

Integrated Climate Adaptation and Resiliency Program (ICARP)

2017-18 Progress Report and Recommended Programmatic Next Steps

March 2019

Executive Summary

The Integrated Climate Adaptation and Resiliency Program (ICARP), established through Senate Bill 246 (Wieckowski), is charged with developing a cohesive response to the impacts of climate change by coordinating state and local adaptation efforts that advance local implementation. Through the enabling legislation, ICARP focuses on efforts that advance climate equity and support integrated climate strategies that benefit both greenhouse gas reductions and adaptation. Senate Bill 246 established two components to the program: development of an Adaptation Clearinghouse (<http://resilientca.org>) and formation of a Technical Advisory Council (TAC). The following document outlines the accomplishments of both program components since its launch in 2017, as well as initial recommendations for the program moving into the next administration. These recommendations will be further discussed and refined at the Council's first quarterly meeting in 2019.

ADAPTATION CLEARINGHOUSE

The Adaptation Clearinghouse – developed through a robust engagement process with end users – provides a centralized and user-friendly source of information to assist decision makers across state, tribal, regional, and local government when planning for and implementing climate adaptation efforts.



ResilientCA.org

The initial build out of the Adaptation Clearinghouse occurred during a twelve-month period in 2017-2018, with a contract with the Geospatial Innovation Facility at UC Berkeley. The site was officially launched in August 2018 at the California Adaptation Forum. Central to the site build out were a series of important partnerships with state and federal agencies (outlined below) resulting in the integration and distribution of multiple adaptation and resilience efforts into a single, searchable site.

ACCOMPLISHMENTS

Alignment with Safeguarding California: California's Climate Adaptation Strategy

By working closely with California Natural Resources Agency, the Adaptation Clearinghouse is aligned with the 2018 Safeguarding California Report ("*Safeguarding*") in two important ways. First, the Clearinghouse includes a series of curated topic pages, allowing users to find resources specific to sectors and topic areas of *Safeguarding*. These topic pages align directly with the sectors used in the 2018 update to *Safeguarding* including the newly added Climate Justice and Parks, Recreation, and Cultural Resources chapters. Second, ICARP worked with each of the sector leads for *Safeguarding* to help develop topic-specific content, as well as identify key State resources for the Adaptation Clearinghouse. This includes hosting over 40 case studies highlighting statewide adaptation programs or projects.

AB 2516 Sea-level Rise Data Integration

Partnering with the Ocean Protection Council (OPC), the Adaptation Clearinghouse hosts and has integrated the Assembly Bill 2516 Sea-level Rise Database, responding directly to legislative directives for both agencies to provide users with a centralized point of access for climate adaptation and resilience resources. This partnership also resulted in administrative and cost efficiencies by leveraging resources towards the development of a single database-driven, user-friendly and interactive website.

Partnership with Caltrans for SB 1 Planning Grant Case Studies

The CalTrans Adaptation Planning Grant, funded through Senate Bill 1, is the State's first adaptation-specific planning grant, providing an crucial opportunity for State agencies to learn how future adaptation-specific grant programs can respond to local needs in a quickly-evolving field of practice. To facilitate this learning opportunity, OPR and CalTrans worked closely to integrate ICARP as a resource into the SB 1 Adaptation Planning Grant program, including the development of grantee case studies that catalog State investments in adaptation made through the SB 1

Adaptation Planning Grant. The Adaptation Clearinghouse houses these case studies for public viewing. While not directly related to the Adaptation Clearinghouse, CalTrans and ICARP are also working to document lessons learned from this program that could help inform other State adaptation grant programs. The Clearinghouse will host this final report after completion of the final round of grants in 2021.

Plan Alignment Compass

A multi-agency group led by the National Ocean and Atmospheric Administration (NOAA) and the United States Geological Survey (USGS) developed the “Coastal Plan Alignment Compass”, which provides an overview of the required elements and best practices for local coastal programs, local hazard mitigation plans, general plans, and climate adaptation plans. The Compass also identifies crosswalk opportunities between these plans, including ways to leverage vulnerability assessments. As a development partner on the Compass, ICARP is now working with NOAA and USGS to build an interactive “Compass” on the Adaptation Clearinghouse (anticipated completion by March 2019).

