Governor's Office of Land Use and Climate Innovation (LCI)

Integrated Climate Adaptation and Resiliency Program (ICARP)

Technical Advisory Committee (TAC)

August 22, 2025

SUMMARY

TAC Members Present:

- Abby Edwards, LCI
- Jacob Alvarez¹, City of Coachella
- Alex Ghenis, Accessible Climate Strategies
- Nathan Bengtsson, PG&E
- Kim Clark, Southern California Association of Governments
- Amanda Hansen, California Natural Resources Agency (CNRA)
- Lucy Levin, California Environmental Protection Agency² (CalEPA)
- Melissa Boudrye, California Governor's Office of Emergency Services³ (OES)
- Jonathan Parfrey, Climate Resolve
- Linda Helland, California Department of Public Health (CDPH)
- Clare Winterton, The Solutions Project⁴
- John Wentworth, Town of Mammoth Lakes
- Jaylen Tran, California State Transportation Agency⁵

- Michelle Passero, The Nature Conservancy (TNC)
- Nina Bingham, California Department of Food and Agriculture⁶ (CDFA)
- Susan Haydon, Sonoma County Water Agency⁷ (Sonoma Water)

TAC Members Absent:

- Nayamin Martinez, Central California Environmental Justice Network
- David Loya, City of Arcata
- Denise Kadara, Allensworth Progressive Association
- Allison Brooks, Bay Area Regional Collaborative
- Karalee Browne, Institute for Local Government
- Will Madrigal, Jr., Climate Science Alliance
- Roberto Carlos Torres, City and County of San Francisco

Roll Call & Housekeeping

Sam Magill, Sacramento State University College of Continuing Education, reviewed the agenda and discussed meeting logistics for in person and online attendees. Elea Becker Lowe, LCI conducted a roll call. With 16 members present, a quorum was reached, and the meeting was called to order.

¹ Participated remotely; location publicly accessible in compliance with the Bagley Keene Open Meetings Act

² Alternate for Sarah Izant, California Environmental Protection Agency

³ Alternate for Robyn Fennig, California Office of Emergency Services

⁴ Alternate for Gloria Walton, The Solutions Project

⁵ Alternate for Darwin Moosavi, California Department of Transportation

⁶ Alternate for Virginia Jameson, California Department of Food and Agriculture

⁷ Alternate for Grant Davis, Sonoma County Water Agency

Approval of Draft Meeting Minutes

Magill led discussion and approval of the May 16, 2025, TAC meeting minutes. After a brief introduction, the following conversation was recorded:

Kim Clark noted syntax errors in the Vulnerable Communities portion of the May 16 meeting minutes.

Public Comment

None.

Clark made a motion to approve the May 16, 2025, meeting minutes. Nathan Bengtsson seconded. With 13 ayes, 0 notes, and 3 abstentions, the minutes were approved.

Aye: Abby Edwards, Alex Ghenis, Amanda Hansen, Jaylen Tran, Clare Winterton, Jacob Alvarez, John Wentworth, Jonathan Parfrey, Kim Clark, Michelle Passero, Nathan Bengsston, Lucy Levin, Nina Bingham

No: None.

Abstain: Susan Haydon, Linda Helland, Melissa Boudrye

ICARP Programmatic Updates and Staff Report

Edwards led a report out from TAC members, provided new ICARP staff introductions, and led ICARP programmatic updates.

TAC Member Updates

The first update provided was from Linda Helland, CDPH. CDPH works with local health jurisdictions and Tribes to prevent and reduce the impacts of climate change, such as supporting the Pala Band of Mission Indians in the development of a heat plan which may be used as a template for other Tribes in the future. Helland requested if members are aware of other Tribes or local jurisdictions who may need this type of tailored public assistance to reach out to CDPH. Additional updates included:

- In July, CDPH released a special newsletter edition on heat; a similar issue will be provided on wildfire smoke.
- In June, CDPH held the California Climate Action Teram Public Health Workgroup meeting, held in collaboration with the California Air Resources Board and focused on impacts from climate stressors for vulnerable populations.
- The Climate Health Equity Advisory Group (CHEG) was launched to advise CDPH on climate change and healthy equity projects, policies, and plans.
- A storytelling project called The Effect of Climate Change on California's Health is underway with interviews and stories from Californians who have experienced health impacts from climate change.
- The CDPH Climate Anxiety is Real communications campaign is underway to address the mental health impacts of climate change.
- Syndromic surveillance and emergency medical assistance continue to be a significant effort for CDPH. More information will be housed in a climate change health hub on the CDPH website.

