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ICARP

INTEGRATED CLIMATE ADAPTATION & RESILIENCY PROGRAM

Technical Advisory Council
May 16, 2025 Staff Report

Contents

2025 ICARP Priorities

With guidance from the Integrated Climate Adaptation and Resiliency Program (ICARP) Technical Advisory Council, ICARP staff implement a suite of programmatic priorities for 2025 centered on four themes. This quarterly staff report summarizes programmatic updates and their alignment with the following priorities:

Cultivate Trust and Empower Communities

Build lasting, respectful partnerships with California Native American Tribes and vulnerable communities by centering Tribal sovereignty, expanding inclusive engagement opportunities, and aligning State efforts with local needs. Improve grant accessibility, ensure language access, support informed decision-making, and enhance community capacity through targeted training and technical assistance.

Showcase Impact Through Storytelling

Elevate the voices of local communities by sharing stories of climate resilience through accessible campaigns, case studies, and inclusive outreach. Highlight community-led successes, demonstrate the co-benefits of adaptation efforts, and use robust data to celebrate and track progress across California.

Expand Localized Data, Research and Tools

Develop and enhance data tools and resources to guide equitable local planning and climate adaptation. Support Tribally-led and community-driven research, translate complex information for practical use, and coordinate regionally-specific strategies that reflect shared priorities and respect Indigenous data governance.

Implement Innovative Adaptation and Resilience Action

Prioritize investments in frontline communities and foster cross-sector partnerships to drive equitable resilience outcomes. Leverage ICARP's coordinating role, provide technical and funding support for local efforts, and promote integrated, regionally-driven approaches to climate adaptation across jurisdictions.

See Appendix A for the full list of priorities.

ICARP Highlights

- The Fifth Assessment team received seven nominations for new Tribal Advisory Group membership to expand regional representation across the Climate Assessment regions (Cultivate Trust Priority, Showcase Impact Priority).
- All Fifth Assessment research products, including over 50 funded reports and seven State Volunteered reports, are under development (Localized Data Priority).
- The Vulnerable Communities Platform (VCP) Version 1 will publicly launch on May 16th, 2025 (Localized Data Priority). The VCP is an easy-to-use tool that will help users understand what worsening wildfire, extreme heat, flooding, sea level rise, and drought will look like in California communities (Cultivate Trust Priority, Innovative Adaptation and Resilience Action Priority).
- In partnership with CalOES and federal partners, our staff co-led the development of a Recovery Needs Assessment (completed on March 8, 2025) to support recovery from the Los Angeles Wildfires (Innovative Adaptation and Resilience Action Priority). This assessment will inform opportunities to support and accelerate resilient rebuilding in Los Angeles.
- Extreme Heat and Community Resilience staff are working on executing the 47 Round 1 contracts by May 31st for projects to begin this summer. (Innovative Adaptation and Resilience Action Priority)
- Extreme Heat and Community Resilience staff are currently working on developing a peer learning and grantee support strategy with UCLA Luskin, Lawrence Berkeley National Labs, ICARP staff, and other contractors. (Cultivate Trust Priority)
- Adaptation Planning Grant Program staff completed application debriefs for 47 Round 2 applicants. APGP Round 2 funding was cancelled last June due to the state's budget constraints. Staff reviewed applications and provided qualitative feedback to build capacity and support applicants' future grant writing proposals. (Innovative Adaptation and Resilience Action Priority)
- On March 4th, Regional Resilience Planning & Implementation Grant Program staff held a technical assistance workshop for grantees focused on community engagement. The workshop included presentations from grantees Yolo County and Nevada County on effective engagement strategies. This peer-to-peer learning opportunity was attended by over 40 grantee representatives. (Cultivate Trust Priority)

California's Fifth Climate Change Assessment

Staff Lead: Elea Becker Lowe

Background

At the direction of SB 1320 (Stern, 2020) and with funding from the 2021 Climate Budget, ICARP is coordinating California's Fifth Climate Change Assessment in partnership with the California Energy Commission, California Natural Resources Agency, Strategic Growth Council, and other expert and community partners. The Fifth Assessment will include the latest climate change projections and modeling about California's future climate, original research that fills gaps in our understanding of climate impacts, regional and topical synthesis reports uplifting community priorities throughout the state, decision-support tools, and a first-of-its-kind Tribal Research Program. The Fifth Assessment suite of reports, resources, and tools are due to roll out in mid-2026.