MOVING FORWARD

Integration of Adaptation Planning Guide

ICARP works closely with CalOES as part of the inter-agency workgroup for the Adaptation Planning Guide (APG) update. This update will include an interactive version of the APG, which will be integrated into the Adaptation Clearinghouse in late 2019/early 2020.

Coordination with Cal-Adapt

ICARP will work closely with the California Energy Commission (CEC) and the Geospatial Innovation Facility (GIF) to identify and implement integration between Cal-Adapt and the Adaptation Clearinghouse. With additional funding for Cal-Adapt provided by the Strategic Growth Council’s Research Program and the CEC, there will be multiple opportunities to support continued integration of state adaptation and resilience resources, especially focused on providing actionable research and data to inform local decision-making.

Maintenance and Engagement

Having launched the Adaptation Clearinghouse in August of 2018, ICARP staff are developing a long-term maintenance and update plan for the Adaptation Clearinghouse. In addition to adding new resources to the Clearinghouse, staff are working to develop a sustained outreach and engagement plan with local governments and stakeholders. While staffing does not exist to support a full climate-services program for local governments, ICARP will continue to explore partnerships that leverage the Adaptation Clearinghouse as a way to support local implementation of adaptation and resilience efforts. For example, ICARP is exploring a partnership with the CPUC to support better coordination between local governments and energy utilities on adaptation

planning. Staff are also exploring opportunities to support the development of a series of plan alignment “compasses” that focus on multiple adaptation topics (e.g. fire, drought, etc.).

TECHNICAL ADVISORY COUNCIL

The Technical Advisory Council (TAC) brings together local government, practitioners, scientists, and community leaders to coordinate activities that better prepare California for the impacts of a changing climate. (TAC members bring expertise in the intersection of climate change and the sector-based areas outlined in SB 246.) The TAC meets quarterly at rotating locations around the state and hosts periodic workgroup meetings. To date, TAC has guided two work streams outlined below, in addition to providing input and guidance to other State-led adaptation programs.

ACCOMPLISHMENTS

Vision Framework

At the initial meeting of the ICARP TAC in March of 2017, the Council agreed that the State needed a strong organizing framework on adaptation and resilience. After this meeting, the TAC worked to create the following components of this framework:

Vision and Principles

The TAC developed a vision statement that expresses the characteristics of a resilient California and outlined principles to guide implementation of future adaptation actions in order to achieve this vision. The TAC adopted the Vision and Principles in September 2017, with the condition that the TAC would take substantive steps to define

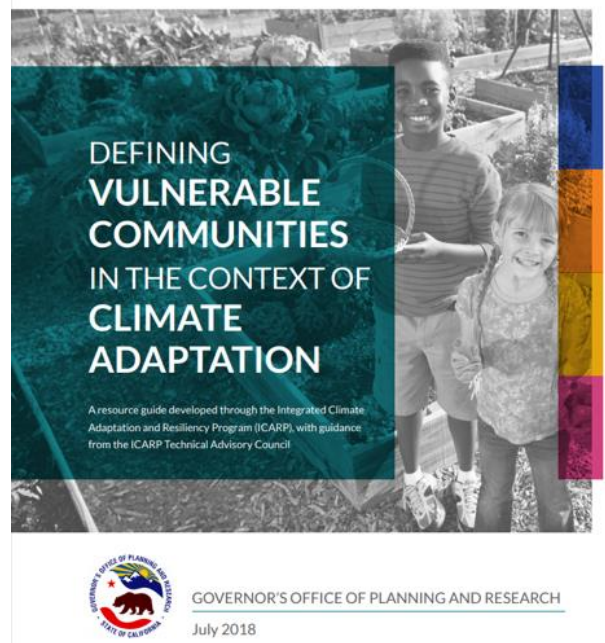
vulnerable communities, a term referenced throughout the Vision and Principles. The ICARP vision and principles have since been integrated into the 2018 *Safeguarding California* update.

Defining Vulnerable Communities in the Context of Climate Change Adaptation

The TAC adopted a definition for vulnerable communities in April 2018 and staff developed a resource guide to help local governments actuate this definition while also meeting climate (Senate Bill 379) and environmental justice (Senate Bill 1000) legislative requirements.

