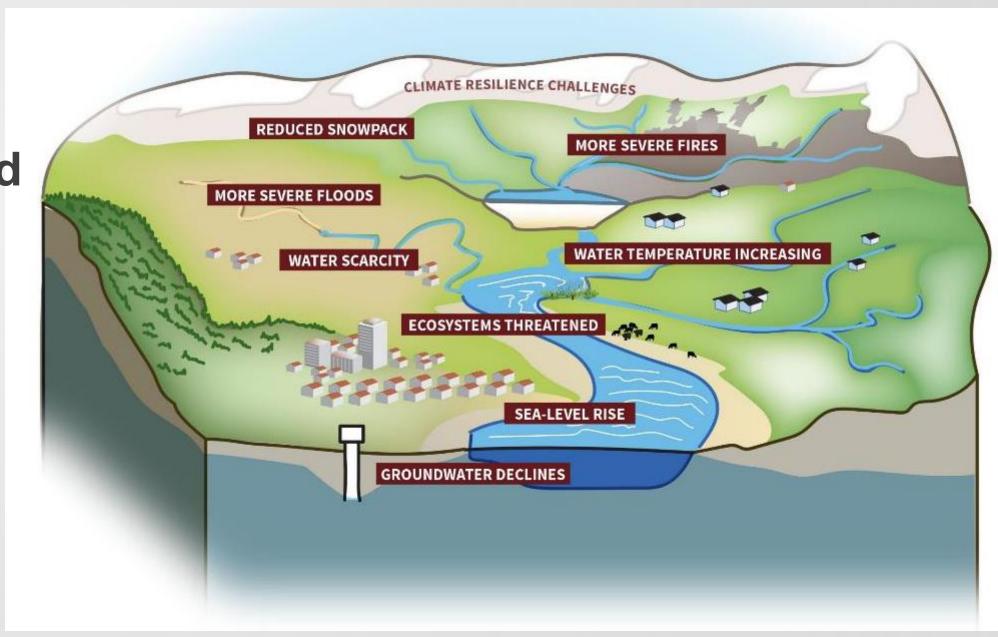
### Watershed Resilience Initiative California Water Plan (CWP) Update 2023

### Eric Tsai, DWR CWEMF Annual Conference April 17, 2023



### **Framing Today's Presentation**

- We are in a **climate crisis**. Each water sector is vulnerable to climate change
- Collaboration across water and land sectors is mixed
- Many agencies lack funding, tools, and institutional capacity to understand climate vulnerabilities
- State agency alignment challenges
- Inequities exist in process and outcomes







# Water Resilience Portfolio

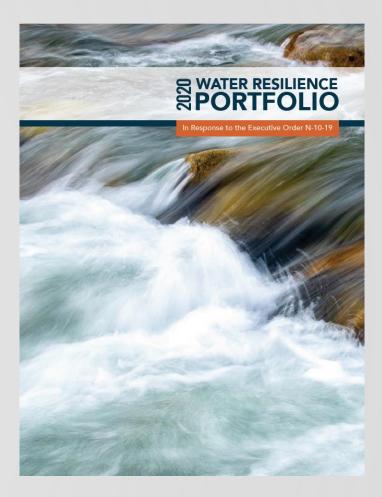
### **Relationship to the Water Resilience Portfolio**

CWP advances Water Resilience Portfolio actions and supports State agencies

### **A Focus on Regional Resilience**

- EO N-10-19 Principle: "Encourage regional approaches among water users sharing watersheds"
- State government must focus on enabling regional resilience while continuing to set statewide standards, enable projects of statewide scale and importance, and help address challenges beyond the scope of any region ... "
- Action 20. Support groups and leaders in each of the state's regions to develop and execute integrated water resilience strategies.
- Action 27: Improve the ability of **regions** to anticipate weather and climate changes