Recent Accomplishments
- The Fifth Assessment team received seven nominations for new Tribal Advisory Group (TAG) membership to expand regional representation across the Climate Assessment regions (Cultivate Trust Priority, Showcase Impact Priority). TAG members are considered members at large and are contracted to advise Fifth Assessment engagement and research on appropriate and meaningful ways to engage and uplift Tribal expertise throughout the research process.
- All Fifth Assessment research products, including over 50 funded reports and seven State Volunteered reports, are under development (Expand Localized Data Priority). These products are authored by teams including representatives from academia, Tribal communities, community-based organizations, practitioners, government entities, and other subject matter experts. Collectively, this portfolio will set a new scientific foundation to help guide State climate policies, planning efforts, and investment decisions.
- The Fifth Assessment team has launched the scoping process for the Fifth Assessment Statewide Summary Report (Expand Localized Data priority).

Looking Ahead
- The Fifth Assessment team is confirming new roles on the Tribal Advisory Group and the author team for the Tribal and Indigenous Communities Report.
- The Fifth Assessment team will be conducting a public solicitation for engagement, Tribal engagement, document design and translation support in the coming months. This will include a Youth Art Competition; artwork will be featured throughout the Fifth Assessment website and select reports (Showcase Impact priority).
- The Fifth Assessment is in the contracting process for Editorial Board Leadership positions (Expand Localized Data priority). The Editorial Board, including Expert Reviewers, will collectively review and edit up to 50 Fifth Assessment reports.
- Ongoing recruitments for Expert Reviewers and Associate Editors will endure throughout the summer. The first round of reviews is due to launch in August.

- The Fifth Assessment team is recruiting for an Associate Governmental Program Analyst position to support communications and engagement.

Follow-ups for Council
- The Fifth Assessment team requests TAC support to elevate future recruitment opportunities, including for expert reviewers and editors, and other contract opportunities in the coming months.

ICARP Climate Services

Staff Lead: Ben McMahan

Background
The ICARP Climate Services Program helps organizations in California understand and use climate change information to advance climate adaptation action across the state. Climate Services are useful to organizations such as local, regional, and State public agencies; community-based organizations; and tribes. The program develops climate adaptation guidance and tools, helps people use climate change science and data, supports local adaptation planning and projects, and assists California public agencies and other organizations in making climate-resilient decisions and investments. The Climate Services Program's portfolio includes the Adaptation Clearinghouse, Cal-Adapt support, State Adaptation Guidance, technical assistance, and the Vulnerable Communities Platform.

Recent Accomplishments
- The Vulnerable Communities Platform (VCP) Version 1 will publicly launch on May 16th, 2025 (Localized Data Priority). The VCP is an easy-to-use tool that will help users understand what worsening wildfire, extreme heat, flooding, sea level rise, and drought will look like in California communities (Cultivate Trust Priority, Implement Innovative Adaptation and Resilience Action Priority).
- Climate Services staff briefed State agency partners on the VCP (Innovative Adaptation and Resilience Action Priority). This process demonstrated use cases and supported future agency use of the VCP to direct investments in communities most vulnerable to the impacts of climate change.
- As part of the VCP development and launch, the team finalized social indicator data and climate hazard data for use in the VCP and developed detailed metadata and a methodology report that is included in the launch documentation. This is an important part of showing our work and explaining the logic and justification for various VCP components (Cultivate Trust Priority, Expand Localized Data Priority)
- Staff piloted technical assistance and analysis support to select author teams for California's Fifth Climate Change Assessment (Expand Localized Data Priority).

Looking Ahead
- The Climate Services team will host outreach webinars on the VCP in Summer 2025, and kickstart the VCP's Community Pilot Program in July 2025 (Cultivate Trust

Priority). This training program will help CBOs and local governments develop their own local climate vulnerability assessments using the VCP.

- Climate Services staff are finalizing a centralized TA platform ("Adaptation Help Desk") for use on the Adaptation Clearinghouse and Vulnerable Communities Platform, and to provide ad-hoc support for Cal-Adapt users (Innovative Adaptation and Resilience Action Priority). We are launching the help desk framework in spring 2025, which will emphasize user needs identified in our User Needs Assessment. Ultimately, the Help Desk will provide support for low-capacity users in navigating State adaptation resources.
- Climate Services staff will develop a set of case studies with partners (e.g., state agencies), to showcase VCP use cases and ground the platform's insights in community (Showcase Impact Priority). This will support storytelling and communication around the uses of the VCP and how its insights can promote adaptation action.
- As part of updates to the Adaptation Clearinghouse (navigation improvements, updated content), the Climate Services team is working with the LCI planning teams to better update and integrate planning resources and information and develop clear guidance for a wider range of users through this partnership (Expand Localized Data Priority, Implement Innovative Adaptation and Resilience Action Priority).
- The Climate Services and California's Fifth Climate Change Assessment teams are collaborating to explore needs and priorities in the tools and resources space, to identify needs and/or opportunities for potential development (Expand Localized Data Priority).

