



Division of Drinking Water

# 2025 Safe Drinking Water Plan

**Board Workshop– July 15, 2025**

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# Purpose

- **Present the 2025 Safe Drinking Water Plan (Plan)**
  - **Review the Plan** through the following link (posted July 7, 2025):  
[https://www.waterboards.ca.gov/drinking\\_water/safedrinkingwaterplan](https://www.waterboards.ca.gov/drinking_water/safedrinkingwaterplan)
- **Invite public comment**
  - **Written comments** on the Plan are due 12:00pm (noon) on **August 29, 2025**
  - Email: [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov) with subject line “**Comment Letter: 2025 Safe Drinking Water Plan**”

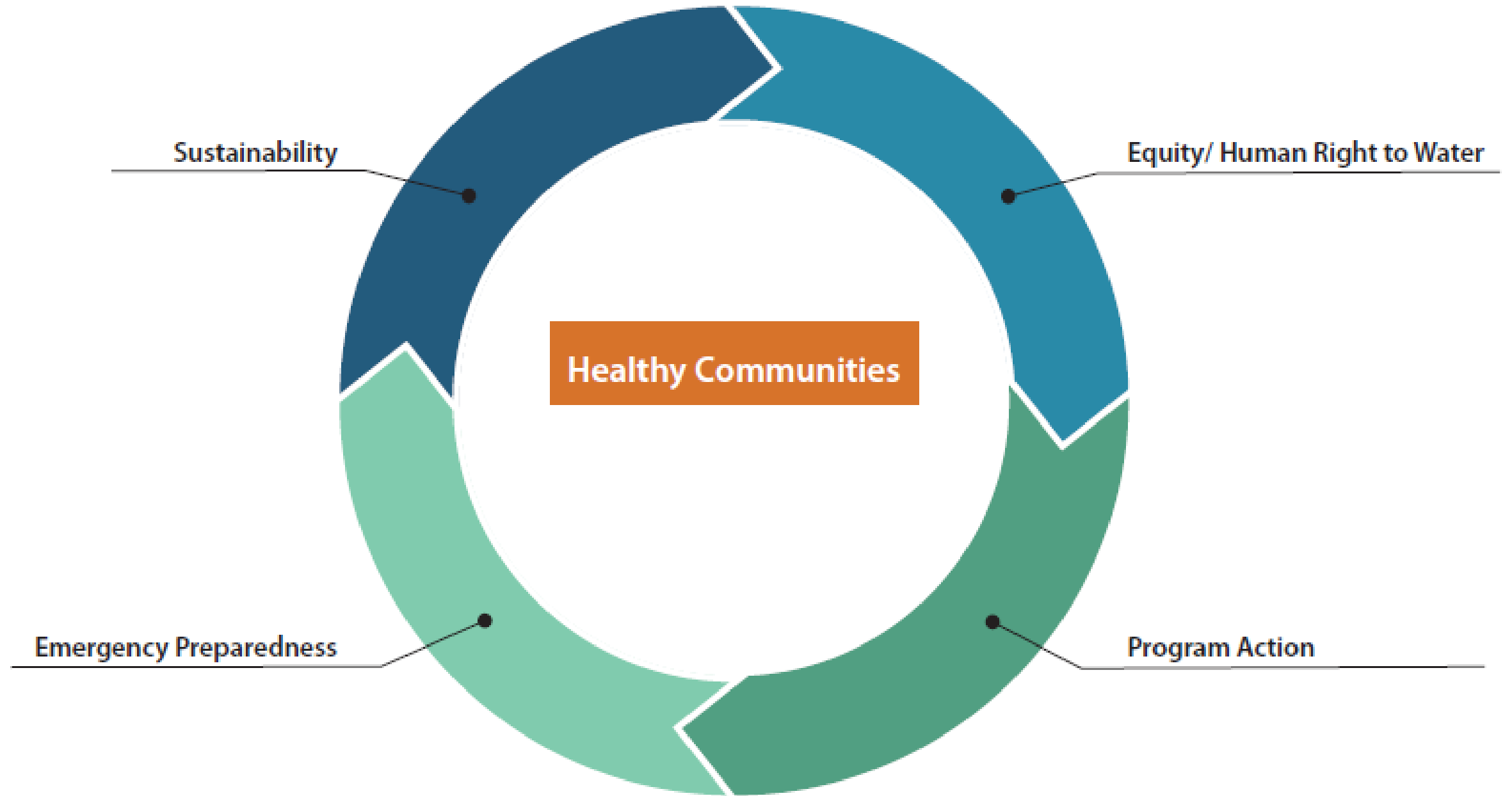
# Presentation Outline

- Safe Drinking Water Plan **Overview**, Document Structure, and Contents
- **Metrics and Milestones** since 2020 Plan
- Strategic **Insights** from the Executive Summary
- ***Chapter Summaries and Primary Recommendations***
- Questions, **Comments**, Suggestions

# Plan Purpose: 5-year update to Legislature (per Health & Safety Code § 116355)

- Assessment of the overall quality of the state's drinking water.
- Identification of specific water quality problems.
- Analysis of the known and potential health risks
- Specific initiatives the State Water Board is undertaking and
- ***Recommendations for continued improvement of CA's drinking water.***