Helland closed by noting that, similar to other agencies, CDPH continues to experience federal funding uncertainty. Federal funding will likely be eliminated in fiscal year (FY) 2026/27; CDPH is still awaiting confirmation that this year's full allotment will be received beginning in early September.

Amanda Hansen, CNRA, noted the California Department of Water Resources (DWR) recently released an adaptation plan, available at https://cadwr.app.box.com/s/yfrzk3xxwic3xxiljhl2qqh6m4l7ymth. CNRA is also close to releasing the California Climate Adaptation Strategy. Finally, CNRA is currently working to update the Climate Smart Lands Strategy.

Melissa Boudrye, OES, provided an update on the Hazard Mitigation Grant Program. The program has received significant interest following the LA wildfires, with specific requests totaling more than \$7 billion for over 500 projects. Although the program does not have the resources to cover the entire \$7 billion request, OES expects additional funding from FEMA in early 2026. Additional funding from other state partners will also be needed.

Susan Haydon, Sonoma Water, noted the agency recently completed a new water control manual incorporating forecast-informed reservoir operations (FIRO) in partnership with the US Army Corps of Engineers for Lake Sonoma. This represents the first FIRO manual in the nation and will provide opportunities to use more flexible water management approaches to retain water in drought years and release water based on forecast data during atmospheric river events.

New Staff Introductions

Following TAC member updates, Edwards provided ICARP programmatic updates. Executive Fellow Azura Haley's assignment to ICARP is ending; Edwards provided appreciation for Haley's excellent work on the TAC and other efforts. Additionally, Edwards introduced new ICARP staff members Sierra Woodruff, Rowena Bush, Jessica McCool, and Guido Franco.

Fifth Climate Assessment Updates

Haley provided updates on ICARP programs:

- On the California's 5th Climate Assessment, an editorial board has been established to oversee the
 review and editing process for up to 50 Assessment research reports. The UC Berkeley California
 Institute for Energy and the Environment is administering the review process, with the first review
 period beginning in August.
- The 5th Assessment team recently appointed three new members to the Tribal Advisory Group from the LA and Central Coast regions; nomination for inland desert Tribal participants is openA request for information was launched to learn about potential engagement support for a youth art competition, oversee Tribal engagement and outreach, and support general public and communications for rollout of the 5th Assessment in 2026.
- The Climate Services team is providing visualization support via GitHub to help share learning across all regional author teams.
- The Vulnerable Communities Platform team conducted a series of meetings focused on priority topic areas such as wildfire and insurance.
- Version 1 of the Adaptation Clearinghouse Help Desk is live to point visitors to the most relevant resources for their needs. The help desk is available at https://vcp.opr.ca.gov/pages/help-desk.
- Extreme Heat and Community Resilience Program staff have worked with a variety of local and state partners to conduct two CalHEAT Score webinars to gather input and feedback from the community and improve the tool for extreme heat planning efforts.

- CNRA and LCI held an interagency meeting to discuss the Extreme Heat Action plan, with additional community listening sessions scheduled on August 5th, 6th, and 21st.
- Adaptation Planning Grant Program staff hosted technical assistance workshops in Q3 2025 on funding and financing, as well as a walkthrough of the Adaptation Planning Guide.
- Numerous Regional Resilience Grant Program (RRGP) activities are completed/underway, including
 the Los Angeles Regional Collaborative Heat Education Ambassadors in Training (LARCHEAT), sites
 visits to support grantees in Butte County with the Machupta Indian Tribe of Chico Rancheria and the
 Paradise Recreation and Park District, and training and workforce development opportunities for
 local Tribal members.
- Finally, LCI hosted two Tribal input sessions on June 25th to inform a Tribal user needs assessment (a deliverable of LCI's FEMA Cooperative Technical Agreement).