Follow-ups for Council

- Sharing the Vulnerable Communities Platform among TAC members' networks to increase visibility and identify use cases.
- Providing the Climate Services team with feedback on Version 1 of the Platform for future iterations.

Community Planning and Capacity Building – Recovery Support Function

Staff Lead: Ben McMahan

Background

In partnership with Cal OES, LCI serves as the lead state agency on the Community Planning and Capacity Building Recovery Support Function (CPCB-RSF), which strengthens the adaptive capacity of local governments to plan for and implement long-term disaster resilience and recovery programs by coordinating information, technical assistance, and funding. LCI, through ICARP, works to integrate climate adaptation and resilience policies into hazard mitigation, emergency management, and disaster recovery programs. To extend the impact of the CPCB-RSF, the ICARP team will lead the development of a peer-to-peer learning network for disaster resilience and long-term recovery planning.

Recent Accomplishments
- In partnership with CalOES and federal partners, our staff co-led the development of a Recovery Needs Assessment (completed on March 8, 2025) to support recovery from the Los Angeles Wildfires (Innovative Adaptation and Resilience Action Priority). This assessment will inform opportunities to support and accelerate resilient rebuilding in Los Angeles.

Looking Ahead
- Our team will be completing the Recovery Support Strategy (RSS) in May 2025 in partnership with Federal, State and Local co-leads. This includes ongoing support and development of a long-term recovery plan over Summer 2025 (Innovative Adaptation and Resilience Action Priority). These efforts will support interagency coordination and alignment of priorities for long-term recovery in Los Angeles.
- As part of the RSS, LCI staff will work with federal, state, and local partners to synthesize regional recovery priorities, and help develop projects that respond to these priorities. These will be integrated into long term recovery planning as well as exploring opportunities for support (Cultivate Trust Priority, Implement Innovative Adaptation and Resilience Action Priority).
- The LCI CPCB-RSF team is coordinating with the Climate Services team on data needs, opportunities for alignment, and the role that the VCP could play in ongoing assessment of community wildfire resilience and vulnerability, and where projects addressing those issues might be most needed (Expand Localized Data Priority, Implement Innovative Adaptation and Resilience Action Priority).

Follow-ups for Council
- None at this time.

ICARP Extreme Heat and Community Resilience Portfolio

Staff Lead: Braden Kay

Background

Extreme heat is a public health, climate resilience, and social equity problem that will impact every community in California. Historically, the lack of guidance and support to plan and implement heat interventions has hindered bold local action to address these unique risks. The Extreme Heat and Community Resilience Program builds capacity for heat action planning and project implementation in the most heat-burdened communities.

The Extreme Heat and Community Resilience Grant Program invests in local, regional, and tribal heat reduction and mitigation efforts and funds projects that mitigate the impacts of extreme heat by adopting strategies, including, but not limited to, heat action plans, providing mechanical or natural shade, increasing building and surface reflectance, providing passive or low-energy cooling strategies, and promoting evaporative cooling. The grant program awarded 47 planning and implementation grants to fund resilience to extreme heat efforts across the state.

Part of this portfolio includes updating California's 2022 Extreme Heat Action Plan (Action Plan). This plan outlines a strategic and comprehensive set of state actions to address

extreme heat. Actions in the plan are organized around four tracks: building public awareness, strengthening community response, increasing the resilience of our built environment, and utilizing nature-based solutions. These tracks include established and recommended state actions to address extreme heat. California committed to updating the Extreme Heat Action Plan in 2026 and every three years thereafter (SB 306, Caballero 2023) to promote comprehensive, coordinated, and effective state and local government action on extreme heat. CNRA and ICARP staff will work with agency partners and members of the public to deliver the 2026 Action Plan update.