# Plan Themes



# Suggested Action from the 2025 Safe Drinking Water Plan

## 2025 Plan Recommendations

- Support Sustainable, Affordable, Safe Drinking Water Communities
  - Expand and strengthen consolidation, collaboration, mutual aid
  - Technical, Financial, Managerial Capacity (TMF) assessment and development
- Invest in Technology and Data
  - Strategic development of tools (Drought Reporting & TMF metrics)
  - Data transparency / public facing dashboards
  - Research including treatment and analytical methods development
- Financial Innovation
  - Address funding shortfall
  - Support program actions
  - Expand asset management and adequate water rates
- Collaborative Emergency Preparedness and Response

# Metrics since 2020 Plan

## 2025 Celebrated:

- **50-years** of the **Safe Drinking Water Act**
- **10-years** of the **Drinking Water Program** at **State Water Board**
- **5-years** of the **SAFER Program** (half-way point of SB200 funding)
  - Consolidation & Administrator **support** to assist **Failing & At-Risk** water systems
  - **\$1B** funding & **\$73M** technical assistance for water system improvements
  - Established various **SAFER program units**, such as the **County** and **Rural Engagement** and **Needs Assessment** Units

# Milestones since 2020 Plan

- Adoption:
  - Federal **PFAS MCL**, including **monitoring** orders w/ state funds for disadvantaged communities
  - **Hexavalent Chromium MCL** Regulation
  - **Direct Potable Reuse** Regulations
- Advanced **microplastic** analytical method development
- **Ongoing review** of MCLS, DLRs, NLs/RLs and other relevant **health protective regulations**
- Advancing Human Right to Water through development of:
  - **Climate and Racial Equity Strategy** (CARES)
  - **Racial Equity Action Plan** (REAP)
- New **sewer system administrator** authority (SB 805, 2024)



# Milestones since 2020 Plan

- Drinking Water **Needs and Affordability Assessments**
- **POU/POE Report**
- **Conservation Regulations**
- Water **Shutoff Protection Act**
- **\$985M Arrearages** Payment Program
- **Expedited** Drinking Water **Grant** Funding Program
- **Lead** service line **inventories** portal and related regulatory **improvements**
- **Childcare lead testing** (ongoing) and data **dashboard**
- **Cross-Connection Control Policy Handbook**
- Increased emphasis and coordination on **drought resiliency planning** and emergency preparedness and response (in response to SB 552, 2021)
- Initiate development of minimum **TMF capacity requirements** (SB 1188, 2024)

# Milestones since 2020 Plan

- Launched:
  - **CLIP** data portal
  - **System Area Boundary Lookup** tool
  - **Residential Water Treatment Device** Registration portal
  - **Affordability Dashboard**
  - State Small Water Systems and Domestic Wells **Risk Assessment Map**
- Redeveloped:
  - **Electronic Annual Report**
  - Water rights source/capacity data into **SAFER Clearinghouse**
- Various **Legislative actions** completed (see Appendix 9 & summary Chapter 2)
- Various **interagency and stakeholder coordination** efforts ongoing
- Various initiatives to **expedite consolidation** projects
- Publication of various **water partnership success**
- Completed **Low-Income Rate Assistance** Program Plan and Legislative Report

# Milestones since 2020 Plan

## Drinking Water **Compliance**

- **98%** PWS customers receive water that meets standards
  - On average, **94%** of PWSs **complied** with water quality standards annually **over the last 5 years**
  - **79%** of water systems have **maintained continual compliance** with drinking water standards **since 2017**

## **Program Actions** completed

- **9 DDW** actions / day
  - **Permits** and permit **amendments** issued: **1,701** (1/day)
  - **Sanitary surveys** completed: **7,270** (5/day)
  - **Enforcement actions** issued: **4,740** (8,950 violations) (3/day)
- **11 ELAP** laboratory actions / week
  - **Application accreditations:** **2,287** (1.5/day)
  - **Assessments:** **816** (4/week)
  - **Enforcement actions:** **308** (1.5/week)
- Analytical **water quality samples:** ~2 million/year (3-4 samples/minute)

# Executive Summary

## What is a Public Water System?



**Community water systems** are city, county, regulated utilities, regional water systems and even small water companies and districts where people live.



**Transient non-community water systems** include entities like rural gas stations, restaurants and State and National parks that provide their own potable water source. Most people that consume the water neither reside nor regularly spend time there.



**Non-transient Non-community water systems** are places like schools and businesses that provide their own water. The same people have a regular opportunity to consume the water, but they do not reside there.

