



**Integrated Climate Adaptation and Resiliency Program**

# **Technical Advisory Council 4<sup>th</sup> Quarter Meeting**

**NOVEMBER 17<sup>TH</sup>, 2023 | 9:30AM – 1:00PM**



# Meeting Agenda

---

Item 1 | Welcome & Roll Call

Item 2 | Meeting Minutes

Item 3 | State Agency Updates

Item 4 | ICARP Programmatic Updates

Item 5 | Vulnerable Communities Platform

Item 6 | Fifth Assessment Tribal Program

Item 7 | Fifth Assessment Synthesis Reports

~~Item 8 | Community Development Block Grant – Mitigation Citizen  
Advisory Committee~~





# Item 1 | Welcome & Roll Call



# Item 2 | Meeting Minutes





# Item 2 Public Comment



## ACTION

---

Approve the meeting minutes from the ICARP  
Technical Advisory Council 2<sup>nd</sup> Quarter  
Meeting on June 30<sup>th</sup>, 2023.

---



# Item 3 | State Agency Updates



# CLIMATE RESILIENCE NEXUS 2024

- January 12, 2024
- Riverside, CA
- Action Tracks:
  - Extreme Heat
  - Research
  - Tools & Resources
  - Financing Resilience





# Item 3 Public Comment



# Item 4 | ICARP Programmatic Updates

# TAC Priority Areas



Actionable Research & Resilience Metrics



Decision Support Tools & Guidance



Building Partnerships & Leveraging Resources



Funding & Financing



Climate Equity & Vulnerable Communities

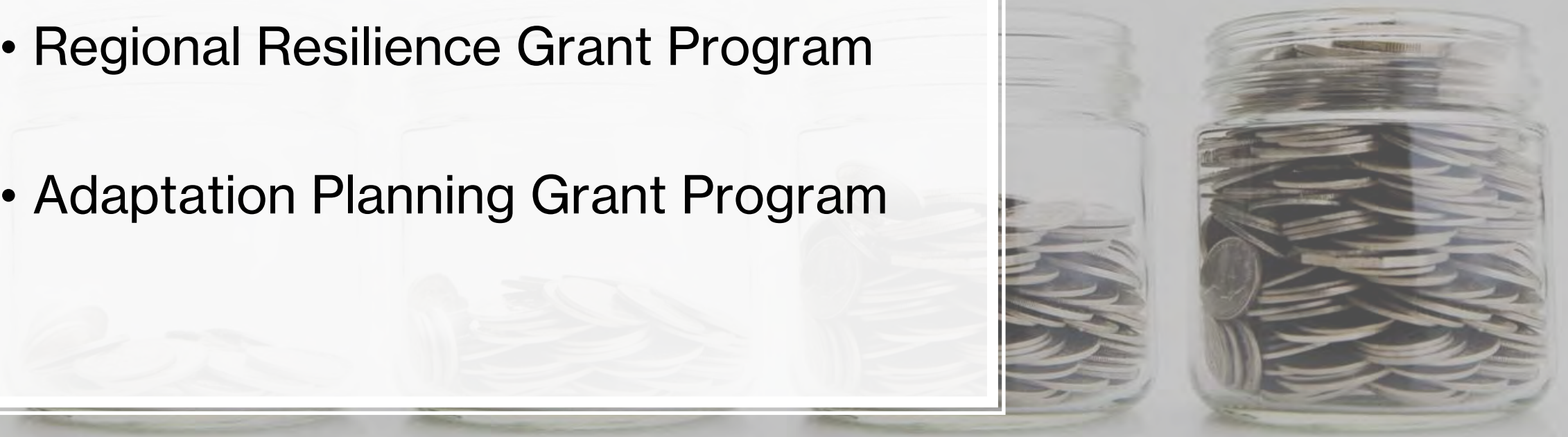


Additional Special Initiatives



# Funding & Financing

- Extreme Heat and Community Resilience Program
- Regional Resilience Grant Program
- Adaptation Planning Grant Program



