation Plan/
Sustainable Communities Strategy



CONNECT SOCIAL 2024 PEIR UPDATE

Ryan Bañuelos (he/him), Associate Regional Planner, SCAG

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SOCAL GREENPRINT UPDATE

Kim Clark, Program Manager, Resource Conservation & Resilient Communities, SCAG

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SoCal Greenprint Update

SCAG Regional Planning Working Groups

May 7, 2024

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What is the SoCal Greenprint?

- A tool of publicly available data to help cities, counties, and transportation agencies make land use and transportation decisions, and conserve natural and farm lands
- A tool to support regional advance mitigation planning (RAMP) efforts



What is RAMP?

Regional Advance Mitigation Planning (**RAMP**) is a **process** for expediting project delivery by **planning for required mitigation to reduce environmental impacts earlier in the planning process and at a wider scale.**

- **Allows state and federal agencies to consider** the environmental impacts and mitigation needs of multiple planned infrastructure and development projects in the early stages.
- **Allows local project leads to identify and satisfy** those mitigation requirements early in the project planning and environmental review process.
- **Helps avoid costs and delays** associated with environmental mitigations **and more effectively avoid environmental harm.**

Regional Council Adopted Greenprint Data Standards:

**Data
Policies &
User
Guidelines**

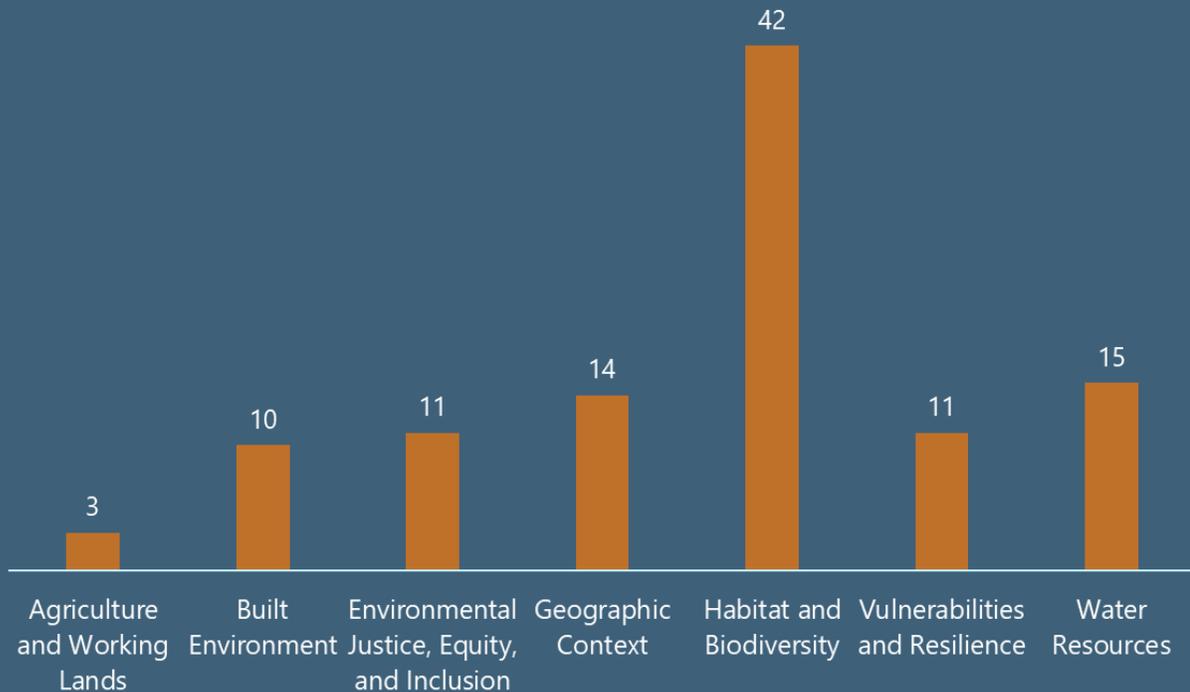
**SoCal
Greenprint
Tool's Data
Governance
Standards**

**Data
Selection
Criteria**

**Process to
Resolve Potential
Divergent
Perspectives on
SoCal Greenprint
Tool Data**

**Data
Parameters**

Regional Council and Energy & Environment Committee Reviewed Data Layers



Data Layers by Thematic Area

The screenshot shows the interface for the 'CA Important Farmland: Most Recent' map service. It includes a map preview, a 'Map Service' section with a 'View Map' button, and a 'Details' section with metadata. The 'Details' section lists the dataset as 'California Important Farmland: Most Recent', updated on June 7, 2016, with 172,439 records. It also notes that the data is public and available under a custom license.

