

# FUNDING



# MODERATOR

Dilip Trivedi

Coastal Engineer and Vice President  
*Moffatt & Nichol*

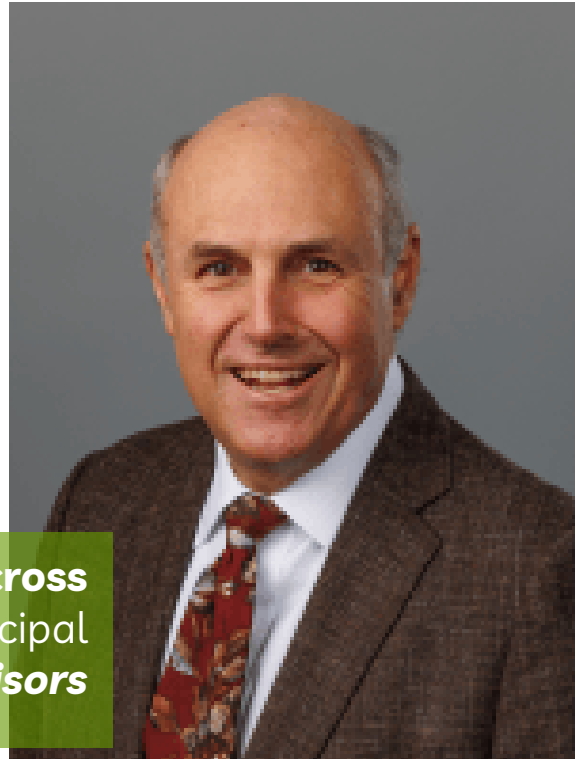




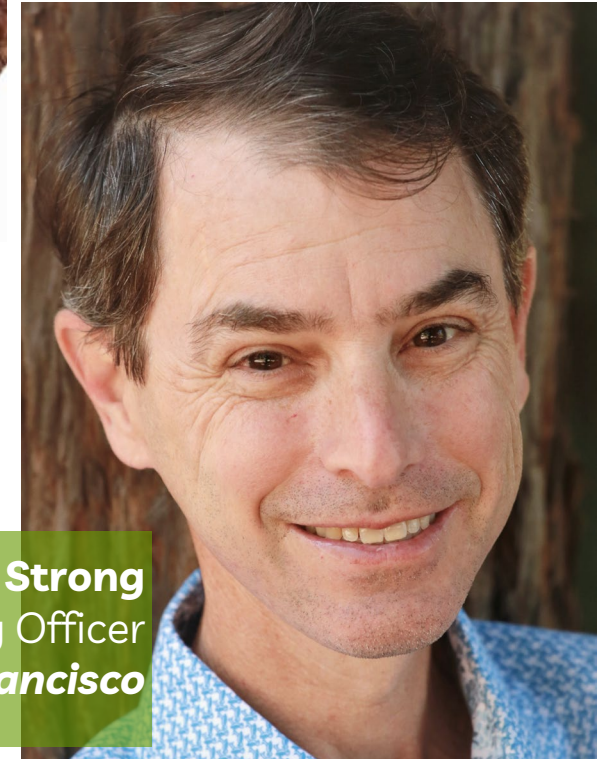
**Amy Hutzel**  
Executive Officer  
*California Coastal Conservancy*



**Sloane Viola**  
ICARP Program Manager  
*Governor's Office of Planning & Research*



**Mark Northcross**  
Principal  
*NHA Advisors*



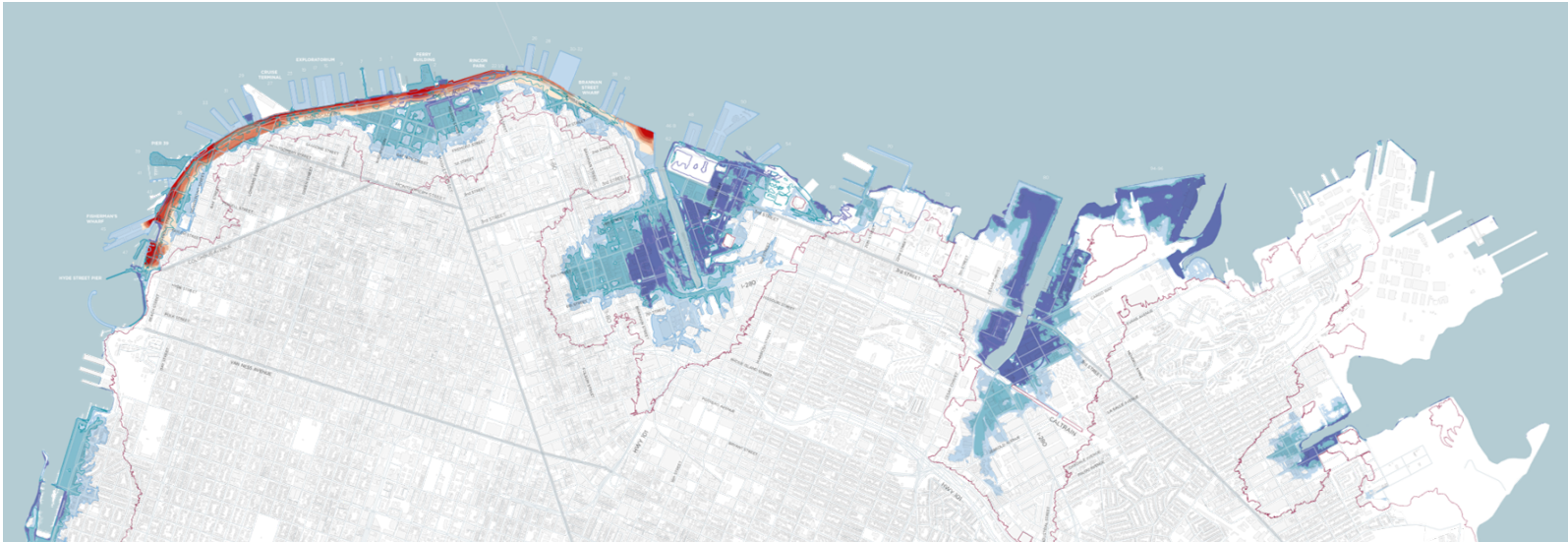
**Brian Strong**  
Chief Resiliency Officer  
*City and County of San Francisco*