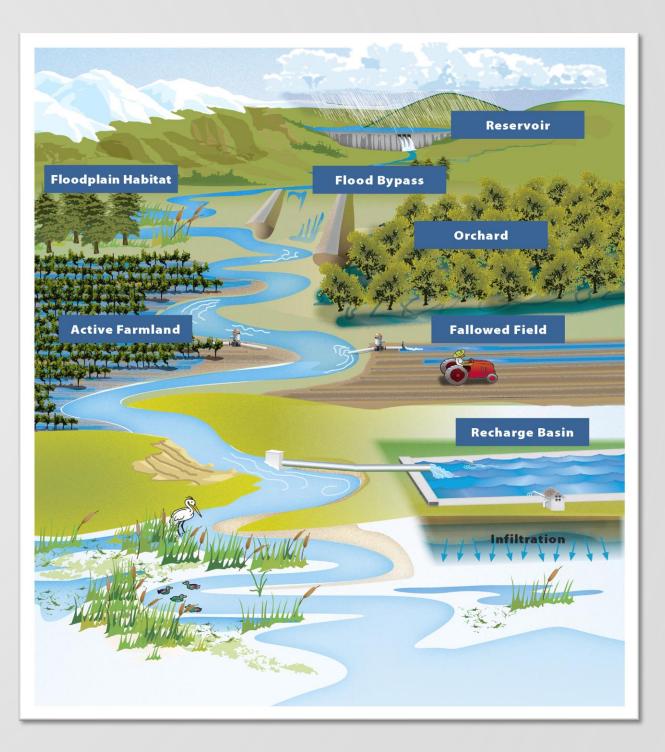


# State's Focus on Watershed Resilience

- Systems Approach to Water
- Align Human Activities with Natural Systems
- Common Thread across Water/Land Sectors and IWM

DWR is orienting our data/analytics, technical support, and outcomes tracking with a focus on watersheds.