CA Important Farmland: Most Recent

California Important Farmland: Most Recent

Authorized

Private Member
California Department of Conservation

Map Service

View Map Download More

Summary

The Farmland Mapping and Monitoring Program (FMMP) provides data to decision makers for use in planning for the present and future use of California's agricultural land resources. The data is a current inventory of agricultural resources. This data is for general planning purposes and has a minimum mapping unit of ten acres.

This dataset may be a mix of two years and is updated as the data is released for each county. For example, one county may have data from 2014 while a neighboring county may have had a more recent release of 2016 data. For specific years, please check the service that specifies the year, i.e. California Important Farmland: 2016.

Established in 1982, Government Code Section 65570 mandates FMMP to biennially report on the conversion of farmland and grazing land, and to provide maps and data to local government and the public.

The Farmland Mapping and Monitoring Program (FMMP) provides data to decision makers for use in planning for the present and future use of California's agricultural land resources. The data is a current inventory of agricultural resources. This data is for general planning purposes and has a minimum mapping unit of ten acres.

Details

Dataset
Feature Layer

June 7, 2016
Info Updated

Biannually
Data Updated: September 28, 2023

June 7, 2016 at 12:00 AM
Published Date

Records: 172,439
[View data table](#)

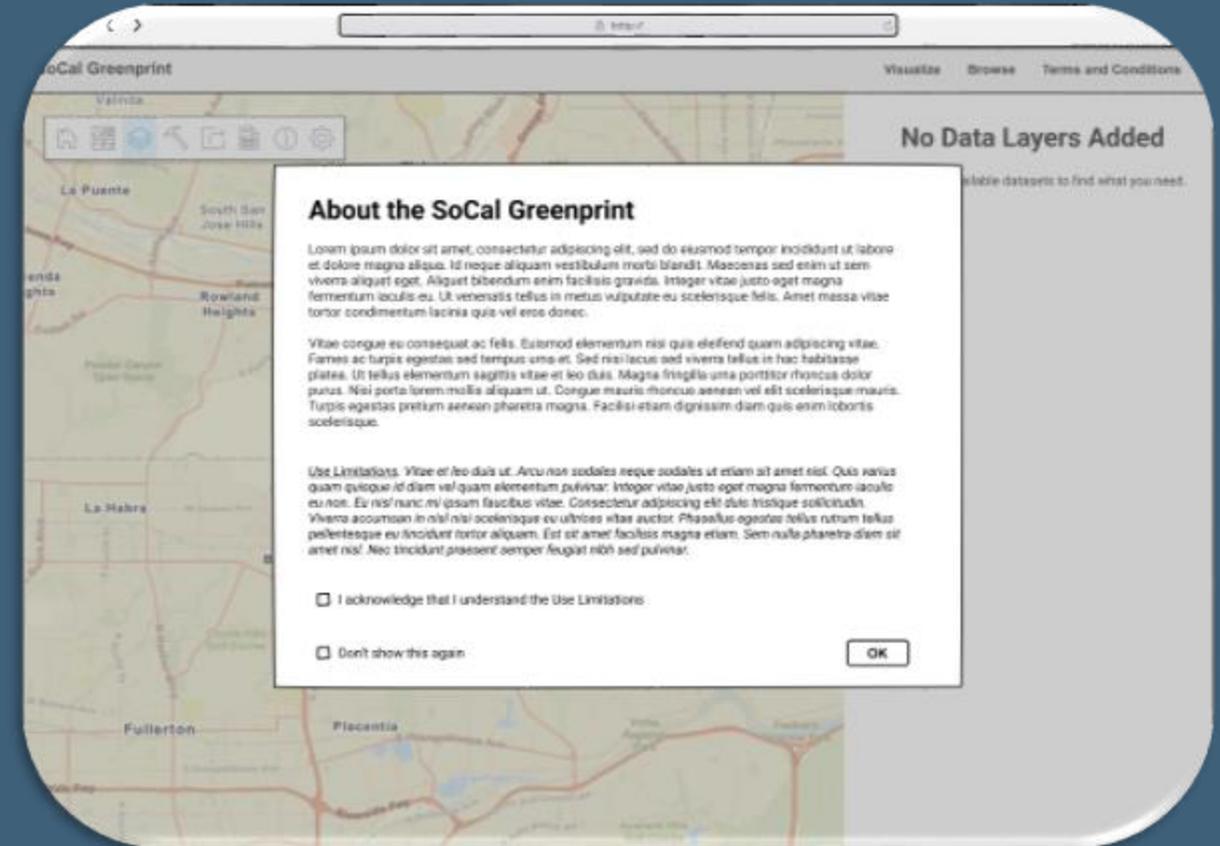
Public
Anyone can see this content

Custom License
[View license details](#)

Relevant Area

Greenprint Tool Functionality

- **Glossary and methods section** that will provide full transparency to users on data elements featured
- **Metadata** will be consistent with the Geospatial Metadata Standards and Guidelines established by the Federal Geographic Data Committee (FGDC).