# Additional Special Initiatives

- California Climate Adaptation Strategy
- Extreme Heat Action Plan



# Item 4 Public Comment

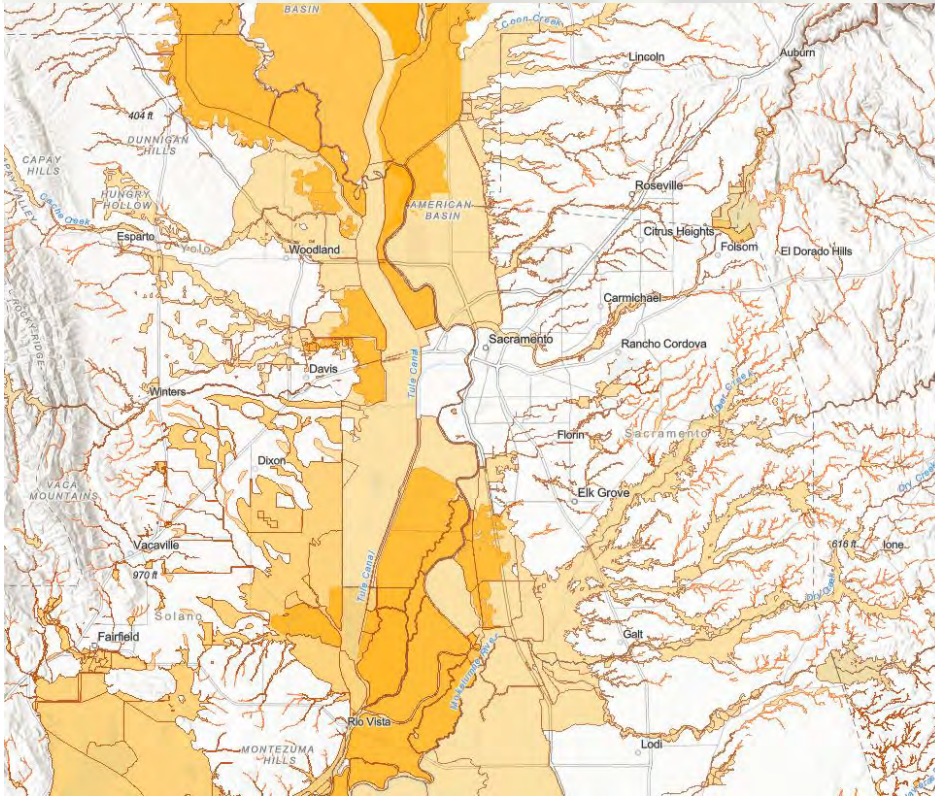




# Item 5 | Vulnerable Communities Platform

# Integrated Climate Adaptation and Resiliency Program (ICARP)

Advancing equitable, integrated climate adaptation and resilience solutions across local, regional, and state efforts



## Vulnerable Communities Platform

Ankitha Doddanari  
Staff Analyst, Climate Equity and Resilience Engagement

# TAC Definition of 'Vulnerable Communities'



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.



# What is the VCP?

Web-hub that assists in understanding and visualizing the underlying factors that drive climate vulnerability with the goal of identifying and supporting those that are most vulnerable

# Why do we need it?

There is no existing tool that holistically displays all the data needed to understand a community's climate vulnerability



# Statewide Climate Hazard and Sensitivity Maps

---



- ❖ Current and projected climate hazard data (Extreme Heat, SLR/Flood, Wildfire, Drought)
- ❖ Intersecting social factors that exacerbate corresponding climate hazard (ex. Extreme Heat and Outdoor Workers or Seniors Living Alone)
- ❖ Guidance on relevance of each factor



# Local Community Impacts

---

Display on-the-ground community experiences with climate change

- ❖ Workshops hosted in partnership with local community based organization
- ❖ Use climate hazard maps to assess risk and provide feedback
- ❖ Share experiences with climate change and existing resilience enhancing assets
- ❖ Assessments will be displayed on VCP

[Example](#)



# Climate Vulnerability Tool Comparison

---



- ❖ Collection of existing climate resiliency related tools (ex. Healthy Places Index, California Heat Assessment Tool, CalEnviroScreen)
- ❖ Allow users to compare and contrast
- ❖ Provide guidance on use cases

Example



# Resilience Resource Springboard

---

- ❖ Entry level primer to available resources; grant sources, policy requirement summaries, planning documents, collaboratives, etc.
- ❖ Connect to Adaptation Clearinghouse

[Example](#)

## VCP DEVELOPMENT TIMELINE



- ❖ Development for each feature is prioritized and staggered
- ❖ Iterative, ongoing improvements will be made to all features based on engagement feedback





# Stakeholder Engagement 2023 Progress & 2024 Next Steps

---

## Phase 1: Expert User Engagement:

- ❖ Feedback on proposed tool functions
- ❖ Data priorities and recommendations
- ❖ Other related tools and resources
- ❖ Advice for conducting community workshops (who to include, how to do most effectively)

## Phase 2: Community Lived Experience Engagement:

- ❖ Feedback on prototype designed with ESRI
- ❖ Workshops to identify:
  - ❖ Climate challenges community has faced
  - ❖ Adaptive capacity enhancing assets (social, environmental, built, etc.)
  - ❖ Opportunities for building resilience



# Discussion

---

- ❖ What current or anticipated events or engagement – especially with community based organizations and local governments – would be good opportunities for the VCP's continuing engagement with stakeholders?
- ❖ Are there any topics or sectors we should prioritize as we look to integrate tools and data into the VCP?



# VCP Contact

---

**Ankitha Doddanari**

Staff Analyst, Climate Equity & Resilience Engagement

[Ankitha.Doddanari@opr.ca.gov](mailto:Ankitha.Doddanari@opr.ca.gov)





