



2023-2024

ICARP Impact Report

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Letter from the Director

On behalf of the Governor's Office of Land Use and Climate Innovation (LCI) (formerly the Governor's Office of Planning and Research), it is my pleasure to share this 2023-2024 Impact Report of the Integrated Climate Adaptation and Resiliency Program (ICARP).

In 2023 and 2024, we saw exceptional progress and accomplishments for the program: the Adaptation Planning Grant Program (APGP) and Regional Resilience Grant Program (RRGP) awarded nearly \$30 million; the California Climate Change Assessment connected with communities across the state through nine in-person workshops; the Plan Alignment Toolkit expanded with the addition of an updated version of the Coastal Compass; and the Vulnerable Communities Platform launched a test site. I look forward to the continued progress of these and other projects over the years ahead.

The devastating floods California experienced at the start of 2023 may have seemed exemplary, especially on the heels of a multiyear drought. However, the science is unequivocally clear that climate change will cause our weather patterns to swing from one extreme to another, with increasing severity.

As we face the challenges climate change already poses and prepare for them to intensify, I am heartened by the hard work and dedication of the ICARP team to chart a path toward a future where hazards and stressors have less pronounced impacts, especially for the most vulnerable. Guided by the interdisciplinary thought leadership of the ICARP Technical Advisory Council, the program's efforts to deliver cutting-edge climate science, tools, guidance, technical support, policy and planning coordination, and direct investments will undoubtedly keep us on a steady path to resilience.



Samuel Assefa

Director

*Governor's Office of
Land Use and Climate
Innovation*

A handwritten signature in black ink, appearing to read 'Sam Assefa'.

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Executive Summary



The Integrated Climate Adaptation and Resiliency Program (ICARP), established through [Senate Bill 246 \(Wieckowski, 2016\)](#), advances a cohesive and holistic response to the impacts of climate change by coordinating regional and local efforts with state climate adaptation strategies to support comprehensive planning and accelerate implementation. Through its enabling legislation, ICARP is centrally focused on efforts that advance climate equity and support integrated climate strategies, or those strategies that benefit both greenhouse gas reductions and adaptation.

Prioritizing climate equity throughout all programmatic activities puts vulnerable and historically underserved communities at the forefront of ICARP’s approach.

ICARP works to advance these priorities through five core priority areas, in addition to special initiatives, identified by its Technical Advisory Council:

- Actionable Research and Resilience Metrics
- Decision Support Tools and Guidance
- Building Partnerships and Leveraging Resources
- Funding and Financing
- Climate Equity and Vulnerable Communities

Prioritizing climate equity throughout all programmatic activities puts vulnerable and historically underserved communities at the forefront of ICARP’s approach to fostering a climate resilient future and ensures that program development and evolution continue to embed equity as a holistic and foundational keystone, with cross-linkages spanning all

ICARP workstreams. This framing also helps us evaluate our progress in ensuring that equity is a holistic goal for the entire ICARP program; one where we continue to advance and develop strategies that address equity at broader scales, while recognizing and uplifting the value of community-level action.

This report provides an overview of ICARP's recent efforts to achieve its mission—detailing the program's innovative approaches and documenting key milestones from 2023 and continued efforts in 2024. Highlights include:

- The Climate Services team conducted User Needs Assessments in 2023 to guide improvements to the Adaptation Clearinghouse and Cal-Adapt. These User Needs Assessments and additional outreach and engagement illuminated gaps in practitioners' understanding, accessibility, and application of climate adaptation tools and resources. In 2024, the team has been developing new functions on the Adaptation Clearinghouse, including an Adaptation Help Desk to provide hands-on support for communities in their adaptation and resilience efforts.
- The Cal-Adapt Analytics Engine (AE) will enhance informed decision-making after integrating the latest downscaled climate modeling in 2023 from California's Fifth Climate Change Assessment. In 2024, the Climate Services team has been working to coordinate support resources for the new data and identify opportunities to adapt AE resources to meet a greater variety of user needs, including Fifth Assessment Report Authors, and to integrate new data into the Vulnerable Communities Platform (VCP).
- The Fifth Assessment team finalized a list of 26

research topics for the Assessment's products and issued a Notice of Intent to Award for the core climate research reports. The team engaged over 470 individuals and hosted 13 public workshops in 2023; participants' feedback informed development of a framework and author team structure for the Assessment's Regional and Topical Synthesis Reports. In 2024, the author teams are being assembled and report development is forthcoming.

- ICARP's Adaptation Planning Grant Program (APGP) and Regional Resilience Grant Program (RRGP) made their first rounds of awards, investing \$8 million in local planning through APGP's 14 local planning projects and \$21.7 million to 10 planning and 6 implementation projects through RRG. Initiation of these projects in 2024 will demonstrate the value of investing in resilience. In 2024, the Extreme Heat and Community Resilience Program will accept applications and issue awards for its first round of funding.
- The Fifth Assessment's Tribal Research program established a Tribal Advisory Group in 2023 to provide guidance and leadership over the program, which released a request for proposals at the end of the year. Additionally, ICARP is conducting a Tribal User Needs Assessment in 2024 to understand Tribes' adaptation planning needs and how ICARP can provide additional support.
- In 2024, the ICARP Technical Advisory Council has returned to holding its public meetings with in-person participation. On March 29, the Council convened for an in-person meeting in Sacramento; 17 members joined in-person and virtually. ICARP looks forward to connecting

with communities throughout California through these convenings but will maintain virtual participation options to preserve the increased engagement with the Council that happened when meetings went virtual.

Through these efforts, ICARP sought to center equity in processes and outcomes through meaningful engagement, technical assistance, and capacity building efforts. This report includes a detailed description of the goals, processes, outcomes, and lessons learned of select ICARP programmatic efforts to encourage practitioners to adopt similar principles and practices to empower California's vulnerable communities to prepare for climate change.

Looking ahead to 2025 and beyond, ICARP will continue to deliver on its priorities through the continuation and evolution of several strategic initiatives. The program will continue to foster partnerships and relationships with scientists, state and federal agencies, Tribes, businesses, local governments, and community groups so California can thrive in the face of climate change.



Introduction



What is Climate Resilience?

Climate resilience and adaptation are often discussed together, but it is helpful to distinguish between them. Generally, adaptation is an action or set of actions that reduce physical climate risk. Resilience describes a state of readiness to face climate risks. California is taking steps to prepare for the impacts of a changing climate at the state, regional, and local levels. Preparing for these changes is called adaptation. A series of adaptive steps contribute to resilience.

California is taking steps to prepare for the impacts of a changing climate at the state, regional, and local levels.

Adaptation and resilience are essential to maintain the stability and reliability of our natural, built, and social systems in the face of climate threats. In the absence of adaptation, systems that aren't resilient to climate change will experience severe disruption and require significant time and investment to recover, resulting in social, economic, environmental, public health, and other consequences. Because California has already experienced more frequent and severe climate-driven events, including wildfires, drought, and extreme heat, preparing for climate change isn't a distant need, but an immediate challenge whose solutions and strategies need to also support long-term outcomes.

Californians do not and will not experience climate impacts equally. For example, factors associated with race, gender, age, income, health conditions, disability, access and functional needs, occupation, and more can influence the impacts of a changing climate on individuals and

communities. Climate equity in an adaptation and resiliency context recognizes and seeks to address the fact that climate change will disproportionately impact communities that already experience environmental and socio-economic burdens and have a lower capacity to withstand and recover from climate impacts.

Developing impactful climate adaptation solutions requires targeted policies and investments that reduce vulnerability, and, because existing socio-economic burdens underpin many dimensions of vulnerability, can also redress historic and systemic inequalities. Embedding equity in climate action requires both procedural and distributional equity strategies. Procedural equity seeks to create opportunities for meaningful consultation and participation in decision-making for impacted communities to increase the diversity of perspectives and lived experiences informing decisions. Distributional equity strives for the fair distribution of benefits and burdens, which includes prioritizing benefits to communities most in need to offset historic under-investment.

Recognizing these challenges and opportunities, ICARP advances climate equity throughout its efforts. As part of its foundational work, the ICARP Technical Advisory Council [defined vulnerable communities in 2018](#).

Climate vulnerability describes the degree to which natural, built, and human systems are at risk of exposure to climate change impacts.

Climate vulnerability describes the degree to which natural, built, and human systems are at risk of exposure to climate change impacts. Vulnerable communities experience heightened risk and increased sensitivity to climate change and have less capacity and fewer resources to cope with, adapt to, or recover from climate impacts. These disproportionate effects are caused by physical (built and environmental), social, political, and/or economic factor(s), which are exacerbated by climate impacts. These factors include, but are not limited to, race, class, sexual orientation and identification, national origin, and income inequality.

