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ASSOCIATION OF GOVERNMENTS  
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## REMOTE PARTICIPATION ONLY

# RESILIENCE AND CONSERVATION SUBCOMMITTEE

*Monday, January 23, 2023*  
**9:00 a.m. – 11:00 a.m.**

**To Attend and Participate on Your Computer:**  
**<https://scag.zoom.us/j/82486482030>**

**To Attend and Participate by Phone:**  
**Call-in Number: 1-669-900-6833**  
**Meeting ID: 824 8648 2030**

***Please see next page for detailed  
instructions on how to participate in the meeting.***

### **PUBLIC ADVISORY**

Given the declared state of emergency (pursuant to State of Emergency Proclamation dated March 4, 2020) and local public health directives imposing and recommending social distancing measures due to the threat of COVID-19, and pursuant to Government Code Section 54953(e)(1)(A), the meeting will be held telephonically and electronically.

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Maggie Aguilar at (213) 630-1420 or via email at [aguilarm@scag.ca.gov](mailto:aguilarm@scag.ca.gov). Agendas & Minutes are also available at: [www.scag.ca.gov/committees](http://www.scag.ca.gov/committees).

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1. **In Writing:** Submit written comments via email to: [ePublicComment@scag.ca.gov](mailto:ePublicComment@scag.ca.gov) by 5pm on Friday, January 20, 2023. You are not required to submit public comments in writing or in advance of the meeting; this option is offered as a convenience should you desire not to provide comments in real time as described below.

All written comments received after 5pm on Friday, January 20, 2023, will be announced and included as part of the official record of the meeting.

2. **In Real Time:** If participating in real time via Zoom or phone, during the Public Comment Period (Matters Not on the Agenda) or at the time the item on the agenda for which you wish to speak is called, use the “raise hand” function on your computer or \*9 by phone and wait for SCAG staff to announce your name/phone number. SCAG staff will unmute your line when it is your turn to speak. Limit oral comments to 3 minutes, or as otherwise directed by the presiding officer. For purpose of providing public comment for items listed on the Consent Calendar, please indicate that you wish to speak when the Consent Calendar is called; items listed on the Consent Calendar will be acted on with one motion and there will be no separate discussion of these items unless a member of the legislative body so requests, in which event, the item will be considered separately.

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***In accordance with SCAG’s Regional Council Policy, Article VI, Section H and California Government Code Section 54957.9, if a SCAG meeting is “willfully interrupted” and the “orderly conduct of the meeting” becomes unfeasible, the presiding officer or the Chair of the legislative body may order the removal of the individuals who are disrupting the meeting.***

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### OUR MISSION

To foster innovative regional solutions that improve the lives of Southern Californians through inclusive collaboration, visionary planning, regional advocacy, information sharing, and promoting best practices.

### OUR VISION

Southern California’s Catalyst for a Brighter Future

### OUR CORE VALUES

Be Open | Lead by Example | Make an Impact | Be Courageous



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## Instructions for Participating in the Meeting

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3. Select “Join Audio via Computer.”
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2. Enter the **Meeting ID: 824 8648 2030**, followed by #.
3. Indicate that you are a participant by pressing # to continue.
4. You will hear audio of the meeting in progress. Remain on the line if the meeting has not yet started.
5. During the Public Comment Period, press \*9 to add yourself to the queue and wait for SCAG staff to announce your name/phone number. SCAG staff will unmute your line when it is your turn to speak. Limit oral comments to 3 minutes, or as otherwise directed by the presiding officer.

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**Resilience and Conservation Subcommittee**  
***Members – January 2023***

- 1. Hon. Kathleen Kelly**  
Chair, Palm Desert, RC District 2
- 2. Hon. Cindy Allen**  
Long Beach, RC District 30
- 3. Hon. Margaret Clark**  
Rosemead, RC District 32
- 4. Hon. Trish Kelley**  
Mission Viejo, OCCOG
- 5. Hon. Anni Marshall**  
Avalon, GCCOG
- 6. Hon. Cynthia Moran**  
Chino Hills, SBCTA
- 7. Hon. Oscar Ortiz**  
Indio, CVAG
- 8. Hon. Nicholas Schultz**  
Burbank, AVCJPA
- 9. Hon. Wes Speake**  
Corona, WRCOG

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## RESILIENCE AND CONSERVATION SUBCOMMITTEE AGENDA

Southern California Association of Governments  
Remote Participation Only  
**Monday, January 23, 2023**  
**9:00 AM**

The Resilience and Conservation Subcommittee may consider and act upon any of the items on the agenda regardless of whether they are listed as Information or Action items.

### **CALL TO ORDER AND PLEDGE OF ALLEGIANCE** *(The Honorable Kathleen Kelly, Chair)*

### **PUBLIC COMMENT PERIOD (Matters Not on the Agenda)**

This is the time for persons to comment on any matter pertinent to SCAG's jurisdiction that is **not** listed on the agenda. Although the committee may briefly respond to statements or questions, under state law, matters presented under this item cannot be discussed or acted upon at this time. Public comment for items listed on the agenda will be taken separately as further described below.

**General information for all public comments:** Members of the public are encouraged, but not required, to submit written comments by sending an email to: [ePublicComment@scag.ca.gov](mailto:ePublicComment@scag.ca.gov) by 5pm on Friday, January 20, 2023. Such comments will be transmitted to members of the legislative body and posted on SCAG's website prior to the meeting. Any writings or documents provided to a majority of the Resilience and Conservation Subcommittee regarding any item on this agenda (other than writings legally exempt from public disclosure) are available at the Office of the Clerk, located at 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 during normal business hours and/or by contacting the office by phone, (213) 630-1420, or email to [aguilarm@scag.ca.gov](mailto:aguilarm@scag.ca.gov). Written comments received after 5pm on Friday, January 20, 2023, will be announced and included as part of the official record of the meeting. Members of the public wishing to verbally address the Resilience and Conservation Subcommittee in real time during the meeting will be allowed up to a total of 3 minutes to speak on items on the agenda, with the presiding officer retaining discretion to adjust time limits as necessary to ensure efficient and orderly conduct of the meeting. The presiding officer has the discretion to equally reduce the time limit of all speakers based upon the number of comments received. If you desire to speak on an item listed on the agenda, please wait for the chair to call the item and then indicate your interest in offering public comment by either using the "raise hand" function on your computer or pressing \*9 on your telephone. For purpose of providing public comment for items listed on the Consent Calendar (if there is a Consent Calendar), please indicate that you wish to speak when the Consent Calendar is called; items listed on the Consent Calendar will be acted upon with one motion and there will be no separate discussion of these items unless a member of the legislative body so requests, in which event, the item will be considered separately.



**REVIEW AND PRIORITIZE AGENDA ITEMS**

**CONSENT CALENDAR**

1. Minutes of the Meeting – November 21, 2022 PPG. 5

**INFORMATION ITEMS**

2. Water Resilience Panel 45 Mins. PPG. 15  
*(Kim Clark, Planning Supervisor, SCAG)*
3. Regional Resilience Framework Update 20 Mins. PPG. 17  
*(Lorianne Esturas, Assistant Regional Planner, SCAG)*

**ACTION ITEM**

4. Draft Resilience and Subcommittee White Paper 45 Mins. PPG. 28  
*(Kim Clark, Planning Supervisor, SCAG)*

**RECOMMENDED ACTION:**

Approve submission of Resilience and Conservation Subcommittee White Paper recommendations to the Joint Policy Committee.

**ADJOURNMENT**



Southern California Association of Governments  
Remote Participation Only  
**January 23, 2023**

**MINUTES OF THE MEETING**  
**RESILIENCE AND CONSERVATION SUBCOMMITTEE (RCS)**  
**MONDAY, NOVEMBER 21, 2022**

THE FOLLOWING MINUTES IS A SUMMARY OF ACTIONS TAKEN BY THE RESILIENCE AND CONSERVATION SUBCOMMITTEE (RCS). AN AUDIO RECORDING OF THE ACTUAL MEETING IS AVAILABLE AT: <http://scag.ig2.com/Citizens/>.

The Resilience and Conservation Subcommittee (RCS) of the Southern California Association of Governments (SCAG) held its meeting virtually (telephonically and electronically), given the declared state of emergency (pursuant to State of Emergency Proclamation dated March 4, 2020) and local public health directives imposing and recommending social distancing measures due to the threat of COVID-19, and pursuant to Government Code Section 54953(e)(1)(A). A quorum was present.

**Members Present**

**Hon. Kathleen Kelly, Chair**  
**Hon. Margaret Clark, Vice Chair**  
Hon. Cindy Allen  
Hon. Peggy Huang  
Hon. Trish Kelley  
Hon. Anni Marshall  
Hon. Oscar Ortiz  
Hon. Nicholas Schultz

***Palm Desert***  
***Rosemead***  
***Long Beach***  
  
***Mission Viejo***  
***Avalon***  
***Indio***  
***Burbank***

**District 2**  
**District 32**  
District 30  
TCA  
OCCOG  
GCCOG  
CVAG  
AVCJPA

**Members Not Present**

Hon. David Avila  
Hon. Lorrie Brown  
Hon. Cynthia Moran  
Hon. Wes Speake

***Yucaipa***  
***Ventura***  
***Chino Hills***  
***Corona***

SBCTA  
District 47  
SBCTA  
WRCOG

**CALL TO ORDER AND PLEDGE OF ALLEGIANCE**

The Honorable Kathleen Kelly called the meeting to order at 9:01 a.m. Chair Kelly asked Honorable Trish Kelley, Mission Viejo, OCCOG, to lead the Pledge of Allegiance.

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**PUBLIC COMMENT PERIOD**

Chair Kelly opened the Public Comment Period and outlined instructions for public comments. She noted this was the time for persons to comment on any matter pertinent to SCAG’s jurisdiction that were not listed on the agenda. She reminded the public to submit comments via email to [ePublicComment@scag.ca.gov](mailto:ePublicComment@scag.ca.gov).

The Clerk acknowledged there were no written public comments for items not listed on the agenda.

Seeing no public comment speakers, Chair Kelly closed the Public Comment Period.

**REVIEW AND PRIORITIZE AGENDA ITEMS**

There was no prioritization of agenda items.

**CONSENT CALENDAR**

1. Minutes of the Meeting – October 17, 2022

Chair Kelly opened the Public Comment Period.

Seeing no public comment speakers, Chair Kelly closed the Public Comment Period.

A MOTION was made (Ortiz) to approve the Consent Calendar. Motion was SECONDED (Kelley) and passed by the following votes:

**AYES:** Allen, M. Clark, Kelley, Kelly, Marshall, Ortiz and Schultz (7)

**NOES:** None (0)

**ABSTAIN:** Huang (1)

**INFORMATION ITEMS**

2. Climate Change Impacts for Natural and Working Lands in Southern California

There were no public comments for this item.