# Item 5 Public Comment

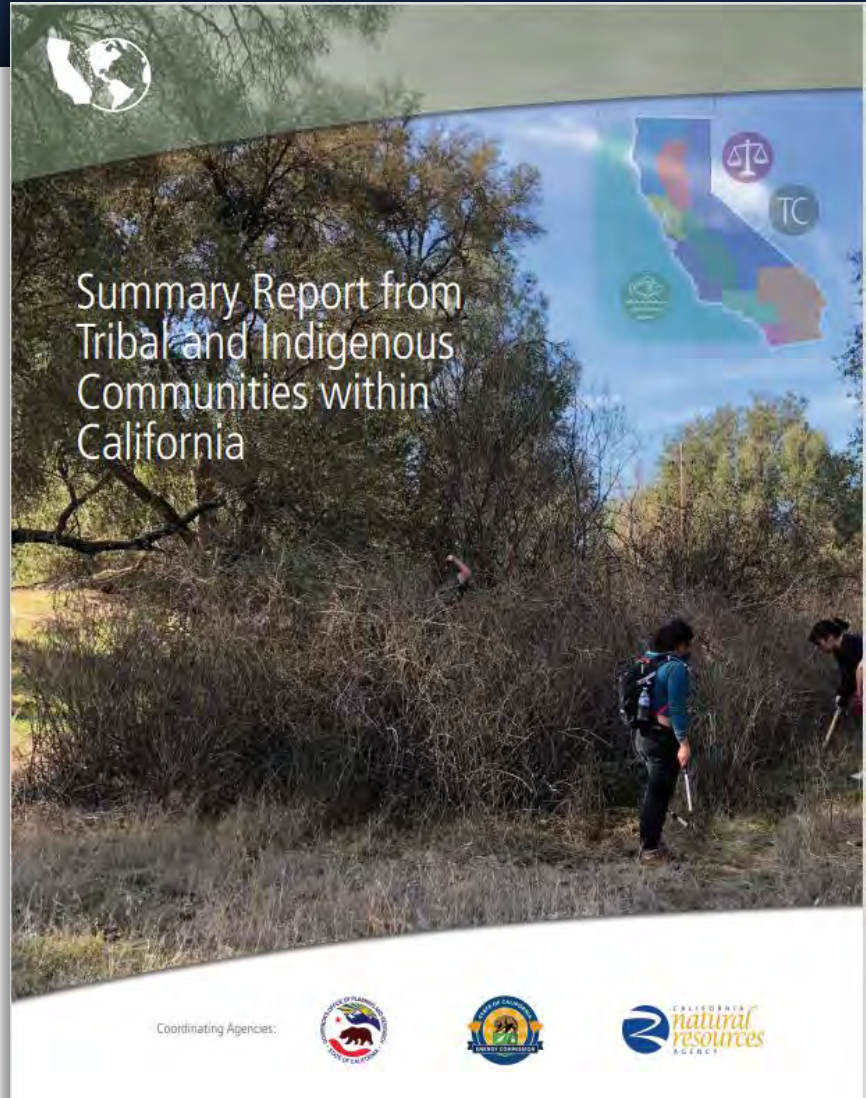


# Item 6 | Fifth Assessment Tribal Program

# Climate Assessment Tribal Research Program



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT



“This report is the beginning of something truly innovative: **a mutual invitation between tribes and the state to share learning with an urgent focus on climate action, incorporating traditional knowledges and practices.** This synthesis is the starting point of a new productive climate conversation between tribes and the state”

– page 10 of CA Fourth Climate Assessment Tribal and Indigenous Communities Report (2018)



# Climate Assessment Tribal Research Program

Per SB 1320 (Stern, 2020) the Climate Assessment must address, “issues of statewide significance, including, but not limited to, environmental justice considerations, impacts on [built systems, natural systems, and social systems, including the welfare of vulnerable communities, and the potential fiscal and economic impacts of these effects in California], and [the unique risks posed to, and research and monitoring approaches used by, tribal communities.](#)”



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

# Tribal Research Program Goals



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

- **Strengthen partnerships** with Tribes through early, often, and meaningful **engagement and consultation**,
- Establish a **Tribal Advisory Group (TAG)** to ensure collaboration on Indigenous knowledge and tribal expertise throughout the Assessment,
- Support tribally led research through a **Tribal Grant Program** to address California-specific tribal research needs and tribally led, local climate assessments,
- Develop a **Tribal and Indigenous Communities Report** that includes tribally led research and summarizes climate change impacts to tribes in California, and
- Collaborate with Tribes to develop tribally led **Guidance on Collaboration and Protection of Indigenous Knowledge and Tribal Expertise** through research processes and report handling.

# Strengthening Partnerships, Consultation, and Engagement



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

- 8 Tribal Workshops/Listening Sessions
- 4 Tribal Grant Office Hours Session
- Presented at over 20 tribal consortia meetings
- Consulting with 7 Tribes
- Dozens of direct conversations with tribal program staff and tribal NGO's
- Partnered with Tribes and Tribal NGO's to co-host multiple, in-person Regional Workshops to inform the scope of the Assessment's Regional Reports.
- 4 Tribal Roundtables in conjunction with our Regional Meetings
- 6 Tribal Advisory Group meetings, 1 in person

Program Goal:  
**Strengthen partnerships** with  
Tribes through early, often,  
and meaningful **engagement**  
**and consultation**



# Tribal Advisory Group



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

Program Goal:  
Establish a Tribal Advisory  
Group to ensure  
collaboration on Indigenous  
knowledge and tribal  
expertise



**Tiana Williams-Claussen**, Wildlife Director, Yurok Tribe



**Raymond Gutierrez**, Eco-Cultural Ecologist, Wuksachi Indian Tribe

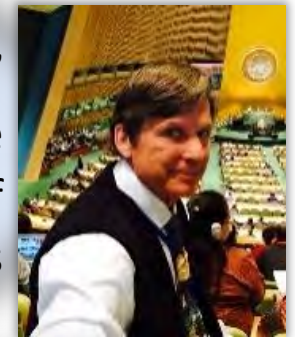
**Connor Magee**,  
Research and Data  
Application Manager-  
Climate Science  
Alliance, Pala Band of  
Mission Indians



**Christina McDonald**,  
Secretary, North  
Fork Rancheria of  
Mono Indians



**William "Yaan Yaan Eesh" Micklin**, Chief Executive Officer, Ewiiapaayp of Kumeyaay Indians



**Teresa Romero**,  
Coastal Band of  
Chumash Nation,  
Tribal Member



**Michael Shaver**,  
Water Resources  
Director, Potter  
Valley Tribe



**Dean Tonenna**, VP Mono Lake Kootzaduka'a Indian Community Cultural Preservation Association



# Tribal Research Grant Program: Next Steps:



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

## Purpose

- Support research by California Native American tribes
- Tribal needs and questions related to climate change
- Support participation in California's Fifth Climate Assessment
- Inform Fifth Assessment reports to guide climate resilient planning

Program Goal: Support tribally-led research through a Tribal Grant Program

## Funding

- \$3.625 million available over 3 Rounds
- 20k-400k for Individual Awards

## Grants Types

- Topic-specific Research
- Climate Assessment
- Project Implementation
- Information Sharing
- Tool Development
- Other