# SEISMIC & FLOOD RISK TO THE SF WATERFRONT

As we shared at the BPC Spring Summit, SF faces earthquake & flood risk today, increasing over time:

**Future floodplain:** 40+ miles of road, 13,500 residents (58% people of color), wastewater system serving 580,000 residents, 360,000 regional commuters, 25+ miles of MUNI track



**Current Earthquake Risk:** Shoreline failure due to lateral spreading from the Bay Bridge north and San Francisco's maritime terminals at Pier 80 and 94-96.



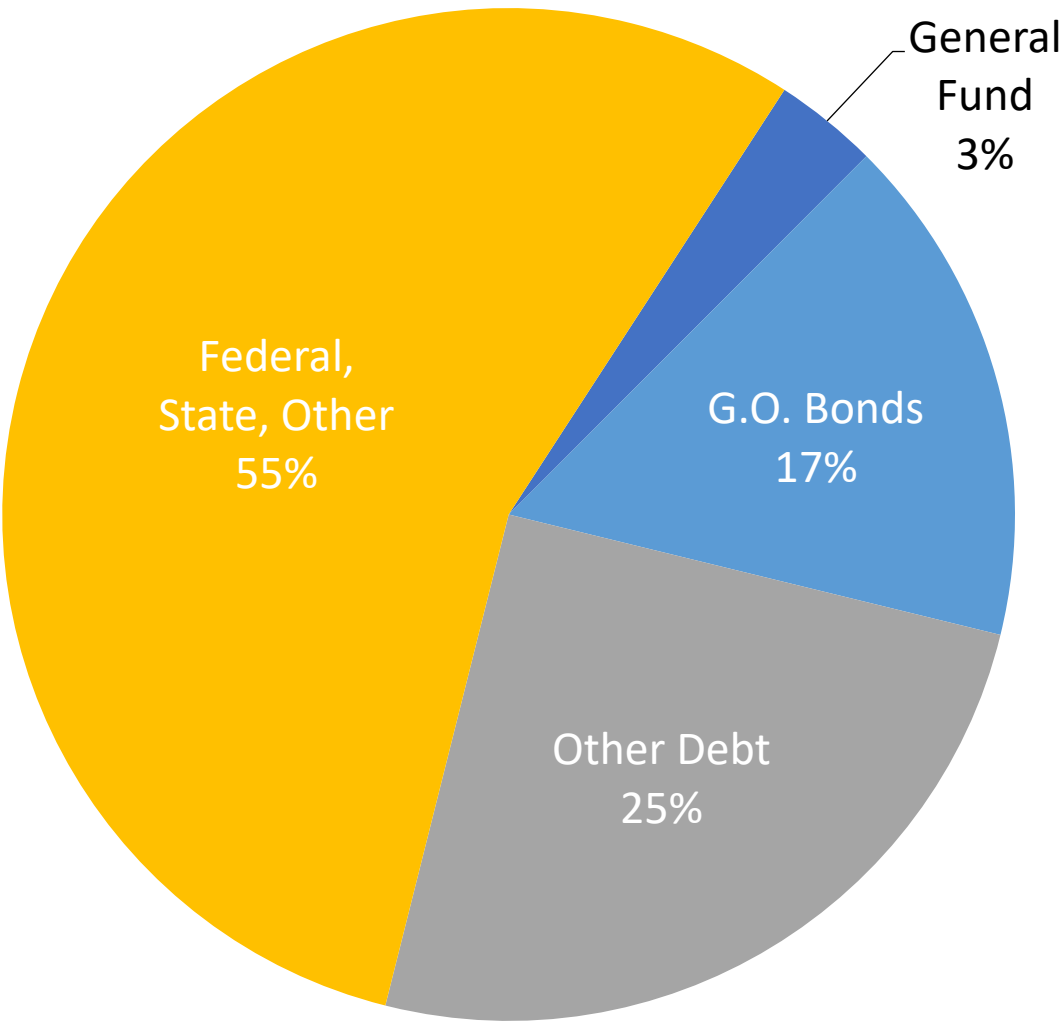
Embarcadero, 1906 – Near Pier 27



Recology – Pier 96

# City and County of SF 10 Year Capital Plan Funding Overview FY22-31 - \$38 billion through 2031

Funding Sources - All Depts



The 10-Year Capital Plan has helped build confidence:

- \$6 billion in GO Bond voter approvals since 2008
- \$2 billion in the last two years
- SFMTA GO Bond failed to reach 2/3 threshold in June 2022
- Considering how to add resilience to the 10 Year Capital Plan

# FUNDING AND FINANCE

## Federal Advocacy

### Benefit Cost and Discount Rate Reform

- SF working with other cities to advocate for a simpler, more equitable federal grant process, particularly for projects under \$10 million.
- OMB 7% discount rate is a relic of the early 1990s. Discounting future project benefits is exactly the kind of thinking that got us into the climate crisis.
- Replace complex benefit cost analysis with simpler measures of cost-effectiveness. Would the federal government spend less predisaster than after a disaster. Can a project cost-effectively deliver environmental, mobility, resilience, and equity benefits?
- Independent analysis of FEMA predisaster programs may be published shortly.

Contact [brian.strong@sfgov.org](mailto:brian.strong@sfgov.org) and [brad.benson@sfport.com](mailto:brad.benson@sfport.com) to join this advocacy.

# Mark's Wrong Numbers: 4 Scenarios for the Annual Cost Per Parcel for the 9 County Bay Area for SLR Adaptation

Source of estimate	ACOE/Silicon Valley Water Alviso Project (2022 \$)	Hamilton Field Horizontal Levee Project (2005 \$)	UC Berkely study for all of San Francisco Bay (2016 \$)	Bridging the Gap - Funding Sea Level Rise Adaptation in the Bay Area (2019 \$)
Total Project Cost (low bid in SSFBSP project)	545,000,000	351,000,000	77,000,000,000	not applicable
Linear feet of project	21,120	11,800	4,308,480	not applicable
Cost per linear foot	25,805	29,746	17,872	5,800
Cost per mile	136,250,000	157,057,627	94,362,745	30,624,000
Cost per mile adjusted by DGS to 2022 \$	158,766,798	295,039,576	125,966,383	37,345,336
Total cost for entire Bay Area (assuming 816 linear miles of Bay front)	129,553,706,934	240,752,293,711	102,788,568,621	30,473,793,953
Annual debt service cost per parcel if funded by 30 year bond	4,214	7,831	3,343	991
Notes	Project broke ground on April 14, 2022	Source: San Francisco Bay Restoration Authority	Source: Choosing a Future Shoreline for the San Francisco Bay: Strategic Coastal Adaptation Insights from Cost Estimation, Journal of Marine Science and Engineering, September, 2017	BCDC study of potential cost of SLR adpatation for the Bay Area

## Social Equity: West Oakland Compared with Facebook on Measure AA

- ▶ In June 2016, Measure AA adopted a \$12 per year parcel tax earmarked for the restoration of wetlands surrounding the San Francisco Bay
- ▶ As the tax is levied on a per-parcel basis, various sub-regions of the Bay Area can pay **differing amounts of taxes per acre** based on the size of respective parcels

### Facebook

- Estimated 0.3 parcels/acre
  - Approximately 135 acres
  - Approximately 40 parcels
- **Roughly \$4 in taxes per acre**
- Roughly **\$540** in annual Measure AA taxes

### West Oakland

- Estimated 9.6 parcels/acre
  - Approximately 4,160 acres
  - Approximately 39,940 parcels
- **Roughly \$108 in taxes per acre**
- Roughly **\$479,200** in annual Measure AA taxes



# Potential Material Required for Horizontal Levies in the Bay

	Linear Miles of Bay Front to be Protected (1)			
Cubic yards of material per linear mile (2)	600	900	1,200	Notes
40,000	24,000,000	36,000,000	48,000,000	Low end of material per cubic mile without habitat slope enhancement
60,000	36,000,000	54,000,000	72,000,000	Reflects minimum 50% increase in material required for habitat slope enhancement at low end of range
85,000	51,000,000	76,500,000	102,000,000	High end of material per cubic mile without habitat slope enhancement
127,500	76,500,000	114,750,000	153,000,000	Reflects minimum 50% increase in material required for habitat slope enhancement at high end of range

(1) Source of range for linear miles of bay front: *Journal of Marine Science and Engineering*, September, 2017. "Choosing a Future Shoreline for the San Francisco Bay: Strategic Coastal Adaptation Insights from Cost Estimation", Daniella Hirschfeld and Kristina E. Hill