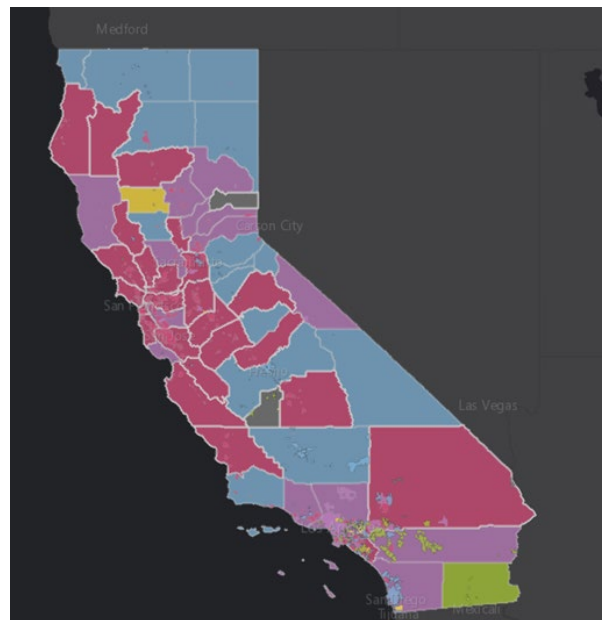
At the March 29, 2024, Technical Advisory Council Meeting, the Council approved the addition of “disability” as a factor defining vulnerable communities. Moving toward 2025 and beyond, there is a commitment to continue to explore and improve our definition of vulnerable communities.

Local and Regional Climate Adaptation in California

Local and regional governments are taking action by integrating climate into long-range planning, per [SB 379 \(Jackson, 2015\)](#). To support local and regional governments in preparing for climate change, the state produces an [Adaptation Planning Guide](#), a step-by-step process to plan for climate change. The planning process promoted by the Guide is flexible so that each local plan is responsive to community needs.

Figure 1: The [ResilientCA Adaptation Planning Map](#) shows that at least 282 (58.5%) of California's cities and 39 (67%) of California's counties have conducted climate risk/vulnerability assessment and adaptation policy development activities.

Figure 1: The [ResilientCA Adaptation Planning Map](#)



Legend

 Unknown/uncategorized	 Completed adaptation policy development
 Acknowledges climate risk or adaptation efforts	 Completed vulnerability assessment and adaptation policy development
 Completed vulnerability assessment	 Updated and adopted Safety Element



ICARP

ICARP, established through Senate Bill 246 (Wieckowski, 2016), advances a cohesive and holistic response to the impacts of climate change by coordinating regional and local efforts with state climate adaptation strategies to support comprehensive planning and accelerate implementation. Through its enabling legislation, ICARP is centrally focused on efforts that advance climate equity and support integrated climate strategies, or those strategies that benefit both greenhouse gas reductions and adaptation. By connecting and aligning California's adaptation efforts, ICARP advances a coordinated and comprehensive approach to climate adaptation and resilience.

Vision and Principles

At the inception of the program, ICARP developed a Vision and Principles to describe the characteristics of a resilient California, and how adaptation actions can contribute to this outcome. This creates a framework for action that guides adaptation efforts so California can be resilient to changing climate conditions.

ICARP Vision

All Californians thrive in the face of a changing climate. Leading with innovation, California meets the challenge of climate change by taking bold actions to protect our economy, our quality of life, and all people. The state's most vulnerable communities are prioritized in these actions. Working across all levels of government, the state is prepared for both gradual changes and extreme events. Climate change adaptation and mitigation is standard practice in government and business throughout the state. California meets these goals with urgency, while achieving the following long-term outcomes:

All people and communities respond to changing average conditions, shocks, and stresses in a manner that minimizes risks to public health, safety, and economic disruption and maximizes equity and protection of the most vulnerable.

Natural systems adjust and maintain functioning ecosystems in the face of change.

Infrastructure and built systems withstand changing conditions and shocks, including changes in climate, while continuing to provide essential services.



ICARP Principles



Integrated climate actions

Prioritize integrated climate actions, those that both reduce greenhouse gas emissions and build resilience to climate impacts, as well as actions that provide multiple benefits.



Promote equity, foster community

Prioritize actions that promote equity, foster community resilience, and protect the most vulnerable. Explicitly include communities that are disproportionately vulnerable to climate impacts.



Natural and green infrastructure solutions

Prioritize natural and green infrastructure solutions to enhance and protect natural resources, as well as urban environments. Preserve and restore ecological systems (or engineered systems that use ecological processes) that enhance natural system functions, services, and quality and that reduce risk, including but not limited to actions that improve water and food security, habitat for fish and wildlife, coastal resources, human health, recreation, and jobs.



Planning and investment decisions

Avoid maladaptation by making decisions that do not worsen the situation or transfer the challenge from one area, sector, or social group to another. Identify and take all opportunities to prepare for climate change in all planning and investment decisions.



Best-available science

Base all planning, policy, and investment decisions on the best-available science, including local and traditional knowledge, including consideration of future climate conditions out to 2050 and 2100, and beyond.



Flexible governance approaches

Employ adaptive and flexible governance approaches by utilizing collaborative partnership across scales and between sectors to accelerate effective problem solving. Promote mitigation and adaptation actions at the regional and landscape scales.



Reduce climate change risks

Take immediate actions to reduce present and near-future (within 20 years) climate change risks for all Californians; do so while also thinking in the long term and responding to continual changes in climate, ecology, and economics using adaptive management that incorporates regular monitoring.



Council Priorities

Each year, the ICARP Technical Advisory Council establishes Council Priorities that structure and guide the program's efforts over the year ahead to advance climate resiliency in California. The Council Priorities provide near-term areas of focus that work toward the long-range goals established in the Vision and Principles, while also being responsive to emerging issues. The 2023 Council priorities were:

- Actionable Research and Resilience Metrics
- Decision Support Tools and Guidance
- Building Partnerships and Leveraging Resources
- Funding and Financing
- Climate Equity and Vulnerable Communities
- Additional Special Initiatives

Programmatic Workstreams

ICARP works to meet its statutory objectives and advance its Vision, Principles, and Council Priorities through its programmatic workstreams. These efforts include the development and dissemination of decision-support tools, actionable climate science, guidance, technical assistance, and grant programs.

Policy and programmatic alignment: [The Technical Advisory Council](#) serves as a crucial public forum for meaningful discussion on California's adaptation and resilience policies, bringing together local, regional, and Tribal governments; nonprofits and boundary organizations; academia; the private sector; and state agencies. ICARP staff, in collaboration with the Council, coordinates and aligns local and regional efforts with the state's climate adaptation and resilience strategies. The Council's feedback is elevated into action through interagency and interorganizational coordination, ensuring that

public, private, and community partnerships contribute to California's climate efforts and amplify diverse perspectives.

Actionable Climate Science: To promote decision-making supported by actionable climate science, ICARP leads the development of [California's Climate Assessment](#). The Assessment consists of a portfolio of critical and cutting-edge data, research, and actionable tools that underpin state and local resilience actions. A robust and ongoing engagement initiative that strategically uplifts the perspectives and experience of diverse community partners throughout the research process ultimately ensures that the state's best available science and information on climate change is representative of and meaningful to all Californians.

Climate Services: ICARP promotes alignment of resilience priorities across state, regional, local, Tribal, and non-governmental entities by providing guidance, tools, and technical assistance. An important resource to support these activities is the [Adaptation Clearinghouse](#), established through SB 246 (Wieckowski, 2015) to serve as a central resource for curated case studies, reports, tools and data, and climate adaptation planning and project best practices. Ongoing work to provide support and guidance that expands access and usability of climate data and adaptation resources ultimately ensures these tools and systems are relevant and useful to a wide range of organizations and partners in California.

Direct Investments: ICARP oversees three grant programs to fund local, regional, and Tribal adaptation planning efforts across the state. The Adaptation Planning Grant Program (APGP) provides support to local, regional, and Tribal governments to support much-needed adaptation planning efforts. The [Regional Resilience Planning and Implementation Grant Program](#) (RRPG) supports regions in advancing resilience through capacity-building, planning, and project implementation. The Extreme Heat and Community Resilience Program (EHCRP) will help communities prepare for the impacts of extreme heat, recognizing that historically and currently underserved communities are particularly vulnerable to heat-related illnesses. This program directly addresses those gaps by ensuring communities gain access to the resources they need to be resilient in the face of climate events.

The following report highlights major programmatic accomplishments in 2023 and highlights the program's ongoing work in 2024.