September-  
November 2023

- Application Window

Spring 2024

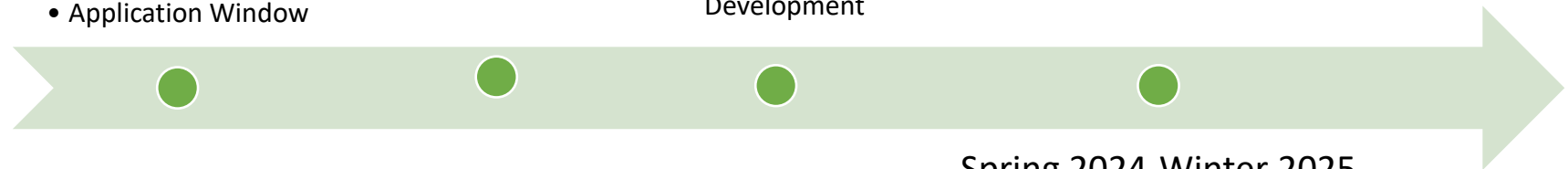
- Agreement  
Development

Winter 2023

- Grant Selection

Spring 2024-Winter 2025

- Project Work



# Tribal Synthesis Report Timeline



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

Program Goal: Develop  
a Tribal and Indigenous  
Communities Report

All 2023

- Scoping Phase

Winter 2025

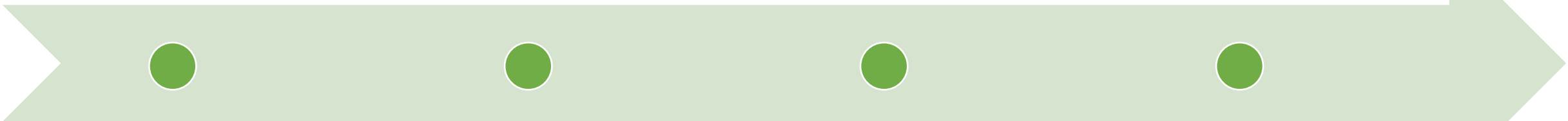
- Final Review

2024-2025

- Report Drafting

Spring 2026

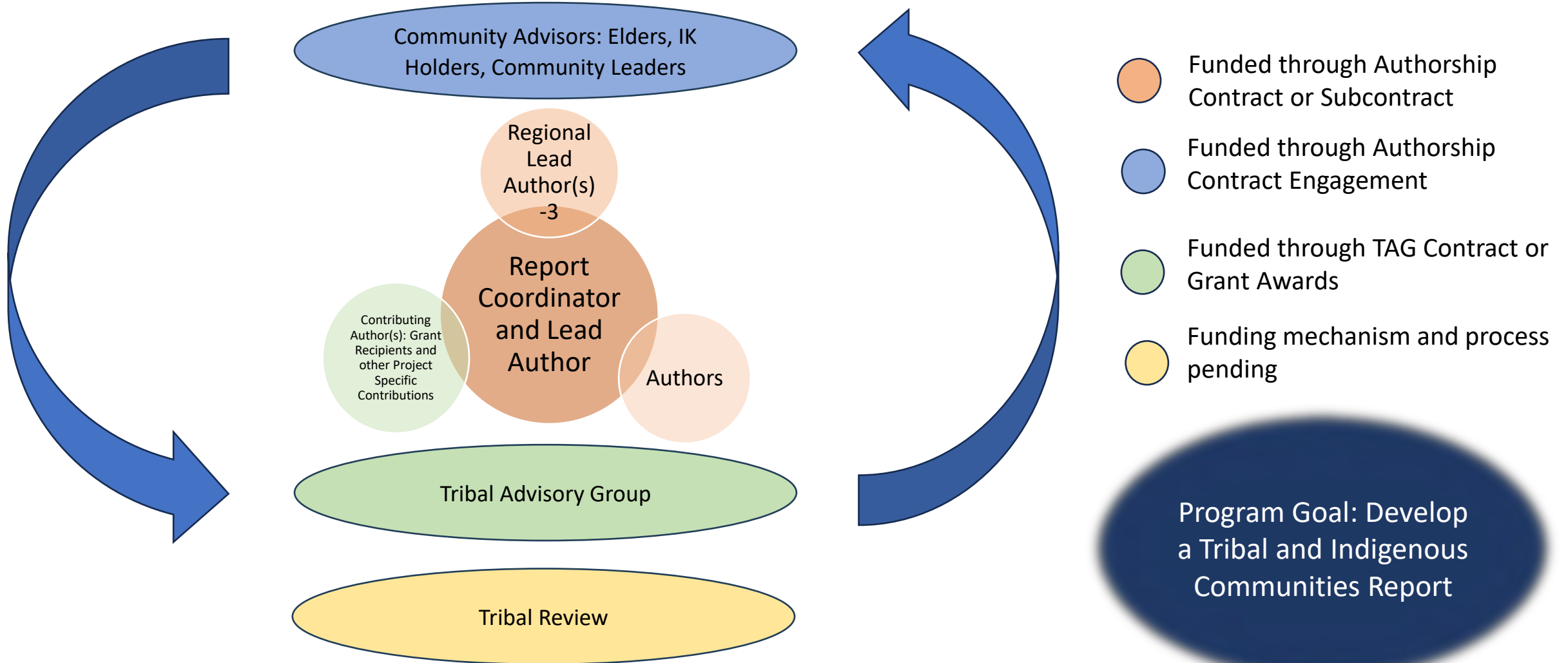
- Release



# Tribal Author Team-Proposed



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT





# Indigenous Knowledge Guidance



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

*Program Goal: Develop Tribally  
led Guidance, Protocols, and  
Training on Collaboration and  
Protection of Indigenous  
Knowledge*

**Purpose:** Provide context, guidance, and procedures to support State and Tribal collaboration on IK in climate change research.

