

Placer County Drought Resilience Plan

Public Draft



Prepared with funding from the:
California Department of Water Resources

Prepared for:
Placer County

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February, 2026

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Placer County

Drought Resilience Plan

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Acknowledgements

The Placer County Drought Resilience Plan was developed with direct technical assistance from the California Department of Water Resources' County Drought Resilience Planning Assistance Program. This plan was developed by Placer County staff in coordination with Stantec Consulting Services Inc. Additional support was provided by the Placer County Drought and Water Shortage Task Force and the California Department of Water Resources Water Justice Office.

Guided by Senate Bill (SB) 552 of 2021 and benefited by funding made available by the Budget Act of 2021, the California Department of Water Resources launched the County Drought Resilience Planning Assistance Program to help counties facilitate drought and water shortage preparedness for state small water systems and domestic wells within their jurisdiction per requirements of SB 552.

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Abbreviations and Acronyms

°F	degrees Fahrenheit
ACS	American Community Survey
CASGEM	California Statewide Groundwater Elevation Monitoring
CDAG	County Drought Advisory Group
County	Placer County
County Environmental Health	County Department of Environmental Health
County Public Works	County Department of Public Works
CWC	California Water Code
DRP	Drought Resilience Plan
DWR	California Department of Water Resources
DWWM	domestic drinking water well mitigation
EIDWD	Emergency and Interim Drinking Water Distribution
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GSA	groundwater sustainability agency
GSP	Groundwater Sustainability Plan
HSC	California Health and Safety Code
HUC	U.S. Geological Survey's Hydrologic Unit Code
Legislature	State Legislature
LTMSA	long-term mitigation strategies/action
MCL	maximum contaminant level
OES	Office of Emergency Services
PCT	Project Coordination Team
PCWA	Placer County Water Agency
PLSS	Public Land Survey Section
PSPS	public safety power shutoff

SB	Senate Bill
SGMA	Sustainable Groundwater Management Act
SSWS	state small water system
State	State of California
STRA	short-term response action
Task Force	Drought and Water Shortage Task Force
TDS	total dissolved solids
USGS	U.S. Geological Survey
WPGSA	West Placer Groundwater Sustainability Agency
WSVE	Water Shortage Vulnerability Explorer
WY	water year

1.0 Introduction

The Placer County (County) Drought Resilience Plan (DRP) documents how the County, its Drought and Water Shortage Task Force (Task Force) members, and other entities with water supply and drought management responsibilities will address water supply vulnerabilities for three types of systems in the County: domestic wells, as defined in California Health and Safety Code (HSC) Section 116681(i) (State of California 2025) and California Water Code (CWC) Section 10609.51(d) (State of California 2023); state small water systems (SSWS), as defined in HSC Section 116275(n) (State of California 2024) and CWC Section 10609.51(l) (State of California 2023); and surface water systems. This County DRP was prepared pursuant to Senate Bill (SB) 552: Drought Planning for Small Water Suppliers, State Small Water Systems, and Domestic Well Communities (Hertzberg; see Section 1.2 for additional detail). This County DRP was developed by the County with funding and technical support provided by the California Department of Water Resources (DWR) Drought Resilience Planning Assistance Program.

1.1 Document Organization

Organization of this document draws from DWR's *County Drought Resilience Guidebook* (March 2023; Guidebook). The Guidebook is a resource for counties to use to develop a County DRP specifically for SSWSs and domestic wells. Consistent with the Guidebook, the County DRP is organized into six chapters, as follows:

- **Chapter 1: Introduction** provides an overview of the legislation relating to SB 552 and the development of the County DRP. This chapter also includes background on County demographics, geography, and an overview of domestic wells and SSWSs within the County's jurisdiction.
- **Chapter 2: County Drought and Water Shortage Task Force** provides an overview of the Task Force, including its development process and charter, membership, roles, purpose, and meeting frequency.
- **Chapter 3: Drought and Water Shortage Risk Assessment** characterizes the vulnerability of domestic wells and SSWSs within the County to drought and water shortage. This chapter also presents the approach and data used to assess vulnerability. It highlights areas within the County that have a higher risk of drought and water shortage where domestic wells and SSWSs are present. Additionally, data gaps are identified to help inform potential long-term strategies.
- **Chapter 4: Short-Term Response Actions** details the proposed short-term response actions for emergency and interim drought solutions, including specific actions, local response triggers, and public engagement.

- **Chapter 5: Long-Term Mitigation Strategies and Actions** details the proposed long-term mitigation strategies and actions for improving the water supply resilience of domestic wells and SSWs.
- **Chapter 6: Implementation Considerations** presents a roadmap for implementing short-term response actions (STRA) and long-term mitigation strategies and actions (LTMSA) consistent with the mission and authority of involved agencies. This includes identifying agencies and entities responsible for implementation, the status of implementation, funding, authorization for implementation, and the anticipated schedule. This section also summarizes the level of multi-agency collaboration identified by agencies to support implementation.
- **Chapter 7: References** provides a list of references used in this plan.

1.2 Legislative Requirements

Signed into law September 2021 by Governor Gavin Newsom, SB 552 (Hertzberg)¹ obligated the State of California (State) and local governments to share the responsibility in preparing for and responding to a water shortage event. These new requirements are expected to improve the ability of Californians to manage future droughts and help prevent catastrophic impacts on drinking water for communities vulnerable to the effects of climate change. The bill outlines the new requirements for small water suppliers, county governments, DWR, and the State Water Resources Control Board (State Water Board) to implement more proactive drought planning and be better prepared for future water shortage events or dry years (Hertzberg 2021).

SB 552 also implements legislation on Water Conservation and Drought Planning (SB 606 [Hertzberg] and Assembly Bill 1668 [Friedman], as amended; collectively referred to as “2018 Legislation”) passed by the State Legislature (Legislature). The 2018 Legislation provides a new framework for urban water use efficiency; directives for eliminating water waste; additional requirements for strengthening local drought resilience for urban areas, vulnerable small water

¹ In 2018, DWR convened a County Drought Advisory Group (CDAG) to assist in a vulnerability assessment and to develop recommended actions for improving drought planning for small water suppliers and rural communities. The CDAG consisted of representatives from counties and other local agencies, small water systems, tribes, academics, non-profit organizations, and other interested parties. The CDAG’s recommendations were provided to the Legislature in March 2021 and served as the basis for SB 552. DWR has also established a standing drought and water shortage interagency task force, in coordination with the State Water Board and other relevant state agencies, to facilitate proactive state planning and coordination for pre-drought planning, emergency response, and post-drought management, consistent with SB 552. The interagency task force, called the Drought Resilience Interagency and Partners Collaborative, serves as a public forum with State and non-State agency members to advance drought strategies and continue building resilience to the increasingly arid conditions California faces. More information is available at: <https://water.ca.gov/drip>.

suppliers, and rural communities; and recommendations for improving agricultural water use efficiency and drought planning (Friedman 2018; Hertzberg 2018).

Water users protected under SB 552 include the following:

- **Small Water Supplier:** A community water system serving 15 to 2,999 service connections, inclusive, and that provides less than 3,000 acre-feet of water annually (CWC Section 10609.51(k)) (State of California 2023).
- **Community Water System:** A public water system that serves at least 15 service connections used by yearlong residents or that regularly serves at least 25 yearlong residents of the area served by the system, as defined in HSC Section 116275(i) (State of California 2024) and Section 10609.51(a) (State of California 2023).
- **State Small Water System:** A system for the provision of piped water to the public for human consumption that serves at least five, but not more than 14, service connections and does not regularly serve drinking water to more than an average of 25 individuals daily for more than 60 days out of the year, as defined in HSC Section 116275(n) (State of California 2024) and Section 10609.51(m) (State of California 2023).
- **Domestic Well:** A groundwater well used to supply water for the domestic needs of an individual residence or a water system that is not a public water system and that has no more than four service connections, as defined in HSC Section 116275(n) (State of California 2024) and Section 10609.51(d) (State of California 2023).
- **Nontransient Noncommunity Water System:** A public water system that is not a community water system and that regularly serves at least 25 of the same persons over six months per year, as defined in HSC Section 116275(k) (State of California 2024) and Section 10609.51(f) (State of California 2023).

For the water users protected under SB 552, this County DRP addresses water shortage vulnerabilities for domestic wells and SSWSs. Other water users protected under SB 552 not included in this County DRP have separate requirements to address water shortage vulnerabilities (Hertzberg 2021).