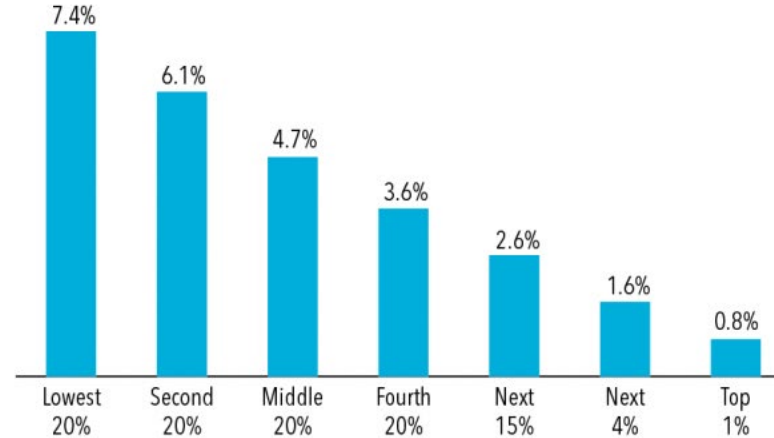
(2) Source of estimates: Very rough estimates by ESA.

Google Maps shows about 180 miles for a drive around the Bay.

# Sales Tax is Regressive

## California's Sales and Excise Taxes Are Regressive

California State and Local Sales and Excise Taxes as a Share of Family Income, by Income Group



Note: Chart reflects total state and local taxes enacted through 2020 as a share of 2015 income for non-elderly taxpayers. Breaks between income percentile groups are: 20%: \$23,200; 40%: \$39,100; 60%: \$62,300; 80%: \$112,900; 95%: \$261,300; 99%: \$714,400.

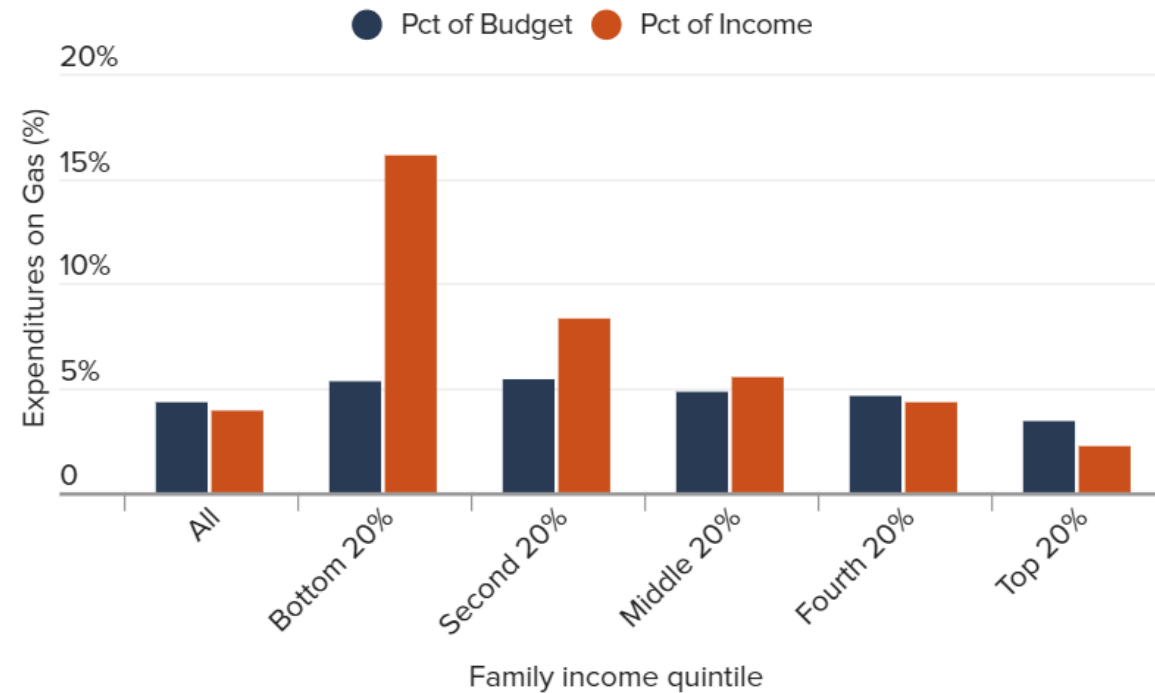
Source: Institute on Taxation and Economic Policy



California Budget  
& Policy Center

# Gas Tax Is Regressive

**Lowest-income households spend a larger share of their income on gasoline**



**Source:** Consumer Expenditure Survey for California; PPIC calculations.

**Notes:** California family budgets measured in 2018-2019, and spending is adjusted for price increases between then and December 2021. Quintiles reflect total cash income before any cash assistance or taxes. "Gas" includes household and auto fuel.