Timeline for Tool Development

We are here

Feedback
Opportunity





THANK YOU

scag.ca.gov/greenprint

For questions, please contact:
scaggreenregion@scag.ca.gov



SUSTAINABLE AGRICULTURAL LANDS CONSERVATION (SALC) GRANT UPDATE

India Brookover (she/her), Senior Regional Planner, SCAG

brookover@scag.ca.gov



Study: Economic and Fiscal Benefits of Natural and Farm Lands

Sustainable Agricultural Lands Conservation Planning Grant

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What is the Sustainable Agricultural Lands Conservation (SALC) Program?

- Funded by the Strategic Growth Council (SGC) through California's Greenhouse Gas Reduction Fund (GGRF) and administered by the Department of Conservation
- Supports agricultural land conservation, economic growth, and sustainable development by providing grants for planning, acquisition, or organizational capacity
- Component of SGC's Affordable Housing & Sustainable Communities Program (AHSC)

Study Overview

- Planning grant to study the economic, and resilience benefits of key environmental services provided by natural and agricultural lands in the SCAG region
- Intended to inform regional and local planning efforts to preserve and enhance natural and agricultural lands and secure needed funding
- Study timeline: Spring 2024 – Spring 2027
- Total funding is \$500,000
- Included in 2024 Connect SoCal

Key Deliverables

- Baseline analysis of natural and farm lands and development trends
- Carbon Sequestration and GHG reduction analysis
- Co-benefits analysis
- Public health impacts assessment and farmworker housing analysis
- White paper and Toolkit containing model policies, case studies, funding opportunities/resources, etc.

Stakeholder Engagement

- **Target stakeholders:** Cities, Counties, Tribes, Farmers, Ranchers, Farmworkers, Community-Based Organizations, Environmental Groups, Researchers, and Conservation Districts
- **Early 2025:** Listening Sessions
- **Spring 2025 – Spring 2027:** Quarterly Stakeholder Advisory Group
- **Summer 2027:** Webinars and One-on-One trainings

Next Steps

- RFP release in Late Summer/Early Fall
- Estimated kick-off in Winter 2024



THANK YOU!

Questions/comments?

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WATER RESILIENCE CASE STUDIES & DATA RESEARCH

Maya Luong (she/her) & Adrian Ponce (he/him), CivicSpark Climate Fellows, SCAG



Photo By CA Dept. of Water Resources

CIVICSPARK FELLOW PROJECT UPDATE

Presented by: Maya Luong & Adrian Ponce



INTRODUCTIONS

Who We Are and Our Goals for Serving with SCAG

Implementing SCAG'S Climate and Water Action Resolutions

As Fellows for SCAG, our current scope of work is to help implement SCAG's Climate and Water Action Resolutions.

1) Phase 1: Water Action Best Practices Guide

- Develop a data library of water-relevant resources, and the Local, State, and Federal actors that participate in Southern California's water direction.
- Case studies of farming practices for drought resilience that farming communities impacted by drought have benefited from.

2) Phase 2: Climate Action Best Practices Guide

- Develop a data library of Climate Change pollution actions for implementation.
- Engage with Community-Based Organizations to solicit feedback and guidance on exploratory scenario analysis.

Current State of California Water

- **Groundwater is a key reserve for agriculture during drought.** However, recent trends of over-pumping and saltwater intrusion brought on from coastal flooding has threatened water wells and groundwater aquifers.¹
- **California on average, cycles between wet periods and drought,** with California becoming increasingly dry since 1895.²
- **The state currently has an issue regarding its aging water dams,** that are at risk of failure from earthquakes and flooding, as they were designed during a time in which an increasing climate did not pose a risk to infrastructure.³
- **In drier seasons, we rely on other sources of water.** This varies from groundwater reservoirs and melted snowpack runoff, but Climate Change is changing the amount of rain and snow we get.⁴

Our Current Projects:

1. **Collected both GIS feature layers and shapefiles** to begin mapping the water-relevant resources that fall within the SCAG region.
2. **Analyzed various policy literature** on recommendations for addressing California's current water conditions and implementation challenges.
3. **Recorded and developed a database** of the various water actors who participate and monitor California's Water direction.
4. **Documented farming practices** that are most beneficial for conserving water within regions of Southern California impacted by drought.

Our Data Sources: State

During the collection of our data sources, we utilized a variety of sources from reputable state agencies, news articles, webinars, literature and publications from policy think tanks that have an obligation in the comprehensive examination and monitoring of water policy, direction and literature.



Our Data Sources: Federal

During the collection of our data sources from state agencies and entities, we also utilized sources from federal agencies that also have an obligation or interest in monitoring and coordinating water policy through the Clean Water Act.