1.2.1 County Agency Requirements

This plan fulfills County requirements for preparation of a plan that includes potential drought and water shortage risk and proposed interim and long-term solutions for domestic wells and SSWS stems within the County's jurisdiction (CWC Section 10609.70 [State of California 2022a]). While measures to protect small water suppliers and nontransient noncommunity water systems are not within the scope of this document, this plan considers integration opportunities consistent with the intent of SB 552. Applicable County requirements are:

- Establish a standing County Drought and Water Shortage Task Force (CWC Section 10609.70(a) [State of California 2022a])

- Develop a plan that considers, at a minimum, each of the following (CWC Section 10609.70(b) [State of California 2022a]):
 - 1) Consolidations for existing water systems and domestic wells
 - 2) Domestic well drinking water mitigation programs
 - 3) Provision of emergency and interim drinking water solutions
 - 4) An analysis of the steps necessary to implement the plan
 - 5) An analysis of local, State, and federal funding sources available to implement the plan

1.2.2 State Agency Involvement and Implementation

SB 552 defined a series of requirements for the State Water Board and DWR (Hertzberg 2021). These include the following:

State Water Resources Control Board (CWC Section 10609.70(c) [State of California 2022a]):

The state board shall work with counties, groundwater sustainability agencies, technical assistance providers, nonprofit organizations, community-based organizations, and the public to address state small water systems and domestic well community drought and emergency water shortage resiliency needs, including both of the following:

- (1) Proactive communication to domestic well communities before a drought occurs, such as information on local bottled water and water tank providers.*
- (2) Funding for installation of basic drought and emergency water shortage resiliency infrastructure, such as well monitoring devices.*

California Department of Water Resources (CWC Section 10609.80(a) [State of California 2022b]):

The department shall take both of the following actions to support implementation of the recommendations of its County Drought Advisory Group:

- (1) Maintain, in partnership with the state board and other relevant state agencies, the risk vulnerability tool developed as part of the County Drought Advisory Group process and continue to refine existing data and gather new data for the tool, including, but not limited to, data on all of the following:*
 - (A) Small water suppliers and nontransient noncommunity water systems serving a school.*
 - (B) State small water systems and rural communities.*
 - (C) Domestic wells and other self-supplied residents.*

(2) Update the risk vulnerability tool for small water suppliers and rural communities periodically, by doing all of the following:

(A) Revise the indicators and construction of the scoring as more data becomes readily available.

(B) Make existing and new data publicly available on the California Open Data internet web portal.

(C) In consultation with other relevant state agencies, identify deficits in data quality and availability and develop recommendations to address these gaps.

(b) (1) The department, in collaboration with the state board and relevant state agencies, shall establish a standing interagency drought and water shortage task force to facilitate proactive state planning and coordination, both for predrought planning and post-drought emergency response, to develop strategies to enhance collaboration between various fields, and to consider all types of water users.

(2) The interagency drought and water shortage task force shall include representatives from local governments, community-based organizations, nonprofit technical assistance providers, the public, and experts in land use planning, water resiliency, and water infrastructure.

1.3 Purpose of Placer County Drought Resilience Plan

This County DRP documents how the County, Task Force members, and other entities with water supply and drought management responsibilities intend to address water supply vulnerabilities of water users protected under SB 552 in the County. It is a single document for ease of reference and future updates. It describes the water shortage vulnerabilities present in the County, the responses to identified vulnerabilities, and the policy, financial, and regulatory considerations necessary for the implementation of the County DRP. Implementation of the County DRP is led by the County Office of Emergency Services in close coordination with other departments, including the Community Development Resource Agency, the County Department of Public Works (County Public Works), and the County Department of Environmental Health (County Environmental Health). In addition, the Platte County Water Agency (PCWA) will support the County with County DRP Implementation.

This DRP was developed by the County with funding and technical support provided by DWR's Drought Resilience Planning Assistance Program and conforms to the legislative requirements of SB 552.

1.4 Placer County Overview

Placer County is located in Northern California and contains six incorporated cities and towns, including the County seat in Auburn (County of Placer n.d.), and is home to the Sierra Nevada Mountain Range (EDD 2024), national forest land, and North Lake Tahoe (County of Placer n.d.). It is located in the ancestral homeland of the Washoe, Nisenan (Raney 2024), and Miwok people (UAIC n.d.).

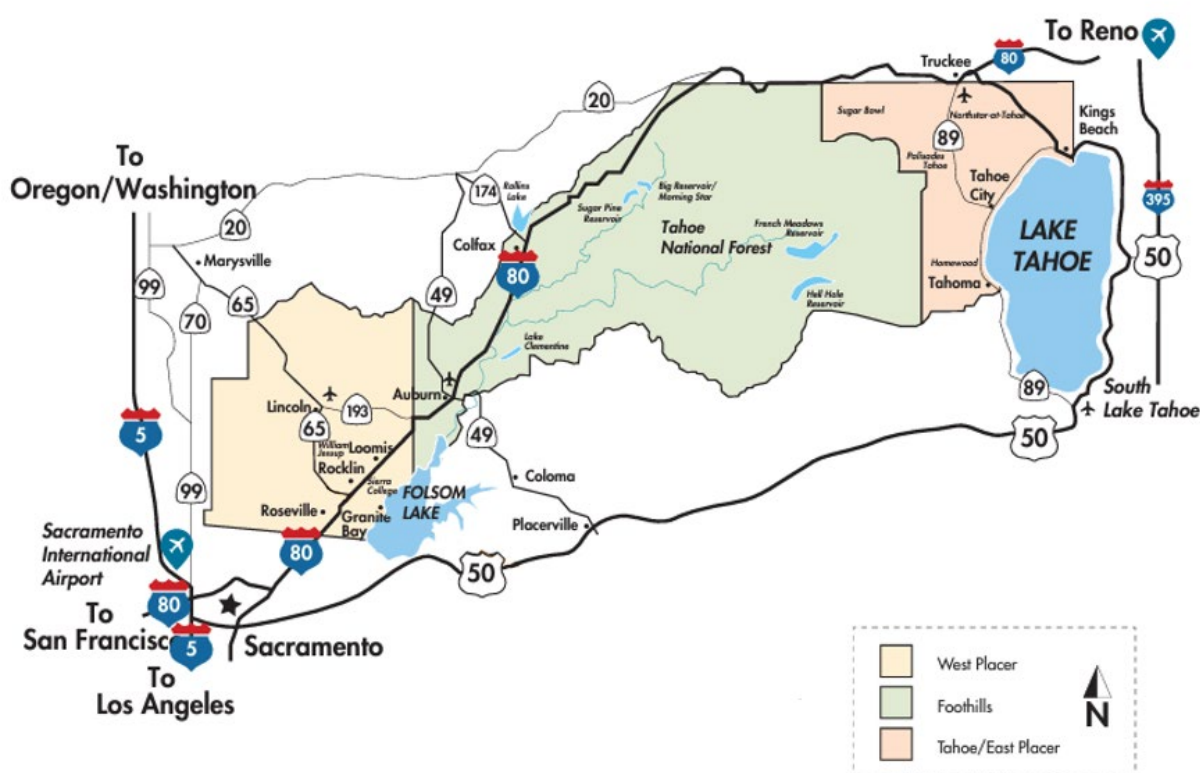
1.4.1 Demographics

Selected demographics of the County are summarized below per the 2020 Census and 2023 American Community Survey (ACS) (USCB 2023c), and Esri (Esri 2024).

- **Population:** The County is home to 404,739 people (USCB 2023c), and includes the incorporated areas of Auburn, Colfax, Lincoln, Roseville, Rocklin, and the Town of Loomis.
- **Age:** The County has a median age of 42.4. Around 21.5 percent of the population is under 18 years old, while 21.1 percent is 65 years and over (USCB 2023b).
- **Ethnicity:** The three largest ethnic groups in the County are White (69.7 percent), two or more races (14.9 percent), and Asian (9.8 percent) (USCB 2023a).
- **Income:** The median household income of the County, per the Esri forecast data, is \$107,851 and projected to be \$120,507 in 2028. The per capita income is \$55,843 and projected to be \$63,792 in 2028 (Esri 2024).
- **Education:** The percent of the population in the County with a Bachelor's degree or higher is 44.3, compared with the State average of 37.5 percent (USCB 2023c).
- **Poverty Level:** The County has a 6.4 percent poverty rate, as compared with the 12 percent rate for the state. Poverty in the County is split similarly across all age groups— younger than 18, 18 to 64, and 65 or older—with a 5.3, 6.7, and 6.9 percent rate, respectively (USCB 2023c).