Discussion

Edwards led a discussion session with TAC members on the state agency updates listed above. The input and questions received are as follows; chair/staff responses are provided below as sub-bullets:

- Susan Haydon asked for additional updates on the Vulnerable Communities Platform.
 - In June, LCI conducted interagency coordination to engage on key topics such as wildfire, insurance and housing considerations, data gaps, and a comparison of other state tools. The group also worked extensively to improve visualizations in the Platform.
- Jonathan Parfrey noted demographics and community economics shifted considerably following the Altadena fire in 2025. Communities that were previously not considered disadvantaged changed overnight, but private resources that may be used for recovery based on CalEnviroScreen are not available. Parfrey asked if the Vulnerable Communities Platform would take this type of situation into account.
 - The Vulnerable Communities Platform looks at the combination of social factors and climate hazards. This allows a greater level of granularity in assessments than some other tools.
 Updates will be ongoing to modify layers such as previously burned areas.
- Parfrey asked if it's possible to look at or incorporate tax assessor records for the Vulnerable Communities, noting that before the fire, a home may have been worth \$1 million, but after the land itself may only be assessed at \$300,000.
 - o This information is not currently included in the Vulnerable Communities Platform.
- John Wentworth asked if it's possible to see a draft or beta version of the Vulnerable Communities Platform, and whether it will include Jobs First layers.
 - The Vulnerable Communities Platform does not currently include Jobs First layers. Although the tool does not currently have a public version, TAC members will be informed as soon as it's available.
- Michelle Passero asked if the Vulnerable Communities Platform could be developed to allow for small updates (such as adding new GIS layers) without needing an entirely new version.
 - Although major updates may be needed when the Platform adds something like a new hazard type, a public feedback button could be included to determine where further improvements may be needed.
- Boudrye commented OES has a capability to incorporate post-disaster data, which may be helpful in leveraging interagency recovery coordination elements.

TAC Vice-Chair

Edwards led nominations for a TAC Vice-Chair, noting the Vice-Chair serves as a partner to the Chair in guiding the TAC's discussions and helping set priorities. The Vice-Chair can also facilitate meetings in the absence of the Chair in collaboration with ICARP staff. Based on discussions with staff, three TAC members expressed interest in the role. Further discussion narrowed candidates down to two current TAC members: Wentworth and Clark. ICARP recommends the Vice-Chair serve a one-year term. At this time, Edwards offered a nomination of Clark to serve for the first year, followed by Wentworth. Clark welcomed the nomination, noting that it could help bring more of a Southern California perspective into TAC discussions.

Public Comment

None.

Edwards made a motion to nominate Clark as the Vice-Chair. Nathan Bengtsson seconded. With 15 ayes, 0 notes, and 1 abstention, Clark was approved as the Vice-Chair.

Aye: Abby Edwards, Alex Ghenis, Amanda Hansen, Jaylen Tran, Clare Winterton, Jacob Alvarez, John Wentworth, Jonathan Parfrey, Michelle Passero, Nathan Bengsston, Lucy Levin, Nina Bingham, Susan Haydon, Linda Helland, Melissa Boudrye

No: None.

Abstain: Kim Clark

Nature-Based Solutions State Targets and Context Setting

Clessi Bennett, CNRA, Nina Bingham, CDFA, and Jim Falter, California Air Resources Board, provided an overview of nature-based solutions for climate challenges. A 2019 special report from the International Panel on Climate Change (IPCC) provided an updated assessment of the impacts of climate change on the land, but also the impact that land use management can make on climate change. The report stresses the importance of sustainable land management for building resilience against and mitigating the effects of climate change. Nature based solutions are land management practices that increase the health and resilience of natural systems, which support their ability to durably store carbon. Examples include prescribed and cultural burns, riparian restoration, compost application to boost soil health and many others.

In 2020, Governor Newsom signed Executive Order N-82-20 on nature-based solutions to elevate the role our lands and nature play in achieving the state's climate goals of carbon neutrality and climate resilience. An outgrowth of the Executive Order was the development of the first Climate-Smart Land Strategy in 2022, which seeks to implement nature-based solutions under a single cohesive strategy. It also clarified that climate action should be implemented in a way that advances equity and economic and workforce opportunity across 8 land-types: forests, shrublands/chapparal, grasslands, wetlands, croplands, sparsely vegetated lands such as deserts, kelp forests and sea grasses, and developed lands. Specific nature-based solutions identified in this Strategy were incorporated into California's two guiding documents for climate adaptation, including the Scoping Plan for Achieving Carbon Neutrality and the Climate Adaptation Strategy. The Scoping Plan sets out a strategy for achieving carbon neutrality by 2045; the Climate Adaptation Strategy guides the state's collective efforts to identify and address California's climate priorities.