- Examine the risk tribes face when sharing IK with the State
- Develop recommendations, guidance and/or procedures
- Increase understanding of the State's role in collaborating with tribes on IK
- Ensure benefit to indigenous communities
- Expand cultural competency in IK amongst non-indigenous communities
- Support the Fifth Assessment Author Team(s) in implementation of the IK Guidance.

# Discussion Question



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

From your perspective and your work, what is the most challenging factor or barrier to meaningfully collaborate with tribes on Indigenous Knowledge and Tribal Expertise within the context of climate change research and resilience efforts?

What resources would help address those barriers?



# Item 6 Public Comment



# Item 7 | Fifth Assessment Synthesis Reports





CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

# California's Fifth Climate Change Assessment

## ICARP TAC Q4 2023 Update



# What are the California Climate Change Assessments?

California's Climate Change Assessments contribute to the **scientific foundation for understanding climate-related vulnerability at the regional and local scales** and informing resilience actions, while also directly informing State policies, plans, programs, and guidance, to promote effective and integrated action to safeguard California from climate change.



CALIFORNIA'S  
CLIMATE CHANGE  
ASSESSMENT



CALIFORNIA  
STRATEGIC  
GROWTH  
COUNCIL



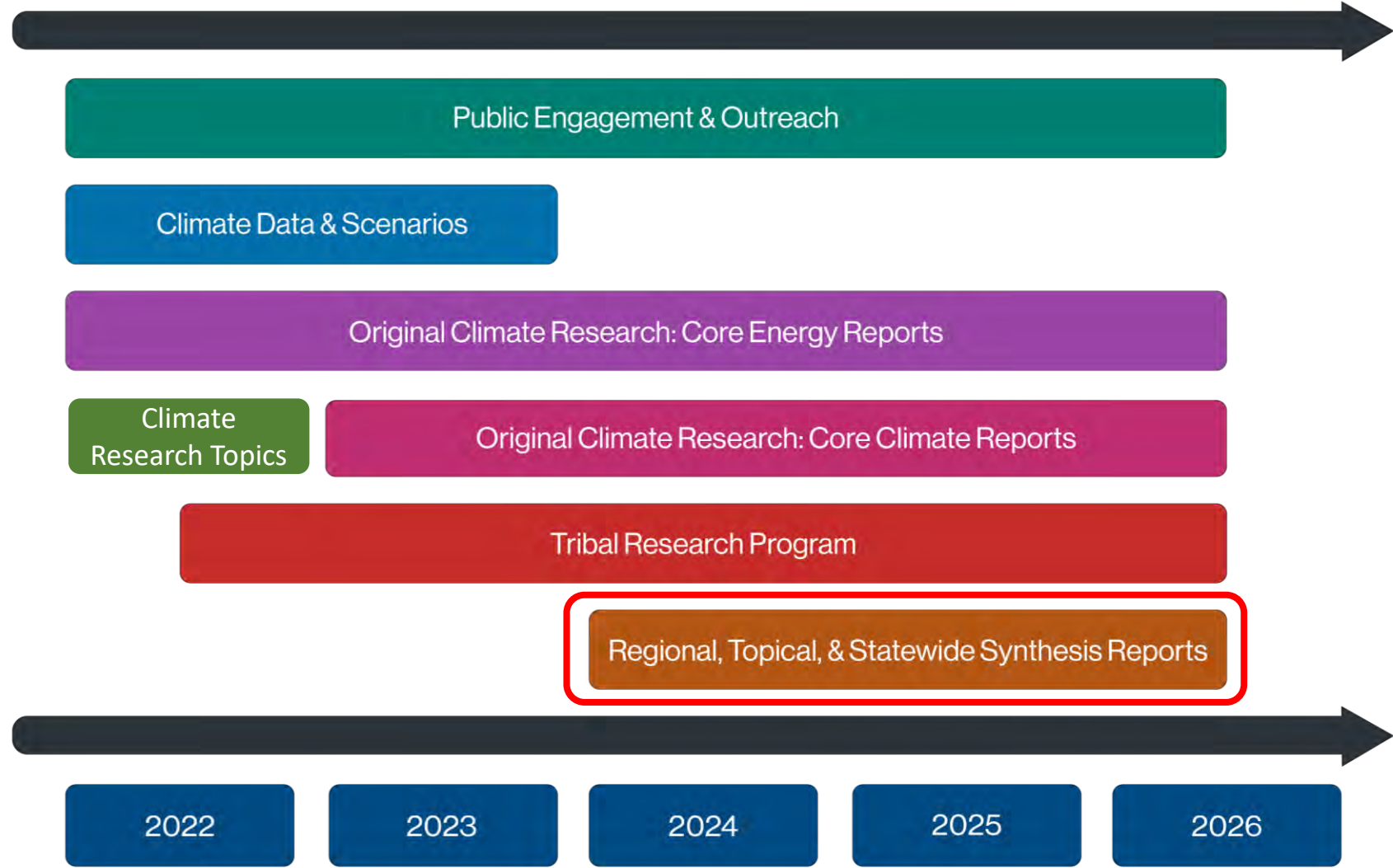
CALIFORNIA  
NATURAL  
RESOURCES  
AGENCY

# Fifth Assessment Products & Timeline

The Fifth Assessment will produce a suite of research and tools that report the impacts and risks of climate change, based on the best available science.