1.4.2 Geography

The County has three primary regions: West Placer, encompassing the Sacramento Valley and western Sierra Nevada foothills; the Foothills, encompassing the Sierra Nevada foothills east of the intersection of Interstate 80 and State Route 193; and East Placer, encompassing the high Sierra Nevada around the north side of Lake Tahoe (County of Placer 2020b). Together, these regions can be seen in Figure 1-1, and include suburban areas, national forest, rivers, and lakes.



Adapted from: County of Placer 2020b

Figure 1-1. Geographic Regions in Placer County

1.4.2.1 Surface Water Hydrology

This County DRP applies the U.S. Geological Survey's (USGS) Hydrologic Unit Codes (HUC) system. This system was developed to classify and manage watersheds across the United States, with the hierarchy indicated by the number of digits in the code. This system organizes watersheds into six levels of classification within six two-digit fields, each representing a different scale of hydrologic units. The fourth level of classification – referred to as HUC 8 – has been applied to this County DRP for planning purposes. The County includes a portion of seven level-8 hydrologic unit code (HUC-8) basins. These include the Upper Bear, Upper Coon–Upper Auburn, and Lower American watersheds in West Placer, the Upper Bear and North Fork American watersheds in the Foothills, and the Upper Yuba, Truckee, and Lake Tahoe watersheds in East Placer, as depicted in Figure 1-2.

Primary land cover in these basins within the County includes evergreen forest, shrub, and grassland, with a minimal amount of developed land. Due to the partial inclusion of Lake Tahoe, a small portion of the County's land is classified as open water (Stroud Water Research Center 2024). Other major lakes and reservoirs include Folsom Lake, French Meadows Reservoir, Hell Hole Reservoir, Camp Far West Reservoir, Rollins Reservoir, Lake Combie, and Lake Valley Reservoir. Major rivers include the North Fork and Middle Fork of the American River, the Yuba

River, and the Truckee River (USGS n.d.). This includes the headwaters for the North and Middle Fork of the American River.

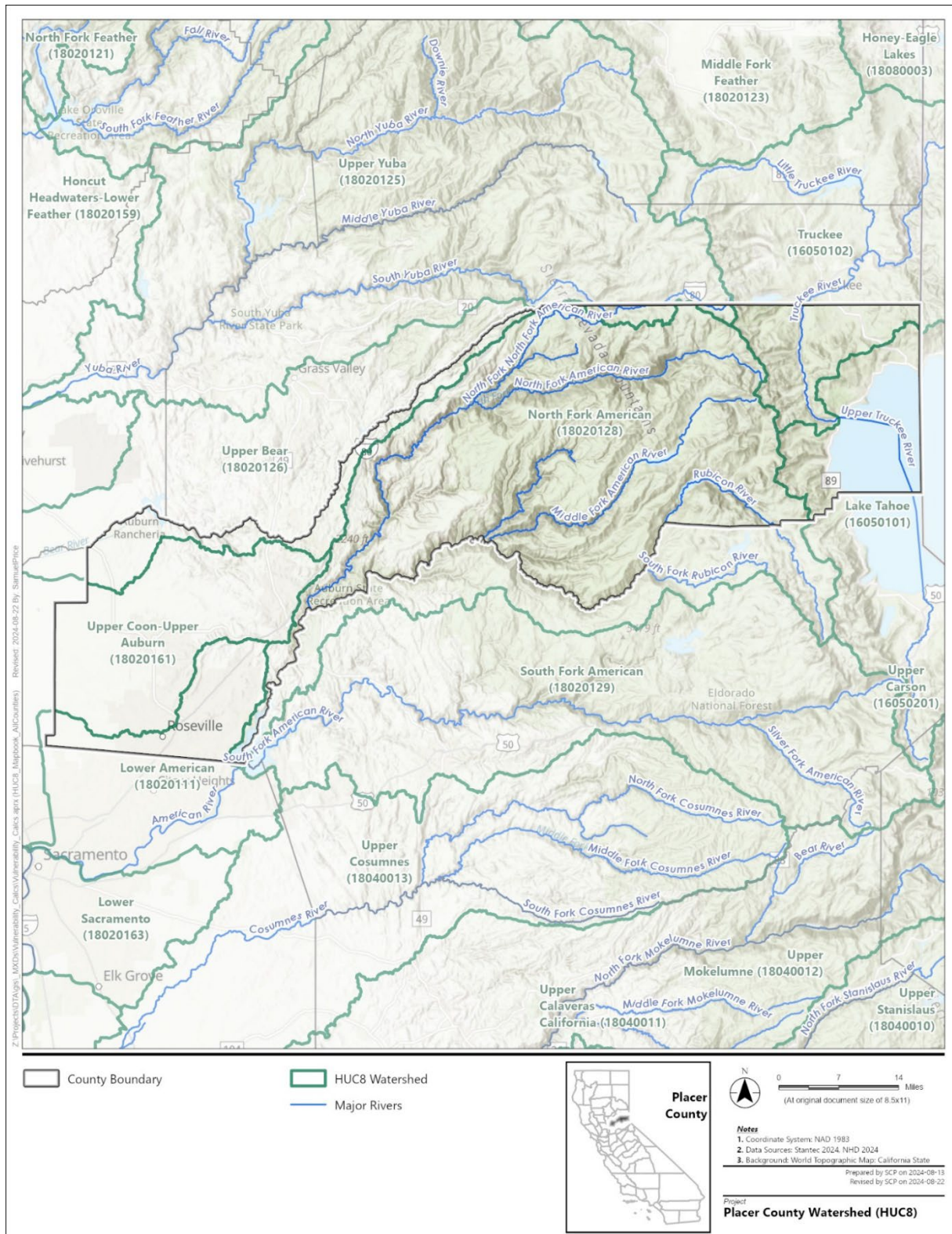


Figure 1-2. Hydrologic Subregions Within Placer County

1.4.2.2 *Precipitation*

Precipitation occurs at varying frequencies across the County. Lincoln, a station in West Placer, recorded an annual total of 21.9 inches in water year (WY) 2024, and 29.8 in WY2023. Greek Store in the Foothills received 59.2 inches in WY2024 and 84.8 inches in WY2023, and Palisades Tahoe SNOTEL (Palisades) in East Placer recorded 47.7 inches in WY2024 and 76.3 inches in WY2023. Precipitation in all three regions occurs primarily from October through April to mid-May, with snowfall recorded at Greek Store and Palisades from around December to mid-May and November to mid-May, in the Foothills and East Placer respectively. Maximum snowfall recorded at Greek Store was 80 inches in WY2024 and 133 inches in WY2023; at Palisades it was about 96 inches in WY2024 and 150 inches in WY2023. Snow depth at both stations peaks around March (CDEC 2024).

1.4.2.3 *Topography*

Topography in the County varies across the three regions, as shown in Figure 1-3. West Placer has elevations below 2,000 feet, the Foothills have elevations between 2,000 and 6,000 feet, and East Placer has elevations in the Sierra Nevada Mountain Range primarily between 6,000 and 10,000 feet.