Evaluation Framework

After establishing a vision statement and guiding principles, ICARP staff, guided by the TAC, developed an evaluation framework to track progress towards achieving this vision. While the TAC



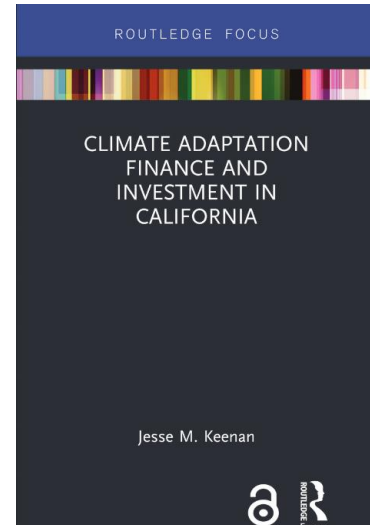
initially explored developing outcomes-based evaluation metrics, the final evaluation framework instead focuses on a processes evaluation. After finalizing the evaluation framework – with public input through a series of workshops and workgroup meetings – ICARP staff partnered with the Government Operations Agency (GovOps) and the California Natural Resources Agency (CNRA) to pilot this evaluation framework on State departments’ efforts to implement Executive Order B-30-15 through the State Sustainability Roadmaps.

Adaptation Finance and Funding

Following the Council’s direction at the March 2017 meeting, Funding and financing for adaptation and resilience has become a major area of focus for ICARP.

Adaptation Finance Guide: Climate Adaptation Finance and Investment in California

ICARP, in partnership with Jesse Keenan (Harvard University, Graduate School of Design), released the first Adaptation Finance Guide for local governments. Moving forward, ICARP will use this guide to hold training workshops and provide technical assistance to local governments and state agencies.



Regional Convenings: Collaborative Partnership with the Federal Reserve Bank

ICARP staff and the Federal Reserve Bank of San Francisco co-hosted a series of regional workshops throughout the state. The convenings brought together diverse stakeholders from local, state and federal government, private finance institutions, community-based organizations and non-profits to identify regional adaptation finance and funding needs. These convenings also provided an important capacity building and information sharing opportunity for practitioners working in finance and climate sectors. While not directly under the purview of ICARP, these convenings catalyzed a number of local projects and initiatives – including efforts to support resilient housing investment in LA and sustainable recreation and forest management in the Eastern Sierra.

MOVING FORWARD

Vision Framework and Building on Existing Work

- Staff should continue to leverage resources, improve partnerships and coordination, and encourage different approaches to adaptation to carry out the adopted Vision Framework.
- Staff should continue building on the TAC’s work to develop a definition of vulnerable communities by exploring opportunities to support development of additional decision-support tools that ensure adaptation actions respond to and benefit vulnerable communities.
- Staff are also exploring opportunities to integrate the ICARP Adaptation Evaluation Framework into existing local adaptation planning evaluation and tracking efforts managed and/or approved by other state and federal agencies.

- Staff should work to package resources so that they are available to State Technical Assistance programs.

Funding and Financing

- Staff will continue to develop an outreach and engagement schedule around the Adaptation Finance Guide, specifically looking to engage city managers and capital improvement program managers.
- Adaptation funding and financing will continue to be a major body of work, including:
 - Identifying opportunities to increase climate considerations in existing state funding programs, including opportunities to mobilize and leverage private capital.
 - Engaging in the development of a long-term State funding strategy, with focus on supporting local government implementation (including efforts to understand economic consequences of inaction).
 - Focusing on the role of the private insurance market and identifying opportunities to align public and private activities that support resilience (e.g. identify insurance drivers that are barriers to implementing resilience post disaster, explore opportunities to couple local resilience planning activities with private insurance markets to incentivize resilient community planning).

Cross-cutting Topics

- To advance climate-informed land use planning, ICARP could explore strategies to address barriers that lead to maladaptation and reduce the long-term health and wellbeing of people across the range of climate impacts. This effort should balance immediate issues and long-term planning.
- ICARP should continue to improve partnerships between state, regional, and local entities in California. These efforts should strengthen the coordination of existing adaptation programs and promote better linkages between a variety of sectors including transportation, agricultural, and health systems. ICARP should focus attention on improving urban and rural connectivity.
- ICARP should actively engage on the public health implications of climate change (e.g. support local government efforts to incorporate public health and adaptation efforts related to heat, air quality, vector-borne disease, etc.).