In 2022, Governor Newsom signed Assembly Bill (AB) 1757, requiring the state to set and track progress towards a set of nature-based solution climate targets. A series of 81 targets were released in 2024 and include goals to reach by 2045 such as:

- 33.5 million acres managed to reduce wildfire risk (primarily through beneficial fire)
- 11.9 million acres of forest managed for carbon storage and protection of California's water supply/biodiversity.
- 1.6 million acres of grasslands managed to restore native grasses.
- 1.2 million acres of increased greening and protection from wildfire.
- 4.2 million trees are planted to protect California's communities from climate change, remove carbon, and increase access to nature.

AB 1757 also requires tracking and reporting of progress towards meeting the targets, including the development of progress reports, utilize California Air Resources Board standard methods for tracking nature-based climate action, and regularly inventory carbon stocks using the Natural and Working Lands (NWL) carbon inventory.

Interagency forums exist to facilitate collaborative actions between state agencies and conduct:

- Direct land management
- Formation of policies and guidance
- Financing activities (including seeking funding from private/non-public sources)
- Execute land use permitting
- Science and research
- Communications, education, and technical assistance

Discussion

Edwards led a discussion session with TAC members on the presentation. The input and questions received are as follows; chair/staff responses are provided below as sub-bullets:

- Passero asked how strategies and targets from the plans listed above are coordinated and integrated with each other.
 - The Scoping Plan is currently being updated and will utilize nature-based solution information. Additionally, as our modeling efforts improve, we can incorporate land management practices and their combined effect into the carbon inventory.
- Bengsston asked if the CalSTA and DWR have nature-based solution targets.
 - Development of the Scoping Plan, Adaptation Plan, and Strategy require close collaboration across 17 agencies, including CalSTA and DWR. There are also specific treatments and solutions targeting both transportation and water management.
- Parfrey asked if the California PUC has had a proceeding on nature-based solutions.
 - o Bengsston was unsure but offered to follow up.
- Clare Winterton asked how the agencies are working with community-based organizations to incorporate their perspectives in this work.
 - O CDFA issues block grants to regional organizations so they can distribute funds to people who know their physical locations the best. CNRA provides technical assistance and specific programs such as the Tribal Nature-Based Solutions Program to fund ancestral land return and increase implementation of Tribally led nature-based solutions. Many departments within CNRA are working to expand access to funds for community-based organizations.

- Haydon noted targets say half of state land needs to be treated in some way and asked how local
 agencies can assist. Block grants have been used by Sonoma Water to fund fire resilience and water
 infrastructure to help meet state targets.
 - Nature-based solution targets are very ambitious, so it's very helpful to know what work has been done towards reaching them. Something similar to the Wildfire and Forest Resilience Task Force could be a model: it maintains a database on all of the vegetation management occurring across California, incorporating 50-60,000 activities each year. Getting information from the local level to the state agencies would be extremely helpful.
- Boudrye asked if there is a mechanism to maximize funding opportunities across all interagency partners.
 - Federal funding currently disincentivizes nature-based solutions, but there may be opportunities to work creatively across agencies to diversify funds and leverage sources we haven't tapped into yet. The Sierra Nevada region has done an exercise to develop a regionwide work plan as a way to pool funding for larger, landscape-level efforts.
- Jaylen Tran asked if agencies have had conversations with the Legislature to ensure there's alignment between Legislative priorities and all of the work agencies are doing around nature-based solutions.
 - There has been significant engagement with the Legislature to connect their priorities to the work agencies are doing in this space. Many of the partners are helping people understand what this work entails, why they should care, and show them how it connects to their agenda. Advocacy groups outside of government have also provide informational briefings on nature-based solutions.
- Edwards asked the presenters how impacts are measured beyond acreage targets (particularly for benefits to public health from nature-based solutions).
 - AB 1757 requires the California Air Resources Board to come up with standard methods to numerically evaluate the impact of nature-based solutions on carbon storage and greenhouse gases. It also requires us to look at additional benefits.
- Parfrey asked what type of communications campaign is or will be used to advertise all of the great work going on and what its benefits will be to the state.
 - A strategic communications effort will be dedicated to highlighting the work and benefits.
 Proposition 4 also presents an opportunity to get the word out about all of the thousands of efforts going on.