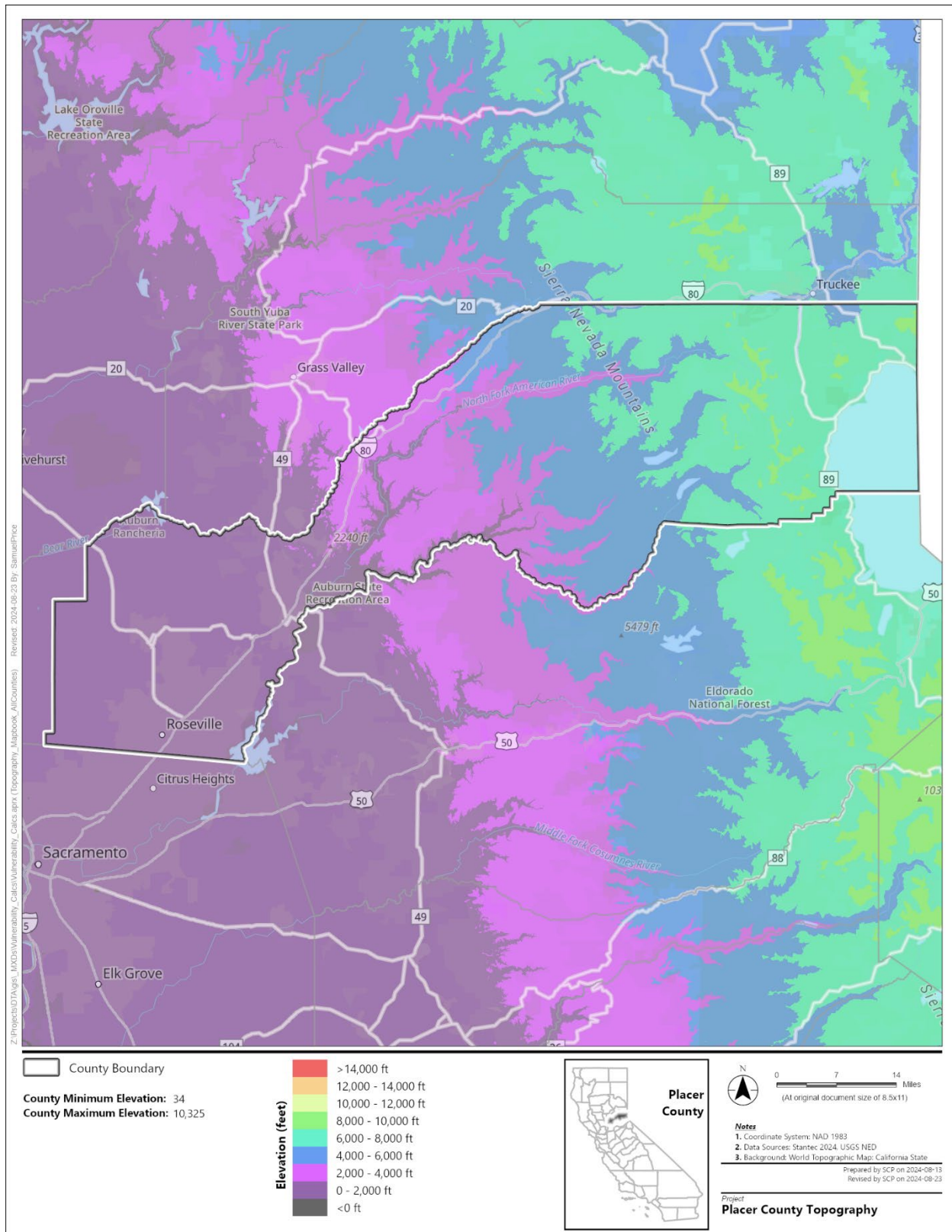


Figure 1-3. Topography of Placer County

1.4.2.4 *Land Use*

Land use in the County, as categorized in Figure 1-4, is primarily urban, agricultural, and forested. The western portion of the County, including the West Placer and Foothills regions, is predominantly urban or agricultural whereas the east portion—East Placer and the eastern region in the Foothills—is forested. Agriculture occurs primarily in the Sacramento Valley (DWR 2023a) with major crops such as forage, rice, almonds, walnuts, and tangerines (USDA 2022).

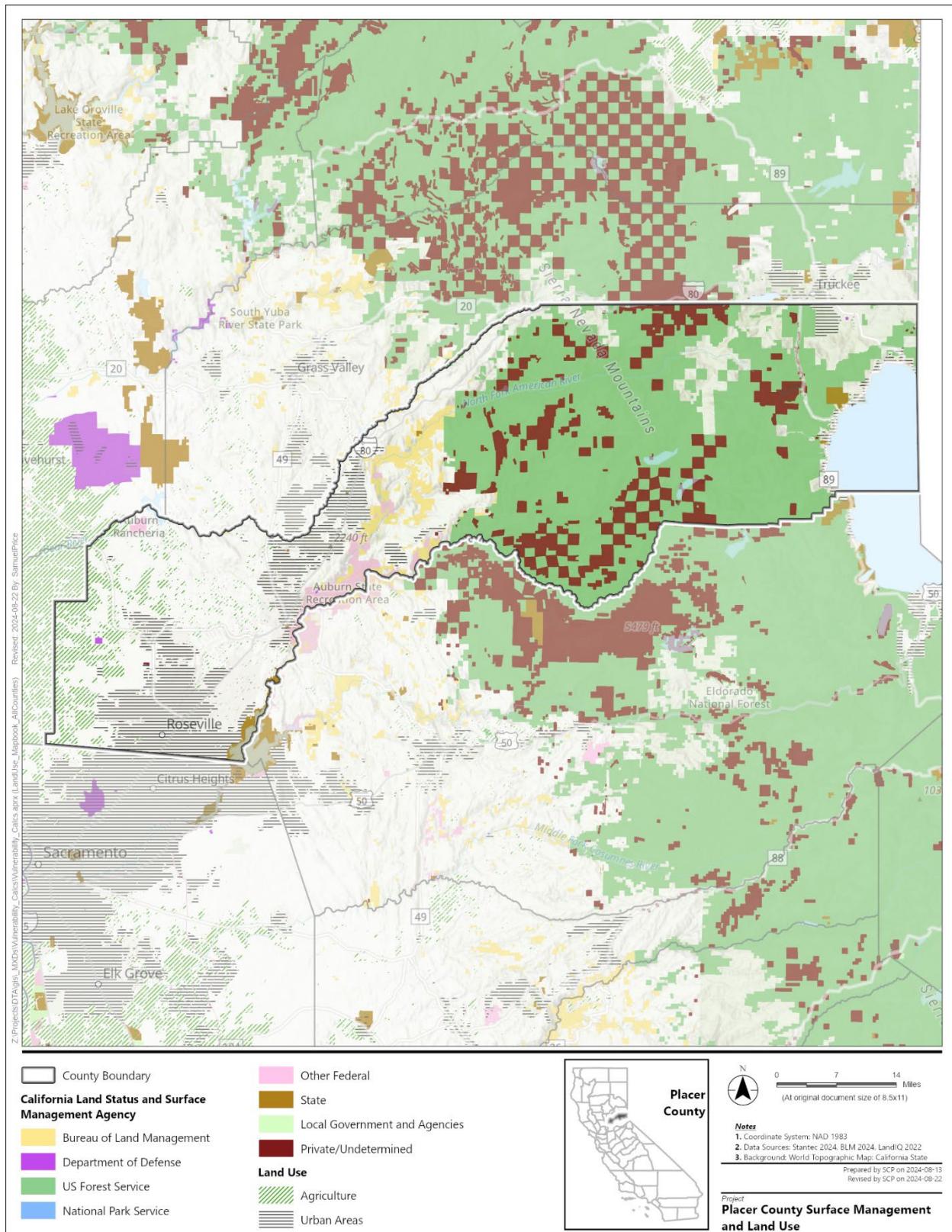


Figure 1-4. Land Use Within Placer County

Geology

The County has varied geology, with the most prevalent being plutonic, marine sedimentary, and volcanic rock forms. West Placer contains primarily marine and nonmarine sedimentary rocks including alluvium, lake, playa, terrace, Pliocene and/or Pleistocene sandstone, shale, and gravel deposits. In the eastern region of West Placer there is Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite, along with undivided Mesozoic volcanic and metavolcanic rocks. The Foothill region is primarily undivided Paleozoic metasedimentary rocks, undivided Mesozoic volcanic and metavolcanic rocks, and volcanic rocks. Geology in East Placer is primarily volcanic rock (California Department of Conservation 2013a and 2013b). Major geologic features include the Sierra Nevada Mountain Range and northern Lake Tahoe.

1.4.3 Water Landscape: Supply, Use, and Management

Water supplies for domestic, industrial, agricultural, and environmental uses within the County are described below:

1.4.3.1 Water Supplies

- **Groundwater:** Groundwater resources in the County are sourced from either one of five groundwater basins, or from aquifers in fractured rock areas. Groundwater contributes a smaller portion of total available water resources than surface water and is described as lower quality than surface water supplies (Crawford Multari & Starr et al. 1994).
- **Surface Water:** PCWA is the primary water purveyor in the County and has many surface water sources, including the Yuba River, Bear River, American River (PCWA 2021), and the French Meadows and Hell Hole Reservoirs as part of the Middle Fork American River Project (PCWA 2023). There are also available supplies through pre-1914 water rights and contracts with the U.S. Bureau of Reclamation for the Central Valley Project (PCWA 2021).

1.4.3.2 Water Uses

- **Agriculture:** The County includes approximately 85,000 acres of farmland used primarily for growing forage, rice, almonds, walnuts, and tangerines, and for grazing cattle, sheep, and goats (USDA 2022). Agriculture is focused in the Sacramento Valley–North American subbasin in West Placer.
- **Municipal and Domestic:** The County is supported by 126 public water systems (State Water Board n.d.[a]), approximately 12,600 domestic wells, and seven SWSs (DWR 2024b). 42 of the public water systems are managed by SWRCB and the remaining 90 are regulated by the County.