Recent Accomplishments
- Staff completed close to 40 debriefs with unawarded applicants to support their efforts in applying to other grants and assess readiness for applying to Round 2 of the grant program (Implement Innovative Adaptation and Resilience Action Priority)
- Staff are working on executing the 47 Round 1 contracts by May 31st for projects to begin this summer. (Implement Innovative Adaptation and Resilience Action Priority)
- Staff are currently working on developing a peer learning and grantee support strategy with UCLA Luskin, Lawrence Berkeley National Labs, ICARP staff, and other contractors. (Cultivate Trust Priority)

Looking Ahead
- Listening sessions will take place in June and July to receive input on plan for Round 2 Extreme Heat and Community Resilience Grant Program. (Cultivate Trust Priority)
- Notice of Funding Announcement for Round 2 of the grant program will likely be announced in September will applications due in December. The current estimate for the funding available for this Round is 22.5 million dollars made up of Greenhouse Gas Reduction Funds and Proposition 4 bond funds. (Implement Innovative Adaptation and Resilience Action Priority)

Follow-ups for Council
No current action needed

ICARP Adaptation Planning Grant Program and FEMA Cooperative Technical Partnership Grant

Staff Lead: Sarah Samdin

Background

In 2021, LCI, through ICARP, received funding in the state budget to fund the ICARP Adaptation Planning Grant Program to support local, regional, and tribal adaptation planning across California.

As communities in California experience more frequent, prolonged, and severe impacts of climate change, state, regional, local, and tribal governments are undertaking adaptation and resiliency planning. However, many jurisdictions lack the capacity, tools, guidance, and resources to effectively prepare for climate impacts. To meet this need, the Adaptation Planning Grant Program provides funding to help fill planning needs, provides communities the resources to identify climate resilience priorities, and supports the development of a pipeline of climate resilient infrastructure projects across the state.

- Explicitly and meaningfully prioritize equitable outcomes, particularly in the most vulnerable communities
- Encourage communities to equitably plan for and respond to multiple climate risks
- Build statewide capacity to plan for and implement equitable planning strategies
- Embed equity into the planning process, from project visioning through project evaluation
- Support coordination and alignment of state and federal climate and disaster resilience funding programs

Recent Accomplishments

- Staff completed application debriefs for 47 Round 2 applicants. APGP Round 2 funding was cancelled last June due to the state's budget constraints. Staff reviewed applications and provided qualitative feedback to build capacity and support applicants' future grant writing proposals. (Implement Innovative Adaptation and Resilience Action Priority)
- Staff are reviewing APGP grantees' midterm reports to highlight key milestones to date and identify opportunities to support future technical assistance and capacity building needs. (Cultivate Trust Priority)

Looking Ahead

- Staff will be hosting two technical assistance convenings for Round 1 grantees in the next quarter. The first will be focused on a "Walkthrough of the Adaptation Planning Guide" of June 18th and the second will focus on "Navigating Long-Term Funding and Financing Strategies" on July 10th. (Cultivate Trust Priority)
- Staff are continuing to work on a guidebook promising practices, opportunities, challenges, and lessons learned to support the coordination and alignment of local, state, and federal funding streams. This guidebook is part of LCI's FEMA Coopeative Technical Partners FY22 grant deliverables. This guidebook serves a dual purpose: assisting state agencies in aligning their funding programs with federal implementation funding and furthering LCI's ongoing efforts to support coordination across the disaster lifecycle. (Implement Innovative Adaptation and Resilience Action Priority)

Follow-ups for Council
- None at this time.

ICARP Regional Resilience Planning & Implementation Grant Program

Staff Lead: Dolores Barajas

Background

The Integrated Climate Adaptation and Resiliency Program has developed the Regional Resilience Planning and Implementation Grant Program (Regional Resilience Grant Program, RRGP) that funds planning and implementation resilience projects on a regional scale. Available to CA Native American Tribes, public entities, community-based organizations, and academic institutions, the Regional Resilience Grant Program supports diverse partnerships in advancing resilience addressing multiple climate risks. In 2023, the program awarded $21.8M in grants to 16 projects. Awards were offered through a competitive process and through funding set-asides.

Key Priorities of ICARP's Regional Resilience Grant Program are to:

- Support regional projects aligned with ICARP priorities that improve regional climate resilience and reduce climate risks from wildfire, sea level rise, drought, flood, increasing temperatures, and extreme heat events.
- Support projects or actions that address the greatest climate risks in the region, particularly in the most vulnerable communities.
- Fill the gaps in climate resilience funding and support sustainable and cohesive climate resilient projects.