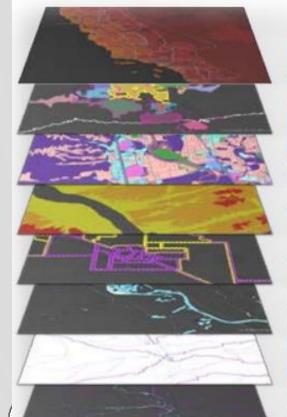




### San Joaquin River Basin Watershed Studies



### Watershed Studies Integrate Data and Analytics



Rainfall-Runoff and Climate Change Data

Local, State, Federal Governance and Jurisdictions

Demographics/ Vulnerable communities

Flood Risk

Land Use

Surface Water and Operations

Conveyance and Delivery Infrastructure

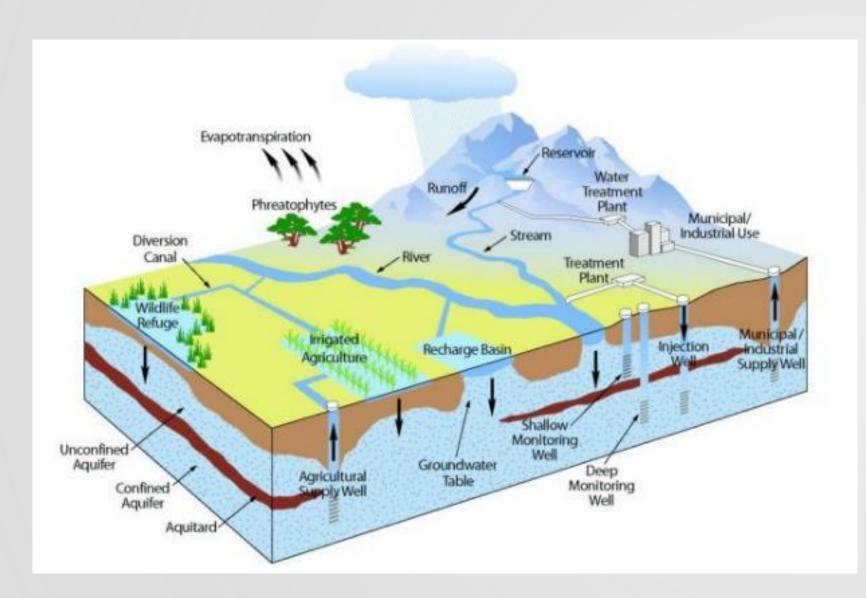
Recharge Emphasis Areas and Groundwater

Ecosystem Opportunities Millerton Lake

> Flood Risk

Ecosystem Water Supply

# Sustainable, Resilient and Equitable Watersheds







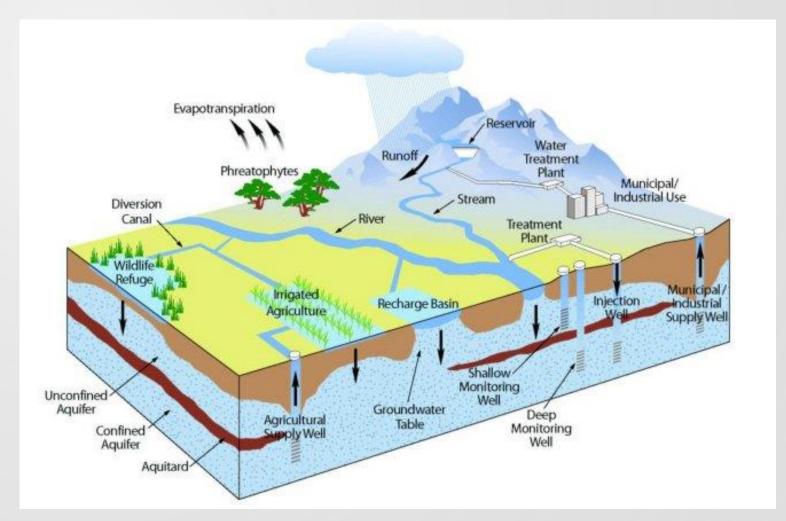
## Watershed Resilience Goal

### Increase regional climate resilience through integrated water management at watershed scales

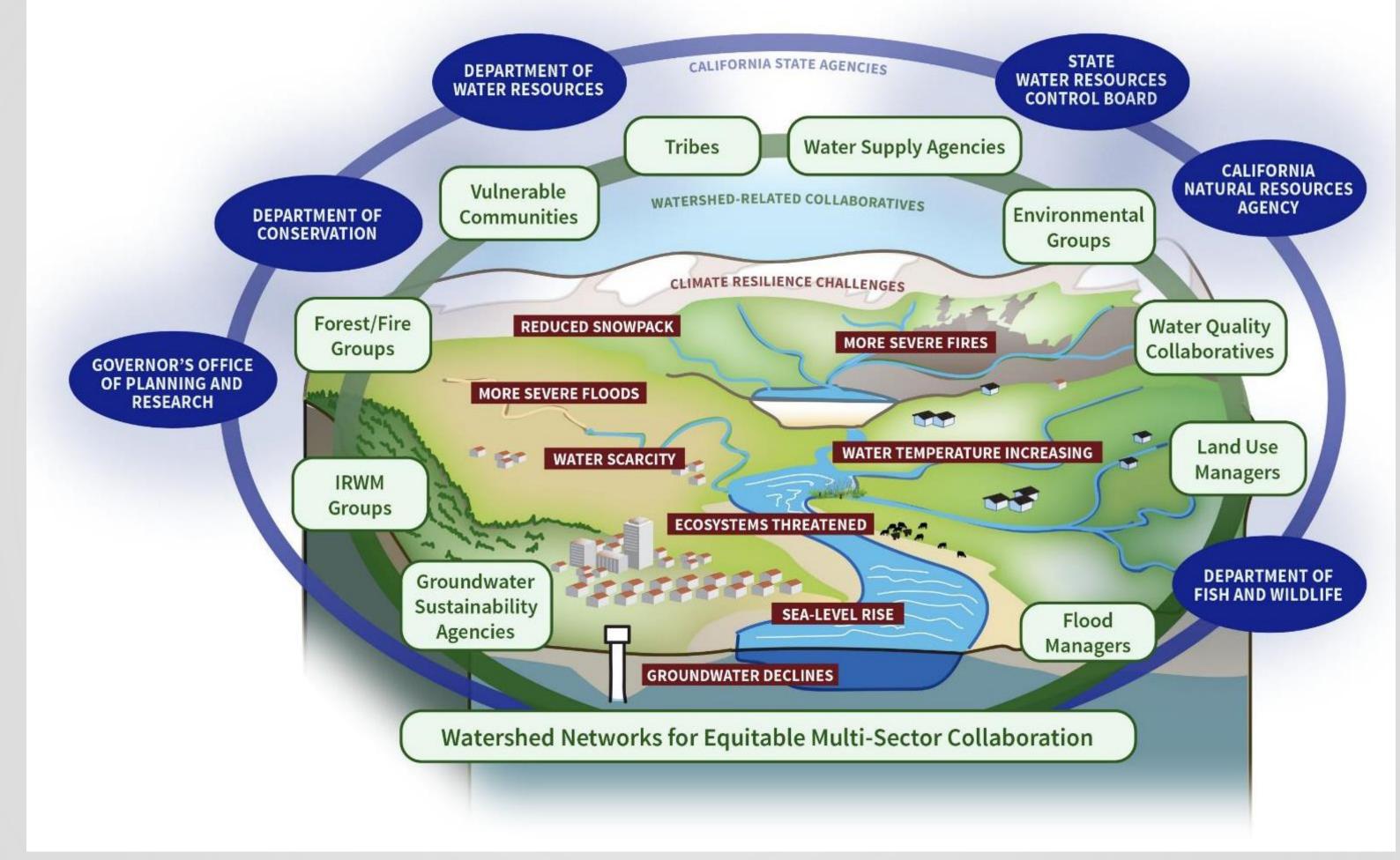
### **Major Principles**

- Climate Change Adaptation
- Integrated Water Management
- Networks
- Equity
- Outcomes-based Management
- Watershed Scale











### Watershed Resilience-Related Products for **CWP Update 2023**

- Statewide Climate Change Risk and Preparedness Assessment
- Watershed Resilience Framework and Toolkit
- Watershed Performance Tracking Hub



### Statewide Climate Change Risk and Preparedness Assessment

- Vulnerability
  - Water Supply
  - Flood Management
  - Groundwater
  - Ecosystems
  - Water Quality
  - Recreation
  - Hydropower
  - Drought
  - Wildfire

- Preparedness
- Reviewed over 800 plans for:
  - Collaboration
  - Staffing for Climate Resilience
  - Identified Climate Impacts