1.4.3.3 Water Management Actions

- **Long-Term Surface Water Supply Reliability Planning:** PCWA facilitates county-wide planning efforts to maintain and enhance water supply reliability throughout the County

with renewable water supplies. This includes the County-Wide Master Plan, which identifies, evaluates, tracks, and funds water needs throughout the County. The County-Wide Master Plan is an online project database of potential projects that identify and address water needs in the County. When prioritizing projects in the CWMP, many factors are included such as infrastructure and supply reliability, efficiency, and if the project is in an unserved area.

- **Groundwater Sustainability Plan (GSP):** The County includes a portion of one high-priority subbasin (DWR 2022), the Sacramento Valley–North American subbasin, which is managed by the West Placer Groundwater Sustainability Agency (WPGSA) in accordance with the Sustainable Groundwater Management Act (WPGSA 2024), including submission of a GSP in 2022 (DWR 2024a). Participating members of WPGSA include the County, the cities of Roseville and Lincoln, Placer County Water Agency, and the California American Water Company (WPGSA 2024; DWR 2024c).
- **Recycled Water Initiatives:** New development within Placer County has been planned to use recycled water for landscape irrigation in an effort to reduce demand on potable supplies (which are primarily supplied by surface water). At this time, the County is evaluating the requirements and costs associated with potentially becoming a recycled water retailer to these proposed new developments. The recycled water service areas are primarily in the eastern portion of the county and consist of the Sunset Area, Dry Creek Area, and Regional University Area. One or more specific plan areas are located within each recycled water service area. In addition, there are two recycled water customers in the County's Dry Creek Area who currently receive recycled water service from the City of Roseville. The County intends to become the service provider for these customers as well. As these recycled water initiatives would primarily offset surface water use in more urban areas of the County, the benefit to groundwater supplies of domestic wells and SSWS would likely be limited.
- **Drought Preparedness:** Water conservation in the County Code of Ordinances includes direction for all new and existing single-family, multi-family, and public use spaces to have water-saving devices installed (County of Placer 2024). Prior conservation measures at the County level have included reduction of irrigation and manual watering, inspecting irrigation and watering systems, prioritizing correction of leaks, adjusting park watering schedules, using automated irrigation control, and using water-reduction lawn maintenance practices (County of Placer 2014).

1.4.3.4 *Placer County Water Agency*

PCWA is the primary water resources agency for the County, established in 1957 under the Placer County Water Agency Act and governed by an independently elected five-member Board of Directors. PCWA's mission centers on providing reliable water and energy resources within the County while acting as a steward of the region's natural systems.

PCWA plays a central role in supplying water across the County through a portfolio of surface water, groundwater, and conveyance systems. The agency provides retail and wholesale treated and untreated water to cities, water districts, agricultural users, and rural customers, and supports regional water reliability through integrated planning and partnerships. A cornerstone of PCWA's water and energy portfolio is the Middle Fork American River Project, a major multipurpose system that provides water supply, hydroelectric power, recreation, and environmental benefits to communities in County and the broader region. In recent years, PCWA has advanced a capital improvement and planning program focused on renewing aging infrastructure, expanding treatment capacity, and improving drought resilience.

While PCWA primarily serves communities not covered by the DRP, it is involved in several programs that could involve domestic wells and SSWS.

- PCWA is actively developing consolidation projects in the County, which are discussed in Section 5.4.
- The PCWA Financial Assistance Program provides grants and loans to eligible public water agencies and districts in Placer County to support projects that improve water supply reliability, infrastructure condition, conservation, and watershed stewardship. Projects are proposed and prioritized through PCWA's County-Wide Master Plan, which guides funding decisions based on regional benefits and strategic objectives.
- As PCWA focus is county-wide, it can support water supply reliability initiatives for domestic well and SSWS communities even if they do not receive water from PCWA through technical assistance and advocacy.

1.4.3.5 *Groundwater Detail*

The County contains five Bulletin 118 groundwater basins: the Sacramento Valley–North American subbasin (5-021.64) and the Tahoe Valley–Tahoe West (6-005.02), Tahoe Valley–Tahoe North (6-005.03), Martis Valley (6-067), and Olympic Valley (6-108) basins. Of the five basins, the Sacramento Valley–North American Subbasin has been classified as a high-priority basin under DWR's Basin Prioritization process. The remaining four basins have been classified as very low priority. Groundwater regions outside the five basins receive water from fractured rock aquifers (DWR 2024b).

Basin Prioritization is a technical process that applies eight components as identified in CWC Section 10933(b) for California's 515 groundwater basins (State of California 2019b). These classifications determine which provisions of the California Statewide Groundwater Elevation Monitoring (CASGEM) and the Sustainable Groundwater Management Act (SGMA) apply. Passed in 2014, SGMA represents a statewide framework to protect groundwater resources over the long term. SGMA led local public agencies in medium and high-priority basins to form groundwater sustainability agencies (GSA) and prepare GSPs (State of California 2019a).

The North American Subbasin overlays portions of Placer County, Sacramento County and Sutter County and includes five GSAs. Two of the five GSAs fully or partially overlay Placer

County: West Placer GSA and South Sutter Water District GSA. Formed in 2017, the West Placer GSA is composed of the cities of Roseville and Lincoln and Placer County Water Agency, and in participation with the California American Water Company (WPGSA 2024; DWR 2024c). The South Sutter Water District GSA was formed in 2017 by South Sutter Water District. Subbasin management is performed through the coordinated efforts of the five GSAs via the North American Subbasin GSP. Activities of this GSP include expansion of conjunctive use, coordination with local policy makers, education and awareness efforts, and monitoring 41 groundwater wells. The monitoring wells within the County limits are plotted in Figure 1-5.



Note: Only portions of the County with monitoring wells are shown

Source: DWR 2022

Figure 1-5. Groundwater Sustainability Agency Monitoring Wells in Placer County

1.4.4 Water Systems Within Placer County's Jurisdiction

California Water Code Section 10609.70 requires the County DRP to include domestic wells and SSWs (State of California 2022a). The domestic wells and SSWs within the County are depicted in Figure 1-6; their locations relative to basin type are summarized in Table 1-1. These presentations include domestic wells that are outside of, but within groundwater basins that cross County limits. Of the approximately 14,000 domestic wells in the County, more than 90 percent are within a fractured rock area.

Table 1-1. Summary of Groundwater Basins, Domestic Wells, and State Small Water Systems in Placer County

Bulletin 118 Basin ID	Groundwater Basin Name	SGMA Priority	Domestic Wells Drilled After 19771	Domestic Wells Drilled Before 19771	State Small Water Systems	Domestic Wells in Basin but Outside County
5-021.64	Sacramento Valley–North American	High	691	89	0	1,955
6-005.02	Tahoe Valley–Tahoe West	Very Low	34	11	2	18
6-005.03	Tahoe Valley–Tahoe North	Very Low	5	2	0	0
6-067	Martis Valley	Very Low	8	0	0	253
6-108	Olympic Valley	Very Low	3	5	0	0
N/A	Fractured Rock Area	N/A	13,280	1,323	5	N/A
Total			14,021	1,430	7	2,226

Note

¹ Information presented in this table and figure are based on well completion reports. Geographic information on well completion reports may be inaccurate and/or place the well at the incorrect well location. As a result, the number of domestic wells may be overestimated.

Key:

N/A = not applicable

SGMA = Sustainable Groundwater Management Act

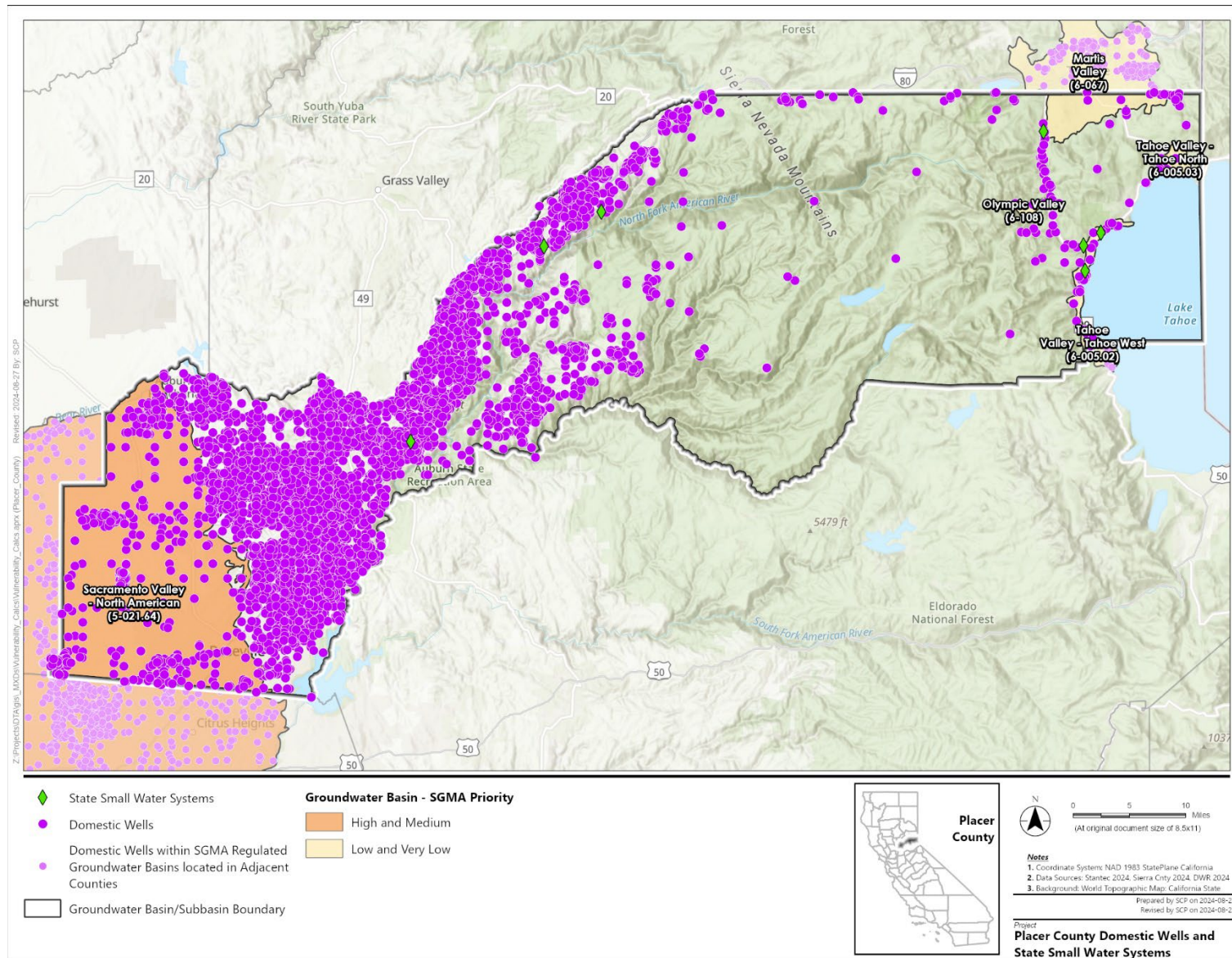


Figure 1-6. Locations of Domestic Wells and State Small Water Systems in Placer County

2.0 County Drought and Water Shortage Task Force

This section describes the Task Force that was established in support of the County DRP and the activities done to communicate and collaborate with interested parties to the County DRP. The Task Force Charter developed for the Task Force is included in Appendix A.

2.1 Purpose and Goals

The purpose of the County Task Force Charter (Charter) is to:

- Establish the authority, scope, and structure of the Task Force, a standing body established pursuant to SB 552 and CWC Section 10609.70 (State of California 2022a).
- Define the organization structure of the Task Force for development, revision, and implementation of the Placer County Drought Resilience Plan (County DRP), as described further in Section 2.3.
- Describe additional Task Force communication and engagement efforts related to the County DRP, as described in Section 2.4.

The Task Force seeks to achieve the following goals:

- Facilitate drought and water shortage preparedness for domestic wells and SSWSs within the County's jurisdiction.
- Facilitate regular coordination and communication among the staff of relevant County departments, local water agencies, local water suppliers, GSAs, and others representing the concerns of domestic wells and SSWS users.
- Develop a County DRP that supports drought and water shortage preparedness and responsiveness for domestic wells and SSWSs within the County's jurisdiction.
- Support implementation of the County DRP.

2.2 Legislative Direction

In September 2021, SB 552 (Hertzberg) was enacted to address, among other things, water shortage risks faced by small water suppliers and domestic well users during drought and water shortage events. Under SB 552, counties are required to prepare a County DRP to achieve meaningful and long-term improvements in water resilience for domestic well and SSWS communities (Hertzberg 2021).

Passage of SB 552 mandates establishment of a standing Task Force to cultivate the continued practices of drought planning and improving long-term water resilience (Hertzberg 2021).

Composition of the Task Force is guided by CWC Section 10609.70 (a)(1) and (2) (State of California 2022a):

(a)(1) A county shall establish a standing county drought and water shortage task force to facilitate drought and water shortage preparedness for state small water systems and domestic wells within the county's jurisdiction, and shall invite representatives from the state and other local governments, including groundwater sustainability agencies, and community-based organizations, local water suppliers, and local residents, to participate in the task force.

(2) In lieu of the task force required by paragraph (1), a county may establish an alternative process that facilitates drought and water shortage preparedness for state small water systems and domestic wells within the county's jurisdiction. The alternative process shall provide opportunities for coordinating and communicating with the state and other local governments, community-based organizations, local water suppliers, and local residents on a regular basis and during drought or water shortage emergencies.

The County Task Force has been established pursuant to CWC Section 10609.70(a)(2) (State of California 2022a). The composition, roles, and responsibilities defined in this Charter are intended to fulfill the County's obligations under SB 552.

2.3 Organizational Structure

The Task Force is an authorized standing body that, in coordination with the Project Coordination Team (PCT), focuses on water shortage vulnerabilities and water supply reliability of domestic wells and SSWS communities. Figure 2-1 shows the organization of the Task Force and PCT.

2.3.1 Project Coordination Team

The PCT is composed of the County offices and departments responsible for preparation, revision, and implementation of the County DRP. The PCT is led by the County Office of Emergency Services (OES). Additional participating County departments include County Environmental Health and County Public Works.

Unless otherwise agreed, County OES leads engagement efforts with the County Board of Supervisors. The PCT may be supported by additional entities as needed.

The PCT's responsibilities include:

- Lead and manage preparation and revision of the County DRP
- Convene, collaborate, and respond to informational needs of the Task Force in relation to the preparation, revision, implementation, and adoption of the County DRP
- Support the Task Force in the conduct of annual and emergency meetings

- Coordinate revision and adoption of the County DRP with the Board of Supervisors consistent with County policies and regulations
- Lead and coordinate implementation of the County DRP by County agencies and other partner agencies
- In collaboration with the Task Force, lead communication and engagement activities with County DRP interested parties
- Evaluate and accept non-County parties as PCT members where such parties serve as implementation partners of the County DRP

2.3.2 Drought and Water Shortage Task Force

The Task Force, whose makeup is shown in Figure 2-1, is an authorized standing body established pursuant to CWC Section 10609.70(a)(2) (State of California 2022a) and formed administratively by the PCT. The Task Force is an advisory and consultative entity to the PCT.



Figure 2-1. Structure of Parties Involved in Placer County Drought and Water Shortage Task Force

2.4 Communication and Engagement

To facilitate communication and collaboration both on a regular basis and during droughts or water shortage emergencies, County OES would implement a series of communication and engagement activities. These activities provide opportunities for broad community awareness among County DRP interested parties and serve to support the County in fulfilling the requirements of CWC Section 10609.70(a)(2) (State of California 2022a). The communication and engagement activities to be completed by County staff include:

- **Website:** County OES has established a [webpage](#) to support distribution and dissemination of information associated with the County DRP. The webpage includes general information that includes:
 - Background on SB 552, including related links such as:
 - DWR Direct Technical Assistance Program
 - DWR Water Shortage Vulnerability Explorer (WSVE) Tool
 - Meeting materials and summaries, information materials, and draft documents
 - Contact information for County staff
- **Notifications:** The County would use multiple channels to notify stakeholders and interested parties about County DRP updates including via newsletter, social media (Facebook, NextDoor, X.com), press releases, the County DRP webpage, and community bulletin boards.
- **Communications and Engagement Activities:** County staff would provide periodic updates to the Board of Supervisors, offering milestone updates and opportunities for public engagement to ensure broad-based input and feedback. Public outreach efforts would include town hall meetings, workshops, and informational presentations to keep the community informed and engaged.
- **Community Feedback:** To foster an open dialogue with the community, the Task Force would establish a feedback mechanism through the County website where residents can submit their concerns, suggestions, and questions regarding the County DRP. This feedback will be reviewed regularly by Task Force members and will inform the decision-making process to better address the community's needs and priorities.
- **Educational Campaigns:** The Task Force, in collaboration with the County Public Information Office and water purveyor partners, would create educational campaigns aimed at raising awareness about water conservation, drought preparedness, and sustainable water management practices. These campaigns will include informational materials, public service announcements, links to additional information on the website, and partnerships with entities such as school districts, special districts, municipalities, Tribal entities, and community partners to increase awareness and promote best practices.