Case Study

Empowering Climate Resilience Through Meaningful Engagement, Technical Assistance, and Capacity Building

ICARP is committed to serving California's vulnerable communities through policy development, partnerships, actionable climate science, technical assistance, and direct investments. Meeting this goal requires effective engagement and capacity building to be truly transformative because policies and programs are most effective when shaped by the lived experience of vulnerable communities. ICARP's thoughtful engagement across its programmatic efforts demonstrates these principles in action, and this case study seeks to encourage broad adoption of these effective policies and practices.

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As an organization that serves the entire state of California, ICARP's programs must meet the unique needs of its different communities and ecosystems. This requires seeking input from diverse perspectives, sectors, and regions when

developing programs and policies. Implementing these engagement practices across ICARP's numerous programmatic efforts requires thoughtful coordination to avoid over-burdening low-capacity communities by repeatedly seeking similar information from them. Additionally, engaging a broad and diverse audience also requires flexibility to meet people where they are. This can be applied literally through physical presence in a community for in-person workshops, or figuratively by holding engagement opportunities during different times of day to accommodate work schedules or sending surveys for people to contribute ideas when they have time. Taken together, these practices center and advance equity by prioritizing diverse representation, with a particular emphasis on seeking the lived experience of overburdened communities that are most affected by the outcomes of this work.

The Fifth Climate Change Assessment's 2023 Request for Information and regional in-person and virtual engagement series are illustrative examples of this coordinated approach. The Request for Information was issued in April 2023 and offered the public an opportunity to provide feedback on priority themes for the regional reports. It also solicited feedback on report development to emphasize community



engagement and partnerships. While a traditional Request for Information process asks the public to provide input to specific questions or prompts in a written format, the Fifth Assessment team complemented this effort with four virtual listening sessions to allow a broader audience to engage with the process. Hosting virtual listening sessions at varied times and prioritizing specific regions invited more diverse partners to provide feedback, especially for participants that are time-constrained, were engaging in a Request for Information for the first time, or had questions about the process.

In summer and fall 2023, the Fifth Assessment team also held in-person workshops in nine distinct regions of the state and three virtual workshops that engaged over 400 participants. While the development of past California Climate Assessments has centered on the expertise of researchers and academics, the Fifth Climate Assessment is prioritizing the integration

of diverse community voices throughout the research process. In doing so, the Fifth Assessment will fill critical research gaps and inform climate action that directly benefits California communities.

For each of the regional workshops, the Fifth Assessment team partnered with local and regional community-based organizations as co-hosts to better connect with communities that may not have otherwise engaged in the process. To ensure an equity-centered engagement process, the Fifth Assessment team worked with co-hosts and partners to provide participation assistance to under-resourced community members, Tribes, and Tribal-serving organizations. Additionally, to respect and maximize the time that communities had available to provide valuable feedback, the workshops integrated discussions on two other state initiatives that were also conducting public engagement: the California Climate Adaptation Strategy and the Vulnerable Communities Platform

(VCP). This coordinated approach avoided overburdening communities by providing a forum for feedback on several initiatives, rather than asking people to make time for multiple meetings on similar topics. Meeting communities where they are reduces the engagement burden placed on them, strengthens relationships with local partners, and centers their lived experiences, which is especially important for communities that are experiencing many climate impacts for the first time.

Meeting communities where they are reduces the engagement burden placed on them, strengthens relationships with local partners, and centers their lived experiences.

Engagement efforts by ICARP's Climate Services team in 2023 sought to address a common challenge with climate services: there is often a lack of collaboration between the people who develop climate data, adaptation tools, guidance, and technical assistance and the people who use them to advance climate resilience in their communities. The result of this disconnect is that many people who need these services may find them inaccessible or ineffective for their intended purposes and may choose not to use them at all. ICARP's Climate Services team undertook a User Needs Assessment that prioritized directly engaging users for feedback to understand how resources might serve low-capacity communities differently than high-capacity communities, and conducted targeted outreach to low-capacity and vulnerable communities. The team used multiple

strategies, including interviews, surveys, online data analytics, and other activities to engage over 180 individuals.

Through this process, the team learned that local governments and low-capacity organizations are less likely to use ICARP's resources. Some contributing factors include that users need content and resources that match their realities, with lower barriers to entry, more capacity-building resources, and more locally relevant information. The assessment also found that navigation improvements and content curation could allow users to find the resources they need more easily, but beyond that, more hands-on support in identifying and leveraging resources would be transformative. This has informed the team's work for 2024 and beyond, which includes several site updates and new services, including a new Adaptation Help Desk to help connect Californians to more accessible adaptation support from the program, and broader guidance in navigating the impressive suite of resources developed across the state.

ICARP's investment programs have honed processes for engaging communities to design program guidelines that are responsive to vulnerable communities' needs and provide technical assistance and capacity building for applicants and awardees. In 2023, the EHCRP began developing the program with extensive listening sessions to inform the development of the draft Guidelines and released an [engagement summary](#) to publicly communicate key takeaways. This followed the model set the previous year by the APGP ([APGP Engagement Summary](#) and [APGP Public Comment Summary](#)) and RRGP, which allowed public engagement to shape APGP and RRGP to be

responsive to the needs of vulnerable communities by not only tailoring eligibility criteria to meet these communities' needs and priorities, but also lowering barriers to accessing funding through improvements to the application process itself.

In winter and spring 2023, APGP and RRGp released their final Guidelines and solicited requests for proposals. During the application period, each program held webinars to provide general support for application development, and provided tailored technical assistance to applicants during office hours. The hands-on support provided during office hours helped low-capacity applicants get specific feedback on how they could develop a more competitive application, making their time spent applying more worthwhile and more likely to be successful. These efforts resulted in the programs exceeding their funding targets for vulnerable communities and Tribes.

Surpassing its goal of investing at least 51% of funds to directly benefit the most vulnerable communities to climate risks and 10% of funds to support projects led by Tribal applicants, 87% of RRGp's Round 1 funding will support projects that directly benefit disadvantaged communities and 65% of funding will support projects where at least one applicant is a Native American Tribe. Of the 16 RRGp projects, nine are led or co-led by California Native American Tribes.

The 14 APGP projects represent a significant step toward fostering cross-sector collaboration and equity in statewide efforts to adapt to climate change. Over 60% of the projects are located within Justice40 communities and will advance the Biden Administration's goal to invest in

communities burdened by legacy pollution. Of these, three are led or co-led by California Native American Tribes.

The teams also went beyond the norms of grant program management to provide additional support to projects that did not receive funding by providing feedback to unawarded applicants on ways to improve their applications in future rounds and to recommend other funding sources that could also meet their needs. The teams intend to replicate and build on this success with the EHCRP's first round of awards in 2024 and any other future funding opportunities.

Finally, the ICARP Technical Advisory Council, a crucial public forum devoted to coordinating regional and local efforts with state climate adaptation and resiliency strategies, has a unique obligation to represent and engage California's diverse regions and elevate the needs of vulnerable communities. ICARP strives for a broad range of perspectives [represented on the Council](#) to balance different areas of expertise, sectors, geographies, level of capacity, and urban and rural contexts. This diversity of voices and perspectives helps ICARP to connect with a broad range of local and regional actors, supporting the alignment of their efforts with state climate adaptation and resiliency strategies. Our diverse Council also helps ICARP spotlight unique challenges and opportunities for the state to be responsive to and strengthen connections with communities that would benefit from additional support and capacity.

A total of 259 unique individuals registered for the ICARP Technical Advisory Council's four virtual meetings in 2023.

Contributions from Councilmembers in 2023 helped the program be more intentional about centering equity in all aspects of ICARP's work, from increasing specificity in the language about the importance of equity in the 2022 Impact Report to challenging the grant programs to set ambitious targets for investing in vulnerable communities. In 2024, the Council continues to improve its ability to connect with and highlight the unique needs and opportunities of California's

diverse communities by holding hybrid meetings. This will allow ICARP to maximize the ability to engage California's communities through both the flexibility and convenience of virtual participation as well as the grounding in local context and relationship-building of in-person settings.

As ICARP continues to grow and adapt to the ever-changing landscape of climate change in California, the lessons learned from communities throughout the state will enable the program to continue to lead by developing processes, policies, and programs that meet ICARP's vision of prioritizing California's most vulnerable communities in the state's resilience efforts.



PROGRAMMATIC IMPLEMENTATION

2023-2024 Highlights



Actionable Research and Resilience Metrics

Actionable climate science is a cornerstone of California's leadership on climate change action and supports science-informed policies and investments to respond to accelerating climate impacts. California provides resources to translate and apply climate science to empower communities, the private sector, and local, regional, and Tribal governments to make informed decisions.