Public Comment

Following TAC discussion, Edwards and Magill invited members of the public to provide public comment on the earlier presentation. The following discussion was recorded:

- Bridgette Mulkerin, National Audubon Society: I had a question related to the 50% of land that hopes
 to be supported by nature-based solutions. I know that nearly 50% of California's land is federal land,
 so I'm just curious how you all plan to kind of bridge that gap. I know it's really challenging in a time
 like this, so I don't mean to bring up hard times, but I'm just curious what that looks like, and how
 other organizations could support in that work.
 - The task force is co-led by the state and the US Forest Service; the Million Acre Strategy is a shared stewardship strategy between the state and the federal government. I think it's kind of taking it day by day and understanding what reorganization and loss of funds look like and developing solutions to those challenges as they arise.
- Emily Burgeno, Pi Nation of San Isabel, North County San Diego: I have 3 comments. Using words like nature-based solutions further separates us [from] nature and separates the involvement of human

activity within what people consider the "wild", or nature. Using language like that continues colonial separation of people and the natural ecosystems or cultural landscapes. Secondly, with the California Tribal Nature-Based Solutions, as great as the opportunity is for the state to fund land acquisitions, I want to reaffirm that this is not funding "land back." Land back requires transfer of deed and not land through purchase. Although it is a great opportunity, it does require Tribal Nations, which are governments, to relinquish limited Tribal sovereign immunity. This goes against Tribal sovereignty. The state still requires a leash on Tribes when it comes to agreements, and that is one major steppingstone my Tribe had to work through to be award funding to buy our own land. Third, the Wildfire and Forest Health Task Force only has one Tribal delegate or representative, and that is not sufficient for Tribal representation. As you all should know, there are over 100 Tribal nations in California, and to rely on one person is not only tokenism, but it's unprofessional and inappropriate. Including more Tribal representation on these task forces and committees [is critical]. Thank you.

o Thank you. These are three important points we need to consider in terms of our framing, the accessibility of our programs, and for representation on councils and committees.

LUNCH BREAK

Case Study: Urban Forestry

Walter Passmore, CalFire, provided an overview of the Urban Forestry Program and how it connects to the nature-based solutions portfolio discussed before the lunch break. Passmore noted while urban forestry is not the most significant carbon sink or pollution mitigation strategy for air and water quality issues, it is personal and direct as the first filter of pollutants where most of the people in California live. Without urban forestry, our communities would be very harsh places to live. It also connects people to the environment in a meaningful way.

Urban forestry provides on average \$2-\$6 in benefits for every \$1 spent, and the industry as a whole generates roughly \$12 billion annually in California. Ecosystem service benefits provide another \$12 billion annually, and that does not count the health benefits. Although we spend about \$600 million, we collect \$1 billion in tax revenue. We need to invest the money that we're already collecting from the industry and the benefits that we derive in order to advance our goals. This is particularly important when considering that California lost roughly 12% of its total canopy cover over 4 years. Initiatives like Green Schoolyards seek to mitigate this loss: California passed the first in the nation funding for green schoolyards, allocating \$150 million for the program in 2022. More work is needed in the space beyond planting trees however, such as implementing better policies and general plan guidelines.

Uriel Hernandez, City of Palo Alto, delivered a presentation on CalFire urban forestry grants in Palo Alto and East Palo Alto. In 2015, Palo Alto was awarded a grant to plant 500 trees in the city. Significant disparities exist between Palo Alto and East Palo Alto, with clear discrepancies in canopy cover between the two cities. East Palo Alto was provided with an additional CalFire grant to develop its Urban Forest Mast Plan in collaboration with a range of agencies, NGOs, and community members. This Plan lays out the importance of trees in an urban setting and identified areas where planting could have the greatest impact such as along highways and in school yards.

Case Study: Sequoia Riverlands Trust

Adam Livingston, Sequoia Riverlands Trust (SRT), provided information on the types of projects the SRT is involved in in the Southern Sierra, San Joaquin Valley, and Carrizo Plain and how the efforts related to 30x30. SRT seeks to conserve the lands and waters of California's Heartland, historically focusing on conservation efforts in Fresno, Tulare, Kings, and Kern Counties.

SRT has been part of the Power in Nature Coalition since 2020 and fully supports the goal of conserving 30% of state lands and waters by the end of the decade. It has actively conserved 50,000 acres of land in that time. By the end of the decade, SRT hopes to conserve an additional 25,000 acres. This is generally done by working with willing sellers to protect land through acquisition or easements. After acquisition or establishing easements, SRT provides land management services to maintain agricultural productivity, habitat functions, and open space values on a case-by-base basis. Many SRT preserves are open to the public. It should be noted the first Pathways report from the early 2020s raised a question of whether preservation of agricultural lands count towards 30x30 goals; this is an open and ongoing issue.

