Integrated Climate Adaptation and Resiliency Program Technical Advisory Council

Item 7: Science Advisory Group Best Practices and Recommendations

March 25, 2022

Introduction

Actionable science is foundational to California's climate agenda and supports science-informed policies and investments to respond to the accelerating climate impacts. Many state agencies have science advisory bodies that guide their individual programmatic missions. Examples include the Ocean Protection Council's Science Advisory Team and the Tahoe Science Advisory Council. From 2012 – 2018, the Department of Water Resources convened the Climate Change Technical Advisory Group.

While these groups provide valuable, and sector-specific guidance, over the last two decades, there have been many calls to convene statewide and multi-sector science advisory bodies that provide consistent climate science guidance across state agencies and inform statewide climate adaptation and resilience decision making.

- In 2009, the Pacific Council on International Policy and the California Adaptation Advisory Panel, recommended the state establish a Climate Risk Council. The Council's proposed role was to translate climate science into risk guidance to inform decision-making and ensure that knowledge is incorporated into action at all levels.
- The Climate-Safe Infrastructure Working Group (AB 2800, Quirk, 2016), made up of scientific experts, engineers, and architects, examined how climate change impacts can be included in infrastructure planning, design, and implementation processes and produced "The Path Toward Climate-Safe Infrastructure in California" (2018).
- Most recently, the Public Utilities Commission Order Instituting Rulemaking for Climate Change Adaptation (2019) working group sessions highlighted the need for a technical advisory group that reviews and assesses existing and new climate data and support development of criteria for climate data considered suitable for IOU planning and operations. Feedback from these public sessions called for a coordinated, whole-of-government approach to managing climate data and climate science guidance.

As the state's primary hub for coordination on adaptation and resiliency across local, regional, and state efforts, and with funding through the 2021 Climate Budget, ICARP staff will convene the ICARP Science Advisory Group (SAG) to promote alignment of the state's deployment of climate science in resilience planning, policy, and investments. The SAG will significantly advance ICARP's goal of providing relevant, actionable data and research to support robust climate adaptation and resilience planning and policy.

Overview of science advisory body processes in CA and abroad

ICARP staff reviewed the scope and structure of 20 existing science advisory bodies across California, the United States, and beyond (see attached table for details). Of those reviewed, all advisory bodies are comprised of technical experts with diverse expertise and advance science-informed policy by providing guidance on scientific information for decision makers. The most common roles of these science advisory bodies are to:

- Develop climate assessments, technical reports, and guidance documents that translate data into actionable information, which can be implemented and incorporated in planning processes;
- Review quality and relevance of scientific and technical information;
- Advise on the integration and alignment of climate science in government plans, programs, or initiatives;
- Serve as a liaison with climate research community and keep abreast of new scientific and research developments as they relate to climate change; and,
- Identify priority research areas and gaps.

The number of members in science advisory bodies range from 10 to 45 participants; bodies with a larger number of members are often split into workgroups or committees by workstream or topic area. The majority of members are experts from research institutions (within the state, across the U.S. or international), while the remainder of members include state, federal, or tribal governments, and private and non-profit representatives. All held regular meetings that ranged from monthly, bimonthly, quarterly or biannually.

Proposed ICARP SAG Structure, Function and Role

Based on exploratory discussions and research, ICARP staff propose the following initial recommendations on the ICARP SAG's structure, function, and role:

1. Be comprised of subject matter experts across California's climate impacts (for instance, wildfire, extreme heat, precipitation changes, sea level rise and coastal flooding, riverine and fluvial/pluvial flooding) with a broad range of physical and social science expertise
2. Provide scientific and technical guidance and expertise to inform state climate science and research needs and incorporate climate science into state planning and investment decisions

Discussion Questions

In exploring the structure, function, and role of the ICARP SAG, ICARP staff has identified the following questions for the ICARP TAC:

1. While the intended audience of the SAG is state agencies, where are the opportunities to make sure this group supports and informs local implementation efforts?
2. Does the ICARP TAC have recommendations or examples of successful science advisory bodies?
3. How does the ICARP TAC propose supporting coordination between the Council and the Science Advisory Group?