**Table 2-1: Number of California Public Water Systems by Type as of November 2024**

Public Water Systems by Type	Number
Community Water System	2,837
Transient Non-community Water System	2,958
Non-transient Non-community Water System	1,470
<b>Total</b>	<b>7,265</b>

# Executive Summary

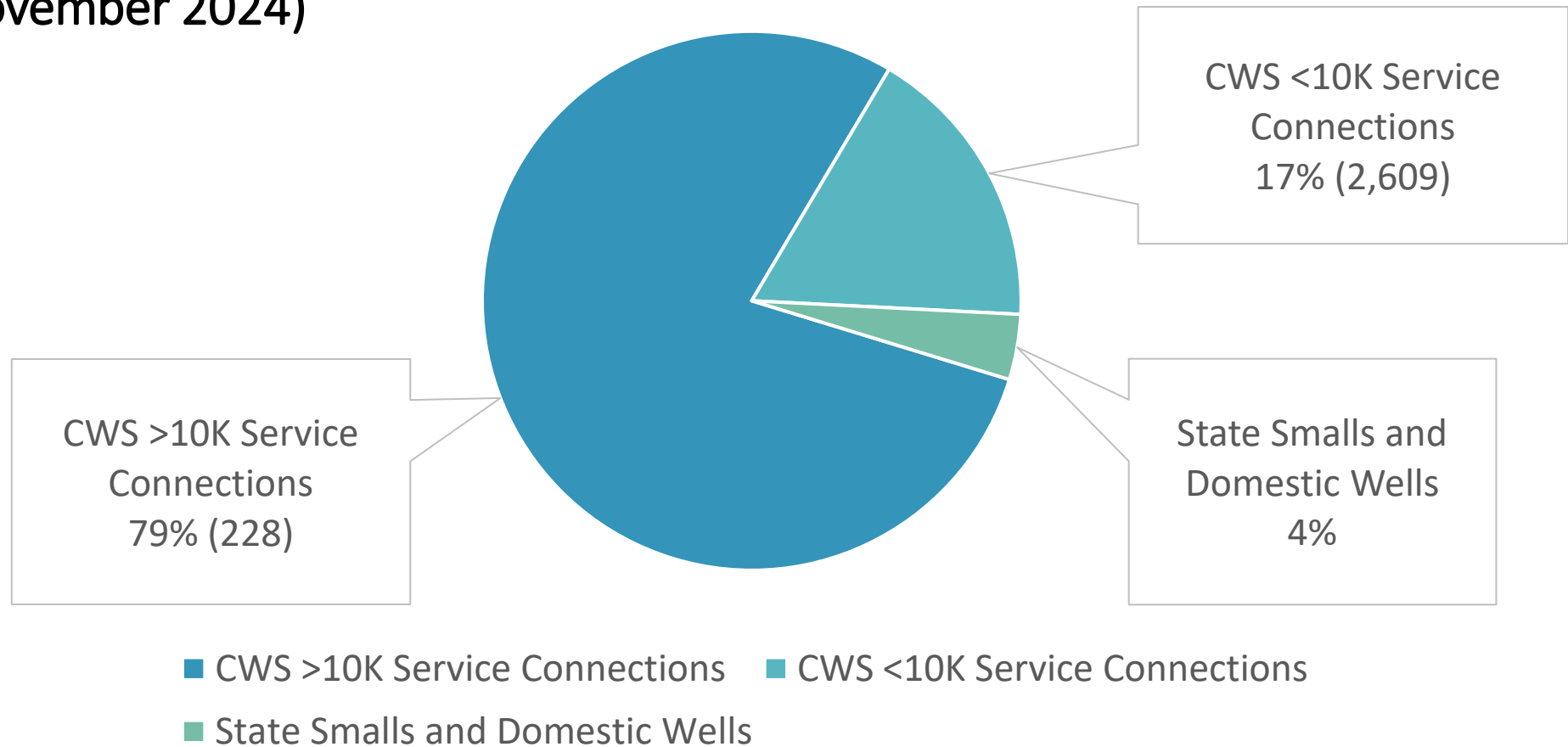
## Regulation of Drinking Water and Water Quality Compliance

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- **98%** of CA drinking water consumers served by PWS receive water that meets standards
  - **79%** of water systems have maintained continual compliance with drinking water standards since 2017
- **Smaller Systems & Compliance Issues:**
  - Community Water Systems (CWS) with fewer than **3,000** connections, represent **1/3** of Public Water Systems (PWS), but serve only **6%** of the population
  - **84%** of at-risk systems for non-compliant water identified in DDW's 2024 Needs Assessment
  - Almost all violations between 2019-2023 are in PWSs with fewer than **500** connections
- **Regulatory Challenges:**
  - **43%** of violations occur within Local Primacy Agencies (LPAs)