As discussed above, the 30x30 goals are ambitious. At least in the short term, the current federal administration is unlikely to be an active partner in the establishment of new protected lands and may be trying to move in the opposite direction. The question of agricultural easements is particularly important in this context, as they typically do not operate the same as fee title acquisitions for preservation and restoration but do preserve land from further development.

To meet overall 30x30 goals, it's imperative to put resources into conservation work on a scale commensurate with the goal. Accelerating the rollout of Proposition 4 funding and a reauthorization of GGRF will be important. Additionally, private conservation efforts with willing landowners will play an important role in further conservation.

Case Study: Healthy Soils

Gilles Robertson, Siskiyou Economic Development Council (EDC), provided insights from regional block grants from the CDFA Healthy Soils Program in Siskiyou County. The EDC seeks to empower business growth, build success, and connect the community with vital resources to create a prosperous County. In particular, the Siskiyou Farm Company seeks to assist growers with innovation in food and agricultural systems to ensure regional viability through consultation, workshops, and technical assistance.

A Healthy Soils block grant in 2023 helps incentivize sustainable farming practices with \$4 million paid directly to growers for implementing healthy soils priorities. Specifically, the grant provides technical assistance, funding for approved soil amendments, labor for implementation, and soil sampling. It allows us to be in the fields building projects and the relationships and cross-organization partnerships with groups like the Shasta Valley Resource Conservation District necessary to sustain them. Individual projects range from \$10,000 to the maximum of \$200,000. By investing in rural agriculture, we've strengthened soil health, resilience to climate and water challenges, encouraging producer adoption of these practices, and strengthening local economies.

TAC Discussion

Please note that TAC discussion following the Health Soils case study also included questions on the Urban Forestry, Sequioa Riverlands, and Healthy Soils presentations. Edwards led a discussion session with TAC

members. The input and questions received are as follows; chair/staff responses are provided below as subbullets:

- Hansen asked for information on workforce development and job creation as a component of urban forestry efforts.
 - o In East Palo Alto, urban forestry requires rethinking utility easements and infrastructure, as much of the area is fully built out with large developments and tract homes. These types of projects necessarily create new jobs, training programs, and internships. It would be useful if East Palo Alto had an on-staff arborist instead of contracting work out to enforce their tree protection ordinance as well, but resources are limited.
 - From the statewide perspective, the urban forestry industry currently employs 78,000, generally in maintenance positions. We need to expand our career ladder and recognize urban forestry as an interdisciplinary profession.
- Clark asked if funding for both planting and maintenance of trees is available.
 - Maintenance is always a challenge for urban forestry initiatives. Everyone wants to be part of a ribbon cutting or tree planting, but long-term maintenance is critical and requires creative solutions such as creating internal agency efficiencies to free up funding for tree care.
 - Maintenance for East Palo Alto trees has also been an issue. The program launched in 2015
 was successful in planting trees and providing plants to tenants, but ownership changes,
 people move, and trees may not receive the care they need. Having certified arborists on staff
 would help significantly.
- Winterton asked how community benefits are quantified and advertised.
 - Although we don't emphasize things like health benefits as the primary goal of urban forestry work, we have received national attention by talking about health for students, learning from the environment, and creating resilience to extreme heat events.
- Parfrey asked how Siskiyou County Healthy Soils efforts addressed logistical concerns such as sourcing materials for projects.
 - o In Siskiyou County, we try to connect grant recipients directly with people who produce compost. We can't direct them to specific vendors but can provide a suite of vendors to use from Redding all the way down to Colusa County. We also have local entrepreneurs looking at producing compost on a large scale.
- Parfrey asked for confirmation of 78,000 urban forestry jobs in California.
 - 78,000 is correct and documented in a recent economic study on the California Relief website. Workforce development is part of an ongoing effort and will be documented in a report to the Legislature by June 30, 2026.

Labor and Climate Intersections

Steven Knight, WorkSafe, discussed worker safety in relation to climate issues. WorkSafe is a statewide advocacy organization dedicated to the empowerment of workers and increasingly focused on climate impacts in the workplace. Numerous state, multi-state, federal, and international efforts are looking into these impacts. California messaging and outreach efforts such as sharing the story of Maria Isabel Vasquez Jimenez, a young worker who unfortunately died from heat stress while working, have led to standards to protect outdoor workers.

