LAKE COUNTY
Climate Adaptation Plan

Agenda

1. Introductions
2. Climate Adaptation Plan Overview
3. Climate Vulnerability Analysis
4. Pillars of Landscape Resilience
5. Contents of the CAP
6. Next Steps
7. Questions & Discussion

Project Team

Key County Staff	Resource Conservation District	City Staff	PlaceWorks (Consultant)
• Mireya G. Turner, Community Development Department Director • Shannon Walker-Smith, Deputy Community Development Administrator • Michelle Irace, Senior Planner • Terre Logsdon, Office of Climate Resiliency • Office of Emergency Services • Agriculture Commissioner's Office • Public Services Department • Public Health Department • Water Resources Department • Public Works Department • Economic Development Department	• John Vandervort, Conservation Program Manager	• Alan Flora, City Manager, City of Clearlake • Mark Roberts, Senior Planner, City of Clearlake • Kevin Ingram, City Manager, City of Lakeport	• Tammy L. Seale, Principal • Jacqueline Protsman Rohr, Project Manager • Autumn Paynton, Project Planner • Miles Barker, Associate

Project Background

- The Lake County Community Risk Reduction Authority (CRRA) was established in 2018 and expanded in 2019 and 2021.
- Lake County Office of Climate Resiliency formed in 2022.
- CRRA approved the Pillars of Landscape Resilience in 2023.
- The County, with the RCD and cities as partners received a State Adaptation Planning Grant for Planning for an Equitable Climate-Safe Lake project in 2023.
- Development of the Climate Vulnerability Analysis, Countywide Evacuation Study, and Climate Adaptation Plan began in 2024 concurrent with Lake County 2050 (General Plan Update).

Climate Adaptation Plan Overview

What is a Climate Adaptation Plan?

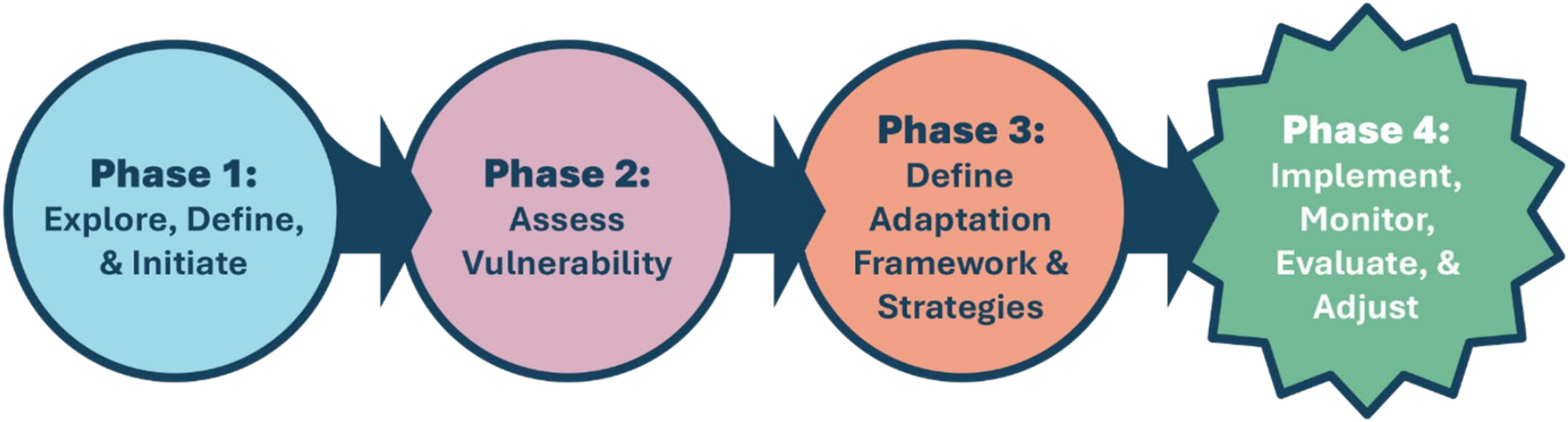
A roadmap for building climate resilience across Lake County.