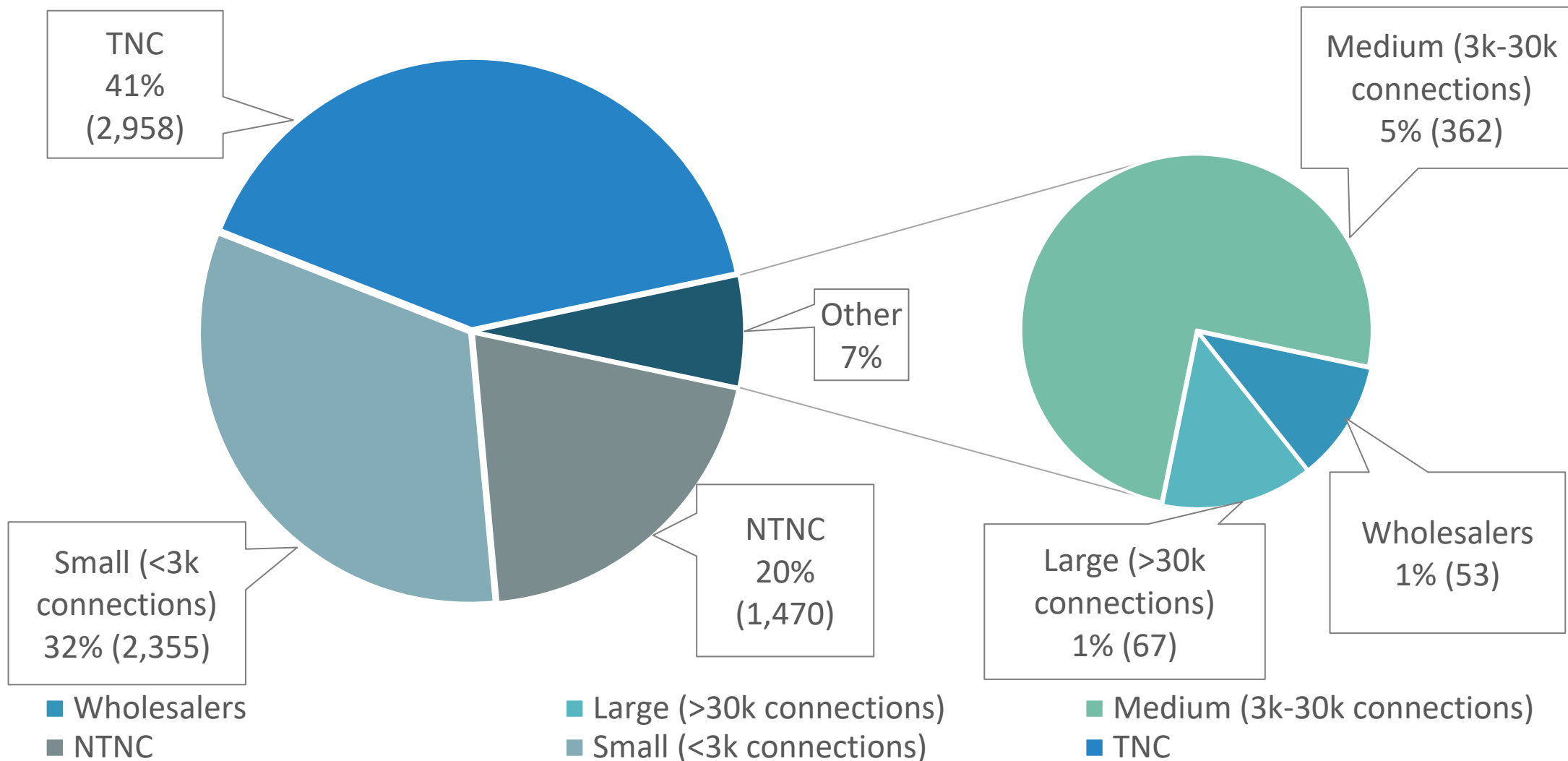
# Executive Summary

## Estimated Percentage of Population Served by System Size (November 2024)



# Executive Summary

## Number of Public Water Systems by Type and Size (November 2024)



# Executive Summary

## Consolidations and Sustainability of Water Systems

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### Key Achievements:

- **>250** consolidations completed since 2017
- **260** consolidations currently in funding, planning, or construction phase

### Strategic Interventions:

- **17** mandatory consolidations initiated
- **16** administrators appointed for small systems serving disadvantaged communities

### Impact on Safe Drinking Water Access:

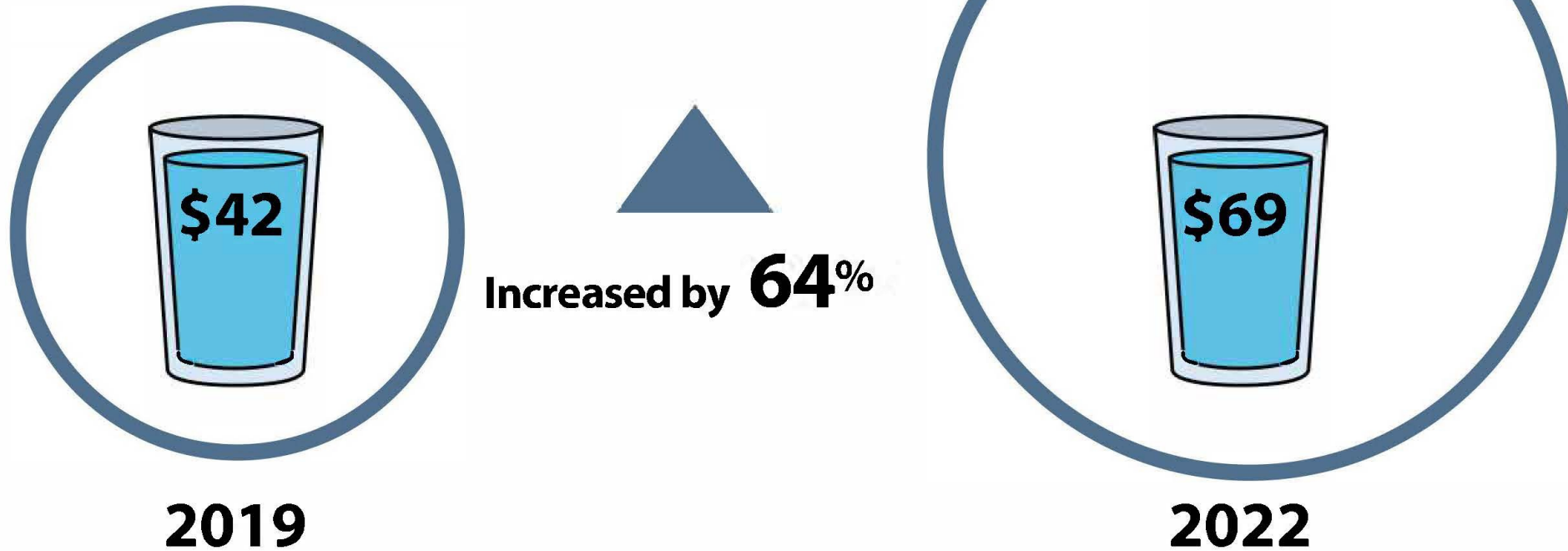
- Californians lacking access to safe drinking water **reduced by half**