CALIFORNIA'S FIFTH CLIMATE CHANGE ASSESSMENT



# Regional Synthesis Reports

## GOALS

- **Support a community-led process**
- **Produce actionable science & resources**
- **Implement a consistent framework across regions**
- **Synthesize statewide climate issues & highlight local priorities**



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT





## California's Fifth Climate Change Assessment

### Regional Synthesis Report Framework

#### General Overview:

California's Fifth Climate Change Assessment (Fifth Assessment) is a suite of original research and tools describing the impacts and risks of climate change to equip communities and leaders across the state with the best available science to inform their adaptation planning and decision-making processes. Worse and more frequent extreme weather events and trends are impacting the state every year, making up-to-date information on climate change imperative to driving sound policy and investment decisions.

The Fourth Climate Assessment developed a model for nine regional synthesis reports that compile the best available science on climate change and other informational resources at a local scale to help communities understand and develop informed responses to the impacts of climate change in their region. State agencies involved with the Fourth Assessment, in collaboration with author teams, established these regional boundaries based on: considerations for climate, economic, other environmental issues throughout the state; the availability of geographical expertise at the time; and alignment with other jurisdictional boundaries (e.g., county) where practicable.

The Fifth Assessment team conducted an extensive review of the Fourth Assessment regional reports and hosted multiple engagement opportunities with diverse representatives and expert groups throughout the state to gather input the Fifth Assessment's Regional Synthesis Reports. These opportunities included a public survey for suggested research topics, expert roundtable discussions, interagency collaborations, community workshops and listening sessions, and a formal Request for Information.

The Fifth Assessment Summer Engagement Workshops will be an opportunity to collect additional input on local priorities and develop a framework that future author teams will use to guide the development of the Fifth Assessment Regional Synthesis Reports.

#### Purpose of Regional Synthesis Reports:

- Fill local knowledge gaps by synthesizing climate projections data and new research on climate change impacts in California to meet the needs and context of communities across the state.
- Support a community-led research process and uplift local priorities and knowledge(s).
- Create informational resources and tools that can be used to guide local policy, planning, and action on climate change, including regional and local vulnerability assessments, adaptation planning and community resilience efforts.

#### Audience / Users:

- Local, regional and statewide policy leaders, decision-makers and planners
- Scientists and researchers
- CA Native American tribal communities
- Key organizations (e.g., community-organizations, businesses, advocacy groups)
- General California users

#### Author Team Structure:

- Coordinating Lead Author (UC/CSU)
- Lead Author (NGO/LG)
- Authors
- Subject Matter Expert Advisors / Contributors
- Community Advisors

#### Report Outline:

##### INTRODUCTION

- Summary overview of local climate priorities and key geographical, natural, infrastructural, economic, cultural and demographic features.
- Summary of existing local climate resources: Climate Adaptation/Mitigation plans, policies and programs

##### CLIMATE SCIENCE

###### Key Impacts & Events:

- Sea Level Rise
- Extreme Heat
- Drought
- Flood
- Wildfire
- Cascading & compounding (multiple, intersecting hazards)

###### Historical & projected trends:

- Temperature
- Precipitation
- Extreme storm events
- Clouds, wind, humidity, and other relevant factors

##### GENERAL CROSS-CUTTING THEMES

###### Natural & Working Lands and Waters

- Indigenous Knowledge(s)
- Biodiversity & Habitat
- Agriculture
- Water supply (surface / ground)
- Open space

###### Social Systems & Cultural Resources

- Finance & Insurance
- Labor and Workforce Economics
- Indigenous Knowledge(s)
- Racial Equity & Climate Justice
- Public Health
- Policy and Governance
- Communications / Engagement / Capacity-Building Efforts
- Human displacement (short-/long-term)
- Emergency Capacity

###### Built Systems

- Indigenous Knowledge(s)
- Critical Infrastructure
- Housing
- Emergency Capacity
- Public Health

##### CONCLUSION

- Recommendations for future research
- Connections to statewide and local priorities / plans / programs

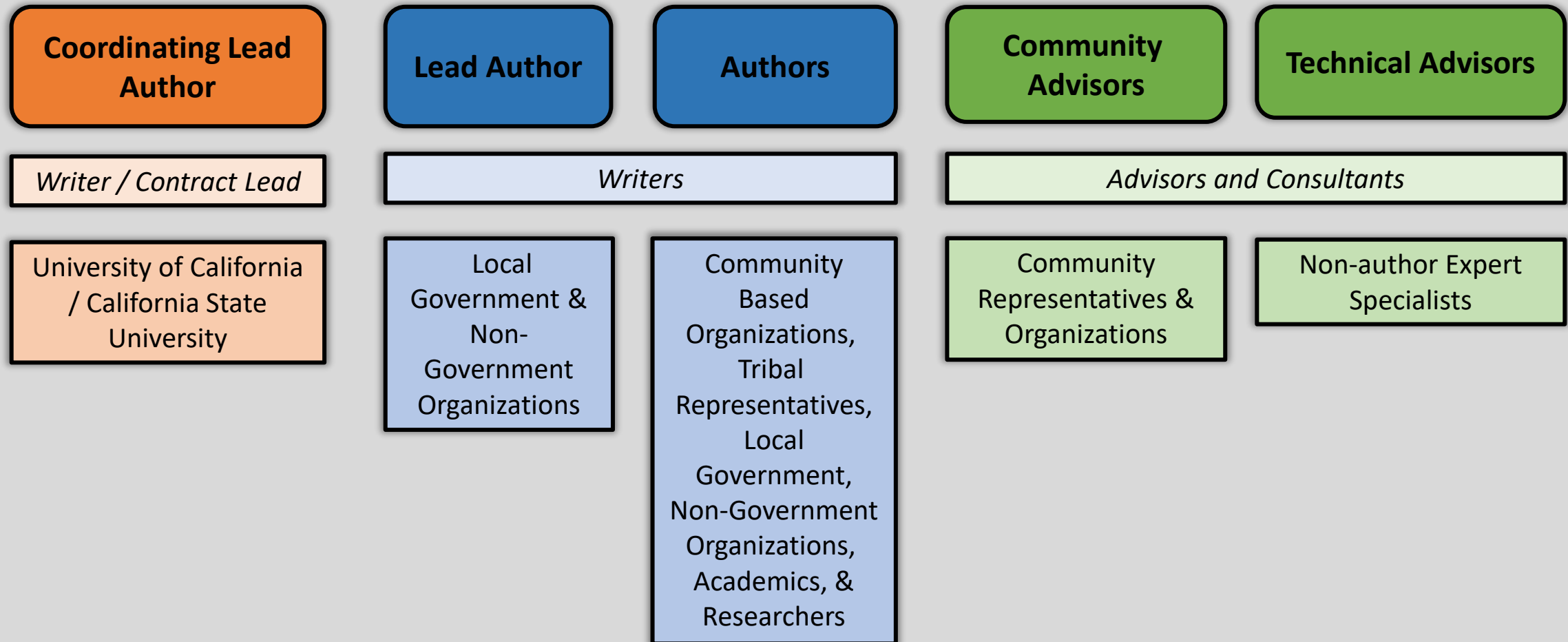
# Regional Synthesis Reports Framework Outline