  - Vulnerability/Risk
     Assessments
  - Adaptation Strategies
  - Funding and
     Implementation

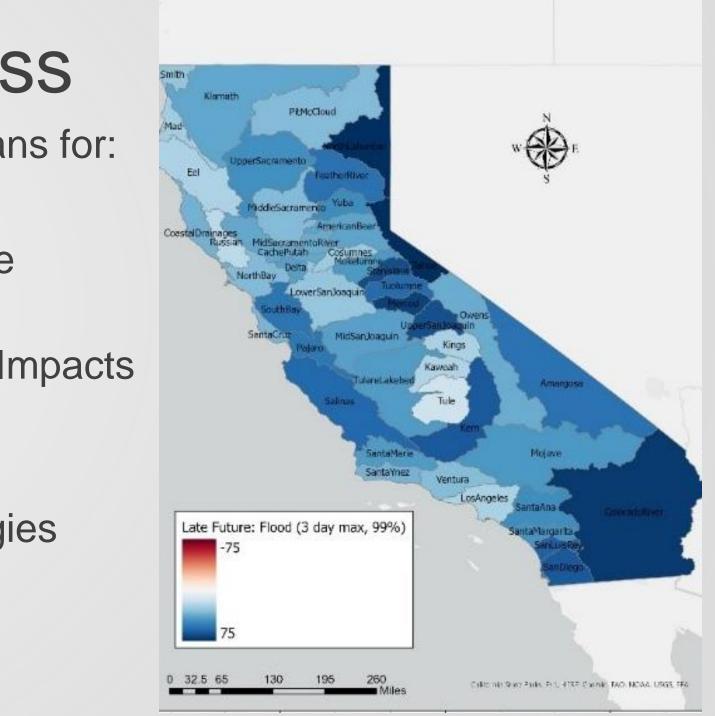
Climate Vulnerability

≈ Climate Risk



CALIFORNIA WATER PLAN UPDATE 2023

**Climate Preparedness** 



### Watershed Resilience Framework and Toolkit

State	Regions	State	Regions	State	Regions
Fund and provide technical and facilitation assistance, as needed for watershed networks. Model cross sector alignment.	define watershed boundaries and conditions, advance watershed resilience plans	Develop water balance guidance Provide future scenarios and climate change analysis guidance	Conduct state of watershed assessments	Develop decision support	Apply and expand resilience toolkit to meet watershed- specific needs Prioritize adaptation strategies
0 Form Watersh Networks	ned C	2 urrent & Future Conditions	4 Adaptation Strategy Development		
State F	Vision & Goals	Vulner & F	Regions	5 Implementation & Monitoring State	Regions
	Regions	Vulner & F Assess State	Regions	Implementation & Monitoring State	
Develop State Vision and D goals and align State p		Vulner & F Assess State Highlight case studies	rability Risk sments	Implementation & Monitoring State Funding	Identify and secure funding
Develop State Vision and	Regions Develop watershed-specific	Vulner & F Assess State	Regions Conduct vulnerability and risk	Implementation & Monitoring State	Identify and secure funding Regionalize metrics and report to regional resilience performant