# Executive Summary

## The Cost of Water

Average cost of water  
across all water system types



In 2022: Large system customers paid \$42/Month  
Small system customers paid \$74/Month

# Executive Summary

## Drinking Water Financing

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- **Infrastructure Financing:**

- **\$4.5B** in financial assistance agreements since 1998

- **Recent Funding Impact:**

- Over **\$1B** in grants since 2019
- **\$73M** in technical assistance provided
- Assistance provided to **750** small disadvantaged communities
- Support for **13.8M** Californians
- **>2.5x** increase in grant funding compared to 2015–2020

# Structure of the 2025 Safe Drinking Water Plan

## Contents:

- Executive Summary
- Chapter 1-2: Introduction & Regulatory Oversight
- Chapters 3-4: Water Supplies, Threats & Violations
- Chapter 5-6: Data Systems & Analytical Methods
- Chapters 7-8 – Treatment Technologies & Sustainability Strategy
- Chapter 9-10: Financing, Affordability & Assistance
- Chapter 11-12: Emergency Preparedness & Integrated Recommendations

# Structure of the 2025 Safe Drinking Water Plan

## Contents: Appendices

- Appendix 1. Accomplishments Since the 2020 Plan (2021-2024)
- Appendix 2. Definition of a Public Water System
- Appendix 3. Drinking Water Standards for Contaminants
- Appendix 4. Unregulated Chemicals for which Monitoring is Required (UCMR)
- Appendix 5. Chemicals with State Water Board Notification Levels
- Appendix 6. Recent Drinking Water-Related Regulations
- Appendix 7. Status Update on Recommendations from the 2020 Plan
- Appendix 8. List of Treatment Technologies Used by Public Water Systems
- Appendix 9: Key Drinking Water Legislation 2021-2024 (Since 2020 Plan)

# Chapters 1 & 2

## Introduction & Regulatory Oversight

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- **Chapter 1 – Introduction:**

- **Background** and **History** of public water systems.
- Key drinking water **legislation** (2021-2024)
- Highlights **challenges** in delivering a continuous supply of **safe potable water**.

- **Chapter 2 – Regulatory Oversight:**

- **Governance** structure & roles of **local** and **state agencies**.
  - **Types of Public Water Systems** and **DDW Program** details
- **Challenges:**
  - **Fragmented oversight**; 43% of violations occur at county-level **Local Primacy Agencies (LPAs)**.
  - Need for **robust inter-agency collaboration**.

- **Key Recommendation:**

- **Improve Coordination** with local building and planning authorities and bolster **county-level resources**.