**From:** [PPIC Blog](#), March 2022.

## Social Equity is a Design Criteria

- California requires a 2/3 vote for most form of tax increases
- Utility rates require a majority protest process under Prop 218
  - Prop 218 mandates that costs be allocated to ratepayers solely based on “cost of service”
- If our “best case” with 50% grant funding is \$500/parcel, what are our chances of success at the ballot?
- At \$500/parcel the exaction from West Oakland would be approximately \$20 million/year
  - Compared to Facebook at \$20,000/year
- **The scale of climate change makes social equity in funding key to project feasibility**



Remember the “Yellow Vests” in France?



# Now – Some Good News: Unprecedented Grant Funding for Resilience

- Federal

- \$373 billion in the IRA, much of it for grant funding for resilience
  - FEMA BRIC
  - EPA
  - NOAA
  - ACOE
- “Capacity building” can now be grant funded
  - Capacity building means all the collaborative work between multiple stakeholders it takes to bring a project out of the ground

One caveat: many of the grant programs are brand new. Responsible grant making public entities are developing their programs now

- State

- \$54 billion in FY 23 budget (but not all allocated for FY 23)
  - Coastal Conservancy
  - OPR
  - DWR
  - CalFire
  - Multiple other State agencies
- “Capacity building” can now be grant funded at the State level too

# Grant Funding and Social Equity in Resilience

- Can grant funding be used to address social equity issues in funding resilience?
  - Prioritize grant funding for socially vulnerable communities (example: Measure W in Los Angeles County)
  - FEMA BRIC applications require use of CDC SVI map (“socially vulnerable index”)
  - Many State grants give priority to DAC’s

# Bay Planning Coalition Fall Summit

Amy Hutzel  
Executive Officer

September 30, 2022



# 2023 – 2027 Strategic Plan

- Five Year Plan
- Articulate Vision
- Identify Goals & Measurable Objectives

## Plan Context

- Addressing Inequity
- Climate Crisis
- Funding

## Key Strategies

- Implement Existing State and Regional Plans
- Accelerate Action
- Build Capacity and Invest in Meaningful Engagement

Goal 1: Prioritize Equity

Goal 2: Enjoy the Coast

Goal 3: Protect & Restore the Coast

Goal 4: Climate Ready

Goal 5: Organizational Goals





# State Coastal Conservancy Funding

## **FY 2022-23 Funding**

- \$350m for Coastal Resilience
- \$120m for Climate Ready Program for nature-based sea level rise resilience (\$30m to go to SF Bay Area)
- \$50m to support acquisitions that advance nature-based solutions
- \$37.5m to protect communities and natural resources from sea-level rise
- \$11m for SF Bay Wetlands projects
- \$10m for Wildfire Resilience
- \$19.9m of Prop 68
- \$36m for EBRPD for the Point Molate open space acquisition and clean up
- Several specific legislative priority projects