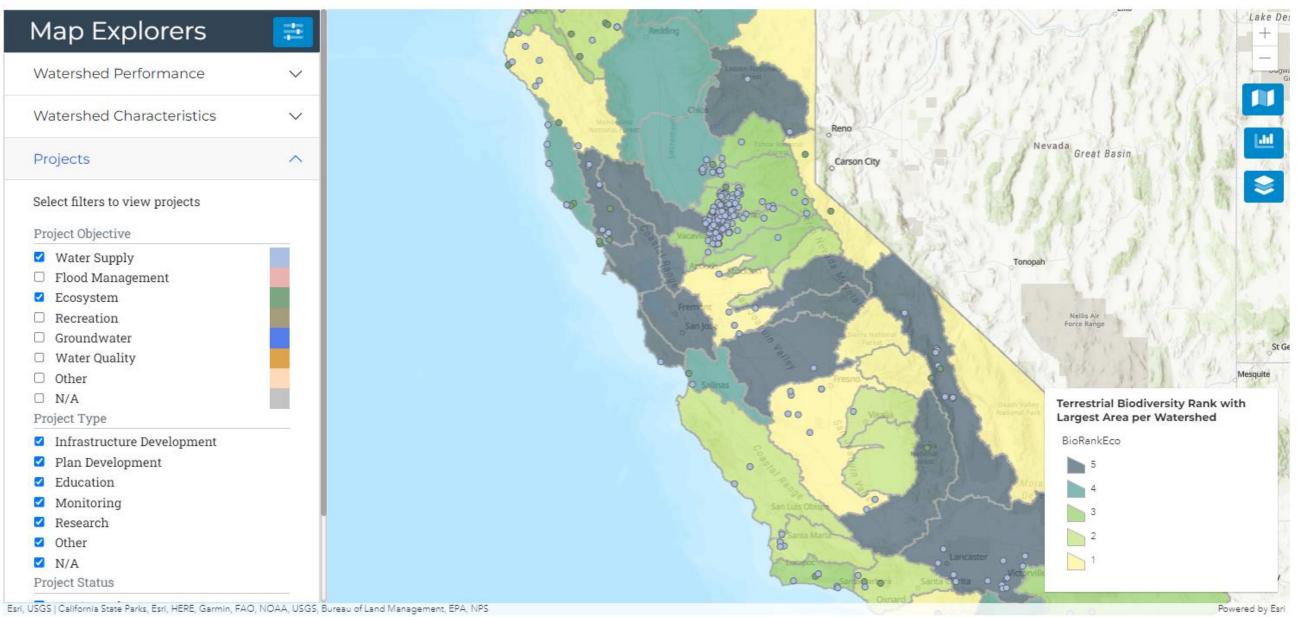
### Watershed Performance Tracking Hub

### **Regional Atlas**



Watershed Performance	~	
Watershed Characteristics	~	
Projects	^	
Select filters to view projects		
Project Objective		
<ul> <li>Water Supply</li> </ul>		
Flood Management		
Z Ecosystem		
Recreation		
Groundwater		
Water Quality		
□ Other		
□ N/A		
Project Type		
<ul> <li>Infrastructure Development</li> </ul>		
Plan Development		
Z Education		
Monitoring		
Research	Ĩ	
Other		
N/A		