# Chapters 3 & 4

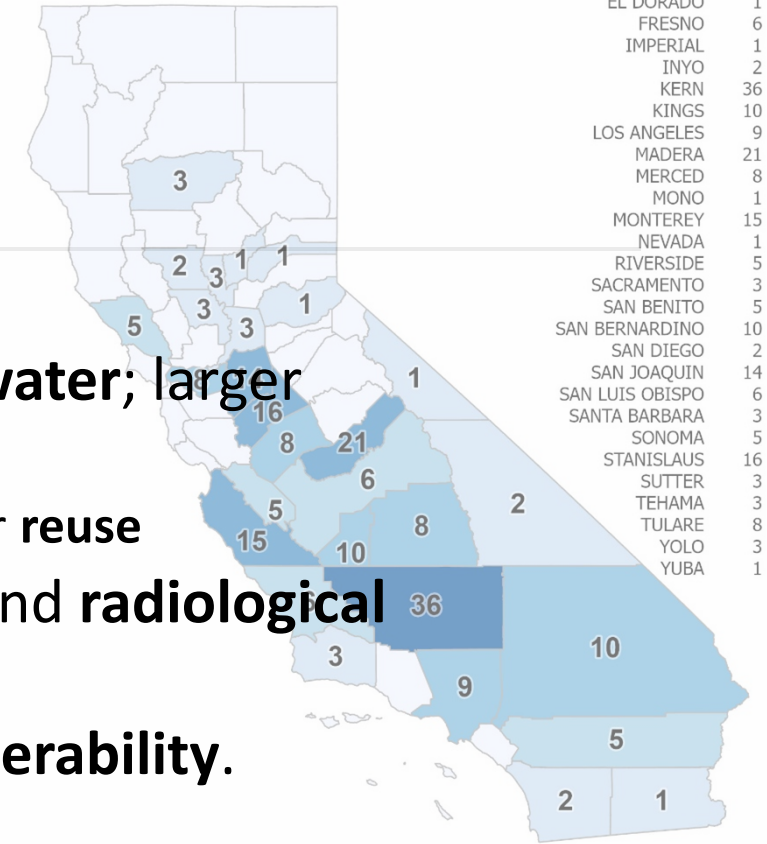
## Water Supplies, Threats & Violations

- **Chapter 3 – Drinking Water Supplies & Threats:**

- **Sources:** 84% of public water systems rely on **groundwater**; larger populations are served by **surface water**.
  - Discusses other sources like **recycled** and the future of water **reuse**
- **Threats:** Include **microbiological, inorganic, organic, and radiological** contaminants.
- **Conclusion:** Small water systems face higher **vulnerability**.
- **Key Recommendation:** Expand consolidation projects.

- **Chapter 4 – Violations in Water Systems:**

- Despite **98% compliance**, most violations are in systems with **fewer than 500 connections**, including **non-community** systems
- **Key Recommendation:**
  - Limit the creation of **small, unsustainable systems** and promote **system consolidation**.



# Chapters 5 & 6

## Data Systems & Analytical Methods



- **Chapter 5 – Information Management Systems:**

- Transition from **legacy systems** to **integrated tools** (CLIP, eAR, GIS) for enhanced **transparency** and **decision-making**.
- **Conclusion:**
  - **Modern data systems** are essential for **compliance** and **informed planning**.
- **Key Recommendation:**
  - **Invest in user training** and **maintenance** of new IT tools, and **public-facing dashboards**.

- **Chapter 6 – Analytical Methods for Contaminants:**

- Advances in **analytical methods** have improved **speed**, **cost**, and **sensitivity**.
- **Challenge:**
  - **Underdeveloped methods** for small water systems.
- **Key Recommendation:**
  - **Fund research** to develop **cost-effective**, **user-friendly monitoring tools** for small systems.

# Chapters 7 & 8

## Treatment Technologies & Sustainability Strategy

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- **Chapter 7 – Treatment Technologies:**

- Reviews current **water treatment methods** with an emphasis on **disinfection** and **advanced processes**.
- **Observation:**
  - **Large systems** better manage **costs** and **complexity**; **small systems** face burdens.
- **Key Recommendation:**
  - **Prohibit new unsustainable small systems and promote system consolidation.**



# Chapters 7 & 8

## Treatment Technologies & Sustainability Strategy

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- **Chapter 8 – Sustainability Strategy (SAFER Program):**
  - Outlines strategies to support the **Human Right to Water** through **consolidation, outreach, and capacity building**.
  - **Key Data:**
    - Over **250 consolidations** since 2017; multiple **mandatory actions** for disadvantaged communities.
  - **Key Recommendations:**
    - **Extend SAFER funding, enhance liability protection, and coordinate regional planning.**

# Chapters 9 & 10

## Financing, Affordability & Assistance

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- **Chapter 9 – Financing & Affordability:**
  - **Challenges:** Rising **water rates** and **operational costs**, particularly in **high-poverty communities**.
  - **Key Findings:**
    - Significant increase in **rate structures** where small systems are disproportionately affected.
  - **Key Recommendations:**
    - Develop **TMF (Technical, Managerial, Financial)** regulations, improve **asset management plans**, and implement **assistance programs** for **low-income households**.

# Chapters 9 & 10

## Financing, Affordability & Assistance

- **Chapter 10 – Financial & Technical Assistance:**

- **Focus:** Support for **capital improvements** and **essential operations & maintenance (O&M)**.

- **Achievements:**

- Over **\$1B in grants** since 2019, assisting **750 disadvantaged communities**.

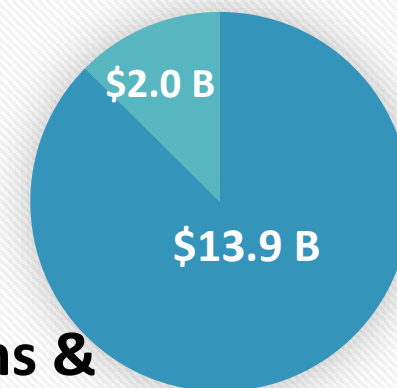
- **Funding Gap:**

- Projected **5-year need: \$15.9B** vs. **\$2B** in State grants; **\$13.9B** to be locally sourced (including loans).