## **Anticipated in FY 23/24 Budget**

- \$150m - Coastal Resilience

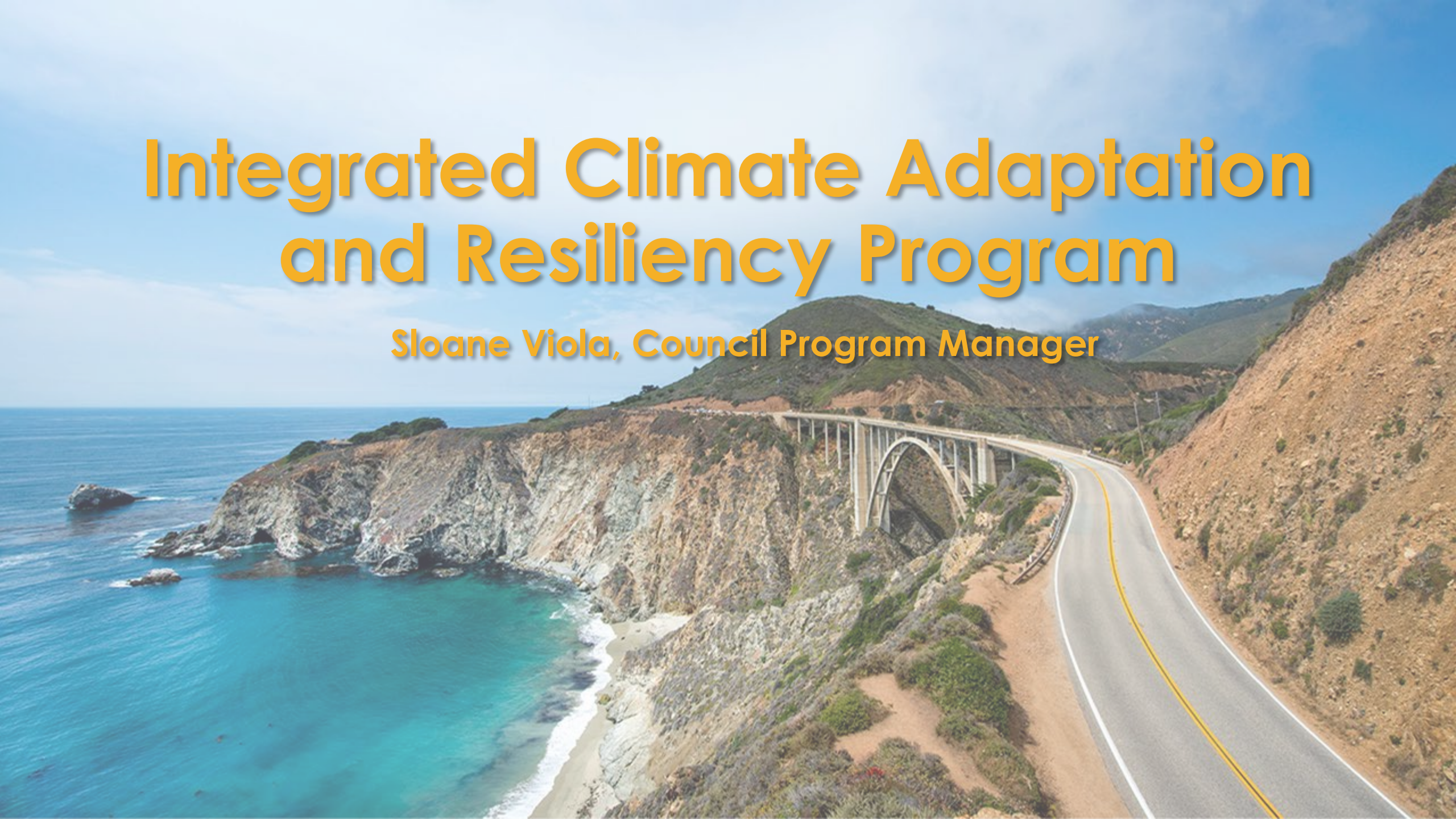
**Approx. \$700 million in FY 22/23**





# Integrated Climate Adaptation and Resiliency Program

Sloane Viola, Council Program Manager





# About ICARP

Coordination and alignment of California's resiliency policy

- [Council & Coordination](#)
- [Fifth Climate Change Assessment](#)
- [Climate Services](#)
- [Investment Programs](#)
  - Adaptation Planning
  - Regional Resilience
  - Extreme Heat & Community Resilience