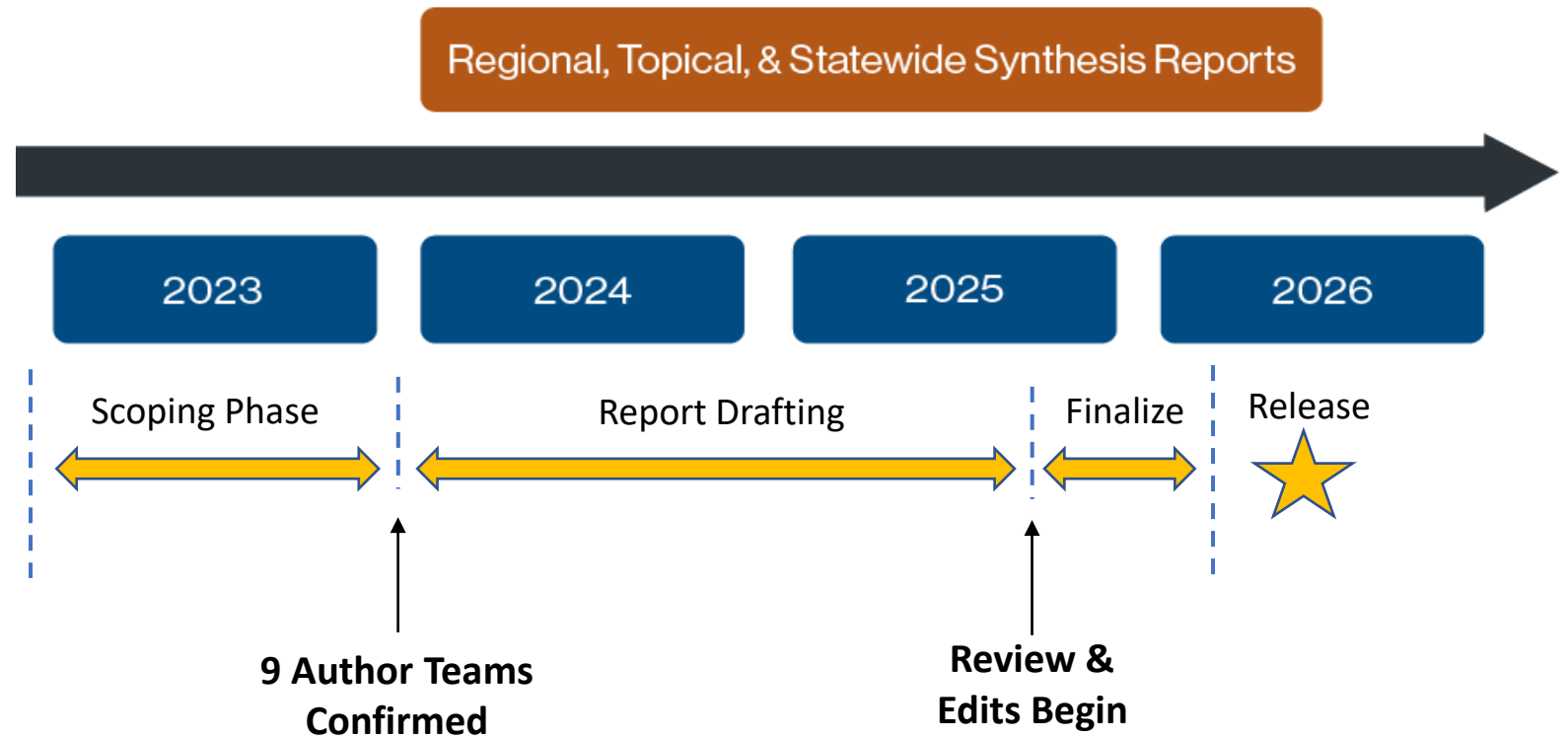
# Regional Author Team



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT



# Regional Synthesis Reports Timeline



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

# Regional Synthesis Reports

## *Updating Boundaries*



CALIFORNIA'S FIFTH  
**CLIMATE CHANGE**  
ASSESSMENT

**Fourth Assessment Regions**



**DRAFT Fifth Assessment Regions**





# Topical Synthesis Reports

Per SB 1320 (Stern, 2020) the Climate Assessment must **address, “issues of statewide significance, including, but not limited to, environmental justice considerations, impacts on [built systems, natural systems, and social systems, including the welfare of vulnerable communities, and the potential fiscal and economic impacts of these effects in California], and the unique risks posed to, and research and monitoring approaches used by, tribal communities.**