Project 1: Southern California Water Source GIS Library



1) Collected various shapefiles and feature layers of water-relevant natural assets within the SCAG region.

2) Collected data ranged from:

- Rivers
- Streams
- Aquifers
- Basins
- Lakes
- Watersheds
- Purveyors
- Facilities

3) All collected data has been recorded and the data is separated by county to later create StoryMaps.

Project 2: Policy Literature Review



1) Researched various literature on water policy solutions and recommendations that the SCAG region would benefit from implementing.

2) In our findings, we found case studies that produced positive results for addressing common issues prevalent in California's overall water crisis.

3) The data and materials collected is planned to be incorporated into a best practices guide when enough data has been evaluated to produce several policy recommendations for all regions under SCAG.

Project 3: Southern California Water Actors Data Collection



- 1) Collected data on the local, state, and federal actors that play a role in California's water direction.
- 2) In the collection process, we documented the sources of management policies.
- 3) All collected data has been recorded with data archived by county directly under SCAG's region.
- 4) Hyperlinks to the webpages of the water actors have also been recorded to be a direct source for accessing relevant data.

Project 4: Farming Practices Case Studies



1) Researched various literature and webinars on farming practices to identify practices that produced positive results on water savings for farmers in drought-affected areas.

2) In our findings, we noticed that the discussion surrounding healthier soils play a large role in water availability for farmers.

3) Upon enough data collection, the next step is to transfer data to a detailed report on better practices for communities that rely on agriculture.

Key Legislations for Planning Framework

- 2014 Sustainable Groundwater Management Act (SGMA): Created a statewide framework which requires local agencies to form groundwater sustainability agencies (GSAs) and groundwater sustainability plans (GSPs) to be adopted for all high/medium priority groundwater basins.⁵
 - Reach sustainability goals by 2040.
- 2017 Senate Bill 252 (Dodd): increase transparency in critically over-drafted basins and share info with GSAs and the public about applications for new wells.⁶
- 2023 Senate Bill 122 (Committee on Budget and Fiscal Review): defined aquifers as "natural infrastructure," which allows putting water back into our aquifers to be considered a public benefit, this now opens new opportunities for public funding.⁷ ([See more here](#))

Key Challenges: Groundwater & Infrastructure



- Groundwater Overdraft:
 - Groundwater resources provides ~40% of water supply in the state on average, with up to 60% during the drier years.⁸
- Around ~380 water systems are currently out of compliance:
 - Within the SCAG Region, 144 systems have been reported as failing or at-risk, 54 of those reported as failing.⁹
- Most of California's water dams and reservoirs were made 50 years ago and the infrastructure impacts from climate-related disasters weren't a risk-factor in the past.¹⁰
- A lot of water coming down at once, creates a vulnerability for flooding, yet groundwater recharge capacities can be better managed to prevent flooding.¹¹

Key Challenges: Pollution



- Pollution in Water Sources:
 - Nitrate and non-nitrate contamination.¹²
 - Major source of contamination in Central Valley: use of fertilizers.¹³
- Water Well Contaminants
 - Microorganisms including bacteria, viruses, and parasites within water run-off from rainfall and snow-melt that is not properly treated.¹⁴
 - Fluoride present in many groundwater aquifers leads towards private water wells having excess amounts that can cause skeletal fluorosis.¹⁵



Key Challenges: Planning



- There is widespread agreement across stakeholders in land-use and water management but are lacking funds for these alignments.¹⁶
- SGMA only protects around 40% of California's water wells.¹⁷
 - 60% of wells for agriculture in California's regulated basins are not protected under current groundwater plans.
 - Most GSA plans lack representation from disadvantaged communities, environmental interests, and tribes.
 - Vulnerable groundwater users were rarely considered when establishing sustainable management criteria.
 - Most groundwater plans don't adequately address climate change.
 - See more challenges in implementation of SGMA. ([See more here](#))

What are Climate Change impact on Water Sources?