# Investment Programs

<https://opr.ca.gov/climate/icarp/grants/>





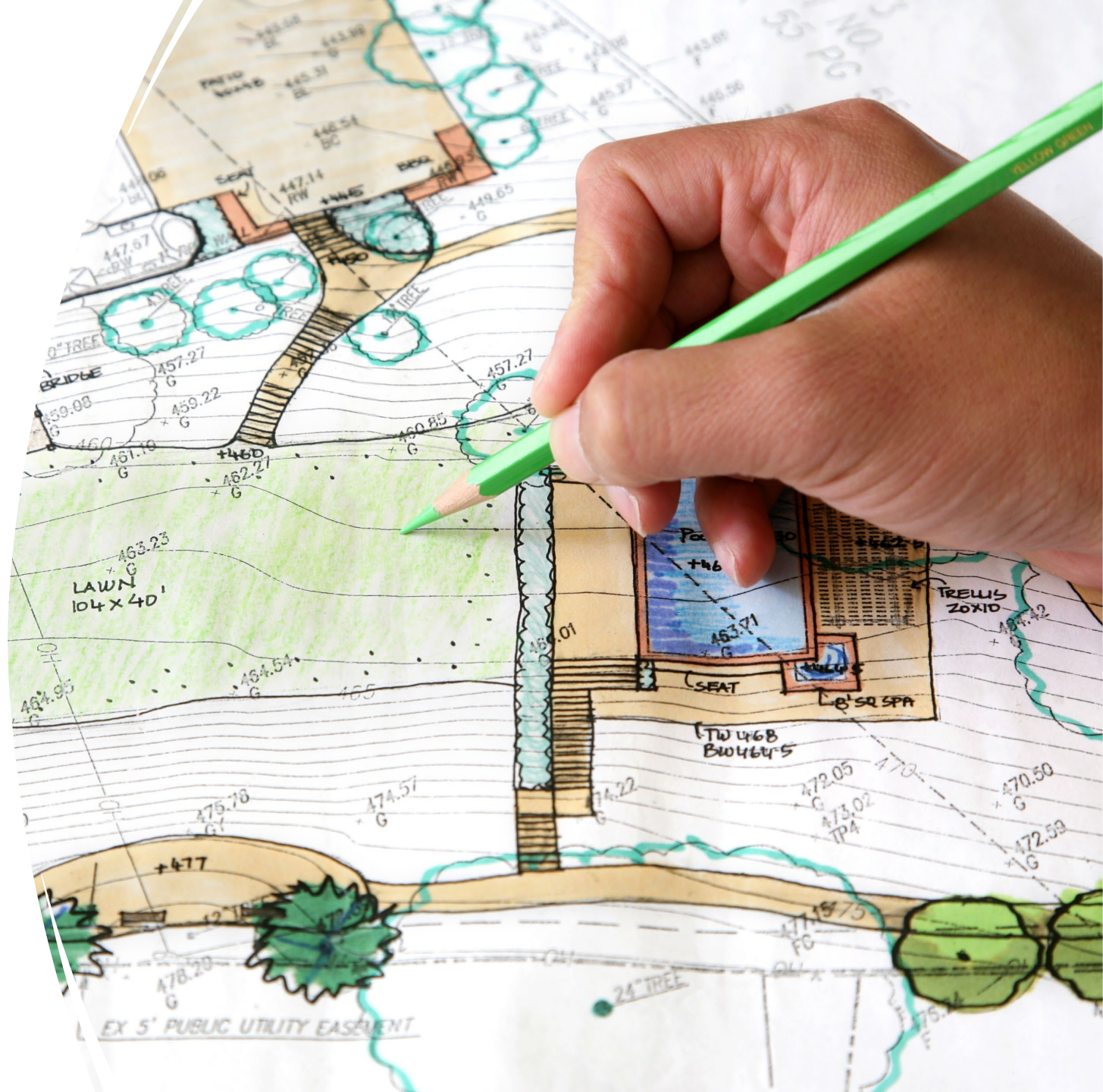
# Adaptation Planning Grant Program

- ICARP received \$25M in the state budget to fund a Climate Adaptation and Resilience Planning Grant Program (**Adaptation Planning Grant Program**).
- Funding aims to:
  - fill **local, regional, and tribal** planning funding needs
  - provide communities the **resources to identify climate resilience priorities**, and
  - support the development of a **pipeline of climate resilient infrastructure projects** across the state.
- **Status:** [Draft Guidelines](#) released! Public comment available through Oct 21<sup>st</sup>

# Key Program Priorities

---

- Support **equitable outcomes**
- Support much-needed **integrated infrastructure planning** to achieve community resilience
- Help communities plan for and respond to **multiple climate risks** simultaneously
- Build **community planning and capacity**



# Regional Resilience Grant Program

- ICARP received \$250M in the 2021 Climate Budget to fund a Regional Resilience Planning & Implementation Grant Program. Funding aims to:
  - Support **local, regional, and tribal** entities' regional-scale climate resilience solutions.
  - Support regions in advancing resilience through three major activities, **capacity-building, planning** and **project implementation**.
    - At least \$12.5M of Round 1's \$25M in funding will support regional adaptation planning and action plans
- **Status:** Engagement summary will be published with our [Oct 7 TAC meeting materials](#), draft Guidelines to follow this fall.



# Key Program Priorities

---

- Support **regional** projects aligned with ICARP priorities that **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.

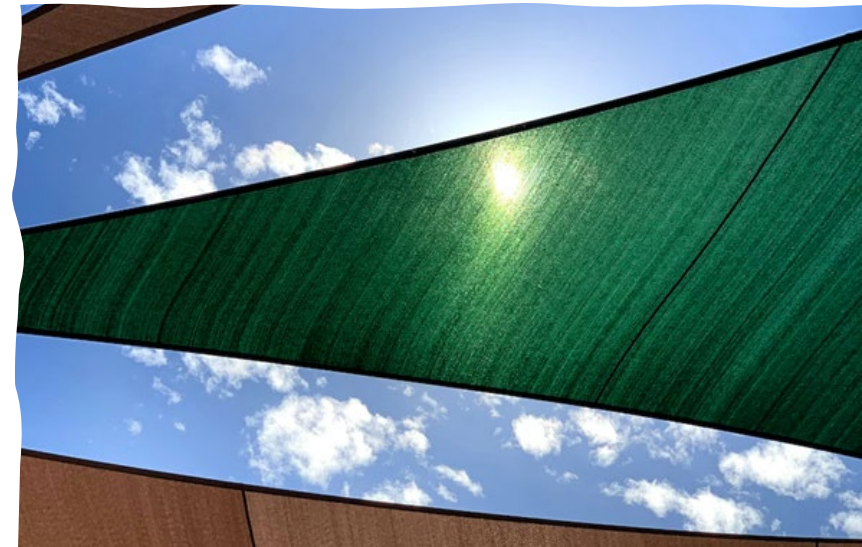




# Extreme Heat and Community Resilience Grant Program

---

- ICARP received \$125M to fund the Extreme Heat and Community Resilience Grant Program. Funding aims to:
  - **Build capacity** for heat action planning in the most heat-burdened communities by investing in **local, regional, and tribal** heat reduction and mitigation efforts
  - **Support implementation of the [California Extreme Heat Action Plan](#)**, the state's all-of-government approach to building a more heat-resilient California for All
- **Status:** Stay tuned! Stakeholder engagement will kick off in early 2023 to inform the draft Guidelines.