Key Features:

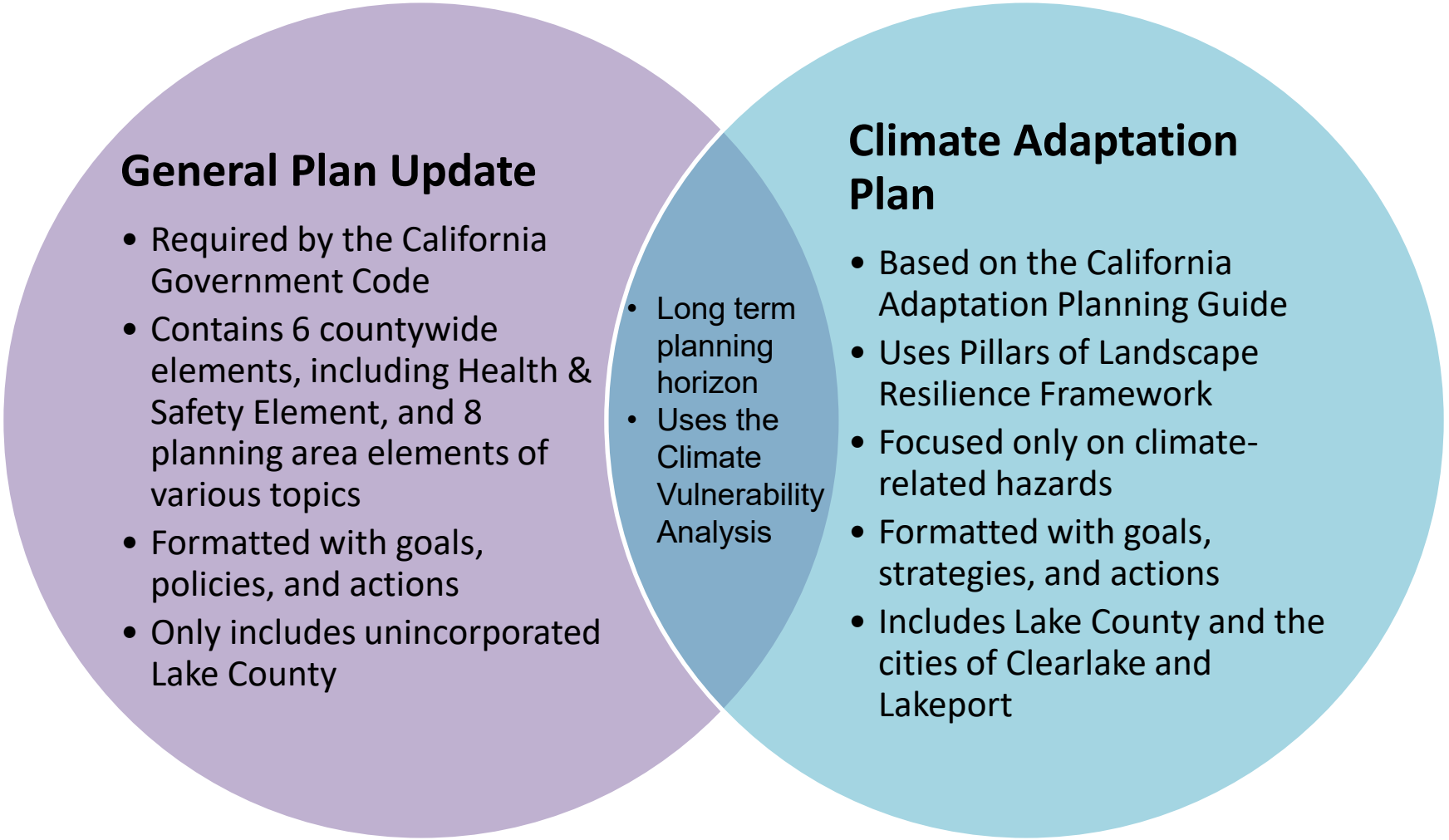
- Identifies the most vulnerable communities, natural systems, and built assets.
- Integrates with the Lake County Pillars of Landscape Resilience.
- Provides practical, feasible strategies and actions to reduce climate risks with clear implementation pathways.