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

# Topical Synthesis Report Topics



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

## *DRAFT Topics*

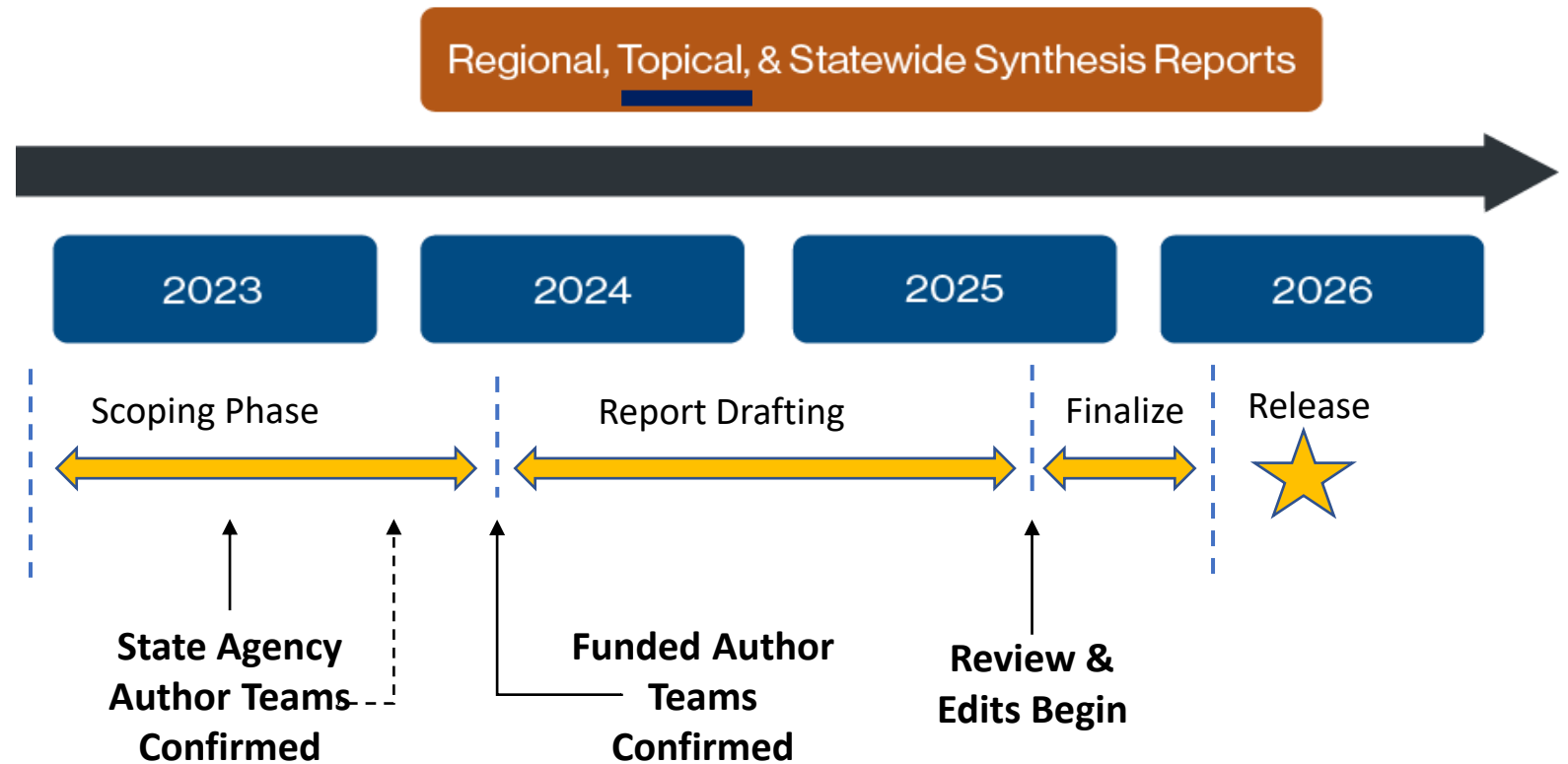
### *Funded:*

- **Racial Equity and Climate Justice**
- **Tribal and Indigenous Communities**
- **Economic Evaluation of Climate Impacts**
- **TBD Topical Report**

### *State Agency Volunteered:*

- **Climate Finance (CDI, et al.)**
- **Labor and Workforce (Labor, et al.)**
- **Public Health (CDPH, et al.)**
- **Biodiversity (CDFW, et al.)**

# Topical Synthesis Reports Timeline



# Questions



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

- What can we do to improve the value or utility of these resources?
- As we initiate this process, at what points should the TAC receive updates on the progress of the reports?



# Fifth Assessment Contacts



CALIFORNIA'S FIFTH  
CLIMATE CHANGE  
ASSESSMENT

***Email:***

**[Neil.matouka@opr.ca.gov](mailto:Neil.matouka@opr.ca.gov)**

**[climateassessment@opr.ca.gov](mailto:climateassessment@opr.ca.gov)**

***Learn About the Fourth Assessment:***

**<http://climateassessment.ca.gov/>**

***Track Updates and Announcements:***

**<https://opr.ca.gov/climate/icarp/climate-assessment/>**





# Item 7 Public Comment



# Item 8 | General Public Comment



# Item 9 | Closing & Meeting Adjourned





# Closing Reminders

---

- Climate Resilience Nexus on January 12<sup>th</sup>
- 2024 Meeting dates will be announced on the [ICARP website](#) in January
- Council member appointments

Thank You!



- ∅ Sloane Viola, ICARP Council Program Manager [Sloane.Viola@opr.ca.gov](mailto:Sloane.Viola@opr.ca.gov)
- ∅ Email [icarp@opr.ca.gov](mailto:icarp@opr.ca.gov) for general ICARP inquiries