The ICARP Impact Report specifically says state and local agencies have a responsibility to "develop partnerships with state agency programs that support the resiliency of California's natural and built environment." Workplaces are critical to that environment, and vital to the future of our economy. Employers

have a duty to provide fresh water at a rate of at least one quart per hour per worker, provide access to shade and encourage employees to cool down for at least 5 minutes, develop and implement written procedures, and provide training for all employees and supervisors about heat illness prevention. Standards also exist for farmworker protection from wildfire smoke.

Heat impacts indoor workers as well and should not be separated out from outdoor heat. There is a direct correlation between workplace injuries and rising temperatures not just from heat related illness, but also from an increase in falls and cuts when workers are overheated. A statewide standard for indoor heat exists thanks to a large coalition of workers, unions, NGOs, and partnerships across environmental groups, the Department of Corrections is specifically exempted. We are working to correct this issue, as prisons are very hot places to work.

The COVID-19 pandemic forced the adoption of additional workplace standards, but those protections are expiring. With limited assistance and active work against new standards from the current federal administration, concerns have been raised about the next coronavirus outbreak. State leadership from the California Occupational Health and Safety Administration (CalOSHA) has not materialized, but WorkSafe continues to advance the issue.

As threats from climate change increase, additional action is needed to improve protections for outdoor and indoor workers. Farm workers in particular face increased threats like wildfire: while surrounding communities are evacuated, farm workers often must stay on the job to complete harvests. Advocacy for new legislation and coordinated interagency intervention is vital to continuing California's role as a leader in global climate adaptation and resilience work.

Discussion

Edwards led a discussion session with TAC members on the presentation. The input and questions received are as follows; chair/staff responses are provided below as sub-bullets:

- Winterton asked for more information on the impacts of immigration enforcement activities on worker health and safety.
 - Studies show the higher the number of Hispanic workers, the more powerful the impact is.
 Federal immigration reform is needed. Employers are never targeted, but their workers are.
- Helland asked if there are systemic improvements needed at CalOSHA.
 - The CalOSHA enforcement system for workplace safety violations is primarily complaintdriven, but anonymous complaints are often dismissed. Workers don't want to put their names on complaints for fear of retaliation. A fully staffed CalOSHA to provide regular workplace inspections is important; enforcement actions alone won't solve the problem.
- Edwards asked if WorkSafe has thought about how to monetize and communicate the value of worker safety.
 - Employers are aware that high turnover in employees is a major cost, and health and safety issues lead to high turnover rates. Communicating the value of reducing turnover by respecting the health and well-being of employees is very important.

The Nature Conservancy: Nature-Based Solutions Funding and Governance

Passero and Rebecca Ferdman, LA County, presented concepts for funding nature-based solutions at scale. The Nature Conservancy (TNC) has dedicated resources to furthering the knowledge of how nature can contribute to climate change [action] by reducing greenhouse gases and increasing carbon sequestration. TNC and its partners have found that over a third of greenhouse gas reductions can be achieved by changing

forestry management and land restoration. California is a leader in these efforts through legislation like AB 1757 and the Scoping Plan. TNC is focused now on implementing these policies through the adoption of nature-based solutions. Incorporating equity regionally and within specific communities has been a major component of our work, as well as working to streamline permitting for restoration activities.

Finding sustainable funding for these efforts is essential for their success. Key barriers to sustainable funding include a heavy reliance on temporary grants, lack of trust in collaboration, and limited capacity for local implementation. Funding fragmentation often leads to competition between organizations who share similar missions and contribute to a lack of trust for collaboration. To address these barriers, TNC recommends ensuring funding continuity by diversifying funding streams, intentional distribution of funds, communicating the benefits of nature-based solutions, tying funding to approved measures and plans, streamlining permitting, and empowering local implementers. To that end, TNC created the concept of a "Nature-Based Solutions Funding Facilitator" to distribute funds directly to implementers at the local/county level and workshop concepts with local government partners.

The LA County Chief Sustainability Office is guided by its County Sustainability Plan, which establishes 12 cross-cutting goals related to nature-based solution implementation for the creation of thriving ecosystems and habitats, as well as creating accessible outdoor public spaces. It should be noted the Chief Sustainability Office only has land use authority over unincorporated portions of LA County, 88% of which is comprised of incorporated cities. Campaigns led by the Chief Sustainability Office include programs such as Room to Grow, the Community Forest Management Plan, and a Park Needs Assessment. LA County understands individual tree plantings won't cover all nature-based solution needs. The County has a wide array of landscape types and microclimates, and a need exists to tailor specific solutions for individual cities, communities, and neighborhoods. To accomplish this work, we work with a wide array of partner organizations and agencies that will make the region more competitive for funding opportunities to implement climate-resilient projects.