Climate Adaptation Plan Process

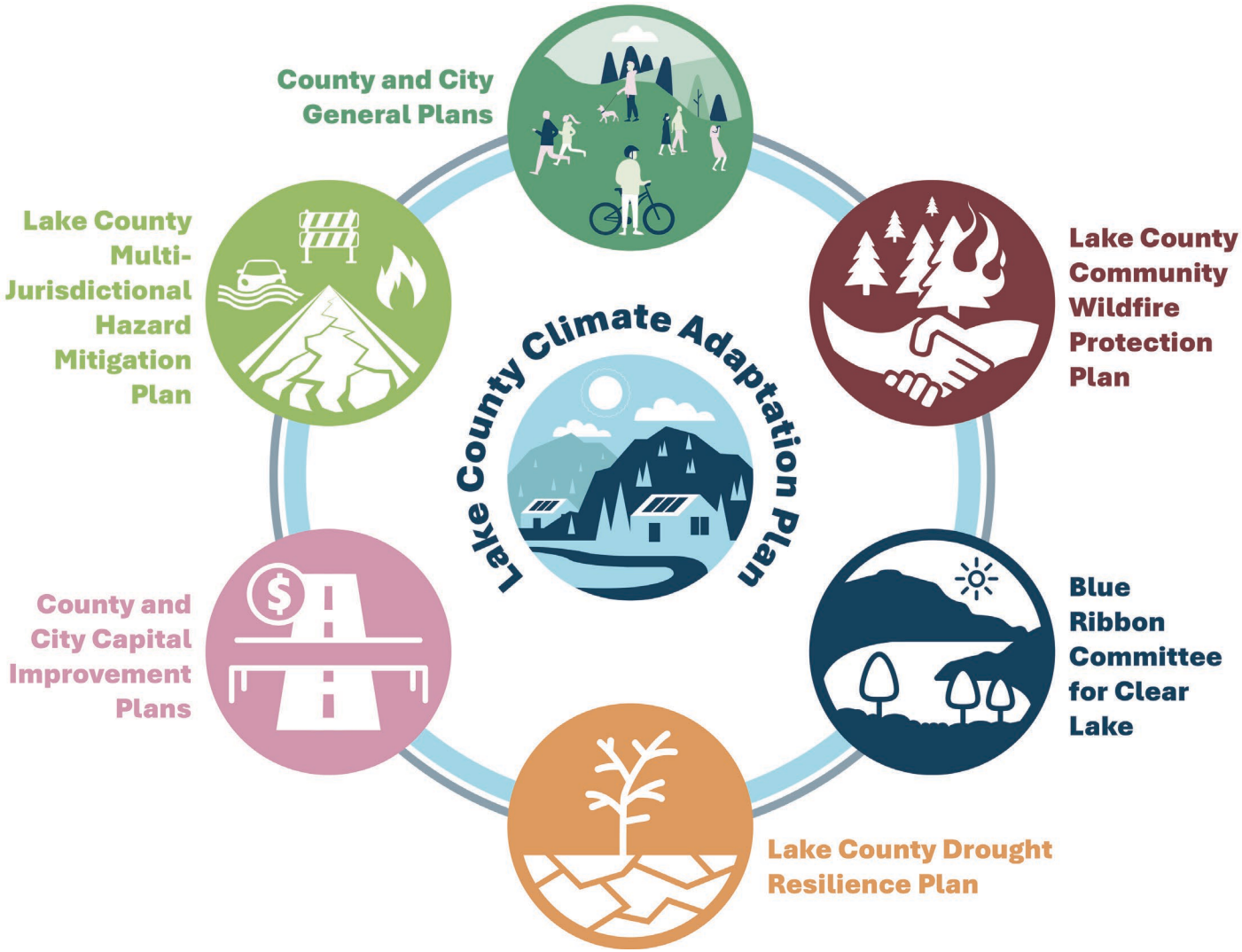
Based on the California Adaptation Planning Guide 4-step process:



Relationship to the General Plan



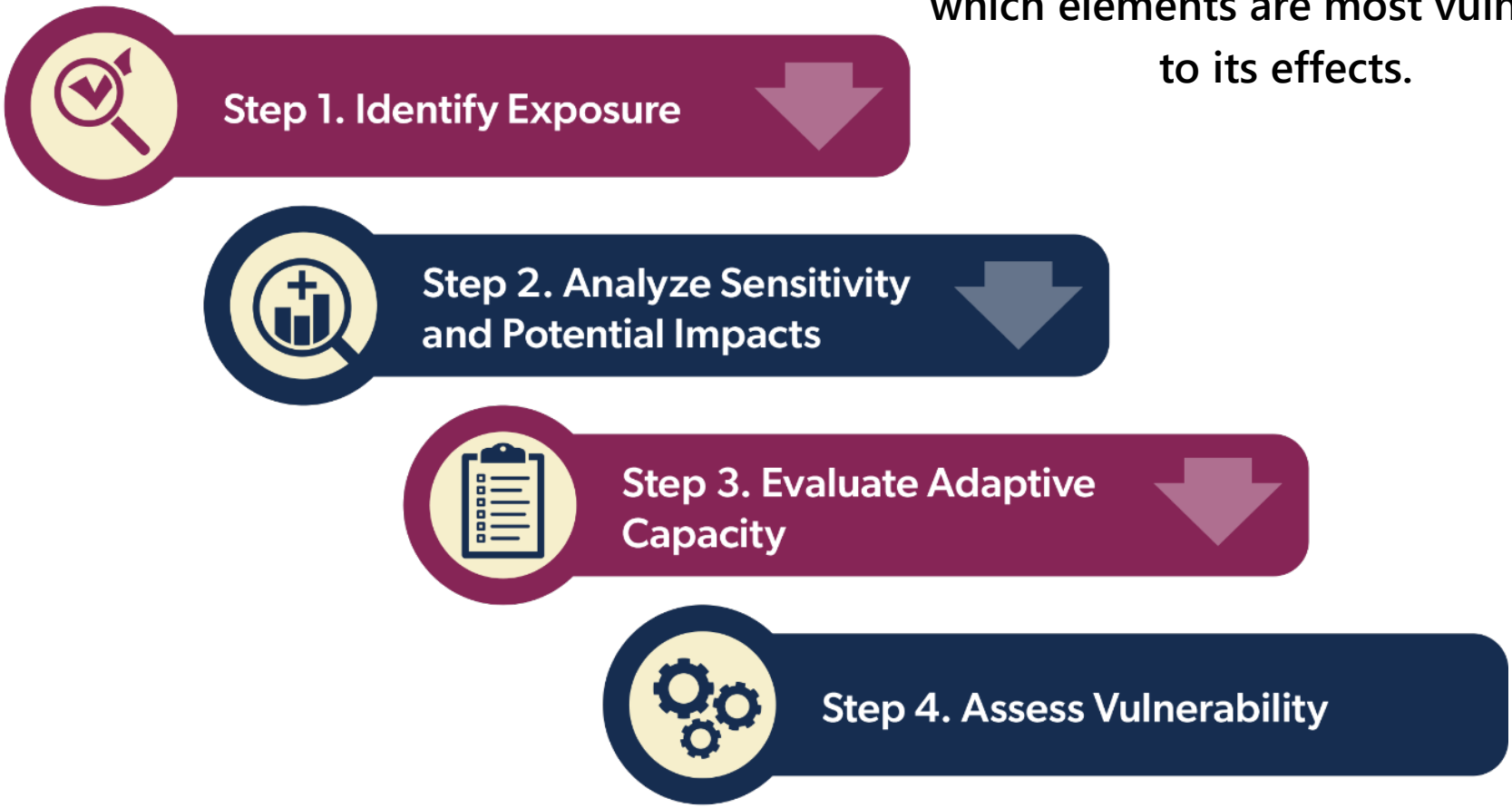
Integration with Other Plans



Climate Vulnerability Analysis

What is a Vulnerability Analysis?

An assessment of how a changing climate may harm the county, and which elements are most vulnerable to its effects.



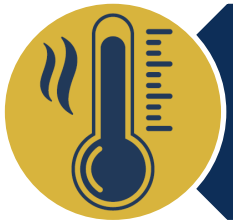
Climate Hazards Analyzed

Agriculture and Forestry Pests and Diseases

Human Health Hazards

Drought

Landslides and Debris Flows



Extreme Temperatures

Severe Weather

Flooding

Wildfire and Smoke

Key Findings

Wildfire and smoke create the most vulnerabilities countywide.

- **Most Vulnerable Populations:**
  - People of color and immigrant communities.
  - Households in poverty.
  - Persons with chronic illnesses and/or disabilities.
  - Older adults.
  - People with high outdoor exposure.
  - Persons in tribal communities.
- **Most Vulnerable Assets:**
  - Energy and communication infrastructure and services.
  - Homes (especially older, manufactured homes).
  - Transportation infrastructure.
  - Agriculture.
  - Outdoor recreation and tourism.

Climate Vulnerability Analysis Survey Feedback

- Rehabilitate Clear Lake water quality without negative environmental impact and/or social impact on Lake County community.
- Underground electrical lines wherever possible.
- Regular control burns to limit the fuel for wildland fires.
- Use farmer contracts to run cattle/livestock in mountainous areas to assist in overgrowth prevention.
- Make local homeownership a priority, especially residents who are working class/lower-middle class.
- Ensure all voices are heard and considered, including people of color, elderly, disabled, and low literate adults.
- Finish the Middle Creek floodplain and wetland reconnection.
- Community microgrids at a water plants, designated shelters, and the Emergency Operations center.

Pillars of Landscape Resilience

Pillars of Landscape Resilience

- Based on the Tahoe-Central Sierra Initiative.
- Adopted by Lake County's Office of Climate Resiliency in 2023.
- Provides metrics for measuring progress toward ecosystem and community resilience.