Dr. Megan Jennings, Conservation Ecologist and Co-Director SDSU Institute for Ecological Monitoring and Management, provided a report on climate impacts and adaptation on Southern

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California's natural landscapes. Her presentation included information on threats and challenges intensifying stressors and disturbances with strong climate connections; shared values and services related to watershed protection and important services, recreational opportunities, and cultural connections; resilience for ecosystems and communities; climate resilient connectivity; connecting wildlands and communities by planning for climate ready landscapes in Southern California; planners in the region interested in incorporating new tools and data in their planning practices; temperature change and extremes; precipitation and drought; change in herbaceous cover; natural lands and resource management for Southern California's changing climate; and identifying refuges from climate impacts.

Hon. Trish Kelley, Mission Viejo, OCCOG, asked Dr. Jennings for clarification on whether some of the lands identified in the study include privately held lands and if the study included outreach to private landowners. Dr. Jennings responded that private landowners were not contacted but doing so would be a good next step. She noted that the primary audience for the study were resource managers and planners.

Hon. Oscar Ortiz, Indio, CVAG, noted concerns about invasive species in the desert and asked if Dr. Jennings was familiar with policies to address invasive species. Dr. Jennings responded that she was not aware of specific policy but agreed that the practice of planting invasive species connects with lack of knowledge.

Chair Kelly noted the importance of nature-based solutions and native animal species. She further noted people rediscovering the utility of reintroducing species that were eliminated in the past. Chair Kelly asked if there were any animal species they can cite as key partners in climate resilience. Dr. Jennings responded that the concept of reintroducing native animal species is known as "re-wilding." She indicated that current efforts have included re-wilding of pronghorns and certain goat species.

The comprehensive staff report and PowerPoint presentation were included in the agenda packet.

### 3. Overview of SCAG's Regional Resilience Framework

There were no public comments for this item.

Lorianne Esturas, Assistant Regional Planner, provide an update on the SCAG's Regional Resilience Framework. Her update included a report on building a more resilient region; the resilience work-to-date; the resilience definition; project overview of the Regional Resilience Framework; timeline and key deliverables; information on Community Based Organizations and Tribal outreach focus groups; focus group participation, discussion topics, and preliminary feedback; and next steps and alignment with Connect SoCal 2024.

Hon. Kelley asked for clarification on how members of the Resilience Advisory Committee (RAC) would be selected and whether members of the business community would be included. Ms. Esturas clarified that the selection process would be refined through the development of a project charter. She noted that the project charter would include several selection criteria to overlap with the resilience definition and the multiple systems listed within it. She noted that criteria of RAC members may include experience with scenario planning, subject matter expertise (e.g., resilience, sustainability, risk management), and convening a broad group of stakeholders (e.g., local jurisdictions, transportation agencies, business community, utility companies, university partners).

Hon. Peggy Huang, TCA, noted the completion of SCAG's Regional Advanced Mitigation Planning – Advisory Task Group (RAMP-ATG) and the upcoming formation of the SoCal Greenprint Technical Advisory Committee (TAC). Hon. Huang noted the importance of making sure there was communication between the RAC and TAC, especially with likely overlap in discussions. Hon. Huang also expressed concern on the potential for duplication of efforts and asked if there had been discussions on the RAC and TAC working together. Ms. K. Clark responded that SCAG anticipates members may end up participating in both committees as local planning staff and county transportation committee members could be potential members. Importantly, Ms. K. Clark noted that the RAC and TAC would have distinct objectives. The RAC would focus on developing exploratory scenarios, whereas the TAC would advise on the data parameters and SoCal Greenprint tool development. Hon. Huang thanked Ms. K. Clark for the clarification and wanted to make sure there were opportunities for the two committees to collaborate on information sharing, messaging, and clarity on environmental concerns.

Vice Chair Margaret Clark, Rosemead, District 32, noted agreement with Hon. Huang's comments and the importance of coordination between the two committees in order to ensure there are no unintended consequences due to lack of collaboration and coordination.

The comprehensive staff report and PowerPoint presentation were included in the agenda packet.

#### 4. Proposed Resilience and Conservation Broad Principles for Connect SoCal

There were no public comments for this item.

Kimberly Clark, Program Manager for Resilience and Resource Conservation, provide a presentation on the proposed broad resilience and conservation principles, which would form the basis for the draft white paper that will be reviewed and discussed further at the final meeting in January. She addressed what had been covered in the prior meetings and noted that along with goals for the Subcommittee, they had established a recommended definition of resilience, reviewed how the 2020 Plan addressed resilience, and also heard from practitioners who address resilience and

climate adaptation for built, economic, and natural systems. She indicated that this meeting and the subsequent session would be largely devoted to discussion on the recommendations that will come from this Subcommittee for consideration by the Joint Policy Committees and Regional Council. Ms. Clark indicated that they were looking to address the question of “how can Connect SoCal mitigate and adapt to the impacts of climate and seismic-related hazards on our built and natural systems and increase our region’s resilience”. She highlighted that the goals for the Subcommittee were to advance the direction set in the SCAG Regional Council Resolution on Climate Change Action to consider opportunities for enhanced resilience and resource conservation; and develop recommendations on how Connect SoCal can support our communities in adapting to changing conditions or mitigating risks to become more resilient.

With respect to how these topics were integrated in the last plan, Ms. K. Clark noted that resilience and conservation were key parts of the vision outlined in Connect SoCal. Specifically, Connect SoCal works to assure that land use and growth strategies recognize local input, promote sustainable transportation options, and support equitable and adaptable communities; encourage transportation investments that will result in improved air quality and public health, and reduced greenhouse gas emissions; and recommend that transportation investments should reflect best-known science regarding climate change vulnerability, in order to design for long term resilience.

Ms. K. Clark also addressed how resilience and conservation were approached by federal and state agencies, as well as other MPOs in California. Looking to our Federal Partners, she explained that the U.S. Department of Transportation developed a Climate Action Plan that looks at ways to increase resilience and promote climate adaptation in the transportation realm and that the report outlined recommendations that include using the best-available science to understand climate risks, impacts and vulnerabilities; prioritizing the most vulnerable people, communities, and infrastructure; preserving ecosystems through adaptation strategies that can increase the resilience of human and natural systems to climate change and other risks; building community relationships, by recognizing that adaptation and resilience require coordination across multiple sectors, geographical scales, and units of government; and engaging globally, as the global transport sector offers some of the most significant opportunities for deep greenhouse gas emissions cuts, healthier cities, and building resilient infrastructure. Looking towards actions from the State of California, she noted that the 2018 Safeguarding California Plan includes principles that climate change should be considered in all functions of government; agencies should partner with California's most vulnerable populations to increase equity and resilience through investments, planning, research, and education; the state should support continued climate research and data tools; agencies should identify significant and sustainable funding sources to reduce climate risks, harm to people, and disaster spending; prioritize natural infrastructure solutions that build climate preparedness, reduce greenhouse gas emissions, and produce other multiple benefits; collaborative adaptation processes should be promoted with federal, local, tribal, and regional government

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partners; and funding and investments in climate change vulnerability assessments of critical built infrastructure systems should be increased.

Looking to examples from SCAG's counterpart MPOs in California, she noted that the Association of Bay Area Governments developed a Regional Resilience Toolkit with support from the U.S. Department of Homeland Security and U.S. Department of Environmental Protection which included strategies to Engage: Build Trust in Partnerships and Relationships; Assess: Conduct a Risk and Vulnerability Assessment and Connect Resilience with Sustainability and Equity; Act: Identify and Prioritize Strategies; Fund: Make the Business Case for Resilience and develop a Resilience Capital Strategy; and Measure: Evaluate Results and Refine Methods. Ms. K. Clark also provided examples of resilience principles and strategies from the San Diego Association of Governments, the Sacramento Area Council of Governments, and the Santa Barbara County Association of Governments.

Ms. K. Clark also noted that building off the guidance from members and best practices from partner agencies, staff developed four broad principles that could help spark discussion and inform the Subcommittee White Paper which included 1) prioritize the most vulnerable populations and communities subject to climate hazards; 2) build strong partnerships; 3) apply ecosystem-based approaches; and 4) maximize mutual benefits.

She further expanded on each. With respect to prioritizing the most vulnerable populations and communities subject to climate hazards to help the people, places, and infrastructure that are most at risk for climate change impacts and recognizing that disadvantaged communities are often overburdened, she noted that examples of how this could be accomplished would be to incorporate climate change considerations into existing processes and programs; map disadvantaged communities with critical infrastructure and assets, and assess vulnerability to hazards; identify and protect communities vulnerable to climate effects; and support implementing agencies in incorporating equity considerations in climate risk management and/or emergency management plans and preparedness procedures. With respect to building strong partnerships by coordinating across multiple sectors, scales, and stakeholders to ensure all people have access to the fundamental physical, health, and social benefits of our natural and built systems, she noted that examples of this could include supporting expansion of public outreach activities to align implementation of strategies with community needs; collaborating with local and regional partners to support building resiliency through preparedness education, trainings, and resources; expanding public outreach and education to policymakers, businesses, and the general public; and developing templates to support jurisdictions in preparing a community-wide outreach program to educate a diverse population on how to prepare and recover from climate change effects. With respect to applying ecosystem-based approaches that can incorporate ecosystem resilience, protection of ecosystem services, and sustainable resource management, she noted examples of related actions could include supporting the use of systems-based risk-management methods and tools for

implementation agencies, and help prioritize options that take into account nature-based solutions and considerations for reducing vulnerabilities (one nature based solution includes prioritizing the use of native plants in areas subject to extreme heat to provide shade and cooling in a means that doesn't disrupt ecosystems and promotes water resilience); and supporting preservation, enhancements, and protection of open space, as well as natural and working lands, that have climate adaptation and resilience benefits – including carbon sequestration, as well as groundwater capture and storage. Lastly, with respect to maximizing mutual benefits to support resilience and conservation initiatives across built, social, economic, and natural systems, such as disaster preparedness, to ensure synergies across systems and reduce/avoid impacts of maladaptation, she noted that examples of this could include incorporating climate change adaptation into relevant local and regional plans; supporting implementing agencies' efforts to include climate-ready home hardening strategies in housing construction to minimize the potential loss of housing units stemming from climate-related hazards, including sea level rise, wildfires, landslides, and extreme flooding, among others; supporting development of Local Hazard Mitigation Plans to help jurisdictions prepare for disasters and access federal disaster relief resources; and supporting integration of climate vulnerability assessments into infrastructure planning and delivery.

Chair Kelly noted that the proposed broad principles showed alignment with the Subcommittee discussion thus far. She further noted that the task of prioritizing broad principles was challenging but would help with moving our resilience and conservation principles forward.