Coastal Erosion



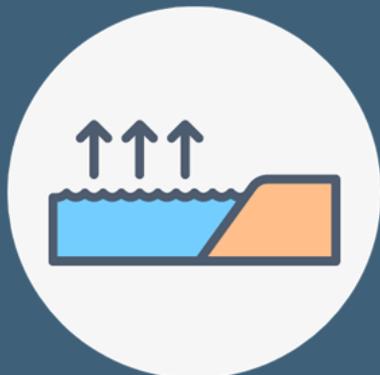
Coastal Flooding



Drought



Snowmelt Flooding



Sea Level Rise



Water Quality



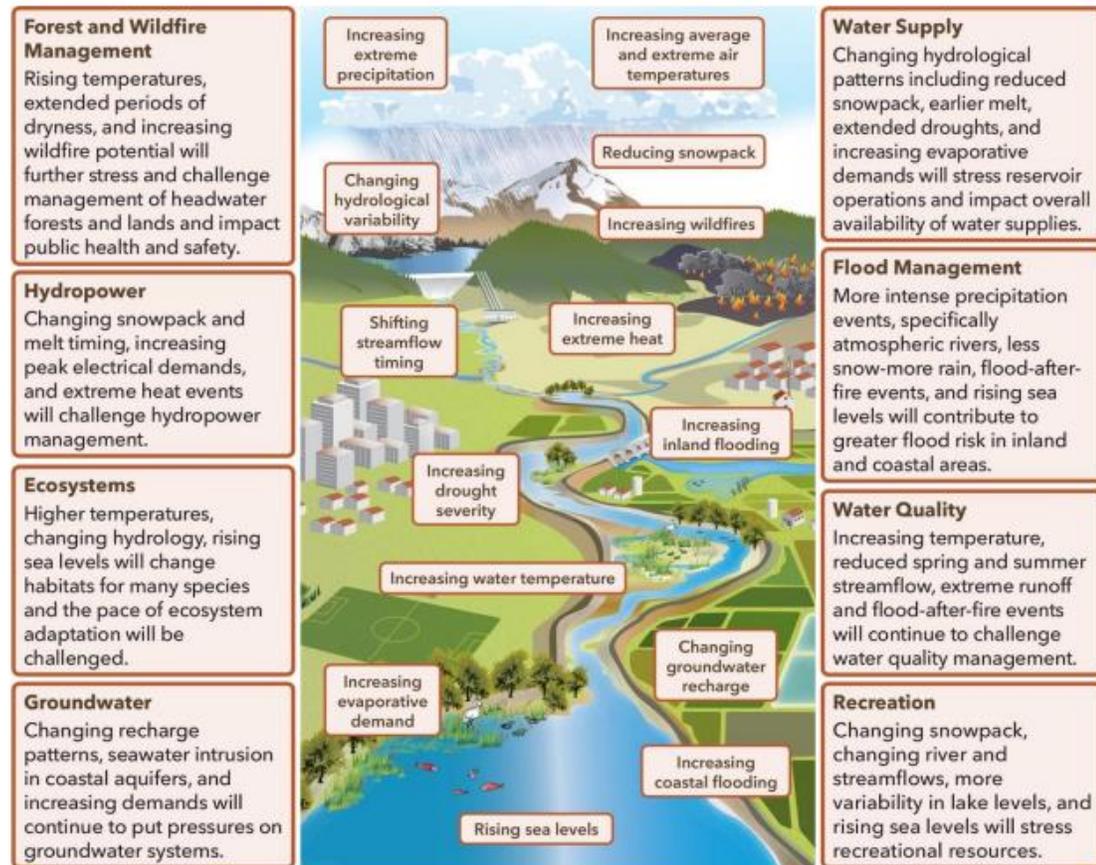
Flooding



Water Infrastructure

Key Challenges: Climate Change Impact on California's Water Supply

Figure 2-2 Climate Change Challenges Can Create Cascading Effects Among Sectors



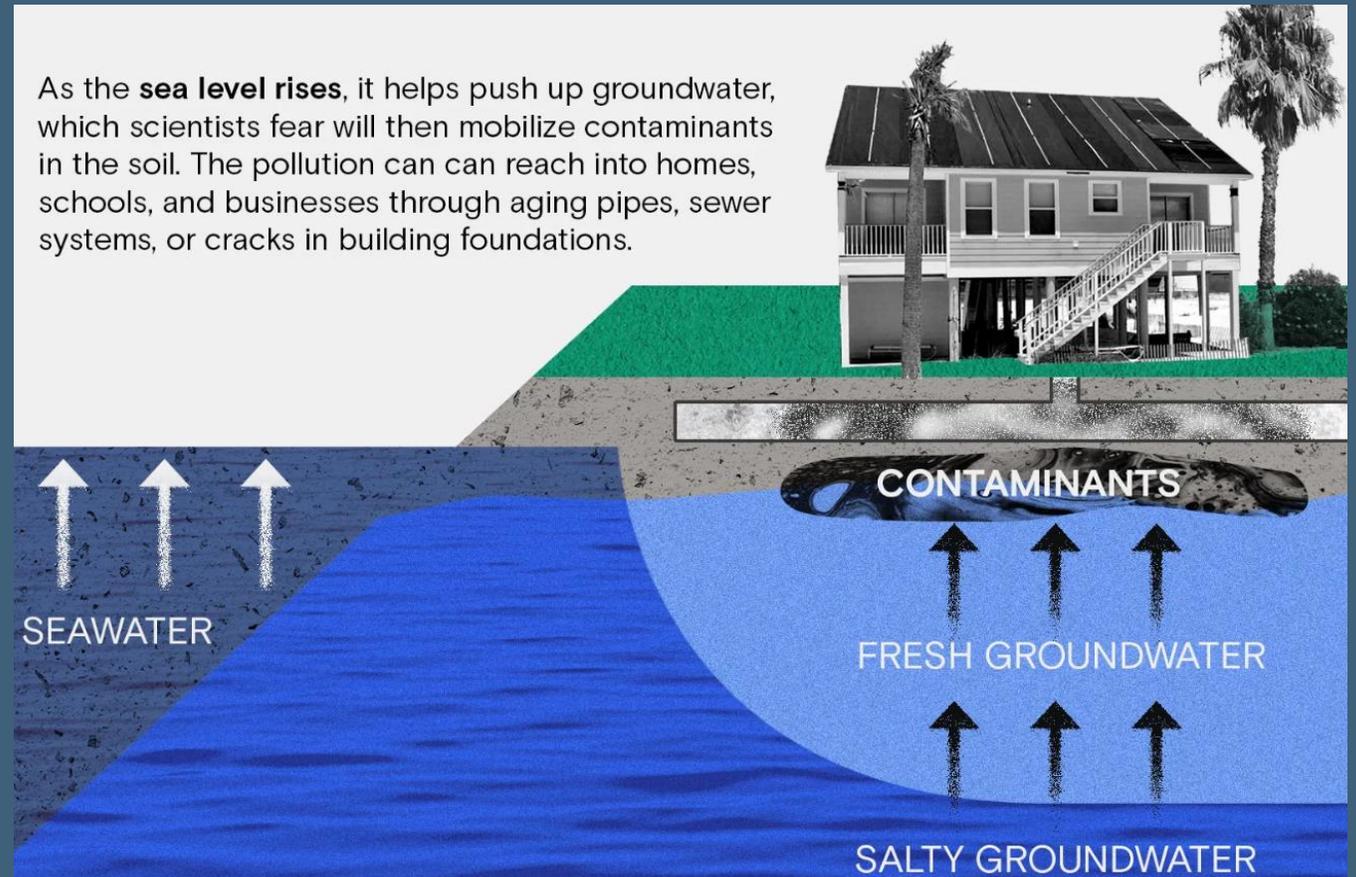
During drought, vegetation becomes visibly dry, water levels in reservoirs begin to fall, and shortages in safe quality drinking water become present in disadvantaged communities.¹⁸

With Climate Change, there is an increasing flow of saltwater into nearby groundwater aquifers from coastal flooding or over-pumping from agriculture affected by drought.¹⁹

Climate Change threatens the quality of water through an increase of stormwater runoff filled with pollutants and sediment, affecting efforts to keep water quality safe for consumption.²⁰

Key Challenges: Climate Adaptation

- The SCAG region can expect more intense and extended duration of droughts, putting greater stress on our existing water supply.²¹
- Rising groundwater can lead to various challenges such as structural damage, infiltration into sewer pipelines, etc.²²



Key Challenges: Climate Adaptation

- Dams that were constructed before the 2000s don't meet the structural requirements to be climate adaptable, thus climate disasters pose a risk to existing dam infrastructure.²³
- Higher temperatures have a corresponding effect on raising water temperatures, allowing stormwater runoff and higher temperatures to create environments for algae blooms to grow in freshwater and marine waterbodies.²⁴