- **Key Recommendations:**

- **Inform stakeholders** of the funding gap, **explore innovative financing** (especially **O&M** and **low-income support**), and strengthen **interagency coordination** via **mutual aid** networks, adopt a modern **accounting system** for **electronic disbursements**

**\$15.9 Billion to  
Achieve Human Right  
to Water**

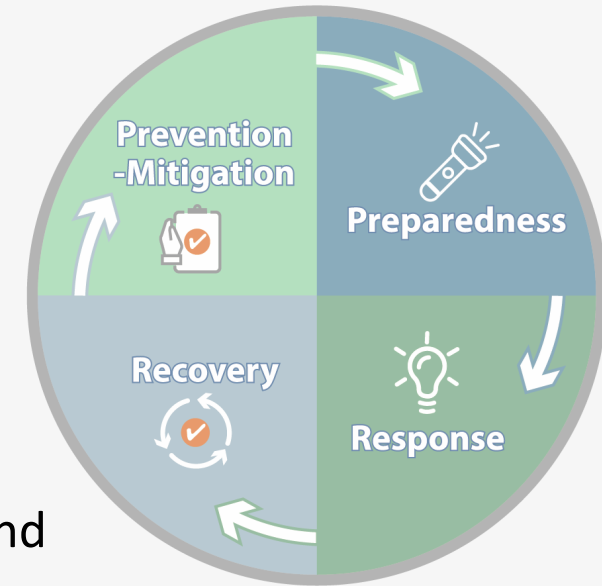


- Local Costs (customer charges/loans/taxes/income)
- SWRCB Grant Funds

# Chapters 11 & 12

## Emergency Preparedness & Integrated Recommendations

- **Chapter 11 – Emergency Management, Security & Resiliency:**
  - Focuses on **planning** for natural disasters, **cybersecurity threats**, and other **emergencies**.
  - **Conclusion:**
    - Public water systems and staff are **critical** for **emergency response** and **recovery**.
  - **Key Recommendations:**
    - **Increase interagency collaboration**, enhance **cybersecurity**, update **GIS data**, and ensure participation in **mutual aid networks**



# Chapters 11 & 12

## Emergency Preparedness & Integrated Recommendations

- **Chapter 12 – Recommendations Summary:**

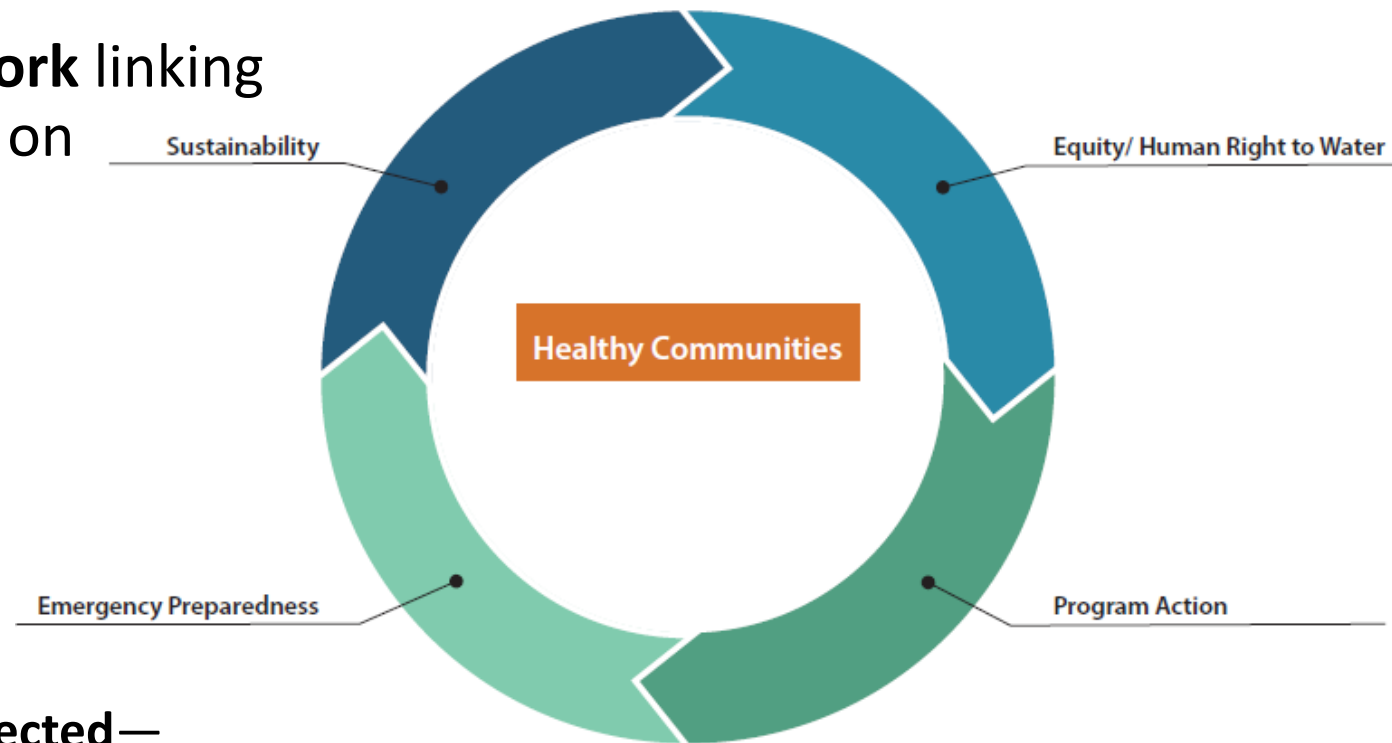
- Provides an **integrated framework** linking all recommendations, centered on "**Healthy Communities**".