Hon. Ortiz thanked staff and noted that the work, thus far, was moving in the right direction. On the topic of "continuous environmental performance," Hon. Ortiz noted a strong push toward electrification. He expressed interest in learning more about the environmental and economic impacts related to electric vehicles and associated energy production. Hon. Ortiz expressed interest in exploring the investment differences between hydrogen energy and electrification and shared concerns about electrification technology becoming obsolete in the future. He noted interest in seeing a side-by-side comparison between the two technologies to help answer why electrification was at the forefront of shifts in energy sourcing and if there was a way to compare the timeframes and costs of implementing either option.

Chair Kelly noted interest in research and development (R&D) on energy alternatives in addition to hydrogen and electrification and asked if R&D could fit within the work of the Subcommittee. Further, Chair Kelly asked if there was a way to state that SCAG will stay diverse when looking into energy solutions. Vice Chair Clark expressed agreement with Hon. Ortiz and exploring all energy possibilities. In response to the members' comments, Ms. K. Clark shared that the exploration of multiple energy solutions is a current topic of study within SCAG's Emerging Technologies Committee. Further, Ms. K. Clark shared that Connect SoCal Key Connection, "Accelerated Electrification," was being updated to "Accelerated Clean Technology" as part of the Connect SoCal

2024 Policy Development Framework. Ms. K. Clark noted that SCAG recognizes the need to be broad in our approach when looking into energy resources.

Chair Kelly asked if prioritization of vulnerable populations could be included as part of the SCAG technical assistance and when exploring funding. Building off of the feedback on “distrust of government” from the Agenda Item 3, Chair Kelly noted that without overcoming that distrust, some of our other strategies may be ineffective. Ms. K. Clark responded that building trust could fall under the “build strong partnership” proposed broad principle. Ms. K. Clark shared that SCAG currently has tools available that can assist local jurisdictions with holding public workshops and engaging with community members at pop-up events. Chair Kelly further noted that her jurisdiction has experience with SCAG-sponsored pop-up events, particularly focused on complete streets. She noted these events attract the public than more traditional modes of communication.

Chair Kelly asked if there was further input from the Subcommittee members and noted that, traditionally, SCAG support has involved development of white papers, technical assistance, and funding partnerships. Chair Kelly asked for suggestions on additional strategies to consider under these priorities.

Hon. Ortiz noted that the City of Indio has asked city staff for social media toolboxes to help with dissemination of information. He noted that making information easy to share can help with building trust with both government and communities.

Chair Kelly noted that some governmental agencies have intentionally adopted a stance for climate change and resilience to receive attention in all functions of governments. She asked if this type of universal emphasis could work for SCAG and its local jurisdictions.

Hon. Ortiz supported the adoption of a broad resilience stance, especially noting the importance of resilience considerations across sectors (e.g., construction, infrastructure).

Chair Kelly agreed and noted Vice Chair Clark’s note on ensuring we are not working in a silo and fail to take account of the collateral impacts.

Chair Kelly proposed prioritizing broad principles #1 and #2.

Ms. K. Clark asked the Subcommittee for feedback on strategies to help prioritize the most vulnerable populations. Ms. K. Clark further asked the Subcommittee members for insight into additional analyses that should be considered in Connect SoCal 2024.

Chair Kelly noted that we tend to decide or make decisions for vulnerable populations and that pop-up's provide an opportunity for vulnerable populations to share what matters to them and provide their own ideas and input.

Ms. K. Clark asked for feedback on additional conservation prioritizations for Connect SoCal 2024.

Hon. Ortiz noted interest in quantifying turf conversions and native planting projects to better understand long-term cost-savings.

Chair Kelly noted the presentation from the Resilience and Conservation Subcommittee Meeting #2 which highlighted efforts to capture stormwater in place of transportation of water from the Colorado River and Northern California water sources. Vice Chair Clark noted concern for unintentional consequences with respect to stormwater capture.

Ms. K. Clark asked for feedback on what SCAG's role should be in promoting resilience and conservation. In the past, SCAG has served as an informational resource, conducted dedicated studies on cost-effectiveness, and served as a convener. Ms. K. Clark further asked for feedback on the types of actions SCAG should hold for implementing the goals of the Plan.

Hon. Ortiz responded that SCAG should continue to focus on information sharing and expand this to include new ways of presenting data and findings to those in leadership roles. He suggested presentations to City Councils and county transportation commissions. While he recognized the great data at SCAG, he expressed uncertainty on how efficient SCAG is with providing data to policymakers across the region.

Hon. Kelley asked and recommended informational videos that could be posted to city websites. She noted that videos in shorter length and data-driven could be impactful with local decisionmakers and suggested 15–20-minute videos to help provide background information on topics of resilience. She further noted that this could be a good way of improving communication lines and shifting towards videos and providing tools for local jurisdictions.

Chair Kelly noted that while SCAG produces superb information, it is often competing with time constraints among governmental officials. Chair Kelly posed a task to the Subcommittee members to ask colleagues how often they open SCAG communications and learn what would induce them to better absorb SCAG information.

The comprehensive staff report and PowerPoint presentation were included in the agenda packet and posted on the SCAG website.

## **ANNOUNCEMENTS**

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There were no announcements.

**ADJOURNMENT**

There being no further business, Chair Kelly adjourned the Meeting of the Resilience and Conservation Subcommittee at 10:36 a.m.

[MINUTES ARE UNOFFICIAL UNTIL APPROVED BY THE RCS]

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# AGENDA ITEM 2 REPORT

Southern California Association of Governments  
Remote Participation Only  
January 23, 2023

**To:** Resilience and Conservation Subcommittee (RCS)

EXECUTIVE DIRECTOR'S  
APPROVAL

**From:** Kimberly Clark, Planning Supervisor  
(213) 236-1844, clark@scag.ca.gov

**Subject:** Water Resilience Panel

**RECOMMENDED ACTION:**

Information Only – No Action Required

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians.

**EXECUTIVE SUMMARY:**

*The purpose of the Resilience and Conservation Subcommittee is to advance the direction set in the SCAG Regional Council Resolutions on Climate Change Action (21-628-1) and Water Action (22-647-3) to consider opportunities for enhanced conservation and how Connect SoCal can support our communities in adapting to changing conditions or mitigating risks to become more resilient in the context of future growth, as well as to identify and integrate policies and strategies to align investments in water infrastructure with housing needs and the adopted growth forecast and development pattern featured in Connect SoCal 2024. To help inform these recommendations, SCAG will welcome guest speakers from The Sonoran Institute and the Metropolitan Water District (MWD).*

**BACKGROUND:**

In October 2022, SCAG’s Regional Council unanimously adopted a Water Action Resolution that resolved to “further explore regional water challenges and solutions [through the Resilience and Conservation Subcommittee] and report findings for consideration by SCAG’s Energy and Environment Committee.” This resolution called on local and regional partners to join together to adopt an “all of the above” approach to addressing the region’s water challenges and catalyzing opportunities, and for SCAG to take action and support partners to reduce water use; improve water conservation, reuse, and efficiency; enhance water systems’ health and resilience; pursue and potentially implement new water supply and storage opportunities; and support 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.

To help inform the Subcommittee's recommendations, presentations will be provided that further link local land use decisions to water demand and conservation practices.

- Waverly Klaw is the Director of the Growing Water Smart program for Sonoran Institute. Growing Water Smart is a training and assistance program that has trained representatives from over 70 local governments in the Colorado River Basin states on integrating water-saving measures into land use plans and policies. Throughout her career in the nonprofit and public sector, Waverly has worked closely with local governments and other organizations to increase the resilience of the built and natural environment to the impacts of climate change. Waverly was formerly with the State of Colorado Department of Local Affairs, where she worked with communities on disaster recovery planning and spearheaded the State's award-winning *Planning for Hazards* guide. She also worked for River Network to strengthen riparian and watershed restoration efforts across the country. She holds a master's degree in urban and regional planning from the University of Colorado Denver and a bachelor's degree in sociology from Syracuse University.
- David Sumi and Elise Goldman are Resource Specialists at Metropolitan Water District (MWD) and will speak on the agency's WaterWise conservation efforts, as well as the 2020 Urban Water Management Plan that provides an assessment of Metropolitan's water service reliability, describes and evaluates sources of water supply, efficient uses of water, demand management measures, implementation strategy and schedule, and other relevant information and programs. In addition to the water reliability assessments, the plan includes an evaluation of frequent and severe periods of droughts, as described in the Drought Risk Assessment, and the preparation and adoption of the Water Shortage Contingency Plan (WSCP).

**FISCAL IMPACT:**

No fiscal impact.



**AGENDA ITEM 3**  
**REPORT**

Southern California Association of Governments  
Remote Participation Only  
**January 23, 2023**

**To:** Resilience and Conservation Subcommittee (RCS)

**EXECUTIVE DIRECTOR'S  
APPROVAL**

**From:** Lorianne Esturas, Assistant Regional Planner  
(213) 236-1853, esturas@scag.ca.gov

**Subject:** Regional Resilience Framework Update

**RECOMMENDED ACTION:**

Information Only – No Action Required

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians.

**EXECUTIVE SUMMARY:**

*As part of Connect SoCal, SCAG committed to developing a Regional Resilience Framework (RRF) to explore potential near- and long-term disruptions to Southern California, such as earthquakes, extreme weather, drought, wildfires, pandemics and economic shocks. To support local jurisdictions in their resilience planning efforts, the RRF will include a matrix of shocks, stressors and resilience indicators (Matrix) to showcase an array of potential disruptions to the Southern California region and indicators to help track and build greater resilience in the face of disruptions. This report provides an overview of the RRF and efforts to develop and refine the Matrix.*

**BACKGROUND:**

As part of Connect SoCal, SCAG committed to exploring new challenges in the region to help move Southern California towards a more sustainable future. To better understand and explore how disruptions, such as acute shocks and chronic stressors, could impact the resilience of the region, SCAG is developing the Regional Resilience Framework (RRF). The RRF explores the potential degrees of disruption that could result from land based, atmospheric, public health and geologic natural hazards. The project will feature:

- Focus groups with community-based organizations (CBOs) and tribal nations to understand concerns related to resilience in local communities
- Matrix of regional pinch-points (i.e., “shocks” and “stressors”, as defined below) that may impact the current and future resilience of local communities

- Resilience Advisory Committee consisting of practitioners from local jurisdictions, subregional and regional partners, county transportation commissions, utilities, etc.
- Exploratory scenario analysis to examine potential futures for Southern California
- Resilience Toolkit for local agencies to integrate best practices in day-to-day and long-range planning activities
- Engagement with SCAG subregional and regional stakeholders, such as council of governments, SCAG policy committees, Regional Council, etc.