2023 Accomplishments

The interagency team developing California's Fifth Climate Change Assessment (Fifth Assessment), led by LCI in collaboration with the California Strategic Growth Council, California Natural Resources Agency, and California Energy Commission, made significant strides toward

completion of the Assessment in 2023. The downscaled climate change projections and scenarios that form the foundation of the Fifth Assessment continued to roll out over 2023 and are becoming available through the [Cal-Adapt Analytics Engine](#). Another foundational step, determining the scope of the Fifth Assessment's products, cleared with the release of a list of [26 research topics](#) at the beginning of the year. Subsequently, the team released a Request for Proposals for the Assessment's Core Climate Research reports and issued a [Notice of Intent to Award](#) on Nov. 1, 2023.

The team made significant progress in 2023 to establish frameworks for the Assessment's Regional and Topical Synthesis Reports. This involved

extensive outreach through the release of a Request for Information and four virtual listening sessions for the Regional Synthesis Reports, as well as nine in-person and three virtual workshops to gather input from communities on the scope of the Regional and Topical Synthesis Reports. This public engagement also informed updated boundaries of the Fifth Assessment's regions, strengthened connections with the VCP, and provided early input to inform the 2024 update of the California Climate Adaptation Strategy. At the end of the year, the team solicited nominations for the Regional Synthesis Report author teams and selected nine Coordinating Lead Authors.

The Fifth Assessment's Tribal Research Program formally established the [Tribal Advisory Group](#) to provide guidance and leadership to the program. Over the course of the year, the program developed and released draft Guidelines and public input on the draft shaped the final Guidelines, which were released in the fall alongside a Request for Proposals. The team conducted extensive engagement and government to government consultation to inform the scopes and author structure of the Indigenous Knowledge Guidance and Tribal and Indigenous Communities Report and ways in which Tribal and Indigenous knowledges should be uplifted throughout the Assessment's research products.

Finally, the Fifth Assessment team participated in multiple statewide conferences in 2023, such as the [California Tribal Water Summit](#), the [California Adaptation Forum](#), the [American Planning Association California Chapter Conference](#), the [Climate Science Alliance's San Diego Climate Summit](#), the [American Geophysical Union's Annual Meeting](#), the [Localizing California Waters Conference](#), and the [Tribal Climate and Health Adaptation Summit](#). These provided opportunities

to broaden awareness of the Assessment, upcoming opportunities to contribute to the Assessment, and strengthen the Assessment's network and connections.

In 2023, staff conducted extensive outreach and engagement:



70 participants in four virtual listening sessions for the Synthesis Reports Request for Information.



400+ participants in nine in-person and three virtual regional workshops.

ICARP also established its vision for the Science Advisory Group (SAG) in 2023. The Council's input on the structure and framework of the SAG contributed to a re-imagining of the group as a "network of networks" to include a wider range of expertise and input. As discussed in the April 2023 Technical Advisory Council meeting, the SAG restructuring was framed around a more nimble response to providing science guidance, but that also included mechanisms to expand the scope of expertise that is included in this network. To date, this has included interagency working groups focused on how to better characterize climate vulnerability, ongoing engagement with advocacy organizations to elevate community input, and ad-hoc connections to experts and academics in response to specific questions. The team identified four priority areas for building relationships with existing networks, which encompass community and environmental justice organizations, interagency collaborators, local governments or low-capacity

organizations interested in technical assistance, and federal and academic experts. Looking forward, the team is exploring options for how this network of expertise could be shared as a rolodex-like resource database for agency or public use, to ensure that the vast array of experts and knowledge in California is more accessible and usable.

2024 Highlights

2024 will mark the completion of the climate projections and data scenarios of the Fifth Climate Change Assessment. The team has finalized Regional and Topical Synthesis Report author teams and initiated the report development process, including development of the Tribal Communities Report. The Tribal Research Grants Program issued a second solicitation for grant proposals in spring and will announce funding awards in fall. The Fifth Assessment team made final awards for the Core Climate Research reports projects (see Notice of Intent to Award) and these projects commenced. The team continues to hold quarterly briefing events and engage with communities and subject matter experts.

In 2024, the SAG will develop science communications around recommended Representative Concentration Pathway (RCP) and Shared Socio-economic Pathway (SSP) modeling scenarios for science-informed climate planning in California. The RCP and SSP modeling include multiple plausible scenarios for global emissions trajectories, but high variability in the latter years creates significant uncertainty that makes long-term planning and projects a challenge. This guidance will fill a gap by bridging a highly technical aspect of climate science to provide more narrow recommendations on the most plausible scenarios to use in planning

decisions, and how to communicate the context and implications of those scenarios. This guidance is being used in ongoing coordination meetings with regional authors to identify how to best utilize updated data and scenarios, to ensure coherent and consistent framing across the regional reports, and to provide support and assistance to regional report authors in using this information as needed.

Finally, the Climate Services team will develop an evaluation protocol to assess the impact and outcomes of ICARP's programs and projects. The team will pilot test this framework through initial applications to the Adaptation Clearinghouse, technical assistance services, the VCP development process, and the Cal-Adapt visualizations for general users. Lessons learned from this pilot testing will inform the utility of this framework for other ICARP workstreams.



A total of **87 proposals sought \$29.4 million** for Core Climate Research grants, over 5 times the amount available.

Decision Support Tools and Guidance

To support local governments with adaptation planning and implementation, the state supports grant programs, guidance, technical assistance, capacity-building, and collaborative partnerships. ICARP plays a key role in equipping local governments and interested parties across the state with the tools and resources they need for climate adaptation planning and implementation.

2023 Accomplishments

Ongoing development of the Adaptation Clearinghouse's resources continued in 2023. The team added information on California cities' resilience planning progress to the ResilientCA Adaptation Planning Map, fulfilling the tool's intent to inventory local government climate risk, adaptation, and resiliency planning efforts and track progress toward statewide adaptation planning. ICARP also released an update to the [Coastal Resilience Compass: A Plan Alignment Guide](#) and a [plan alignment case study from the City of Santa Cruz](#), complementing the resources in the [Plan Alignment Toolkit](#).

This year, the User Needs Assessment that will inform forthcoming updates to the Adaptation Clearinghouse and Cal-Adapt concluded and staff [shared the results with the Council](#). The team also presented the findings of the Cal-Adapt User Needs Assessment to the California Energy Commission's Climate Data Analysis Working Group. Further collaboration with the California Energy Commission in 2023 included pilot testing the Cal-Adapt Analytics Engine.

The team promoted ICARP's tools and resources in several other forums. Staff presented on the Adaptation Clearinghouse and ICARP resources at a California Office of Emergency Services and Federal Emergency Management hazard mitigation and climate planning training. The team also presented on plan alignment at the [UC Davis Wildfire Resilient Structures Conference and Tradeshow](#).

Additionally, ICARP participated in an interagency working group convened by the Office of Environmental Health Hazard Assessment to coordinate the development of an extreme heat ranking system pursuant to [AB 2238 \(L. Rivas, 2022\)](#).

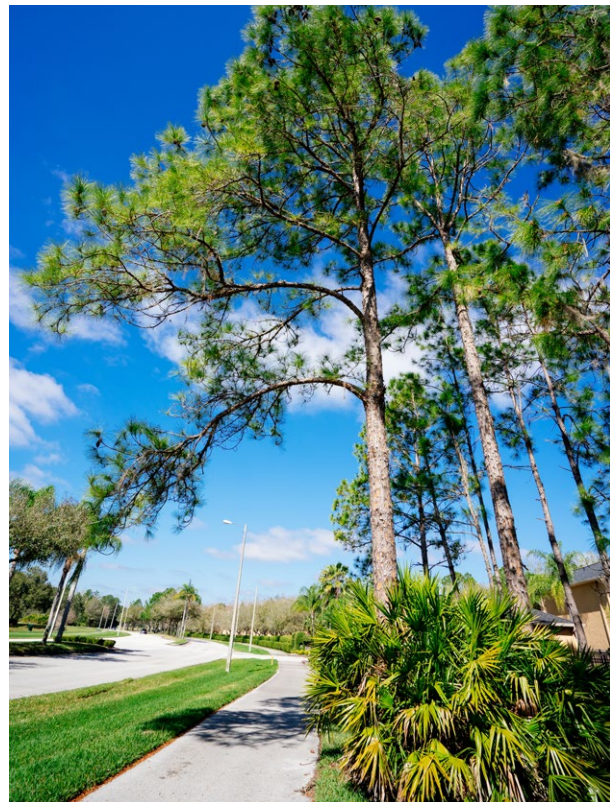
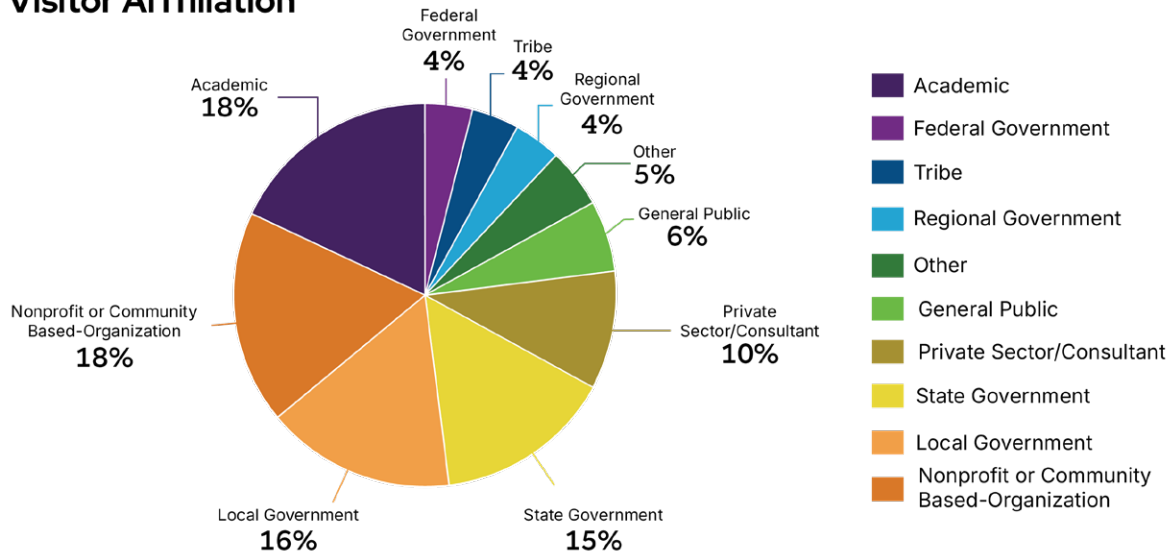