### Map Explorer



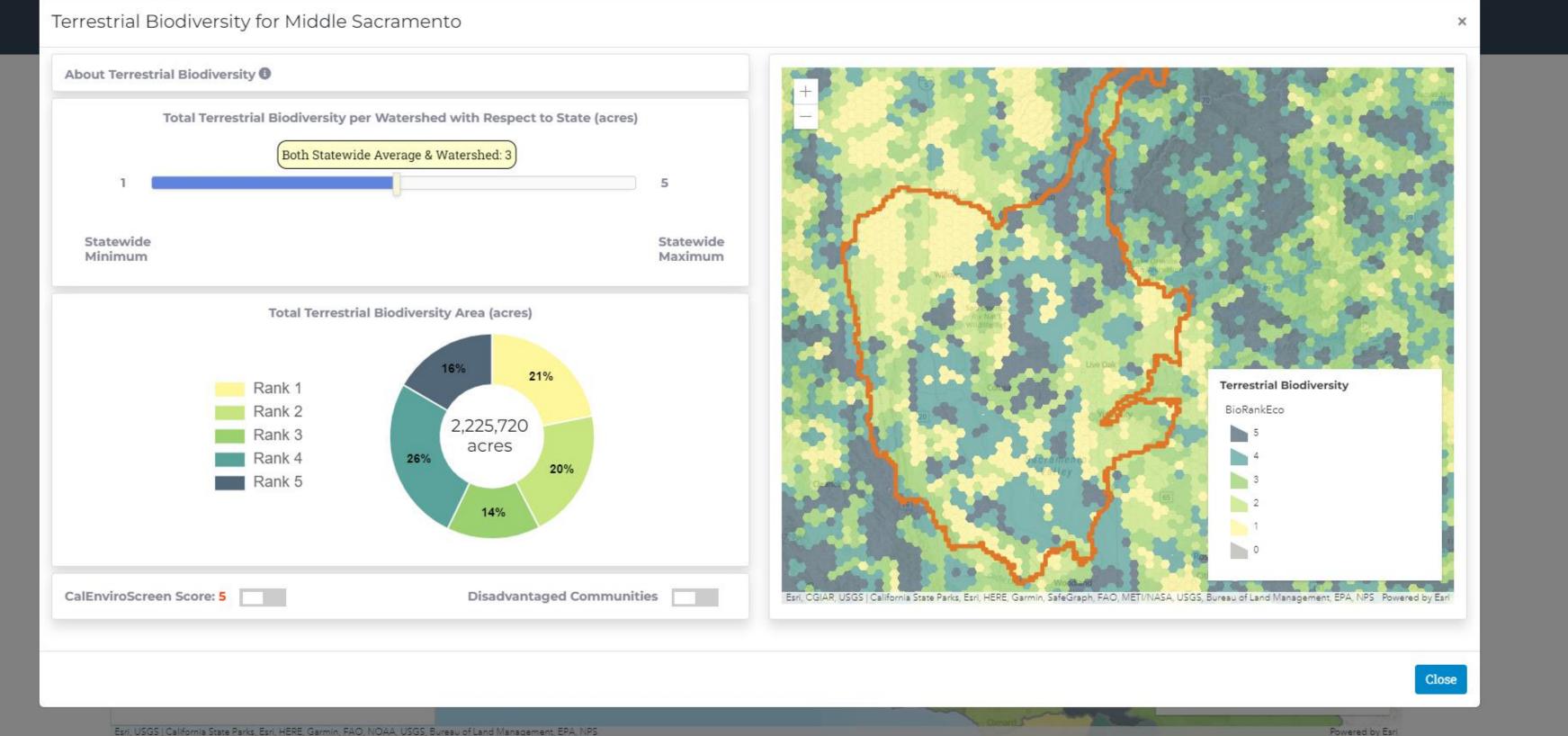


### RESILIENCE DASHBOARD MAP EXPLORER CONTACT

USER LOGIN

### Watershed Performance Tracking Hub

### **Sustainability Outlook**



# Watershed Climate Resilience Funding

- AB 179 Budget Act of 2022 and AB 211 Public Resources Trailer Bill authorized up to \$160 million funding for watershed climate resilience grants.
- Funds provided as grants for drought resilience and identification and assessment of climate risks on a watershed basis.
- Funds shall be prioritized in areas with greatest risk or potential to reduce environmental conflicts
- Includes both longer-term planning and resilience projects
- Next Steps: Looking to pilot test watershed resilience principles and multisector networks with willing regional partners



# Watershed Resilience Program: **Desired Outcomes**

- Robust recognition of climate vulnerabilities at the watershed scale
- Support unique locally-led networks across California's diverse regions
- Promote and achieve resilience at the watershed scale





# Questions