# SGC's Community Assistance for Climate Equity

## Vision

The Community Assistance for Climate Equity Program (CACE) provides technical assistance and builds capacity for California's most under-resourced communities through the California Climate Investment Technical Assistance Program (CCI TA) and the Regional Climate Collaboratives (RCC) Program. Both CCI TA and RCC allow communities to build community-driven leadership, collaborative partnerships, knowledge, and skills to access public funding to plan and implement climate change mitigation, adaptation, and resiliency projects. The work of CCI TA and the future RCC capacity building program supports cross-sector climate action that advances multi-benefit solutions and addresses historical inequities.

our vision



**Regional Climate Collaboratives applications due Oct. 7<sup>th</sup>**



# Funding Resources



# Adaptation Clearinghouse – [resilientCA.org](https://resilientCA.org)

- Data, tools, case studies, best practices
- Adaptation Planning Guide
- [Investing in Adaptation](#)

## Featured Resources

Climate Adaptation Finance and Investment in California

CA Governor's Office of Planning and Research (OPR)

Comparing Sea Level Rise Adaptation Strategies in San Diego: An Application of the NOAA Economic Framework

San Diego Regional Climate Collaborative (SDRCC)

Fortifying San Francisco's Great Seawall: Strategies for Funding the Seawall Resiliency Project

City and County of San Francisco

Resilient by Design Finance Guide 2.0

NHA Advisors



# Resilience Funding & Financing Gantt Chart

## Resilience Funding and Financing Program Timelines

ICARP Staff developed this graphic in response to a request from the ICARP Technical Advisory Council for a resource that visualizes state funding program timelines. This graphic presents this information at the highest level of detail possible, but in some cases, especially for new or less-immediate programs, may be approximate. All timelines presented herein are subject to change. For the most up-to-date information on state funding opportunities, please refer to the State Grants Portal at [grants.ca.gov](https://grants.ca.gov), or the individual programs' websites. ICARP would appreciate any feedback on the utility of this tool - please contact us at [icarp@opr.ca.gov](mailto:icarp@opr.ca.gov) to share your thoughts.

Agency / Department	Program	2022												2023							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
Business, Consumer Services, and Housing Agency																					
Department of Housing & Community Development	Regional Early Action Planning Grants (REAP) 2.0	Advance Application Available - MPOs & COGs		Spring: Final Guidelines			Summer: Higher Impact Transformative Allocation Guidelines														
		Spring: Applications available, rolling submissions thereafter																			
		Rolling Awards																			
Department of Housing & Community Development	Infill Infrastructure Grants (IIG)						NOFA Released														
							Applications: Large Jurisdictions														
									Applications: Small Jurisdictions												
													Awards: Large Jurisdictions								
California Department of Food and Agriculture																					
California Department of Food and Agriculture	State Water Efficiency & Enhancement (SWEEP) Program	Applications Close						Guidelines Development					Applications								
California Department of Food and Agriculture	Healthy Soils Program		Awards							Guidelines Development					Awards						
California Department of Food and Agriculture	Pollinator Habitat Program				Awards					Guidelines Development					Applications						
California Department of Food and Agriculture	Conservation Agriculture Planning Grants Program				Guidelines Development					Applications				Awards							
California Department of Food and Agriculture	Dairy Digester Research and Development Program			Applications						Applications				Awards							
California Department of Food and Agriculture	Alternative Manure Management Program			Applications						Awards				Guidelines							
California Environmental Protection Agency																					
California Environmental Protection Agency	Environmental Justice		Final Guidelines											Winter: Applications							
State Water Resources Control Board	PFAS Support						Summer: Guidelines Development			Fall: Final Guidelines											
									Workshops						Rolling Applications (until funding is fully encumbered)						
		Rolling Awards (until funding is fully encumbered)																			

# OPR Federal Grants Resources



About OPRMeetingsPublicationsPartnersE-Listsⓘ Settings

Governor's Office of  
**Planning and Research**

Search this website 

CEQA & Federal Grants ▾Planning & Land Use ▾Climate Resilience ▾Economic Development ▾Long-Range Research ▾



## Federal Grants

OPR provides technical assistance to state agencies, local governments, institutions of higher learning, and nonprofit organizations, on how to find, apply and manage federal grants.

ON THIS PAGE:

Applying for Grants ▾Links & Resources ▾Review of Programs ▾For More Info ▾

[Home](#) | [State Clearinghouse](#) | [Federal Grants](#)

# State Grants Portal – [grants.ca.gov](https://grants.ca.gov)



The California Grants Portal (a project by the [California State Library](https://www.calstate.edu/library/)) is your one destination to find all grants and loans offered on a competitive or first-come basis by California state agencies.

## BY THE NUMBERS

7

Grants added in  
the past week

163

Current grant  
opportunities

\$17B

Current  
available  
funding

## FIND YOUR OPPORTUNITY

I am  looking for funding in  sector with  
at least  until the application deadline.

Show Me the Opportunities

SHOW ME EVERYTHING →

## Stay in the Loop!

[ICARP Newsletter Sign Up](#)

Text **ICARP** to **22828** to join the newsletter & announcements email list

Email [icarp@opr.ca.gov](mailto:icarp@opr.ca.gov) for general inquiries



# Thank you!

Sloane Viola

[Sloane.Viola@opr.ca.gov](mailto:Sloane.Viola@opr.ca.gov)



# CLOSING

Laura Kennedy

Principal, Business Development Leader

*Woodard & Curran*

President

*Bay Planning Coalition*