In the resilience policy space, shocks and stressors are key factors to consider in resilience, and are commonly defined as:

- *Shocks – Sudden and acute events that threaten immediate safety and well-being*
- *Stressors – Chronic challenges that weaken natural, built, or human systems and resources*

To gain insight into how resilience is viewed at a community level, SCAG conducted focus group interviews with CBOs and tribal nations from October 2022 through December 2022. Feedback from CBO and tribal outreach highlighted the importance of social ties and social resilience in the face of disruptions, such as the COVID-19 pandemic, as well as the need for centralized information centers. The following CBOs and tribal nation participated in RRF focus groups as of December 8, 2022:

- Comite Civico del Valley
- LAC+USC Medical Center Foundation
- People for Housing
- Soboba Band of Luiseno Indians
- Central Coast Alliance United for a Sustainable Economy (CAUSE)
- Center for Community Action and Environmental Justice (CCA EJ)

Building off of feedback from CBOs and tribal nations, as well as SCAG's pre-RRF efforts under the Climate Resilience Landscape Analysis<sup>1</sup>, SCAG is currently developing a matrix of shocks, stressors and resilience indicators (Matrix), to showcase an array of potential disruptions to the Southern California region. The Matrix will help local jurisdictions identify the scale and scope of impact of near- and long-term disruptions and provide metrics and indicators to help track and build greater resilience in the face of disruptions. The Matrix will evaluate shocks and stressors through the lens of multiple systems (built, social, economic, and natural) and be refined through additional literature review and outreach under the RRF.

The entirety of the RRF is anticipated to be completed by late 2023.



**FISCAL IMPACT:**

Work for this effort is funded in SCAG's Fiscal Year 2022-2023 Overall Work Program (OWP) under project 290.4896.01 (Regional Resiliency Analysis).

**ATTACHMENT(S):**

1. PowerPoint Presentation - Regional Resilience Framework Update

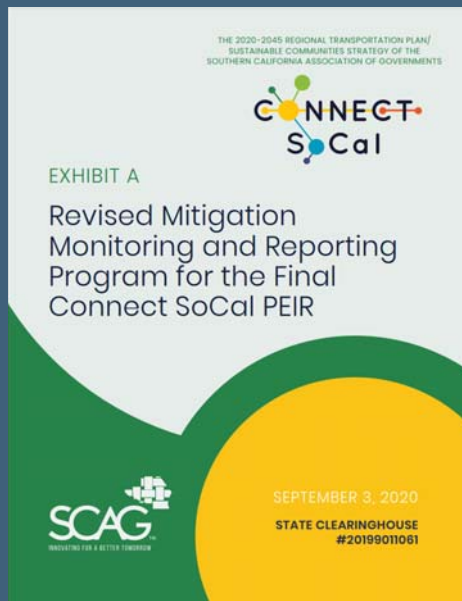


# Regional Resilience Framework

Resilience & Conservation Subcommittee Meeting #4  
January 23, 2023

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## Building a More Resilient Region



## SCAG Resilience Definition

The capacity of the SCAG region's **built, social, economic and natural systems** to **anticipate and effectively respond** to **changing conditions, acute shocks, and chronic stressors** by creating **multiple opportunities** for a **sustainable, thriving and equitable future**.

3

## Regional Resilience Framework (RRF) Overview



### Project Timeline

- 18-month timeline
- June 15, 2022 (kick-off) – Dec 31, 2023 (anticipated)

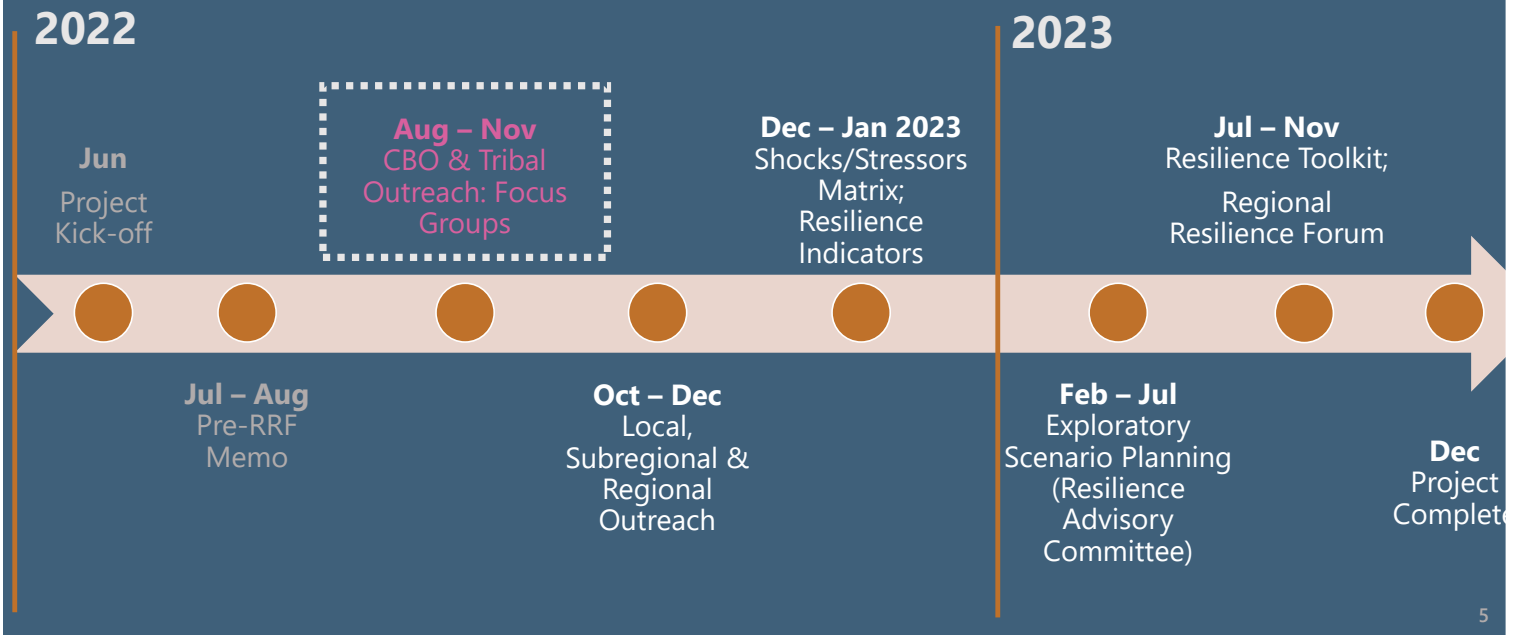
### Project Goals

- Define "regional resilience"
- Understand the impacts of disruptions (shocks/stressors) across the region
- Conduct an exploratory scenario planning process
- Identify strategies to reduce vulnerabilities & increase regional resilience
- Conduct meaningful outreach & engagement
- Support implementation of Connect SoCal strategies

[Connect SoCal: Chapter 6  
Regional Resilience Framework](#)

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# Timeline & Key Deliverables (status as of Meeting #3)

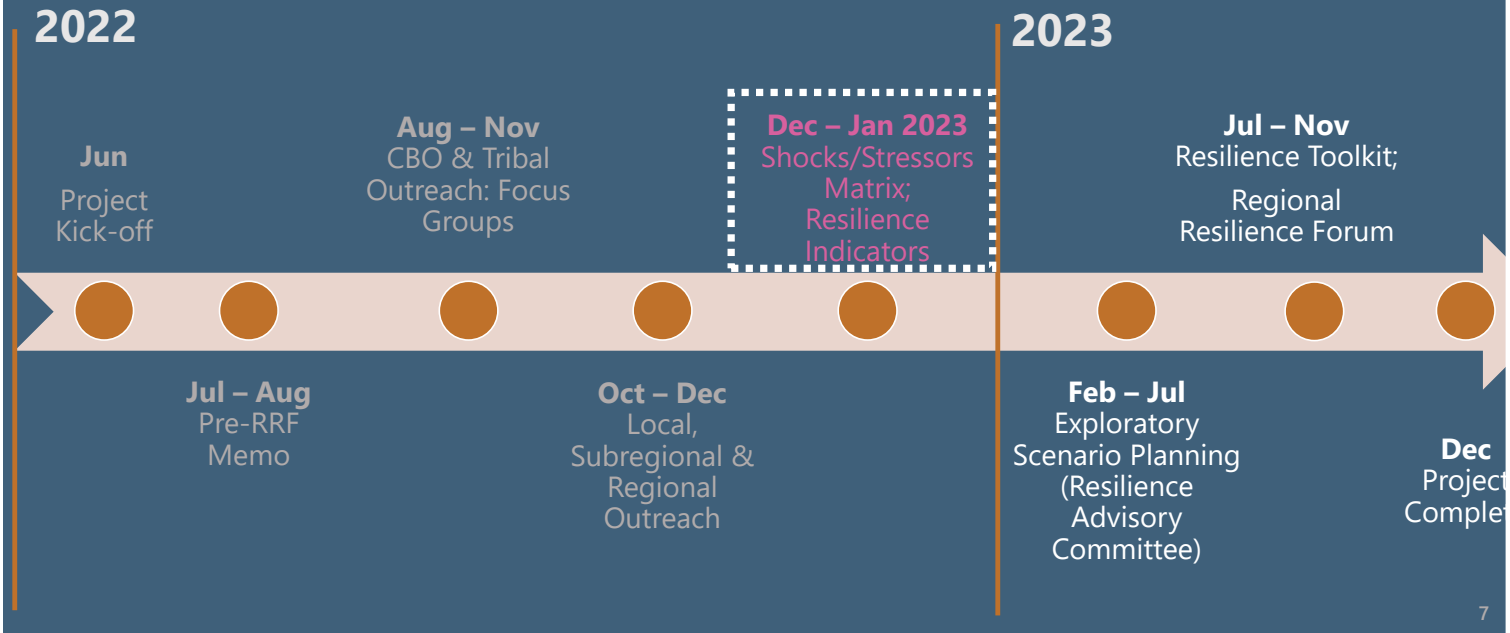


# Focus Group Participation

CBO/Tribe	County	Expertise
Comite Civico del Valley	IM	Social justice, health
LAC+USC Medical Center Foundation	LA	Health
People for Housing	OC	Housing
Center for Community Action and Environmental Justice (CCA EJ)	RV/SB	Env. justice
Soboba Band of Luiseno Indians	RV/SB	Tribal nation
Rolling Start	SB	Accessibility, health
Central Coast Alliance United for a Sustainable Economy (CAUSE)	VN	Economic development



# Timeline & Key Deliverables: Matrix of Shocks & Stressors



Attachment: PowerPoint Presentation - Regional Resilience Framework Update (Regional Resilience Framework Update)

## CLIMATE RESILIENCE LANDSCAPE ANALYSIS

# Climate Resilience Landscape Analysis (Meeting #2)

- Study area**
  - SCAG region (191 cities, 2 tribal communities)
- Compilation of climate-related resilience planning efforts**, including review of
  - CAPs & CAAPs
  - Sustainability Plans
  - Resilience Plans
  - LHMPs
  - General Plans (SB 379, SB 1035, SB 1000)
  - Emergency Operations/Management Plans
- Identification of**
  - Resilience focus areas (RFAs)
  - Climate-related shocks and stressors
- Summary of climate-resilience efforts across the SCAG Region**