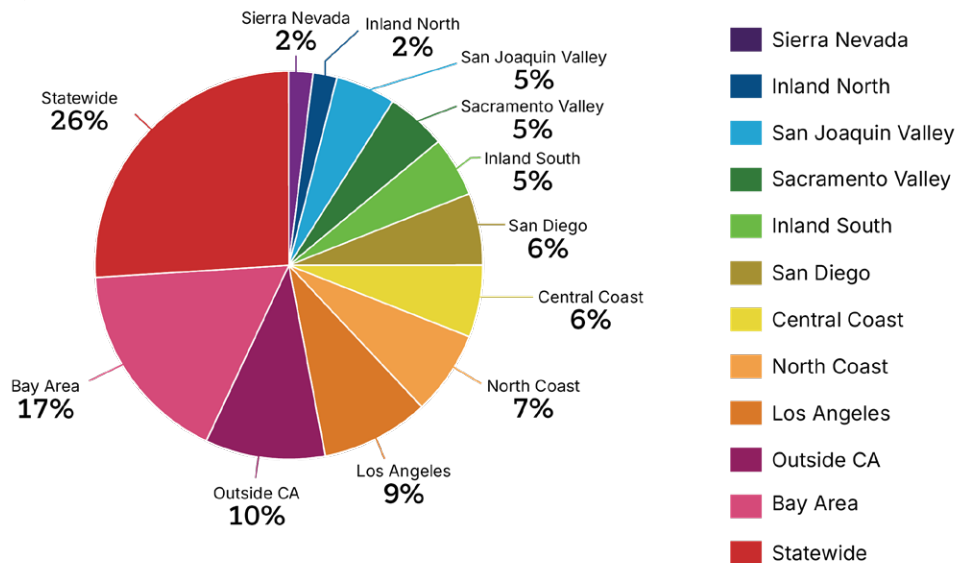
Figure 2. Characteristics of the more than 17,800 visitors to the Adaptation Clearinghouse in 2023.

Visitor Affiliation



Note: Racial categories are "alone or in combination with other races."

Geography Served



2024 Highlights

Updates to the Adaptation Clearinghouse are underway in 2024 and will include changes to the information architecture and navigation, homepage, and then intermediary pages (topics, case studies, tools and data, and search page). The Clearinghouse development is also working to better integrate the VCP and Cal-Adapt. Finally, the team is piloting an exciting new feature, including a new Technical Assistance Help Desk. The help desk pilot is initially focused on the Adaptation Clearinghouse, but is being designed with scalability in mind, and with a larger vision to develop a framework for technical assistance and support across the portfolio of state adaptation resources.

ICARP will continue to refine and build upon its state adaptation guidance products through updates to the Planning and Investing for a Resilient California Guidebook. The new projections generated through the Fifth Climate Assessment and the guidance of the SAG will inform revisions to the Planning and Investing for a Resilient California Guidebook. The team will also model the Plan Alignment Toolkit approach by advising and partnering with California communities on implementing plan alignment best practices.

In 2024, an extreme heat ranking system for the state – California Communities Extreme Heat Scoring System ([CalHeatScore](#)) – will be developed to translate weather information into tangible health warnings for community members. ICARP will play a crucial role in supporting uptake and application of CalHeatScore by developing a comprehensive public communication plan, recommending partnerships with local entities, and reviewing the system to provide specific heat adaptation measures for local governments in alignment with broader adaptation policies.



Building Partnerships and Leveraging Resources

To support development of climate adaptation as an emerging field, leveraging networks and building a community of practice is important to continually scale and improve adaptation and resiliency efforts. ICARP supports local and regional adaptation and resiliency planning and disaster recovery efforts through facilitation, collaborative partnerships, funding alignment, and technical assistance.

2023 Accomplishments

The ICARP Council convened in its capacity as the Citizen Advisory Committee for the Community Development Block Grant Mitigation Program to [discuss Plumas County's recovery efforts](#). The speaker from Plumas County emphasized the importance of data and information needs for long-term recovery planning. The Department of Housing and Urban Development approved an amendment to the 2021 Community Development Block Grant – Disaster Recovery (CDBG-DR) Action Plan for unmet needs from the 2021 wildfires, which will make funding available for reconstruction and home hardening for low- and moderate-income households in Plumas County.

Staff continues to participate in weekly coordination meetings for the Community Planning and Capacity Building – Recovery Support Function convened by the California Office of Emergency Services and attended by ICARP staff, the California Housing and Community Development Department, and the Federal Emergency Management Agency. The flood events in 2023 broadened the emphasis of this group to

go beyond the wildfire emphasis from past years. Finally, the group initiated conversations about reinstating the Peer Learning Network.

The Climate Services User Needs Assessment completed in July 2023 revealed that adaptation practitioners need more direct technical assistance. Staff conducted additional outreach and research in 2023 to identify technical assistance priorities and opportunities for alignment with other technical assistance providers. In 2024, Climate Services staff continued to utilize information from the User Needs Assessments and the technical assistance providers interviews to inform revisions to the Adaptation Clearinghouse, and to help develop technical assistance/support resources for both the Clearinghouse and the VCP.

In November, LCI co-hosted a Local Government Roundtable with San Diego Association of Governments (SANDAG), CivicWell, Metropolitan Transportation Commission (MTC)/Association of Bay Area Governments (ABAG), California Association of Councils of Governments (CALCOG), International Council for Local Environmental Initiatives (ICLEI), Sacramento Area Council of Governments (SACOG), and Institute for Local Government (ILG). The Roundtable hosted city managers and municipal planning organizations across the state. State, regional, and local leaders are reimagining entire transportation networks, installing thousands of miles of broadband, developing large-scale clean energy projects, and building thousands of new housing

units to collectively accelerate clean energy, address climate change, and connect Californians to critical opportunities.

The event was an opportunity for state officials to listen to local leaders about implementation tensions that exist when trying to reach the various goals of the state including affordable housing, decarbonization, climate resilience, public health, and economic development. Many state agency officials including representatives from California Air Resources Board (CARB), Department of Housing and Community Development (HCD), California Public Utilities Commission (CPUC), California Transportation Commission (CTC), Caltrans, and California Energy Commission (CEC) were present to share their work and listen to local and regional officials. While climate resilience and ICARP priorities were not the center of the conversation, some ICARP staff attended and themes arose around how sea level rise, wildfire, and extreme heat impacts and resilience goals should be considered in local and regional government contexts, as local officials are continually balancing a complex array of local and state priorities.

LCI received excellent feedback on the event, including a general consensus that these types of listening sessions are critical to good governance and fostering ongoing support for local and regional governments in working toward California's ambitious environmental, economic, and societal goals.

2024 Highlights

Based on discussions with staff at HCD, ICARP staff will initiate dissolution of the Memorandum of Understanding (MOU) underlying the Community

Development Block Grant Mitigation Program. Changes to HCD's requirements for the program no longer necessitate the association of a public Citizen Advisory Committee with the program. Because these items rarely generated public input into the program, staff determined that the MOU was not meeting its purpose and the ICARP Technical Advisory Council could be more impactful focusing its efforts elsewhere. ICARP and HCD Staff will continue to coordinate and will leverage the ICARP Technical Advisory Council for discussions on this program when deemed beneficial.