Pillars of Landscape Resilience

Air Quality

Fire Dynamics

Biodiversity Conservation

Forest Resilience

Carbon Sequestration

Social and Cultural Well-Being

Economic Diversity

Water Security

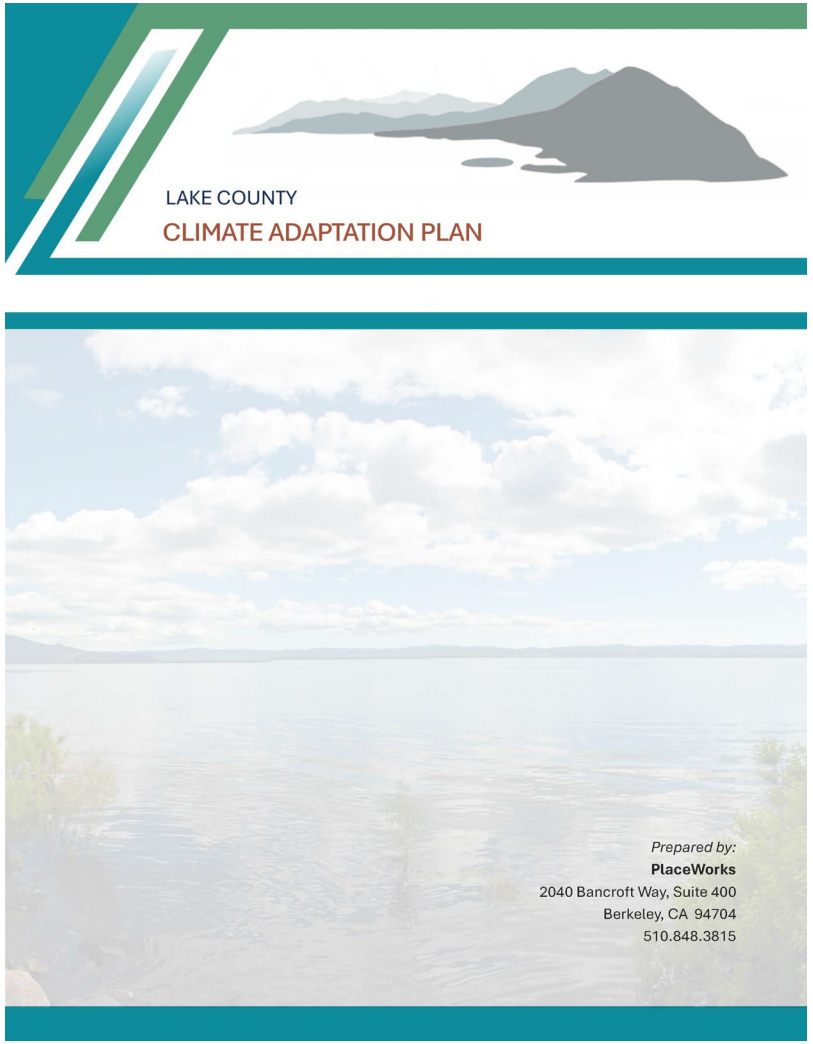
Fire-Adapted Community

Wetland Integrity

Contents of the Climate Adaptation Plan

Adaptation Plan Overview

- **Plan Purpose & Scope:**
  - Covers Lake County, Clearlake, and Lakeport.
  - Organized by the Pillars of Landscape Resilience.
- **Key Features:**
  - Summarizes technical analyses
  - Identifies adaptation and resilience strategies that provide multiple benefits.
  - Leverages existing partnerships and programs.



Resilience Strategy and Action Framework

Organization:

- **Goals -** Broad outcomes describing desired future conditions.
- **Strategies -** Policies, programs, and approaches to achieve goals.
- **Actions -** Specific implementation steps for strategies.
  - Responsible & supporting agencies
  - Timeframes (Short/Mid/Long-term)
  - Cost estimates
  - Funding sources

Draft Resilience Goals (1 to 5)

1. Advance community resilience to smoke and poor air quality events.

2. The County's network of native species and ecological communities is healthy, abundant, and distributed across the landscape to support and sustain their full ecological and cultural roles.

3. Enhanced carbon sequestration capacity across forests, agricultural and working lands, and wetlands to support climate resilience and provide other ecological and community benefits.

4. A sustainable and resilient natural resource-based economy.

5. Fire-prepared and resilient communities with the capacity to manage desired fire and suppress unwanted fire while protecting lives, housing, and critical infrastructure.

Draft Resilience Goals (6 to 10)

6. Fire burns in an ecologically beneficial and socially acceptable way that perpetuates landscape heterogeneity and rarely threatens human safety or infrastructure.

7. Resilient forest ecosystems that provide essential ecosystem services, support cultural heritage, and sustain economic opportunities.

8. A community connected with nature to recreate, maintain, and improve overall health and contribute to environmental stewardship as a critical component of their identity.

9. Reliable, safe, and equitable access to clean, potable water for all Lake County communities.

10. Protected and restored wetland and riparian ecosystems provide essential ecosystem services, provide natural climate resilience benefits, and are key linkages between upland and aquatic systems in forested landscapes.