County	Name	City	Affiliation	Contact Information	Has a climate resilience plan?	Has a sustainability plan?	Has a general plan?	Has an emergency operations/management plan?	Has a resilience plan?	Has a local hazard mitigation plan?	Has a climate action plan?
San Bernardino	County of San Bernardino	San Bernardino	County	1000 N. G Street, San Bernardino, CA 92410							
San Diego	San Diego Regional Council	San Diego	Regional	1615 La Jolla Village Drive, San Diego, CA 92161							
San Jose	San Jose Regional Council	San Jose	Regional	1000 N. Market Street, San Jose, CA 95128							
Orange	Orange County Regional Council	Orange	Regional	1000 N. Main Street, Orange, CA 92667							
San Bernardino	San Bernardino Regional Council	San Bernardino	Regional	1000 N. G Street, San Bernardino, CA 92410							

## Climate Resilience Landscape Analysis (Meeting #2)

### • Key Takeaways:

- Most frequently cited RFAs in LHMPs & GPs are drought, flood, and wildfire
- Further analysis is needed to identify connections between RFAs

### • Next Steps:

- Conduct stakeholder outreach
- Evaluate landscape analysis lessons learned
- Expanded studies on resilience planning efforts by County and/or subregion
- **Ground-truth landscape analysis findings via Regional Resilience Framework**

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## RRF Matrix of Shocks, Stressors and Resilience Indicators

### Goals:

1. Expand the review of shocks/stressors impacting the resilience of the SCAG region
2. Refine compilation of shocks/stressors via community, local, subregional, and regional outreach
3. Provide a "menu" of resilience indicators, actions, and metrics to evaluate and build resilience

10

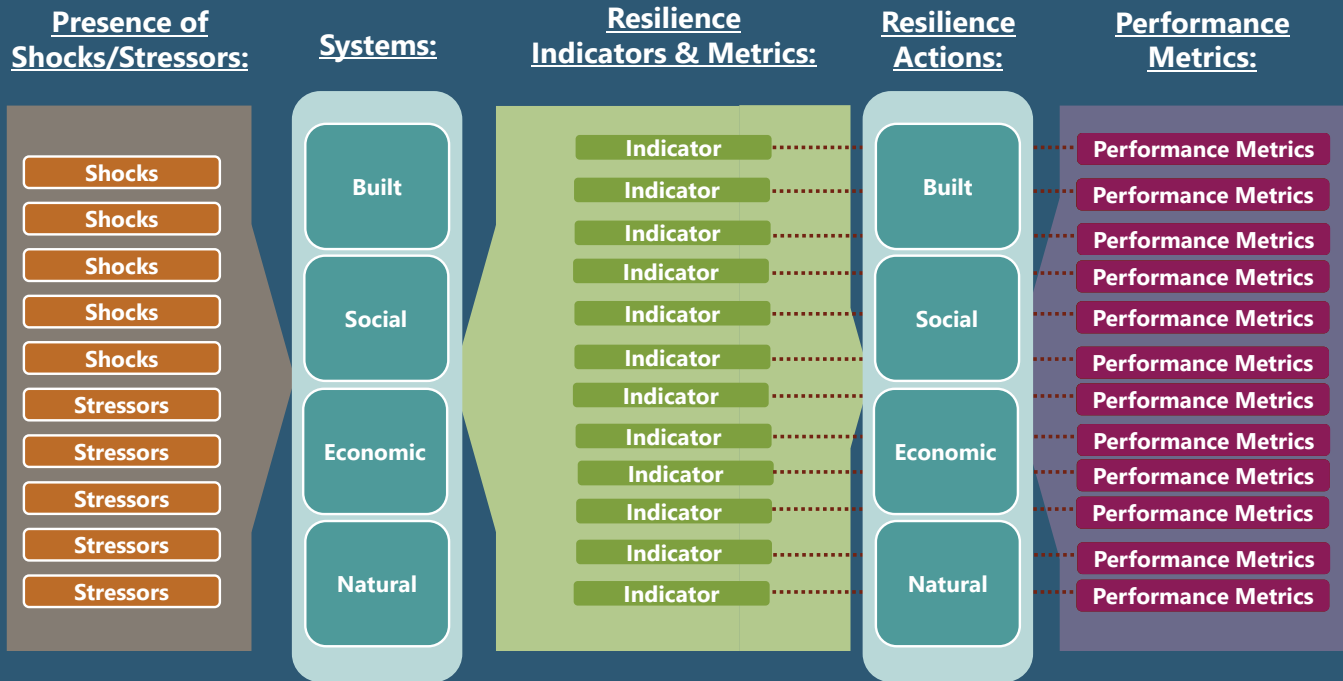
# Matrix: Shocks, Stressors and Resilience Indicators

- **Shocks & Stressors** – summary of shocks/stressors relevant to the SCAG region
- **Scale & Scope** – potential impacts of shocks/stressor, including
  - *Scale a shock/stressor might occur*
  - *Scale of a shock/stressor's impact*
  - *Expected geographic area (e.g., coastal, inland, desert, forest)*
  - *Impacted systems (e.g., built, natural, social, environment)*
  - *Nature of disruption (short- vs. Long-term the short- to long-term nature of the disruption)*
- **Indicator** – help determine relevance of shock/stressor to a jurisdiction
- **Metric Data Sources** – additional details on shock/stressor data sources

# Matrix: Shocks, Stressors and Resilience Indicators

Shocks & Stressors		Scale and Scope					Indicator		
Shocks/Stressors	Category	Geographic Area (Coastal/Inland/Both)	Scale of Occurrence (e.g., local, statewide, regional, statewide)	Scale of Impact (e.g., local, statewide, regional, statewide)	Impacted Systems (Shocks Only) (e.g., community, ecosystem, built environment, natural environment, critical systems)	Nature of Disruption (Shocks Only) (e.g., temporary impacts, limiting impacts to systems, permanent, irreversible threat to systems)	Indicator	Type of Indicator (e.g., current status, potential risk, qualitative)	Indicator Mea
Earthquake	Shock	Both	Regional	Local and Regional	All	Limiting to Permanent	Presence of Active Faults and Liquefaction Zones	Current Status	
Landslide	Shock	Both	Local	Local	All	Temporary	Presence of Landslide Zones	Current Status	
Extreme Cold	Both	Both	Regional	Local and Regional	All	Temporary			
Extreme Heat	Both	Both	Regional	Local and Regional	All	Temporary			
Flood	Shock	Both	Local and Regional	Local and Regional	All	Limiting to Permanent			
Hazardous Materials Release	Shock	Both	Regional	Local and Regional	Community, Natural Environment	Temporary to Limiting	Presence of Permitted Hazardous Waste Facilities in California	Current Status	
Wildfire	Shock	Both	Regional	Local and Regional	All	Limiting to Permanent	Presence of Wildfire Risk Areas	Current Status	
Drought	Stressor	Both	Regional	Regional	All	Limiting to Permanent			
Non-heat-related Severe Weather	Shock	Both	Regional	Local and Regional	All	Temporary			
Tsunamis	Shock	Coastal	Regional	Local and Regional	All	Limiting to Permanent			
Avalanche	Shock	Inland	Local	Local	Community, Critical Systems, Built	Temporary			

# Flow Chart: Shocks, Stressors and Resilience Indicators



# Flow Chart: Examples

Presence of Shocks/Stressors	Impacted Systems	Resilience Indicators & Metrics	Resilience Actions	Performance Metrics
<b>Limited Tree Canopy (Stressor)</b> <ul style="list-style-type: none"> <li>Data: Tree Canopy Coverage</li> </ul>	<ul style="list-style-type: none"> <li>Social (community, health, wellbeing)</li> <li>Economy</li> <li>Natural Environment</li> </ul>	<ul style="list-style-type: none"> <li>% of land cover with tree canopy</li> <li>% of land cover in vulnerable communities with tree canopy</li> </ul>	<ul style="list-style-type: none"> <li>Plant more trees</li> <li>Plant more trees in socially vulnerable communities and/or areas with outdoor workers</li> </ul>	<ul style="list-style-type: none"> <li>Number of trees planted per year</li> </ul>
<b>Aging Infrastructure</b> <ul style="list-style-type: none"> <li>Data: City or County-level public works data</li> </ul>	<ul style="list-style-type: none"> <li>Economy</li> <li>Built (critical services)</li> <li>Social (community, health, wellbeing)</li> </ul>	<ul style="list-style-type: none"> <li>Renewal rate for roadways</li> <li>% of water pipes over 30 years old</li> </ul>	<ul style="list-style-type: none"> <li>Allocate funding and staff resources to increase renewal rate and response time</li> <li>Develop "heat map" of oldest infrastructure</li> <li>Source funding for renewal</li> </ul>	<ul style="list-style-type: none"> <li>Repair response time</li> <li>Miles of roadway/water pipe replaced</li> </ul>



# THANK YOU!

For more information, please visit:

<https://scag.ca.gov/>



**AGENDA ITEM 4**  
**REPORT**

Southern California Association of Governments  
Remote Participation Only  
January 23, 2023

**To:** Resilience and Conservation Subcommittee (RCS)

**EXECUTIVE DIRECTOR'S  
APPROVAL**

**From:** Kimberly Clark, Planning Supervisor  
(213) 236-1844, clark@scag.ca.gov

**Subject:** Draft Resilience & Conservation Subcommittee White Paper

**RECOMMENDED ACTION:**

Approve submission of Resilience and Conservation Subcommittee White Paper recommendations to the Joint Policy Committee.

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians.

**EXECUTIVE SUMMARY:**

*The Resilience and Conservation Subcommittee has convened three times between September and November 2022 with the goals to advance the direction set in the SCAG Regional Council Resolution on Climate Change Action and Water Action to consider opportunities for enhanced resilience and resource conservation, and develop recommendations on how Connect SoCal can support our communities in adapting to changing conditions or mitigating risks to become more resilient.*

*The Subcommittee meetings covered policy areas of focus and examples of implementation tools for built, social, economic, and natural systems in the SCAG region, as well as the impacts of climate hazards and conservation within the SCAG region, along with a series of best practices that could be considered to advance resilience and conservation in the region. Each meeting included a presentation from SCAG staff, presentations from experts in the field, and feedback from Subcommittee members.*

*The Resilience and Conservation Subcommittee White Paper summarizes the learnings from the prior subcommittee meetings along with recommendations from Subcommittee members. Subject to feedback and concurrence from the Subcommittee members in January, the White Paper recommendations will be submitted to the Joint Policy Committee in March 2023.*

**BACKGROUND:**

SCAG is currently developing Connect SoCal 2024. As required by federal and state law, SCAG prepares a long-range Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) every four years which provides a vision for integrating land use and transportation for increased mobility and more sustainable development. SCAG's next RTP/SCS, Connect SoCal 2024, will incorporate important updates of fundamental data, enhanced strategies and investments based on, and intended to strengthen, the plan adopted by the SCAG Regional Council in 2020.