Outreach as part of the Chief Sustainability Office has led to understanding key regional perspectives, including the need to balance regional visions with local actions, alleviate administrative burdens, and elevate biodiversity. At the local level, we've heard a lot of support for the type of Nature-Based Solutions Funding Facilitator to assist with coordinating and addressing these perspectives.

Discussion

Edwards led a discussion session with TAC members on the presentation. The input and questions received are as follows; chair/staff responses are provided below as sub-bullets:

- Clark asked if there are specific challenges in trying to get local actors to understand the value of nature-based solutions and work to implement them.
 - This requires ongoing effort and communication. We need to do more communication to showcase the value and demonstrate successful implementation on a long-term basis.
- Bengsston asked if TNC has engaged any of the Alliance of Regional Collaboratives for Climate Adaptation (ARCA) partners.
 - Yes, but additional follow-up is needed.
- Bingham noted groups like the North Coast Soil Hub have brought together local RCDs to better
 compete for funding, and the California RCD Network is working to expand soil hubs. Groups like this
 can ease administrative burden, increase competitiveness for limited funding, and increase
 coordination among regional partners.
- Tran asked if there are any barriers to increasing the prevalence of wildlife crossings.

LA County is implementing one of the largest wildlife crossings in the state. Some of the
barriers to new crossings is communication on the importance of these projects and the
overall cost (they can be very expensive), and the multi-jurisdictional nature of
implementation (they require the involvement of private landowners, CalTrans, the County,
and local governments).

Implementing Nature-Based Solutions in the Eastern Sierra

Wentworth provided a presentation on climate resilience activities and the implementation of nature-based solutions in the Eastern Sierra. A number of efforts are underway in the Eastern Sierra to implement nature-based solutions in the Sierra Nevada such as Public Lands for the Sierra Nevada Conservancy, the California Wildfire Resilience Task Force, the Sierra Jobs First Collaborative and many others. The federal government is tasked with land ownership and management across much of the Sierra Nevada, and recreation and tourism are a principal economic driver in the region, accounting for as much as \$100 billion in revenue annually. Connecting the many agencies, private organizations and partnerships, and industry is crucial for addressing the impacts of climate change to the Sierra Nevada generally and the Eastern Sierra region specifically.

To assist in this connection around the issue of wildfire, the Eastern Sierra Wildfire Alliance was established to receive state money and implement projects on the ground. Future funding opportunities such as Proposition 4 will create benefits, but Proposition 4 is not through the appropriations process yet. Federal withdrawal or curtailment of funds for nature-based solutions, as well as a massive reorganization of the US Forest Service are also barriers to implementation. Increased investment in these activities by the state and partnerships with the private sector are critical for backfilling leadership spaces left by the current federal administration.

Discussion

Edwards led a discussion session with TAC members on the presentation. The input and questions received are as follows; chair/staff responses are provided below as sub-bullets:

- Hansen asked how the myriad efforts in the Eastern Sierra connect to 30x30 goals, the Outdoors for All strategy, and the Wild Forest Action Plan.
 - O While there are a lot of strategies, there is a clear connection to the implementation of nature-based solution goals at the state level. Dropping down to the ground level showcases what the priorities are and what you hope to get out of specific actions. Focused strategies on individual issues (recreation, wildfire resilience, etc.) allows the flexibility to address a variety of needs and challenges.
- Levin asked where overlap exists between statewide programs discussed during the meeting and regional projects in the Eastern Sierra.
 - Although the current federal administration is problematic for nature-based solution implementation, state leadership from Governor Newsom, Secretary Crowfoot, and many others is encouraging.
- Alex Ghenis, Accessible Climate Strategies, asked if there are any actions the state can take to prevent the privatization of public lands proposed by the current federal administration.
 - This is a major concern. Even if land was deeded to the state, the resources required to actively manage the lands would be significant. We do need to proactive and head this off as much as possible.

• Parfrey commented California Forward is having its economic summit immediately before the October 24th TAC meeting in Allensworth.

General Public Comment

No public comment was recorded.

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