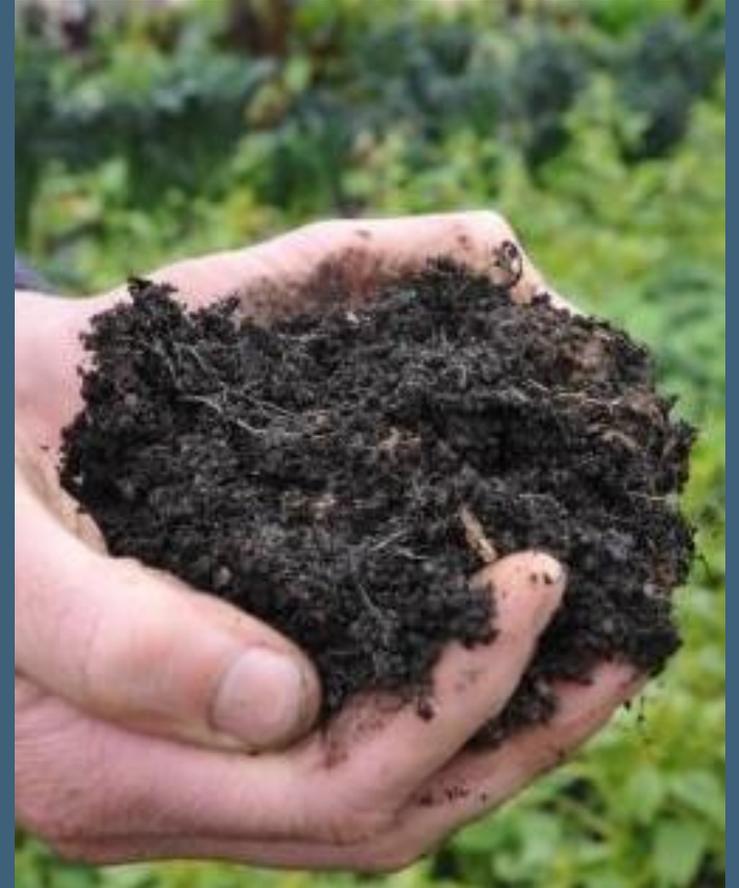


Opportunities for Climate Change Adaptation

1. In our collection, we examined solutions for adapting to the challenges brought on by Climate Change in the SCAG region, showing us opportunities for early action planning.
2. The Environmental Protection Agency (EPA) has a tool for assessing climate vulnerability called the Climate Ready Evaluation and Assessment Tool (CREAT).²⁵
3. The tool enables communities to project potential climate impacts out to beyond the year of 2035.
4. A short-term solution for giving critically at-risk communities time to prepare and adapt to the impacts of climate change.

Opportunities for Water Conservation

1. Water Recycling
 - To develop a new water supply, investments in wastewater recycling and desalination technology can help drought-impacted communities.²⁶
2. Groundwater Recharge
 - California's groundwater basins can store large volumes of additional water, at least three times more than the state's existing dams.²⁷
3. Smart farming that reduces water usage, recharges groundwater, and reduces pollution.

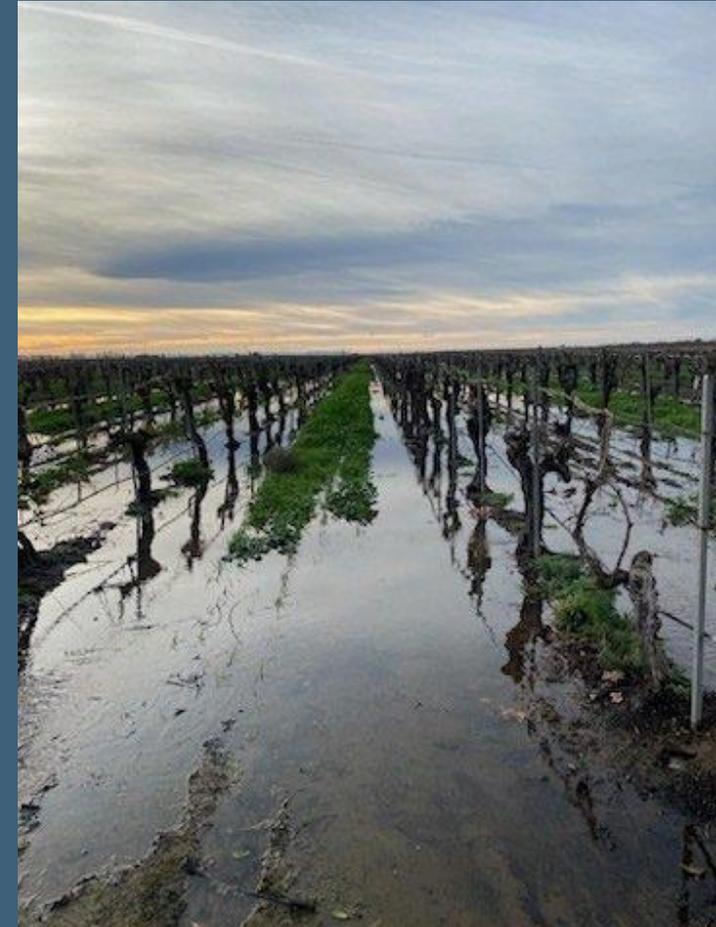


Sustainable Development Approaches

- Investing in infrastructure for local, on-site water recycling.
- Residential rainwater harvesting.^{[28](#)}
- Paying farmers for groundwater recharge.^{[29](#)}
- Climate-smart farming, includes no till farming, that promotes absorption of water.
- Developing partnership between cities and farms.

Sustainable Development Case Study: Tulare Irrigation District

- Farmers can get approval to help the district recharge groundwater through a "managed groundwater recharge" method.³⁰
- Flooding farms with floodwater from atmospheric rivers.
- Farmers receive a credit that adds to the total allowance of allocated groundwater they can use during the dry season.