Example Strategy Concepts by Pillar

Biodiversity Conservation

- Strengthen habitat connectivity and interagency coordination.
- Develop and implement an invasive species management program.
- Protect and restore aquatic habitat and water quality.

Water Security

- Water quality monitoring.
- Water supply infrastructure and emergency coordination.
- Drought resilience for vulnerable populations.

Social and Cultural Well-being

- Integrate public health into emergency planning and outreach.
- Expand access to climate resilient resources and resilience hubs.
- Strengthen tribal co-management of natural resources.

Economic Diversity

- Support climate-resilient agriculture practices.
- Foster healthy and sustainable tourism and recreation.
- Ensure equitable hazard preparedness access for small businesses.

Next Steps

CAP Development and Timeline

2022 – 2023

Project Initiation

- Secured Adaptation Plan Grant funding
- Established Office of Climate Resiliency

2023 – 2024

General Plan Outreach

- Introduced the CAP to the community
- Conducted outreach to tribes and interested parties

Fall 2024 – Spring 2025

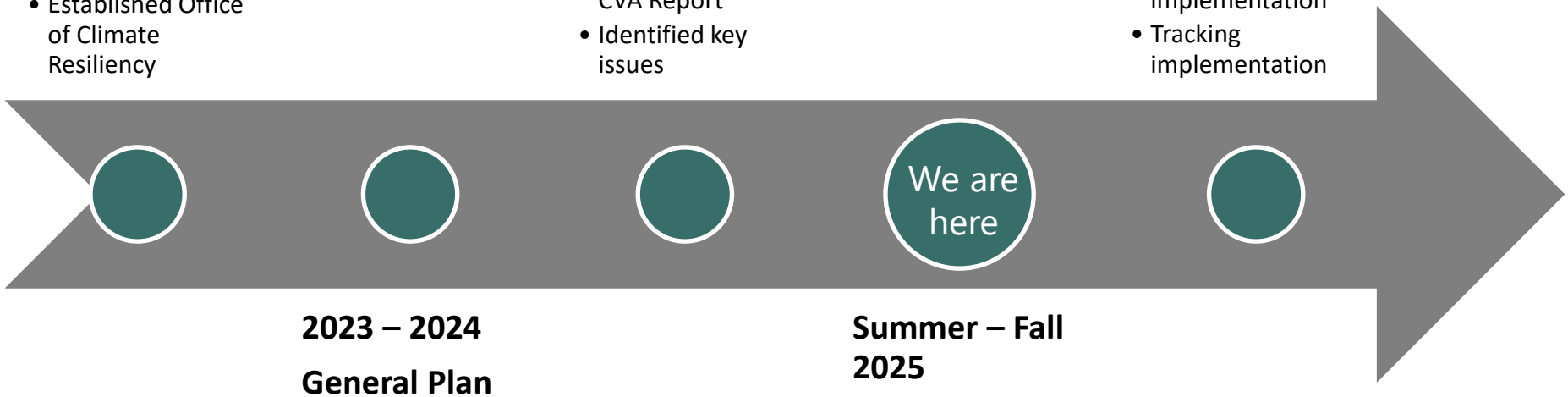
Technical Analysis

- Evaluated climate vulnerability
- Completed Draft CVA Report
- Identified key issues

Summer – Fall 2025

Plan Development

- Drafted resilience goals, strategies, and actions
- Public review of draft CAP



Fall 2025/Winter 2026 – Beyond Implementation

- Securing funding for implementation
- Tracking implementation

Next Steps

- Release of Public Review Draft Climate Adaptation Plan

Visit the project website at: https://lakecounty2050.org/

- Additional Questions or Comments?
  - Please contact Mireya Turner, Lake County Community Development Director, LakeCounty2050@lakecountyca.gov