- **Four Main Themes:**

- Emergency Preparedness
- Sustainability
- Equity/Human Right to Water
- Program Action

- **Visual Summary:**

- Recommendations are **interconnected**—improvements in one area support others.



# Strategic Recommendations Recap

- Legislative action, Support from stakeholders and public water systems

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- **Overall Strategic Recommendations:**

- **Consolidation & Capacity Building for Sustainable Water Systems:**

- Promote consolidation and redundancy to reduce vulnerabilities and improve TMF capacity.

- **Investment in Technology & Data (Program Action):**

- Improve local planning coordination, modernize data systems and analytical methods for informed decision-making.

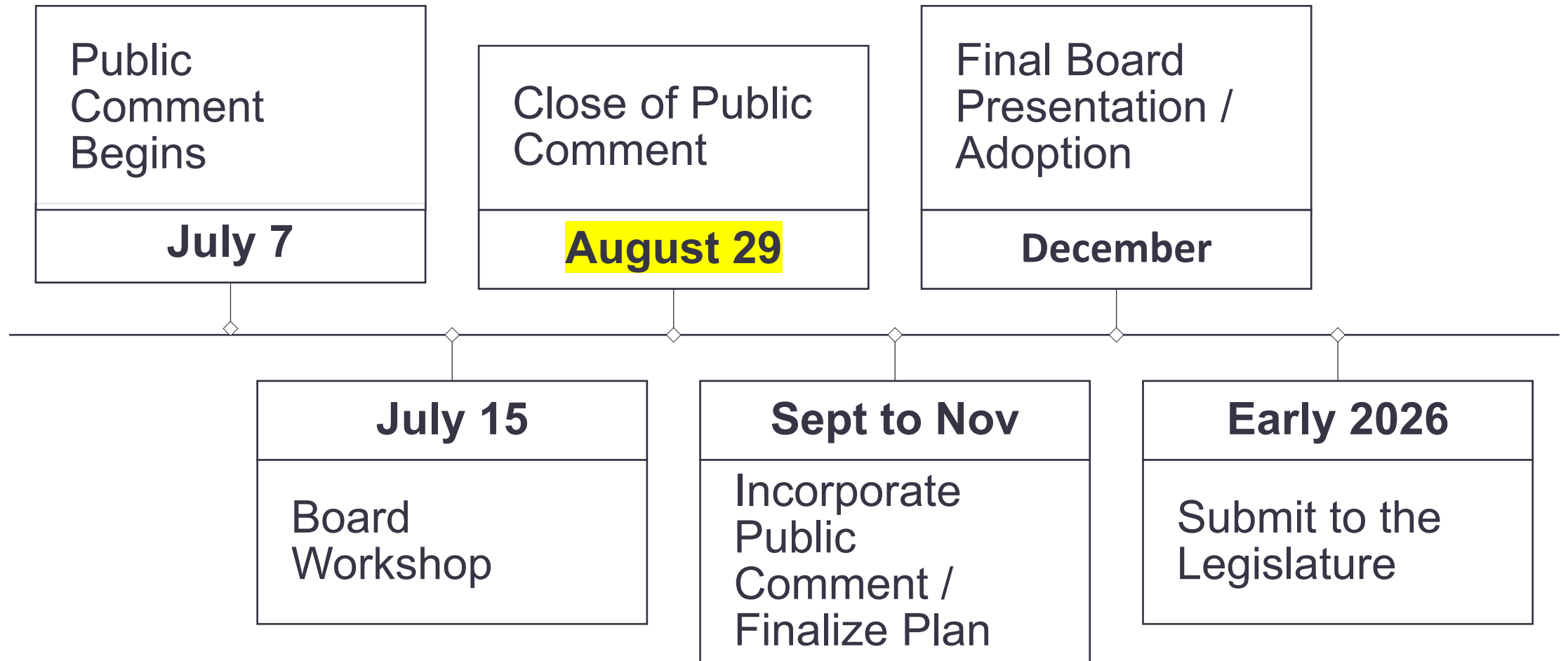
- **Financial Innovation (Equity/HR2W):**

- Address the funding gap by exploring innovative financing models, better asset management, and targeted water rate support for disadvantaged communities.

- **Strengthening Emergency Preparedness:**

- Enhance interagency coordination and invest in cybersecurity and emergency management.

# Schedule & Milestones - 2025



# Questions, Comments, and Suggestions



- **Review the Plan:**  
[https://www.waterboards.ca.gov/drinking\\_water/safedrinkingwaterplan](https://www.waterboards.ca.gov/drinking_water/safedrinkingwaterplan)
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  - Mail: State Water Resources Control Board, Attention: Courtney Tyler, Clerk to the Board, P.O. Box 100, Sacramento, CA 95812-0100
  - Hand-delivery: State Water Resources Control Board, Attention: Courtney Tyler, Clerk to the Board, 1001 I Street, 24th Floor Sacramento, CA 95814. Couriers delivering comments must check in with lobby security and contact Ms. Tyler at (916) 341-5611.