During the development of the County DRP, the following communication and engagement strategies were completed pursuant to CWC Section 10609.70(a)(2) (State of California 2022a).

- Four meetings were held with the Task Force to provide incremental feedback on the County DRP development process.
- A stakeholder presentation was given to the Fire Safe Alliance meeting.

- The Draft DRP was posted on the County DRP Website during development.

3.0 Drought and Water Shortage Risk Assessment

Consistent with CWC Section 10609.70(b), a drought and water shortage risk assessment (risk assessment) was prepared to inform development of the County DRP (State of California 2022a). This risk assessment evaluated how potential hazards impact the County's domestic well and SSWs to characterize the vulnerability of domestic wells and SSWs to water supply shortage. The outcomes from the risk assessment helped inform response plans with short-term actions to employ when a water supply shortage occurs and long-term mitigation strategies and actions that reduce the vulnerability to water shortages. This chapter presents the risk assessment results for Placer County.

The risk assessment presented in this County DRP does not replace the regulatory requirements of the Federal Emergency Management Agency (FEMA). The County DRP could make the County eligible for FEMA's Pre-Disaster Mitigation and Hazard Mitigation Grant programs. However, if a jurisdiction is also seeking approval of the drought and/or water shortage risk assessment within the Local Hazard Mitigation Plan, it should follow the requirements outlined in the FEMA *Local Mitigation Planning Handbook* (FEMA 2013).

3.1 Terminology

The County DRP adapted the following definitions from the FEMA *Local Mitigation Planning Handbook* (FEMA 2013) within the context of drought and water shortage planning:

- **Community Assets:** The people, structures, facilities, and systems that have value to the community. The minimum assets considered as part of SB 552 include domestic wells, SSWs, and populations relying on those water supplies (Hertzberg 2021).
- **Hazard:** A source of harm or difficulty created by a meteorological, environmental, geological, hydrological, or other event. In the context of SB 552, hazards are the natural, human-made, and social processes that can lead to water shortages in the County (Hertzberg 2021).
- **Impact:** The consequences or effects of a hazard related to drought and water shortages on the community and its assets.
- **Risk:** The potential for damage, loss, or other impacts (e.g., water shortage) created by the interaction of natural hazards with community assets and their physical and social vulnerabilities.

- **Risk Assessment:** A product or process that collects information and assigns values to risks for the purpose of informing priorities, developing or comparing courses of action, and informing decision making.
- **Vulnerability:** Characteristics of community assets or populations that make them susceptible to damage from a given hazard. It includes both physical vulnerability and social vulnerability.

3.2 Risk Assessment Methodology

The nature and severity of hazards that can cause water shortages vary at regional and local scales due to differences in conditions such as precipitation patterns, groundwater levels, topography, geology, infrastructure, regulatory frameworks, and other conditions. Communities lacking access to reliable water sources are most vulnerable to water shortage caused by such hazards. To address this, a thorough risk assessment was completed that considered many physical and social hazard indicators. The results and findings of that risk assessment were then used by the County and Task Force to develop actions and strategies to address water shortages (see Chapters 4 and 5).

The risk assessment was completed following the four steps outlined below:

1. **Describe Major Hazards in the County:** Drought, climate change, and water quality hazards were summarized and described.
2. **Complete Draft Risk Assessment using DWR Water Shortage Vulnerability Explorer:** The DWR WSVE Tool was used to (a) identify areas within the County where domestic wells and SSWSs are vulnerable to water supply shortages, and (b) characterize the hazards driving that vulnerability. This information was included in a draft risk assessment. The County and the Task Force reviewed the draft risk assessment, provided feedback, and identified data gaps. Additional details on the WSVE Tool and how it was applied in the risk assessment are included below.
3. **Revise the Draft Risk Assessment:** County and Task Force feedback on the draft risk assessment was used to develop a revised risk assessment.
4. **Incorporate Results of Revised Risk Assessment into County DRP:** Information from the revised risk assessment was included in the County DRP (Section 3.4). Findings from the revised risk assessment were used by the County and Task Force to develop short-term actions and long-term strategies to improve water supply sustainability (Chapters 4 and 5).

Developed by DWR in collaboration with the County Drought Advisory Group (CDAG; see Section 1.2.2 for additional details), the WSVE Tool is an online geospatial tool that assesses hazards based on physical and social vulnerability indicators, which are described in Table 3-1

and 3-2, respectively. These indicators were selected by DWR and the CDAG to reflect the hazards that could make a domestic well or SSWS vulnerable to water supply shortage.

The WSVE Tool calculates both a total physical vulnerability score and a total social vulnerability score, each combining the associated individual indicators. The process used by the WSVE Tool to calculate those total scores is summarized below:

- The total physical vulnerability score was calculated at the Public Land Survey Section² (PLSS) scale by normalizing the indicator value between 0 and 1, with 1 representing the highest possible vulnerability. Normalized scores were multiplied by a weighting factor from 1 to 5 that was assigned by DWR and CDAG to capture how some indicators contribute more to water shortage vulnerability than others.
- The total social vulnerability score was calculated at the Census Block Group³ (CBG) scale by normalizing the indicator value between 0 and 1 and summing the values together without additional weighting.

DWR periodically revises the WSVE Tool to incorporate improved data and updated methodology. Data for the risk assessment was accessed in December 2024 and used the 2024 methodology (DWR 2024b). The detailed methodology describing the WSVE Tool indicators, corresponding values, data sources, and weighting factors is available on the California Natural Resource Agency's Open Data Portal (CNRA 2024).

Table 3-1. Water Shortage Vulnerability Explorer Indicators Used in the Development of Physical Vulnerability Score

Indicator Name ¹	Indicator Description
Climate Change	
Temperature Shift (RC1a)	Projected change in max temperatures by end of century
Saline Intrusion Projected (RC1b)	Spatial extent of projected 1-meter sea-level rise by 2040 into coastal aquifers
Wildfire Risk (RC1c)	Projected area burned by 2035–2064
Current Environmental Conditions and Events	
2024 Precipitation (RC2a)	If 2024 precipitation was less than 70 percent of normal
Consecutive Dry Years (RC2aa)	Count of dry years within the last 5 years (2020–2024)
USFS Wildfire Hazard (RC2b)	USFS wildfire risk severity
Geology (RC2c)	Fractured rock basin within the PLSS

² A Public Land Survey Section is a geographic delineation of an area equivalent to 1 square mile.

³ A Census Block Group is a geographic unit with a population between 600 and 3,000 people that are the smallest geographical unit for which the U.S. Census Bureau publishes data collected from a fraction of households.

Indicator Name ¹	Indicator Description
State Water Board 2025a Water Quality Risk (RC2i)	SAFER Needs Assessment 2024 water quality composite score
Subsidence (RC2d)	Amount of subsidence as measured by remote sensing
Basin Salt (RC2e)	Presence of saltwater intrusion into coastal aquifer
Overdrafted Basin (RC2f)	SGMA critically overdrafted groundwater basin
Chronic Declining Water Levels (RC2g)	Amount of declining groundwater levels over the last 20 years (water years 2003–2023)
Surrounding Land Use (RC2j)	Proportion of irrigated agriculture in PLSS
Infrastructure Susceptibility	
Dry Domestic Well Susceptibility in Basins (RC3a)	Dry well susceptibility
Domestic Well Density in Fractured Rock Areas (RC3c)	Density of Well Completion Reports
Record of Shortage	
Reported Household Outage on Domestic Wells (RC5a)	Presence of 1 or more households with reported outages in PLSS.