Sustainable Development Case Study: East Los Angeles Sustainable Median Stormwater Capture Project



Sustainable Development Case Study: East Los Angeles Sustainable Median Stormwater Capture Project



Sustainable Development Case Study: East Los Angeles Sustainable Median Stormwater Capture Project

- This project captures and infiltrate 21 acre-feet of urban and stormwater runoff from a 3,000-acre tributary area of mostly residential and commercial land areas.³¹
- **Key Outcomes:**
 - Divert and infiltrate stormwater runoff to help improve the water quality of our rivers, channels, and ocean.
 - Replenishing our local groundwater supply.
 - Urban greening through planting trees and drought-tolerant landscaping.
 - Public education.

Sustainable Development Case Study: Fredericktown, Missouri and the Climate Ready Evaluation and Assessment Tool



Sustainable Development Case Study: Fredericktown, Missouri and the Climate Ready Evaluation and Assessment Tool

- This Project captured and recognized their current water source vulnerabilities from levels of erosion, sedimentation and contaminate influx.³²
- **Key Outcomes:**
 - The City of Fredericktown, MO was able to project potential climate impacts, such as increased precipitation events (storms) and drought by 2030.
 - They adopted a short-term resiliency plan to allocate water during water shortages.
 - The projections also made way for a water conservation strategy and early preparation for water-rights agreements during periods of drought.

Potential Research Questions

- 1) Is a universal water resilience framework possible for all municipalities and counties?
 - Counties and municipalities obtain water differently, some from large water retailers while others from water sources such as groundwater reservoirs and basins.
- 2) How do we address over-pumping of water aquifers?
 - When over-pumping occurs, aquifers near the ocean begin to experience saltwater intrusion.

Where We Are Now

Phase 1 *Began templates for water source natural assets and GIS data feature layer collection.*

Created template for case studies and policy literature review.

Phase 2 *Templates for resilience frameworks and best practices guide beginning in May 2024.*

Creation of climate pollutants reduction actions data library.

Phase 3 *Complete best practices guide and resource hub for SoCal Community-Based Organizations.*

Finalize framework recommendations for local implementation.

Current Datasets

1. Compiled by Fellows:

- [Water Case Studies \(Water-primary and Ag projects benefiting water\)](#)
- [Water-Relevant Natural Assets](#)
- [Background Water Research](#)



Water Action Resolution Update & White Paper

SCAG Regional Planning Working Groups
May 7, 2024

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Water Action Resolution

- In October 2022, Regional Council adopted a **Water Action Resolution** that directed SCAG to:
 - Help local jurisdictions **meet housing production needs** in a drier environment;
 - Foster adoption of **alternative groundwater recharge** technologies;
 - Support implementation of **green infrastructure, greywater usage systems, urban cooling programs**; and,
 - Prepare a **white paper** on the state of water in the region that addresses multiple sectors;

RESOLUTION NO. 22-647-3

A RESOLUTION OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS AFFIRMING A DROUGHT AND WATER SHORTAGE EMERGENCY IN THE SCAG REGION AND CALLING ON LOCAL AND REGIONAL PARTNERS TO JOIN TOGETHER TO ADOPT AN "ALL OF THE ABOVE" RESPONSE TO SUCH EMERGENCY, INCLUDING REDUCING WATER USE; IMPROVING WATER CONSERVATION, REUSE, AND EFFICIENCY; ENHANCING WATER SYSTEMS' HEALTH AND RESILIENCE; PURSUING AND POTENTIALLY IMPLEMENTING NEW WATER SUPPLY AND STORAGE OPPORTUNITIES; AND SUPPORTING INVESTMENTS IN WATER INFRASTRUCTURE AND CONSERVATION PRACTICES THAT SUPPORT THE REGION'S ECONOMIC AND POPULATION GROWTH AND FOSTERS PLANNING FOR THE REGION'S HOUSING NEEDS IDENTIFIED IN CONNECT SOCIAL

Water Action Resolution White Paper

- **Phase One** will focus on water management practices and actors impacting Southern California, and SCAG's potential role to help address water issues regionally:
 - **Stakeholder Mapping** of water management actors
 - **Stakeholder Interviews** for multiple sectors & equity considerations
 - **Current and Emerging Issues** assessment for water management
 - **Water Data** landscape analysis
 - **Recommendations on SCAG's Role** in water management ecosystem



Timeline: April 2024 – February 2025

Water Action Resolution White Paper

- **Phase Two** will focus on sustainable and resilient development, and solutions to address issues related to water acquisition, storage, supply, demand and quality:
 - **Sustainable Development** Strategies, Approaches, and Case Studies
 - **Water Resilience** Strategies for Future Growth
 - **White Paper** with Recommendations
 - **Water Resilience Forum**



Timeline: Spring 2025 – Winter 2026



THANK YOU

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REGIONAL ANNOUNCEMENTS

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THANK YOU!

For more information, please visit:

<https://scag.ca.gov/regional-planning-working-groups>

For additional questions, please contact SCAGgreenregion@scag.ca.gov