ICARP staff's continued participation in the Community Planning and Capacity-Building–Recovery Support Function program will support coordination with emergency management agencies to integrate resilience planning into recovery efforts. This includes developing a robust scope for the re-launch of the Peer Learning Network, which will help ICARP staff better understand and provide tools, guidance, and technical assistance to support resiliency in California's communities that are exposed to and impacted by disasters.

The Climate Services team will launch more formal technical assistance services in 2024. The team will first pilot an Adaptation Help Desk on the Adaptation Clearinghouse, and based on this experience, develop Adaptation Help Desk functions to support the VCP and Cal-Adapt. Other priorities include supporting alignment and coordination across state technical assistance providers and supporting peer networks and capacity building.

Funding and Financing

ICARP has three programs that provide direct support for adaptation planning and projects, work to enhance the state's ability to leverage federal investment, and development of partnerships with other state agencies' programs that support the resiliency of California's natural and built environment.

2023 Accomplishments

Continued progress under ICARP's Federal Emergency Management Agency Cooperative Technical Partners grant in 2023 included sharing the lessons learned from coordinating the APGP with federal Hazard Mitigation Act (HMA) funding. Staff developed a case study documenting challenges, opportunities, and lessons learned from incorporating HMA eligibility into the first round of APGP Guidelines.

The APGP released its final Guidelines and Request for Proposals at the start of the year, and subsequently hosted a workshop series to provide technical assistance to prospective applicants. In spring, the program announced \$8 million in awards to 14 projects. In fall, the team updated the Guidelines for a second round of funding and contracted with the 14 grantees.

The RRGp engaged over 780 organizations in 2023 through mailing lists, workshops, surveys, and application submissions. In June, the program published final Guidelines and released a Request for Proposals. At the end of the year, the team announced \$21.7 million in awards for 10 planning grants and six implementation grants. Finally, the program published a report to the Legislature on the first-round awards and impact of the program.

In 2023, ICARP kicked off the EHCRP with a listening session at the first quarter ICARP Technical Advisory Council meeting. Throughout the year, the team hosted a series of 13 public workshops and additional focus groups to ensure the Grant Guidelines meet the needs of heat vulnerable populations. An engagement summary captures the key takeaways of those workshops. In fall, the program released Draft Guidelines for public comment and prepared to release the program Notice of Funding Availability.

ICARP's investment programs attracted significant interest, with applicants seeking far more funding than available:



83 applications to the RRGp included 326 applicants and requested \$111 million, more than five times the funding available.



81 applications to the APGP requested \$63 million, almost eight times the funding available.

2024 Highlights

In 2024, ICARP's Cooperative Technical Partners grant will support outreach and engagement with California Native American Tribes to inform a Tribal User Needs Assessment that will identify opportunities for ICARP to better serve the resilience planning needs of California's Tribes. Staff have partnered with the Pala Band of Mission Indians and the California Indian Environmental Alliance (CIEA) to support Tribal outreach and engagement. Additionally, staff will develop a guidebook on how to align state climate resilience investment programs with federal hazard mitigation assistance funding. Both deliverables will be completed by September 2025.

The APGP initiated its projects, and ICARP staff are conducting peer-to-peer learning and technical assistance workshops for grantees to enhance their capacity-building goals. Additionally, staff meet quarterly with individual grantees for check-ins and have developed templates, polls, and surveys to gather feedback to support grantee short- and long-term needs. A dedicated SharePoint site is available where staff share project highlights, tools, resources, and templates and are currently exploring the establishment of technical office hours to further assist grantees in their adaptation planning efforts. Engaged by ICARP, UC Berkeley's Center for Law, Energy, & the Environment (CLEE) served as a third-party evaluator for APGP Round 1. CLEE's report highlights the program's vital role in climate adaptation planning, emphasizing the need to build resilience equitably while protecting California's economy, environment, and public health. The report provides an initial assessment of Round 1, as well as analysis of program engagement, award data, interviews with the 14 grantees, and four detailed case studies.

The findings outline several recommendations to support climate adaptation planning and emphasize that APGP is a critical funding program, especially as the state's adaptation and resilience grant programs are oversubscribed by an average of 528%. Successful projects like the L.A. Cool Capital Stack and the Ramona Barona Climate Adaptation and Action Plan demonstrate APGP's potential to address multiple climate risks and foster local collaboration. However, the substantial funding demand—projected to reach at least \$12.5 billion for Los Angeles County alone by 2040—raises equity concerns, as less-resourced communities often struggle with grant application processes. As state adaptation and resilience grant programs move forward, addressing these challenges and ensuring equitable access to funding will be vital for advancing climate resilience across the state.

The RRGp initiated projects and ICARP staff are conducting peer-to-peer learning and technical assistance workshops with the grantees to support the capacity-building goals of the program. There are 16 grantees, 10 of which are supporting planning projects and six supporting implementation projects. While seven grantees are focused on risk-specific projects, such as wildfire or drought, nine of the awards address multiple climate risks. Eighty-seven percent of the projects directly benefit disadvantaged communities and 65% of the funding has gone to Tribes. Grantees participated in the official kickoff grantee orientation webinar in late September and will meet individually with RRGp staff quarterly and meet at least biannually as a cohort. Based on grantee feedback, staff have initiated an external SharePoint and listserv for collaboration and information exchange. Technical assistance

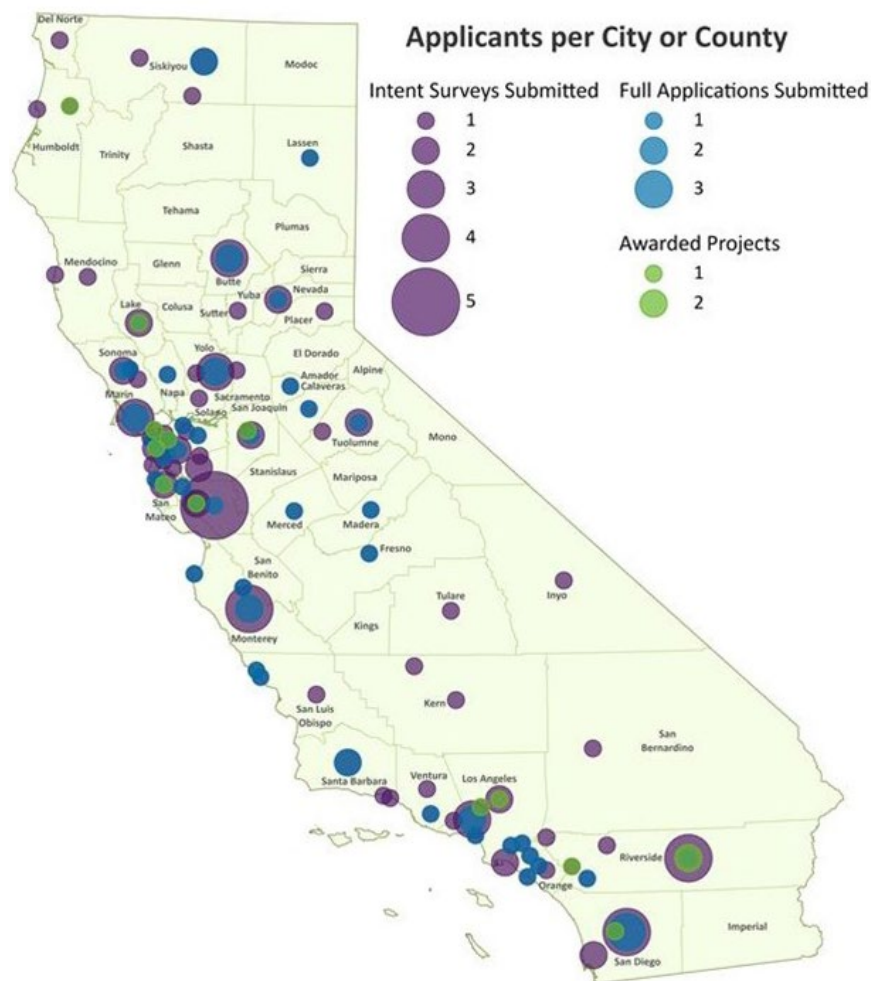
resources such as a grantee guide, invoicing templates, and reporting forms will be shared with grantees throughout the grant cycle.

The EHCRP released the final Guidelines, application, and Notice of Funding Availability for its first round of funding at the start of 2024. After

reviewing applications with an interagency review panel, the program will announce awards and initiate technical assistance activities with grant recipients. Small planning and implementation grants will be announced in early November, and large planning and implementation grants will be announced by the end of 2024.