Three special Regional Council subcommittees have been created around Next Generation Infrastructure, Resilience and Conservation, and Racial Equity and Regional Planning. Each subcommittee planned to meet between September 2022 and January 2023 to identify recommendations that will inform how these emerging issues are addressed in Connect SoCal 2024. The Resilience and Conservation Subcommittee includes Regional Councilmembers from across the region, including:

1. Hon. Kathleen Kelley, Chair, Palm Desert, RC District #2
2. Hon. Margaret Clark, Vice-Chair, RC District #32
3. Hon. Cindy Allen, City of Long Beach, RC District #30
4. Hon. Lorrie Brown, City of Ventura, RC District #47
5. Hon. David Avila, San Bernardino County Transportation Authority (SBCTA)
6. Hon. Peggy Huang, Transportation Corridor Agencies (TCA)
7. Hon. Trish Kelley, Orange County Council of Governments (OCCOG)
8. Hon. Ann Marshall, Gateway Cities Council of Governments (GCCOG)
9. Hon. Cynthia Moran, San Bernardino County Transportation Authority (SBCTA)
10. Hon. Oscar Ortiz, Coachella Valley Association of Governments (CVAG)
11. Hon. Nick Shultz, Arroyo Verdugo Communities Joint Powers Authority
12. Hon. Wes Speake, Western Riverside Council of Governments (WRCOG)

**Resilience and Conservation Subcommittee Summary**

The goals of the Resilience and Conservation Subcommittee are to advance the direction set in the SCAG Regional Council Resolution on Climate Change Action and Water Action to consider opportunities for enhanced resilience and resource conservation, and develop recommendations on how Connect SoCal can support our communities in adapting to changing conditions or mitigating risks to become more resilient.

A summary of each meeting is noted below, with a more thorough overview included in the attached White Paper:

- ***Where We Are: Level Setting and Work Plan Prioritization***

Meeting 1 of the Resilience and Conservation Subcommittee provided the group with an overview of the Subcommittee’s purpose and proposed outlook; SCAG’s proposed definition of “resilience”; and resilience and conservation principles, goals, and strategies embedded in Connect SoCal 2020 and Connect SoCal 2020 Programmatic Environmental Impact Report (PEIR).

- ***How Can SCAG Have an Impact: Policy Areas of Focus and Implementation Tools***

Meeting 2 of the Resilience and Conservation Subcommittee provided an overview of SCAG’s landscape analysis of resilience planning efforts across the SCAG region, as well as a more detailed analysis of resilience planning within the Inland Southern California Region.

Furthermore, following feedback from the Subcommittee, SCAG finalized the resilience definition to the following:

*The capacity of the SCAG region's built, social, economic and natural systems to anticipate and effectively respond to changing conditions, acute shocks, and chronic stressors by creating multiple opportunities for a sustainable, thriving and equitable future.*

Presentations from resilience experts within the region also provided a means of exploring resilience in the context of the region’s built, economic, and natural systems. These speakers included Leah Fisher, Office Chief for Air Quality and Climate Change at Caltrans (CA DOT); Rutger de Koning and Robert Mens, Bouwinvest Real Estate Investors based in The Netherlands; Charles Wilson, Executive Director and CEO of the Southern California Water Coalition; and Dr. Qinqin Liu, scientist and former analyst at California Natural Resources Agency, Department of Fish and Wildlife, and Department of Water Resources.

- ***How Can SCAG Have an Impact: Policy Areas of Focus and Implementation Tools***

Meeting 3 of the Resilience and Conservation Subcommittee included a presentation from Dr. Meghan Jennings, conservation biologist from San Diego State University, who provided information examining ecosystem resilience in the context of climate change. SCAG staff also provided further insight on social resilience via updates on SCAG’s Regional Resilience Framework (RRF), and shared early feedback from community-based organizations (CBOs) and one tribal government participating in RRF outreach and engagement to supplement discussions on social resilience and conservation principles and policies. Finally, SCAG staff presented and sought feedback on broad concepts for inclusion in the Resilience and Conservation Subcommittee White Paper.

- ***Resilience and Conservation Final Draft White Paper***

Meeting 4 will include additional presentations from water experts and further discussion to solidify the resilience and conservation principles and policies for consideration by Policy Committees and Regional Council for inclusion in Connect SoCal 2024.



### White Paper Recommendations

Overall, feedback from members of the Subcommittee can be grouped into four broad recommendations. These recommendations will inform the Connect SoCal Policy Development Framework and on-going development and policy discussions related to Connect SoCal 2024 and will be taken to the Regional Council for further deliberation. Potential actions to support integration and implementation are included as sub-bullets below:

- **Define Resilience:** The capacity of the SCAG region's built, social, economic and natural systems to anticipate and effectively respond to changing conditions, acute shocks, and chronic stressors by creating multiple opportunities for a sustainable, thriving and equitable future;
- **Prioritize the most vulnerable populations and communities subject to climate hazards:** Help the people, places, and infrastructure that are most at risk for climate change impacts, recognizing that disadvantaged communities are often overburdened;
  - Incorporate climate change considerations into Connect SoCal 2024;
  - Map disadvantaged communities with critical infrastructure and assets, and assess vulnerability to hazards in the Equity Analysis for Connect SoCal 2024;
  - Identify and support local agencies to protect communities vulnerable to climate effects;
  - Support implementing agencies in incorporating equity considerations in climate risk management and/or emergency management plans and preparedness procedures;
- **Build strong partnerships:** Coordinate across multiple sectors, scales, and stakeholders to ensure all people have access to the fundamental physical, health, and social benefits of our natural and built systems;
  - Support expansion of public outreach activities for Connect SoCal 2024 to align implementation of strategies with community needs;
  - Collaborate with local and regional partners to support building resiliency through preparedness education, trainings, and resources;
  - Expand public outreach and education to policymakers, businesses, and the general public;
  - Develop templates to support jurisdictions in preparing a community-wide outreach program to educate a diverse population on how to prepare and recover from climate change effects;
- **Apply ecosystem-based approaches:** Incorporate ecosystem resilience, protection of ecosystem services, and sustainable resource management;
  - Support use of systems-based risk-management methods and tools for implementation agencies, and help prioritize options that take into account nature-based solutions and considerations for reducing vulnerabilities;

- Support preservation, enhancements, and protection of open space, as well as natural and working lands, that have climate adaptation and resilience benefits – including carbon sequestration, as well as groundwater capture and storage;
- **Maximize mutual benefits:** Support resilience and conservation initiatives across built, social, economic, and natural systems, such as disaster preparedness, to ensure synergies across systems and reduce/avoid impacts of maladaptation.
  - Incorporate climate change adaptation for natural lands into Connect SoCal 2024;
  - Support implementing agencies' efforts to include climate-ready home hardening strategies in housing construction to minimize the potential loss of housing units stemming from climate-related hazards, including sea level rise, wildfires, landslides, and extreme flooding, among others;
  - Support development of Local Hazard Mitigation Plans to help jurisdictions prepare for disasters and access federal disaster relief resources; and
  - Support integration of climate vulnerability assessments into infrastructure planning and delivery for implementing agencies.

**FISCAL IMPACT:**

Work associated with this item is included in the FY 22-23 Overall Work Program (310.4874.01: Connect SoCal Development).

**ATTACHMENT(S):**

1. PowerPoint Presentation - Draft Resilience and Conservation Subcommittee White Paper
2. Draft Resilience & Conservation Subcommittee White Paper



# Draft Resilience & Conservation Subcommittee White Paper

January 23, 2023

[WWW.SCAG.CA.GOV](http://WWW.SCAG.CA.GOV)

## Refresher: Resilience & Conservation Subcommittee

#	DATE	TOPIC
1	<b>September 19</b>	Where We Are <i>Level Setting &amp; Work Plan Prioritization</i>
2	<b>October 17</b>	How Can SCAG Have an Impact <i>Policy Areas of Focus &amp; Implementation Tools</i>
3	<b>November 21</b>	What SCAG Should Do to Strengthen Resilience <i>Resilience Policy Discussion</i>
4	<b>January 23</b>	Resilience & Conservation Subcommittee Recommendations <i>Final White Paper</i>

## Resilience & Conservation Policy Question



*How can Connect SoCal mitigate and adapt to the impacts of climate and seismic-related hazards on our built and natural systems and increase our region's resilience?*

## Resilience & Conservation Subcommittee Goals

Advance the direction set in the SCAG Regional Council Resolution on Climate Change Action to consider opportunities for enhanced resilience & resource conservation

Develop recommendations on how Connect SoCal can support our communities in adapting to changing conditions or mitigating risks to become more resilient

# Resilience & Conservation Subcommittee Proposed Subcommittee Recommendations

- 1. Define Resilience:** The capacity of the SCAG region's built, social, economic and natural systems to anticipate and effectively respond to changing conditions, acute shocks, and chronic stressors by creating multiple opportunities for a sustainable, thriving and equitable future;
- 2. Prioritize the most vulnerable populations and communities subject to climate hazards:** Help the people, places, and infrastructure that are most at risk for climate change impacts, recognizing that disadvantaged communities are often overburdened
- 3. Build strong partnerships:** Coordinate across multiple sectors, scales, and stakeholders to ensure all people have access to the fundamental physical, health, and social benefits of our natural and built systems
- 4. Apply ecosystem-based approaches:** Incorporate ecosystem resilience, protection of ecosystem services, and sustainable resource management
- 5. Maximize mutual benefits:** Support resilience and conservation initiatives across built, social, economic, and natural systems, such as disaster preparedness, to ensure synergies across systems and reduce/avoid impacts of maladaptation

## Resilience & Conservation Subcommittee: Proposed Recommendation #1

### **Define Resilience:**

*The capacity of the SCAG region's built, social, economic and natural systems to anticipate and effectively respond to changing conditions, acute shocks, and chronic stressors by creating multiple opportunities for a sustainable, thriving and equitable future*



Image source: FormLA Landscaping, U.S. Green Business Council – Los Angeles

# Resilience & Conservation Subcommittee: Proposed Recommendation #2

## ***Prioritize the Most Vulnerable Populations and Communities Subject to Climate Hazards:***

*Help the people, places, and infrastructure that are most at risk for climate change impacts, recognizing that disadvantaged communities are often overburdened;*



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# Proposed Recommendation #2 Connect SoCal Integration & Implementation Actions

- ***Incorporate climate change considerations into Connect SoCal 2024***
- ***Map disadvantaged communities with critical infrastructure and assets, and assess vulnerability to hazards in the Equity Analysis for Connect SoCal 2024***
- ***Identify and support local agencies to protect communities vulnerable to climate effects***
- ***Support implementing agencies in incorporating equity considerations in climate risk management and/or emergency management plans and preparedness procedures***