Recent Accomplishments
- On March 4th, staff held a technical assistance workshop for grantees focused on community engagement. The workshop included presentations from grantees Yolo County and Nevada County on effective engagement strategies. This peer-to-peer learning opportunity was attended by over 40 grantee representatives. Workshop resources, including community engagement plan templates, are available on the RRGP grantee SharePoint site. (Cultivate Trust Priority)
- Grantee milestone update (Showcase Impact Priority):
    - To inform their region's Sea Level Rise Vulnerability Analysis and Action Plan, RRGP grantee, Fairfield Suisun Sewer District, hosted students for a classroom workshop on sea-level rise, climate resilience and nature-based solutions. The students also participated in a tour of the wastewater treatment plant.
    - The City of Watsonville launched the Monterey Bay Adaptation & Resilience Implementation and Funding Roadmap. Including their partners, the City of Santa Cruz, Farallon Strategies, Ecology Action, Association of Monterey Bay Area Governments (AMBAG), and Regeneracion of Pajaro Valley — they

hosted 50 partners from across the region to identify urgent climate risks and reflect on community needs.

Looking Ahead

- In May, RRGP staff will complete quarterly check-ins with each of the 16 grantees. Staff will conduct site visits with four grantees and their project partners, including the following: (Sacramento Valley/Sierra Nevada) Mechoopda Indian Tribe of Chico Rancheria and Paradise Recreation and Park District; and (San Joaquin Valley) Le Grand Athlone Water District and the California State University, Fresno Foundation – California Water Institute. Quarterly check-ins are an opportunity for staff to identify progress to date, challenges, support needs and opportunities for collaboration across grantees. (Cultivate Trust Priority, Implement Innovative Adaptation and Resilience Action Priority)
- In June, RRGP staff will host the 3rd technical assistance workshop for grantees.

Follow-ups for Council

- None at this time.

Appendix A

Cultivate Trust and Empower Communities

A. Deepen partnerships with CA Native American Tribes and Indigenous communities that meaningfully respond to Tribal feedback, include consistent and reliable engagement opportunities, and honor and respect Tribal sovereignty.
B. Foster meaningful ongoing relationships with grantees, local governments, youth, and vulnerable communities.
C. Strengthen participatory and equitable grant processes that prioritize community needs and enhance accessibility to State funds.
D. Evaluate and address shortcomings in community support and engagement to better align State efforts with local priorities.
E. Align public engagement, technical assistance, policies, investments, and State-funded research to meet the diverse needs and contexts across regions. This includes providing language access for non-English speaking communities.
F. Build capacity in vulnerable communities through focused technical assistance and training programs.
G. Guarantee reliable public access to statewide and locally specific information to support informed decision-making.

Showcase Impact Through Storytelling

A. Develop tailored outreach campaigns, case studies, and storytelling initiatives to demonstrate the tangible outcomes of climate adaptation investments. Ensure outreach and storytelling are conducted in a way to meet the needs of vulnerable communities, including persons with disabilities and the hearing impaired.
B. Highlight locally led efforts and success stories across California communities to inspire action and enhance public understanding.
C. Uplift Tribal voices, stories, and perspectives, highlighting the work California Native American Tribes and Indigenous communities have done since time immemorial.

D. Track, analyze, and celebrate investments, policy adoption, and project implementation with robust data to ensure long-term progress.
E. Communicate the co-benefits of resilience efforts, such as job creation, improved health, cost savings from disasters, and opportunities for innovative economic models (e.g., worker-owned cooperatives).

Expand Localized Data, Research and Tools

A. Further develop and leverage informational resources, frameworks, and tools to guide local governments in assessing vulnerabilities and implementing adaptation actions.
B. Identify shared regional and local priorities to streamline efforts, avoid duplicative processes, and ensure consistent messaging.
C. Expand decision-support tools and data resources to deliver equity-centered guidance, enhance local planning capacity, and support resilience-oriented recovery from climate impacts.
D. Support low-capacity users with technical assistance, translating complex data and information into actionable insights for projects and plans.
E. Fund tribally-led research and knowledge sharing that respects Indigenous data governance and acknowledges the unique relationships and histories of Tribes in California.
F. Develop regionally-specific action-based research that uplifts local priorities through a community-driven research model.

Implement Innovative Adaptation and Resilience Action

A. Prioritize investments in climate adaptation and resilience efforts in the communities most vulnerable to the impacts of climate change.
B. Utilize ICARP's role as an interagency connector to advance a comprehensive and coordinated response across state agencies for equitable climate adaptation and resilience outcomes.
C. Foster and invest in diverse partnerships among public, private, Tribal, and community-based entities.
D. Support access to multiple funding mechanisms for local projects.
E. Provide technical assistance to align plans, accelerating the development and implementation of holistic resilience plans.
F. Provide technical assistance, evaluation, and case studies for climate adaptation infrastructure and programs.
G. Identify opportunities to fund regional resilience efforts that help interconnected and diverse communities build resilience across jurisdictional boundaries.