Figure 3: Map depicting the number of applicants to and awardees of the APGP from each California county.

Round 1 Adaptation Planning Grant Program (APGP)



Climate Equity and Vulnerable Communities

Reducing risks from climate impacts requires strengthening protections and increasing the resilience of communities and people to respond, recover, and adjust to climate change-driven impacts. Yet, some communities face compounding vulnerabilities and experience disproportionate impacts, particularly low-income and rural communities, communities of color, and Tribal nations. A resilient California ensures all communities can weather and adjust to climate change so that all communities can thrive. Ensuring a climate resilient “California for All” requires focused support for those communities most vulnerable to climate threats.

2023 Accomplishments

In 2023, the VCP staff created a [demonstration site](#) to outline what the main functionalities of the platform would look like to assist in facilitating discussions about stakeholder needs.

An Interagency team representing the VCP, California’s Fifth Climate Change Assessment (Fifth Assessment), and the State Adaptation Strategy jointly hosted regional workshops throughout the state to engage a variety of community-based organizations, local governments, and academic institutions on their climate priorities and research questions. Input guided the development of the VCP. The team continued to collaborate on the direction of the platform with the Community Resilience Working Group (CRWG), a collaborative of equity and environmental justice nonprofits and community-based organizations. The team also re-established the Interagency Technical Working Group (ITWG), which serves as one of the networks

for the ICARP SAG, and consulted state agency experts on the best data sources. At the fourth quarter ICARP Technical Advisory Council meeting, [staff provided the Council with an update on the project](#) and the robust discussion from the Council contributed to further improvements.

The site design and elements were meant to respond to a sustained feedback and input process, led by the CRWG as well as input from other agency partners, and local organizations and networks, and informed by the 2023 User Needs Assessment led by the ICARP Climate Services team. This feedback culminated in a design philosophy that emphasized the ability to characterize regional nuance on what vulnerability looks like across a range of geographies and framed around five primary climate hazards affecting California (extreme heat, flooding, wildfire, sea level rise, and drought). The design philosophy also elevated the usability of this resource, with opportunities for both a streamlined and user-friendly first iteration of the vulnerability map, but with flexibility for users to modify the map to better reflect the conditions in their local community, or in response to their specific data or project need.

2024 Highlights

In 2024, the team launched a beta of the VCP. The technical platform is in place, and staff are evaluating, revising, and updating data for the platform. The team is also initiating a community engagement partnership pilot to solicit feedback on usability of VCP prototype, collect on-the-ground experiences

with climate change to fill in data gaps on the platform, and serve as examples of how experiential knowledge can be combined with climate risk data to foster inclusive adaptation planning. Throughout the year, staff will refine the VCP prototype based on feedback generated through community workshops and engagement opportunities to ensure the tool reflects the lived experience of California's vulnerable communities. The beta includes the full suite of functions (mapping tool, community resilience assessments, resource springboard, and tool comparison), and in 2024 staff will continue to revise the base platform and initiate the next round of development, which is focused on creating a streamlined reporting tool designed to make the data and information even more accessible and usable.

Additional Special Initiatives

In addition to ICARP's long-range efforts, many of our programs and staff help support new opportunities to further climate resilience and adaptation. This includes building new partnerships, creating initiatives, and providing guidance and support for partner efforts to advance local, regional, and state adaptation and resiliency work.

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2023 Accomplishments

ICARP staff contributed to the development of the 2022 California Climate Adaptation Strategy Implementation Report, which documents state agencies' implementation progress.

2024 Highlights

The ICARP team supported significant public engagement that informed the Draft 2024 California Adaptation Strategy by gathering feedback through regional workshops.

ICARP staff contributed to the development of the 2023 California Climate Adaptation Strategy Implementation Report, which documents state agencies' implementation progress.

ICARP Climate Services team partnered with Duke University's Nicholas School of the Environment to conduct a regional study of drought vulnerability in the San Joaquin Valley of California. Master's student Hanna Bliska, now a Climate Adaptation and Coastal Resilience Specialist with ICARP, conducted interviews with local practitioners in the San Joaquin Valley to learn about drought vulnerability and user needs for applicable and accessible drought information. The project's insights will contribute to ICARP's work to improve technical assistance and support local and regional governments with the information and resources they need for climate adaptation decision-making.

In partnership with the California Natural Resources Agency, ICARP staff are planning and scoping the update process for the Extreme Heat Action Plan, which will be updated every three years, beginning July 1, 2026.

Appendix A

ICARP Investment Program Awardee Profiles

APGP Projects

Lake Elsinore Climate Adaptation Plan

Total Award: \$401,100

Lake Elsinore's Climate Adaptation Plan will assess climate change impacts and the adaptive capacity of residents, especially Lake Elsinore's most vulnerable community members, and develop strategies to respond to specific impacts. View the [Lake Elsinore Climate Adaptation Plan](#).

City of Berkeley Safety Plan and Environmental Element Update

Total Award: \$497,042

The City of Berkeley, in partnership with the Ecology Center and the Berkeley Climate Equity Collaborative, will co-create with community an update to Berkeley's General Plan Safety Element, development of a new General Plan Environmental Justice Element, and creation of metrics that incorporate equitable outcomes to monitor and evaluate progress towards meeting the city's climate and resilience goals. View the [City of Berkeley Safety Plan and Environmental Element Update](#).

City of San Fernando Climate Action and Resilience Plan

Total Award: \$599,918

The City of San Fernando will complete a Climate Action and Resilience Plan (CARP) and update elements in its General Plan (land use, circulation, open space, and conservation) which are crucial for effective resiliency planning and aligning with local, regional, and state initiatives. The project will engage the community early on to gather input in an equitable manner, develop targeted strategies to address disparities, and support vulnerable populations to address climate-related concerns. View the [City of San Fernando Climate Action and Resilience Plan](#).

Planning for an Equitable, Climate-Safe Lake

Total Award: \$649,350

Planning for an Equitable, Climate-Safe Lake will create an inclusive and collaborative framework for improving climate adaptation planning and implementing risk reduction projects in Lake County. The project supports the Community Risk Reduction Authority (RRA) in becoming a self-sustaining climate action provider with an equity focus, including embedding diversity, equity, and inclusion values into RRA's leadership and processes, assessing vulnerabilities, implementing actions from the Local Hazard Mitigation Plan, and tracking progress. View the [Planning for an Equitable, Climate-Safe Lake](#).

Hoopa Valley Tribe Climate Adaptation Plan

Total Award: \$338,448

The Hoopa Valley Tribe aims to complete climate adaptation scoping activities, a Vulnerability Assessment, and develop a Climate Adaptation Plan in partnership with the community and Tribal staff. Along with the Planning Department of the Hoopa Valley Tribe, they will conduct community outreach and use an online survey to increase accessibility and participation from the community. Developing a climate adaptation plan that includes pathways to forest resilience and conservation efforts for salmonid fisheries is a priority for the Hoopa Valley Tribe. View the [Hoopa Valley Tribe Climate Adaptation Plan](#).

L.A.'s Cool Capital Stack

Total Award: \$556,000

The L.A. Cool Capital Stack creates a pipeline of viable community-led climate resilient infrastructure projects designed to strengthen L.A. County communities most vulnerable to extreme heat and other climate hazards. It establishes an agency-community collaborative that brings together L.A. County, Metro, and Infrastructure Justice Los Angeles (IJLA) to co-create an approach to equitable, climate resilient infrastructure development. View the [L.A.'s Cool Capital Stack](#).

Ramona Barona Climate Adaptation and Action Plan

Total Award: \$596,600

The Ramona-Barona Climate Collaborative, led by the Ramona Municipal Water District and its partners the Barona Band of Mission Indians, Sustainable Ramona and the Ramona Chamber of Commerce, aims to develop a comprehensive climate adaptation and action plan to address climate impacts in the area including extreme heat, water shortages, landslides, flooding, and wildfires. View the [Ramona Barona Climate Adaptation and Action Plan](#).

San Jose Interdependent Water, Energy, Security Electrified Transportation Climate Adaptation Plan

Total Award: \$649,970

The San José Interdependent Water, Energy, Security & Electrified Transportation Climate Adaptation Planning Proposal aims to develop a comprehensive climate adaptation plan that focuses on critical infrastructure and incorporates the needs of vulnerable communities. View the [San Jose Interdependent Water, Energy, Security Electrified Transportation Climate Adaptation Plan](#).

San Mateo County OneWatershed Climate Resilience Framework

Total Award: \$649,64

The City/County Association of Governments of San Mateo County is partnering with six water agencies and the community-based organization Climate Resilient Communities to develop a framework that empowers communities to identify local concerns and explore pathways to becoming resilient. View the [San Mateo County OneWatershed Climate Resilience Framework](#).