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# Resilience & Conservation Subcommittee: Proposed Recommendation #3

## **Build Strong Partnerships:**

*Coordinate across multiple sectors, scales, and stakeholders to ensure all people have access to the fundamental physical, health, and social benefits of our natural and built systems*



Image source: SCAG

# Proposed Recommendation #3 Connect SoCal Integration & Implementation Actions

- **Support expansion of public outreach activities** for Connect SoCal 2024 to align implementation of strategies with community needs
- **Collaborate with local and regional partners** to support building resiliency through preparedness education, trainings, and resources
- **Expand public outreach and education** to policymakers, businesses, and the general public
- **Develop templates to support jurisdictions** in preparing a community-wide outreach program to educate a diverse population on how to prepare and recover from climate change effects



Image source: SCAG

# Resilience & Conservation Subcommittee: Proposed Recommendation #4

## **Apply Ecosystem-Based Approaches:**

*Incorporate ecosystem resilience, protection of ecosystem services, and sustainable resource management*



Image source: Santa Ana Watershed Project Authority, 2016 Santa Ana Riverwalk

# Proposed Recommendation #4 Connect SoCal Integration & Implementation Actions

- **Support use of systems-based risk-management methods and tools** for implementation agencies, and help prioritize options that take into account nature-based solutions and considerations for reducing vulnerabilities
- **Support preservation, enhancements, and protection of open space, as well as natural and working lands** that have climate adaptation and resilience benefits – including carbon sequestration, as well as groundwater capture and storage



Image source: Santa Ana Watershed Project Authority, 2016 Santa Ana Riverwalk



# Resilience & Conservation Subcommittee: Proposed Recommendation #5

## **Maximize Mutual Benefits:**

*Support resilience and conservation initiatives across built, social, economic, and natural systems, such as disaster preparedness, to ensure synergies across systems and reduce/avoid impacts of maladaptation.*

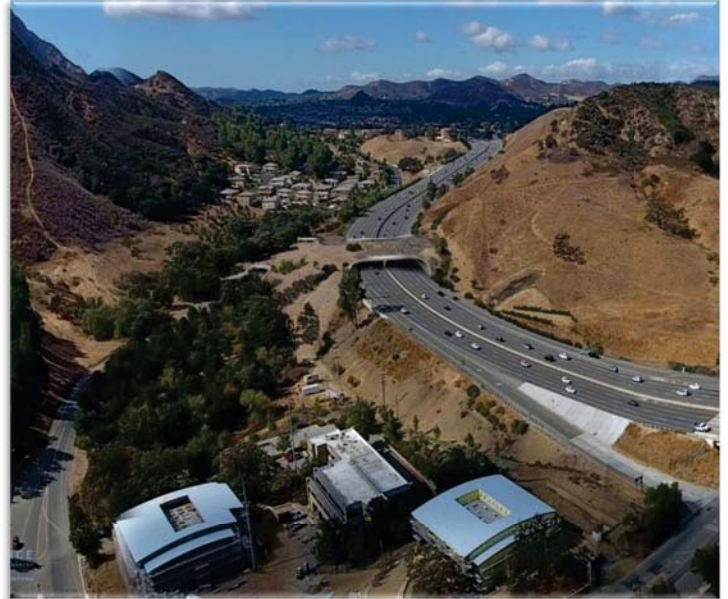


Image source: Resource Conservation District of the Santa Monica Mountains

# Proposed Recommendation #5 Connect SoCal Integration & Implementation Actions

- **Incorporate climate change adaptation for natural lands into Connect SoCal 2024**
- **Support implementing agencies' efforts to include climate-ready home hardening strategies in housing construction to minimize the potential loss of housing units stemming from climate-related hazards, including sea level rise, wildfires, landslides, and extreme flooding, among others**
- **Support development of Local Hazard Mitigation Plans to help jurisdictions prepare for disasters and access federal disaster relief resources**
- **Support integration of climate vulnerability assessments into infrastructure planning and delivery for implementing agencies**



Image source: Resource Conservation District of the Santa Monica Mountains



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# Connect SoCal 2024 Subcommittee Draft White Paper

## RESILIENCE & CONSERVATION

### Introduction

SCAG is currently developing Connect SoCal 2024. Three special Regional Council subcommittees have been created around Next Generation Infrastructure, Resilience and Conservation, and Racial Equity and Regional Planning. Each subcommittee met four times between September 2022 and January 2023, to identify recommendations that will inform how these emerging issues are addressed in Connect SoCal 2024.

The purpose of the Resilience & Resource Conservation Subcommittee is to advance the direction set in the SCAG Regional Council Resolutions on Climate Change Action (Resolution No. 21-628-1) and Water Action (Resolution No. 22-647-3) to consider opportunities for enhanced conservation and how Connect SoCal can support our communities in adapting to changing conditions or mitigating risks to become more resilient in the context of future growth, as well as to identify and integrate policies and strategies to align investments in water infrastructure with housing needs and the adopted growth forecast and development pattern featured in Connect SoCal 2024.

By 2050, the SCAG region is anticipated to grow by an additional 1.7 million people, with a significant 15% increase in employment. Further, the region is expected to experience shocks and stressors related to climate change, such as more intense wildfires, drought, extreme heat and rising sea levels, as well as seismic events that will negatively impact the region's public health, welfare, and the greater economy. Our region's built environment, natural and social systems, as well as the greater economy could be significantly affected by these hazards as well as the associated constraint on essential resources, with particularly acute and disproportionate impacts on vulnerable communities. Significant regional public health and economic benefits could accrue if targeted strategies and investments are prioritized now to address potential impacts of climate-related shocks and stressors. Within the resilience policy space, shocks are commonly defined as sudden and acute events that threaten immediate safety and well-being, whereas stressors are commonly defined as chronic challenges that weaken natural, built, or human systems and resources.

As such, the Subcommittee's policy question at hand is:

- ***How can Connect SoCal mitigate and adapt to the impacts of climate and seismic-related hazards on our built and natural systems and increase our region's resilience?***

To tackle this question and formulate recommendations for inclusion in Connect SoCal, the goals of the body, as established by the members, are to:

- ***Advance the direction set in the SCAG Regional Council Resolution on Climate Change Action and Water Action to consider opportunities for enhanced resilience & resource conservation; and***
- ***Develop recommendations on how Connect SoCal can support our communities in adapting to changing conditions or mitigating risks to become more resilient.***

## Subcommittee Foundations

Resilience and conservation are embedded across the number of SCAG’s work. Within Connect SoCal 2020, resilience and conservation were integrated into the core vision, key goals, and guiding principles of the plan. Looking further at the Connect SoCal 2020 goals, the following elements are featured:

- Enhance the preservation, security, and resilience of the regional transportation system;
- Reduce greenhouse gas emissions and improve air quality;
- Support healthy and equitable communities;
- Adapt to a changing climate and support an integrated regional development pattern and transportation network; and
- Promote conservation of natural and agricultural lands and restoration of habitats.

Additionally, SCAG includes a number of resilience and conservation mitigation measures in the Connect SoCal 2020 Program Environmental Impact Report (PEIR) that address resilience and resource conservation.

Through SCAG’s unanimously adopted Climate Change Action Resolution (Resolution No. 21-628-1) from January 2021, SCAG resolved to develop a Regional Resilience Framework to “help the region plan and prepare for a changing climate, as well as potential near- and long-term disruptions to Southern California.” As part of that work, SCAG conducted a landscape resilience assessment to understand how jurisdictions are planning for climate change. Looking towards the development of Connect SoCal 2024, the Climate Change Action Resolution also called on SCAG staff to “include climate adaptation and mitigation analysis and strategies in the 2024 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS).”

In October 2022, SCAG’s Regional Council also unanimously adopted a Water Action Resolution that resolved to “further explore regional water challenges and solutions [through the Resource & Conservation Subcommittee] and report findings for consideration by SCAG’s Energy & Environment Committee.” This resolution called on local and regional partners to join together to adopt an “all of the above” approach to addressing the region’s water challenges and catalyzing opportunities, and for SCAG to take action and support partners to reduce water use; improve water conservation, reuse, and efficiency; enhance water systems’ health and resilience; pursue and potentially implement new water supply and storage opportunities; and support 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.

## Subcommittee: Discussion & Key Findings

The four meetings of the Resilience & Conservation Subcommittee included presentations from staff and subject matter experts, followed by facilitated dialogue amongst subcommittee members. Each meeting built off the previous and informed and shaped the recommendations that are included in the white paper. Meeting topics included:

- **Where We Are: Level Setting & Work Plan Prioritization**  
Meeting 1 of the Resilience & Conservation Subcommittee provided the group with an overview of the Subcommittee’s purpose and proposed outlook; SCAG’s proposed definition of

“resilience”; and resilience and conservation principles, goals, and strategies embedded in Connect SoCal 2020 and Connect SoCal 2020 Programmatic Environmental Impact Report (PEIR). Resilience and conservation are key parts of the core vision, key goals and guiding principles outlined in Connect SoCal to advance the region’s economic vitality, improve mobility options, and grow in a sustainable way that builds healthy and vibrant communities. As part of the Connect SoCal Guiding Principles, resilience and conservation are most prominently featured across three major efforts: Land Use & Sustainable Development, Transportation & Mobility, and Planning. Furthermore, the Connect SoCal 2020 PEIR includes approximately 20 mitigation measures which address resilience and resource conservation. These mitigation measures span efforts to address wildfire risk, water conservation and planning, greenhouse gas mitigation, agriculture and forestry, biological resources, and more.

In evaluating the proposed definition of resilience for inclusion in Connect SoCal 2024, members of the Subcommittee provided feedback that the effectiveness of responding to climate hazards should be emphasized within the plan. As such, the definition was updated to include “*effectively* respond to climate hazards”, and was subsequently reviewed in Meeting 2 of the Subcommittee.

Other guidance from members included the need to:

- Prioritize strategies that promote long-term and short-term responses to resilience shocks and stressors, and monitor effectiveness;
- Build strong partnerships to ensure shocks and stressors can be effectively addressed; and
- Secure resources for local agencies to promote disaster preparedness.

Potential opportunities for integrating this guidance in Connect SoCal 2024 include:

- Identify how Connect SoCal 2024 strategies address long-term and short-term responses to shocks and stressors.
- ***How Can SCAG Have an Impact: Policy Areas of Focus & Implementation Tools***  
Meeting 2 of the Resilience & Conservation Subcommittee provided an overview of SCAG’s landscape analysis of resilience planning efforts across the SCAG region, as well as a more detailed analysis of resilience planning within the Inland Southern California Region. Kristopher Eclarino, Technical Project Manager at Climate Resolve, and Michelle Baron, Consultant at Climate Resolve, provided a presentation examining the state of climate adaptation planning across jurisdictions within the Southern California region. The study explored the impacts of climate-related shocks and stressors on the SCAG region to further SCAG’s understanding and approach to addressing resilience at a regional scale and involved the review of climate-related resilience planning efforts and documents, such as climate action plans, sustainability plans, resilience plans, general plans, local hazard mitigation plans, and more.

The study area consisted of 191 cities and two tribal nations within the SCAG region. Through the climate resilience landscape analysis, the following trends were found:

- 86 out of 193 (45%) of jurisdictions have adopted a standalone climate, sustainability and/or resilience plan, with 30 of the 86 plans including adaptation strategies;

- 141 out of 193 (73%) of jurisdictions have adopted a local hazard mitigation plan (LHMP) at either the local or multijurisdictional level, with 105 of the 141 LHMPs accounting for climate change impacts;
- 19 out of 193 (10%) of jurisdictions have updated general plans to meet the requirements of SB 379 and SB 1035;
- 104 out of 193 (54%) of jurisdictions contain disadvantaged communities, as defined and identified via CalEnviroScreen 4.0. Of the 104 jurisdictions, 17 have adopted environmental justice goals, policies and objects and 10 have updated general plans which meet the requirements of SB 1000; and
- Drought, flood and wildfire were found to be the most frequently cited climate resilience disruption noted across jurisdiction plans.

Additionally, the following climate-related shocks and stressors were most commonly identified through the review of local planning documents:

<b>Shocks</b>	<b>Stressors</b>
<i>Sudden or acute events that threaten immediate safety and well-being</i>	<i>Chronic challenges that weaken natural, built, or human resources</i>
<ul style="list-style-type: none"> <li>● Avalanche</li> <li>● Drought</li> <li>● Earthquake</li> <li>● Extreme Cold</li> <li>● Extreme Heat</li> <li>● Flood</li> <li>● Hazard Material Release</li> <li>● Infrastructure Failure</li> <li>● Landslide</li> <li>● Non-heat-related Severe Weather</li> </ul>	<ul style="list-style-type: none"> <li>● Access &amp; Function Needs Population</li> <li>● Access to Open Space</li> <li>● Age Dependency Ratio</li> <li>● Aging Infrastructure</li> <li>● Car-less Households</li> <li>● Economic Security</li> <li>● Educational Attainment</li> <li>● Female Head of Household</li> <li>● Food Insecurity</li> <li>● Foreign Born</li> </ul>

Further in the second meeting, following feedback from the Subcommittee, SCAG finalized the resilience definition to the following:

***The capacity of the SCAG region's built, social, economic and natural systems to anticipate and effectively respond to changing conditions, acute shocks, and chronic stressors by creating multiple opportunities for a sustainable, thriving and equitable future.***

Finally, meeting 2 included presentations from resilience experts within the region as a means of exploring resilience in the context of the region’s built, economic, and natural systems. These speakers included Leah Fisher, Office Chief for Air Quality and Climate Change at Caltrans (CA DOT); Rutger de Koning and Robert Mens, Bouwinvest Real Estate Investors based in The Netherlands; Charles Wilson, Executive Director and CEO of the Southern California Water Coalition; and Dr. Qinqin Liu, scientist and former analyst at California Natural Resources Agency, Department of Fish and Wildlife, and Department of Water Resources.

Charles Wilson focused on the current state and future of water supplies in the SCAG region, noting that the SCAG's region's primary water sources are severely stressed. In the coming decades, the region will have to prioritize increased conservation, and invest in new infrastructure for stormwater capture, large scale recycling, and desalination to ensure water supply.

Leah Fisher's presentation provided an overview of Caltrans' work to implement State guidance on infrastructure resilience. Caltrans has updated their climate vulnerability assessments to keep pace with the latest climate science, and adaptation consideration of climate risks is now required for early project planning.

Rutger de Koning and Robert Mens of Bouwinvest Real Estate Investors demonstrated the emerging practice of considering climate change as an integral part of risk management for real estate investment, and the need consider mitigation to lower investment risks.

Finally, Qinqin Liu, Ph.D., shared her conceptual model framework for water, energy, food and ecosystems with climate change, and its implications for integrated regional resource policy. For example, 12 percent of energy use is for water, so it is important to assess energy intensity for regional water planning on management. She concluded that resilience depends on the coordination of multiple sectors including water, energy, agriculture and fish and wildlife, and to assess benefits, trade-offs and conflicts between these systems.

From these presentations, members of the Subcommittee highlighted that data-driven climate vulnerability assessments can better inform decision-making in all areas, including infrastructure projects, natural resource systems, and financial investments. Other areas of importance for SCAG include:

- Providing widely accessible climate hazard and resource data to help inform small-scale and large-scale decision-making in the public and private sectors;
- Prioritizing the most vulnerable people, places, and infrastructure at risk for climate change impacts - recognizing that disadvantaged communities are often overburdened; and
- Applying ecosystem-based approaches to promote sustainable resource management.

Actions to integrate these findings in Connect SoCal 2024 could include:

- Utilize climate hazard and resource areas data to help inform local input on jurisdictional and neighborhood-level forecasted growth, as demonstrated through SCAG's Local Data Exchange completed in December 2022;
- Integrate nature-based solutions and preservation/restoration of native plants to increase water resilience, and adaptation to climate change; and
- Map climate hazards for disadvantaged communities.

- ***How Can SCAG Have an Impact: Policy Areas of Focus & Implementation Tools***

Meeting 3 of the Resilience & Conservation Subcommittee included a presentation from Dr. Meghan Jennings, conservation biologist from San Diego State University, who provided information examining ecosystem resilience in the context of climate change. SCAG Staff also provided further insight on social resilience via updates on SCAG's Regional Resilience Framework (RRF), and shared early feedback from community-based organizations (CBOs) and one tribal government participating in RRF outreach and engagement to supplement discussions on resilience and conservation principles and policies.

Findings from these presentations emphasized that ecosystem resilience is important to minimize impacts of climate change in natural lands (e.g. wildfires) and can be improved through nature-based solutions. Jurisdictions need additional staff resources and funding to address climate adaptation needs. In addition, social resilience and community networks should be prioritized and improved to minimize the impacts of shocks and stressors on the most vulnerable populations.

As such, members of the Subcommittee emphasized outreach with disadvantaged communities, and opportunities for maximizing co-benefits from conservation of wildlife and natural lands:

- Outreach and early involvement with disadvantaged communities is essential to identify potential climate vulnerabilities and potential resilience strategies, especially in the area of social resilience; and
- Maximize mutual benefits to support resilience and conservation initiatives across built, social, economic, and natural systems, such as disaster preparedness, to ensure synergies across systems and reduce/avoid impacts of maladaptation.

In carrying over these findings to the development of Connect SoCal, approaches could include:

- Assessing and minimizing climate hazards for the most vulnerable populations, communities, natural systems, and infrastructure; and
- Integrating climate adaptation strategies that are responsive to the unique shocks and stressors present for focus areas, and avoid maladaptive impacts.

- ***Resilience & Conservation Final Draft White Paper***

Meeting 4 will include additional presentations from water experts and further discussion to solidify the resilience and conservation principles and policies for consideration by Policy Committees and Regional Council for inclusion in Connect SoCal 2024.

### Subcommittee Recommendations

Overall, feedback from members of the Subcommittee can be grouped into four broad recommendations. These recommendations will inform the Connect SoCal Policy Development Framework and on-going policy discussions related to Connect SoCal 2024, and will be taken to the Regional Council for further deliberation:

- ***Define Resilience:*** The capacity of the SCAG region's built, social, economic and natural systems to anticipate and effectively respond to changing conditions, acute shocks, and chronic stressors by creating multiple opportunities for a sustainable, thriving and equitable future;



- **Prioritize the most vulnerable populations and communities subject to climate hazards:** Help the people, places, and infrastructure that are most at risk for climate change impacts, recognizing that disadvantaged communities are often overburdened;
- **Build strong partnerships:** Coordinate across multiple sectors, scales, and stakeholders to ensure all people have access to the fundamental physical, health, and social benefits of our natural and built systems;
- **Apply ecosystem-based approaches:** Incorporate ecosystem resilience, protection of ecosystem services, and sustainable resource management; and
- **Maximize mutual benefits:** Support resilience and conservation initiatives across built, social, economic, and natural systems, such as disaster preparedness, to ensure synergies across systems and reduce/avoid impacts of maladaptation.

## Next Steps

The scope of the subcommittee discussions also illuminated opportunities for broader recommendations to inform SCAG’s work both in Connect SoCal implementation and other program areas. To realize these recommendations, potential actions to support integration into Connect SoCal 2024 and its implementation are summarized below:

- **Prioritize the most vulnerable populations, communities, and infrastructure subject to climate hazards:** Help the people, places, and infrastructure that are most at risk for climate change impacts, recognizing that disadvantaged communities are often overburdened
  - Incorporate climate change considerations into Connect SoCal 2024;
  - Map disadvantaged communities with critical infrastructure and assets, and assess vulnerability to hazards in the Equity Analysis for Connect SoCal 2024;
  - Identify and support local agencies to protect communities vulnerable to climate effects;
  - Support implementing agencies in incorporating equity considerations in climate risk management and/or emergency management plans and preparedness procedures;
- **Build strong partnerships:** Coordinate across multiple sectors, scales, and stakeholders to ensure all people have access to the fundamental physical, health, and social benefits of our natural and built systems
  - Support expansion of public outreach activities for Connect SoCal 2024 to align implementation of strategies with community needs;
  - Collaborate with local and regional partners to support building resiliency through preparedness education, trainings, and resources;
  - Expand public outreach and education to policymakers, businesses, and the general public;
  - Develop templates to support jurisdictions in preparing a community-wide outreach program to educate a diverse population on how to prepare and recover from climate change effects;
- **Apply ecosystem-based approaches:** Incorporate ecosystem resilience, protection of ecosystem services, and sustainable resource management

- Support use of systems-based risk-management methods and tools for implementation agencies, and help prioritize options that take into account nature-based solutions and considerations for reducing vulnerabilities;
- Support preservation, enhancements, and protection of open space, as well as natural and working lands, that have climate adaptation and resilience benefits – including carbon sequestration, as well as groundwater capture and storage;
- **Maximize mutual benefits:** Support resilience and conservation initiatives across built, social, economic, and natural systems, such as disaster preparedness, to ensure synergies across systems and reduce/avoid impacts of maladaptation.
  - Incorporate climate change adaptation for natural lands into Connect SoCal 2024;
  - Support implementing agencies' efforts to include climate-ready home hardening strategies in housing construction to minimize the potential loss of housing units stemming from climate-related hazards, including sea level rise, wildfires, landslides, and extreme flooding, among others;
  - Support development of Local Hazard Mitigation Plans to help jurisdictions prepare for disasters and access federal disaster relief resources; and
  - Support integration of climate vulnerability assessments into infrastructure planning and delivery for implementing agencies.