San Rafael Climate Adaptation Planning Collaborative

Total Award: \$644,200

Led by the City of San Rafael, the San Rafael Climate Adaptation Planning Collaborative will work with disproportionately vulnerable communities in partnership with local organizations in the Canal neighborhood to co-create solutions for improved safety and resilience. Partners will work to improve understanding of climate hazards, prioritize adaptation measures, and build climate capacity within community-based organizations while providing science, technology, engineering, and mathematics (STEM) educational opportunities for students from the Canal neighborhood. View the [San Rafael Climate Adaptation Planning Collaborative](#).

Shade Equity Masterplan for the Unincorporated Eastern Coachella Valley

Total Award: \$644,411

The Shade Master Plan for Eastern Coachella Valley's unincorporated communities in Riverside County will benchmark and develop strategies for shade in predominantly low-income, Spanish-speaking areas experiencing temperatures exceeding 120 degrees. The plan will serve as a blueprint for investing in new shade infrastructure and adapting to extreme heat and associated benefits to residents, agencies, and interested parties in the area. View [Shade Equity Masterplan for the Unincorporated Eastern Coachella Valley](#).

Stockton Climate Action and Adaptation Plan

Total Award: \$650,000

The City of Stockton will partner with trusted, local nonprofits and engage a highly qualified consultant to create a new Climate Action and Adaptation Plan. The City's current CAP hasn't been updated since 2014, leaving the city and its partners without a clear vision for the future of Stockton's environment. A new CAP that focuses on public health and equity will guide strategies to address the impacts of climate change, particularly for disadvantaged communities (DAC) in Stockton. View the [Stockton Climate Action and Adaptation Plan](#).

WRCOG Energy Resilience Plan 2.0 Microgrid Feasibility Studies

Total Award: \$471,000

\$471,000 WRCOG will develop an Energy Resilience Plan 2.0, which will identify up to 10 sites across Western Riverside County to conduct feasibility studies to determine the potential to implement microgrids and community resilience centers. View the [WRCOG Energy Resilience Plan 2.0 Microgrid Feasibility Studies](#).

Yosemite Slough Adaptation Plan

Total Award: \$649,000

\$649,000 The Yosemite Slough Adaptation Plan aims to address the disparity in adaptation planning between the Bayview Hunters Point neighborhood and the rest of San Francisco's urban waterfront. The plan focuses on building community capacity, developing equitable adaptation strategies, and positioning Yosemite Slough for federal funding. Project partners include the San Francisco Planning Department, En2Action, BAYCAT, San Francisco Estuary Institute, California State Parks Foundation, and other city agencies. View the [Yosemite Slough Adaptation Plan](#).

RRGP Implementation Projects

Regional Cohesive Fire Strategy for Evacuation Preparedness and Wildfire Resilience

Total Award: \$1,588,838

The County of San Diego, in partnership with the City of San Diego and the Fire Safe Council of San Diego County, will focus on addressing wildfire hazards by educating residents, maintaining defensible spaces, and safeguarding evacuation routes for high-risk communities.

Los Angeles Regional Collaborative: Heat Education, Ambassadors, and Training (LARC-HEAT)

Total Award: \$2,999,999

The University of California, Los Angeles/Los Angeles Regional Collaborative, in partnership with the Fernandeno Tataviam Band of Mission Indians, Rising Communities, and the Los Angeles County Department of Public Health, will combat extreme heat through a comprehensive Heat Ambassador initiative, focusing on educating and protecting heat-vulnerable communities.

Energy-Resilient Fire Services in High-Threat Communities

Total Award: \$3,000,000

The Redwood Coast Energy Authority, in partnership with the Yurok Tribe Fire Department, Karuk Tribe Department of Natural Resources, and Hoopa Fire, will install energy-resilience infrastructure for fire stations in high-risk areas, ensuring continuous emergency response in remote and vulnerable communities.

Cultural Fire & Land Stewardship for Wildfire & Climate Resilience

Total Award: \$2,989,995

The Tamien Nation, in partnership with the North Fork Mono Tribe, aims to restore Indigenous practices and enhance wildfire protection on ancestral lands by forming stewardship crews, conducting vegetation management, and raising awareness.

Le Grand Community Water Program

Total Award: \$3,000,000

The Le Grand Athlone Water District, in partnership with the Le Grand Community Services District and Socio-Environmental Education Network (SEEN), will address drought and flood risks. The project implements sustainable groundwater management practices, including new well construction, irrigation canal connections, and community education programs.

K'ó:dom Hýbísín ("Land Stewardship")

Total Award: \$1,931,410

The Mechoopda Indian Tribe of Chico Rancheria, in partnership with the Berry Creek Rancheria of Tyme Maidu Indians of California, California State University, Chico, and the Big Chico Creek Ecological Reserve, will address wildfire, extreme heat, and drought hazards through land stewardship, using cultural fire to reduce fuel loads and cultivate climate-resilient vegetation.

RRGP Planning Projects

Mendocino, Lake, Sonoma Tribal Resilience Initiative on Air Quality and Drought (MLS-TRIAD)

Total Award: \$657,415

The Public Health Institute, in partnership with the Big Valley Band of Pomo Indians, Middletown Rancheria of Pomo Indians, and Sherwood Valley Band of Pomo Indians, will address drought, air quality, and climate change concerns through equitable planning, monitoring networks, water quality evaluation, and continuous improvement tracking.

North Coast Regional Climate Resilience Plan

Total Award: \$650,000

The County of Humboldt/North Coast Resource Partnership, in partnership with the Watershed Research and Training Center and Sonoma Water, will prioritize vulnerable communities and focus on addressing multiple climate risks, forging diverse partnerships, and strengthening community capacity through planning, data integration, and engagement of interested parties.

Paradise Regional Wildfire Resilience Implementation Plan

Total Award: \$570,533

Paradise Recreation and Park District, in partnership with the Town of Paradise, Rural Community Assistance Corporation, and Camp Fire Collaborative, will build on previous modeling work, by developing an implementation plan, including regional governance structures and cost-benefit analyses, to create regional wildfire buffer zones.

Santa Ana River Watershed Climate Adaptation and Resilience Plan

Total Award: \$644,190

Santa Ana River Watershed Project Authority, in partnership with the Soboba Band of Luiseño Indians and Inland Southern California Climate Collaborative, will address climate risks like drought, wildfire, and flooding by developing multi-benefit strategies for the entire watershed and provide resources to pursue implementation funding.

Yolo County Regional Resilience Collaborative

Total Award: \$598,420

The County of Yolo, in partnership with the Yocha Dehe Wintun Nation, City of Davis, City of Woodland, and University of California, Davis, will aim to build the region's first collaborative structure, engage vulnerable communities to identify shared climate priorities, establish a governance structure, and develop a funding strategy.

Monterey Bay Adaptation and Resilience Implementation and Funding Roadmap

Total Award: \$649,335

The City of Watsonville, in partnership with the City of Santa Cruz, CivicWell, Ecology Action, Association of Monterey Bay Area Governments, and Regeneración of Pajaro Valley, will develop funding and implementation plans for priority adaptation goals, particularly addressing underserved and vulnerable communities.

Coachella Valley Regional Water Resilience Plan

Total Award: \$649,335

The Coachella Valley Water District, in partnership with the Torres Martinez Desert Cahuilla Indians, and Pueblo Unido Community Development Corporation, will address structural barriers to clean water access, prepare for droughts, improve infrastructure resilience, and align regional plans with state water management objectives.

Solano Bayshore Resiliency Project

Total Award: \$601,113

Fairfield-Suisun Sewer District, in partnership with the City of Suisun City, Greenbelt Alliance, and Solano Resource Conservation District, will create a Sea Level Rise Vulnerability Analysis and Action Plan, emphasizing nature-based solutions and community engagement to address climate hazards affecting vulnerable communities.

Climate Resiliency through Regional Water Recharge in the San Joaquin Valley**Total Award:** \$568,888

California State University, Fresno Foundation - California Water Institute, in partnership with Self-Help Enterprises, North Kings Groundwater Sustainability Agency, and Madera County Groundwater Sustainability Agency, will address drought and flooding by planning for sustainable use of surface and groundwater, educating rural communities, and establishing a collaborative response team for effective flood-water management, ensuring vulnerable communities are prioritized.

Building Climate Resilience in the Central Sierra Region**Total Award:** \$650,000

The County of Nevada in partnership with the Town of Truckee, Nevada City Rancheria Nisenan Tribe, Truckee Tahoe Airport District, Truckee Donner Public Utility District, and the Sierra Business Council, will develop a climate collaborative and create a Climate Adaptation and Resilience Plan that embeds Indigenous knowledge, prioritizes vulnerable populations, and enhances regional readiness for multiple climate risks.