Notes:

¹ Abbreviations are included next to Indicator Name (i.e., “RC1a”) for clarity of the underlying methodology

Key:

PLSS = Public Land Survey Section

SAFER = Safe and Affordable Funding for Equity and Resilience Program

SGMA = Sustainable Groundwater Management Act

USFS = U.S. Fish and Wildlife Service

Table 3-2. Water Shortage Vulnerability Explorer Indicators Used in the Development of Social Vulnerability Score

Indicator Name	Indicator Description
Socioeconomic Status	
Poverty Level	Percent of persons living below poverty level
Unemployment	Percent of persons aged 16 years of age or older that are unemployed
Per Capita Income	Per capita income
Language and Education	
Education Attainment	Percent of persons without a high school diploma
English Language Proficiency	Percent of persons who speak little to no English
Demographics	
Elderly Population	Percent of persons 65 years of age or older
Non-Adult Population	Percent of persons 17 years of age or younger

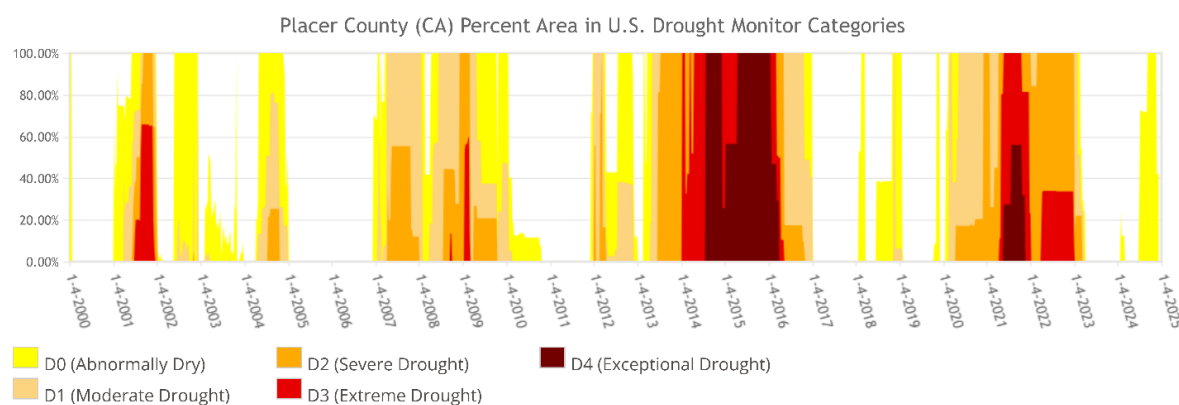
Indicator Name	Indicator Description
Minority Population	Percent of persons that are in a minority population
Disability	Percent of persons 5 years of age or older with a disability
Single-Parent Households	Percent of single-parent households
Housing and Transportation	
Multi-Unit-Housed Population	Percent of persons living in a multi-unit structure
Mobile Home-Housed Population	Percent of persons living in a mobile home
Crowded Conditions	Percent of persons living in conditions with more than 1 person per room
No Vehicle Access	Percent of households with no vehicle available
Race and Ethnicity	
Persons of Color	Percent of persons that identify with a race other than white or identify ethnically as Hispanic or Latino

3.3 Hazards in Placer County

This section summarizes the recent drought, projected climate change, current water quality, and groundwater hazards in the County. Section 3.4 provides more detail on the vulnerabilities related to these hazards.

3.3.1 Drought

The County has experienced all ranges of drought from “Abnormally Dry” to “Exceptional Drought” as well as periods without drought as depicted in Figure 3-1 since 2000. Within the County, drought can both rapidly onset and rapidly diminish, as seen between 2011 to 2018. During this four-year timespan, the County went from nearly drought-free conditions to being entirely in “Exceptional Drought” back to drought-free conditions.



From the U.S. Drought Monitor website, <https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx>, 12-12-2024



Source: National Drought Monitor Center 2024

Figure 3-1. Occurrence of Drought in Placer County**3.3.2 Climate Change**

According to California's Fourth Climate Change Assessment, climate change has increased both average temperatures and the frequency and intensity of heat waves or extreme heat events. While global temperature increases are projected between 1.8 degrees Fahrenheit (°F) and 3.6°F, local observed increases that affect neighborhoods and ecosystems are far more variable and often of greater magnitude. The Sierra Nevada Region Report subsection of the California's Fourth Climate Change Assessment predicted changes over this century to include increased temperatures both at night and during the day in the County, and increased warming from July to September (2.7°F to 10.8°F) in the western region. These expected changes translate into an average daily maximum temperature increase in the County by up to 7.2°F in the western region and 5 to 9°F in the eastern region by the end of the century (Dettinger et al. 2018).

Droughts in California are triggered by a lack of large winter storms, and water shortages are further exacerbated by high temperatures, which increase the evaporative loss of water from soils, rivers, canals, and reservoirs. Drought conditions, particularly when persisting for several years, can cause mental and physical stress in people, reduce the number of workable farm-labor days, and lead to deteriorated air and water quality (Barreau et al. 2017; Greene 2018).

Historical data have shown that daily precipitation extremes have intensified in most areas of the country, including California. As the atmosphere continues to warm, extreme precipitation events could become more frequent as storms can hold about 6 to 7 percent more water for each degree Celsius of warming. Climate model simulations that consider such effects suggest that this trend will continue. Simulations of future climate indicate modest changes in annual precipitation accumulation with some shifts in the seasonality of precipitation that may be relevant for water management, namely, less precipitation from November through January, and possibly more from February through May.

There is also strong evidence that anthropogenic climate change—especially rising temperatures and periodic droughts—have made substantial contributions to the increase in acreage burned in wildfires in the American West. Wildfires can damage infrastructure and cause water quality issues, including those discussed in Section 3.3.3.

3.3.3 Water Quality

Water quality concerns in the County are primarily associated with groundwater supply. Surface water supplies are provided primarily through public water providers whereas groundwater is sourced from many domestic wells.

3.3.3.1 Surface Water

Residents in the County that do not rely on water from PCWA, Nevada Irrigation District (Foster Morrison Consulting and Howell Consulting 2021), or another public provider rely primarily on groundwater obtained through domestic wells, or one of 23 surface water systems and seven

SSWSs (DWR 2024b). These surface water systems have had minimal water quality violations in the last 13 years (State Water Board n.d.[b]).

Groundwater:

Groundwater constituents evaluated with data from wells not used for drinking water in the Sacramento Valley–North American Subbasin (North American Subbasin) as part of the GSP development include arsenic, boron, hexavalent chromium (Chromium-6), iron, manganese, nitrate as nitrogen, and total dissolved solids (TDS). These constituents were selected based on presence in prior studies, combined with potential to impact groundwater health. Of these, five (arsenic, boron, iron, manganese, and TDS) have exceeded the U.S. Environmental Protection Agency’s (EPA) maximum contaminant level (MCL) within the last six years (North American Subbasin GSAs 2021a). As of the WY2023 Annual GSP report, samples from wells not used for drinking water returned TDS and nitrogen levels below their respective minimum thresholds (North American Subbasin GSAs 2024). Water quality analysis in the Martis and Tahoe basins revealed elevated levels of arsenic, boron, molybdenum, and strontium (Fram and Belitz 2012; State Water Board 2025a). A review from 2007 found arsenic, iron, manganese, and TDS historically present in the Olympic Valley basin (HydroMetrics 2007).

Additional information on each constituent is provided below:

- *Arsenic*: This constituent is a metalloid that occurs naturally in the environment, including soils and rock, and is also introduced by anthropogenic activities such as pesticide application and the mining of metals. Ingestion of arsenic via drinking water has led to documented human deaths (ATSDR 2007).
- *Boron*: This constituent occurs naturally in the environment and can also be introduced via sewage, fertilizers, and herbicides. Acute exposure to high doses via ingestion (approximately 66 percent or higher than the average daily intake) has been documented to contribute to death (ATSDR 2010).
- *Chromium-6*: Chromium occurs naturally in the environment and has several forms, including chromium-6. Chromium-6 is listed as a carcinogen by the International Agency for Research on Cancer (ATSDR 2012a).
- *Elevated TDS*: Elevated TDS levels can occur naturally from contact with ions in rocks and soil, and can also be introduced from agricultural practice, arid climate, and the use of de-icing salts. Presence of elevated TDS can lead to drinking water aesthetic issues, crop yield reduction, and stream toxicity (USGS 2019).
- *Iron*: This constituent may enter the environment naturally through mineral dissolution or from human activities such as industrial release and mining. Drinking water may incur taste and color impairments (USGS 2018).
- *Manganese*: Manganese is a naturally occurring constituent in surface and groundwater that may also be introduced from manufacturing releases. There is limited data on the

effects caused by human ingestion (ATSDR 2012b). Introduction to drinking water may impact taste and color (EPA 2024).

- *Nitrate (and nitrite)*: These constituents occur naturally in the environment and can also be introduced via fertilizers, mining, septic and landfill leaks, and animal and industrial waste (among other pathways). Ingestion of nitrates is known to cause methemoglobinemia in infants and may lead to some types of cancer (ATSDR 2017).

3.4 Risk Assessment Results

This section summarizes the risk assessment results, including the County's total physical and social vulnerability scores, followed by discussions of the individual indicators driving physical vulnerability. This information was used to identify the regions of water supply shortage vulnerability described in Section 3.5.

3.4.1 Total Physical Vulnerability and Social Vulnerability Scores

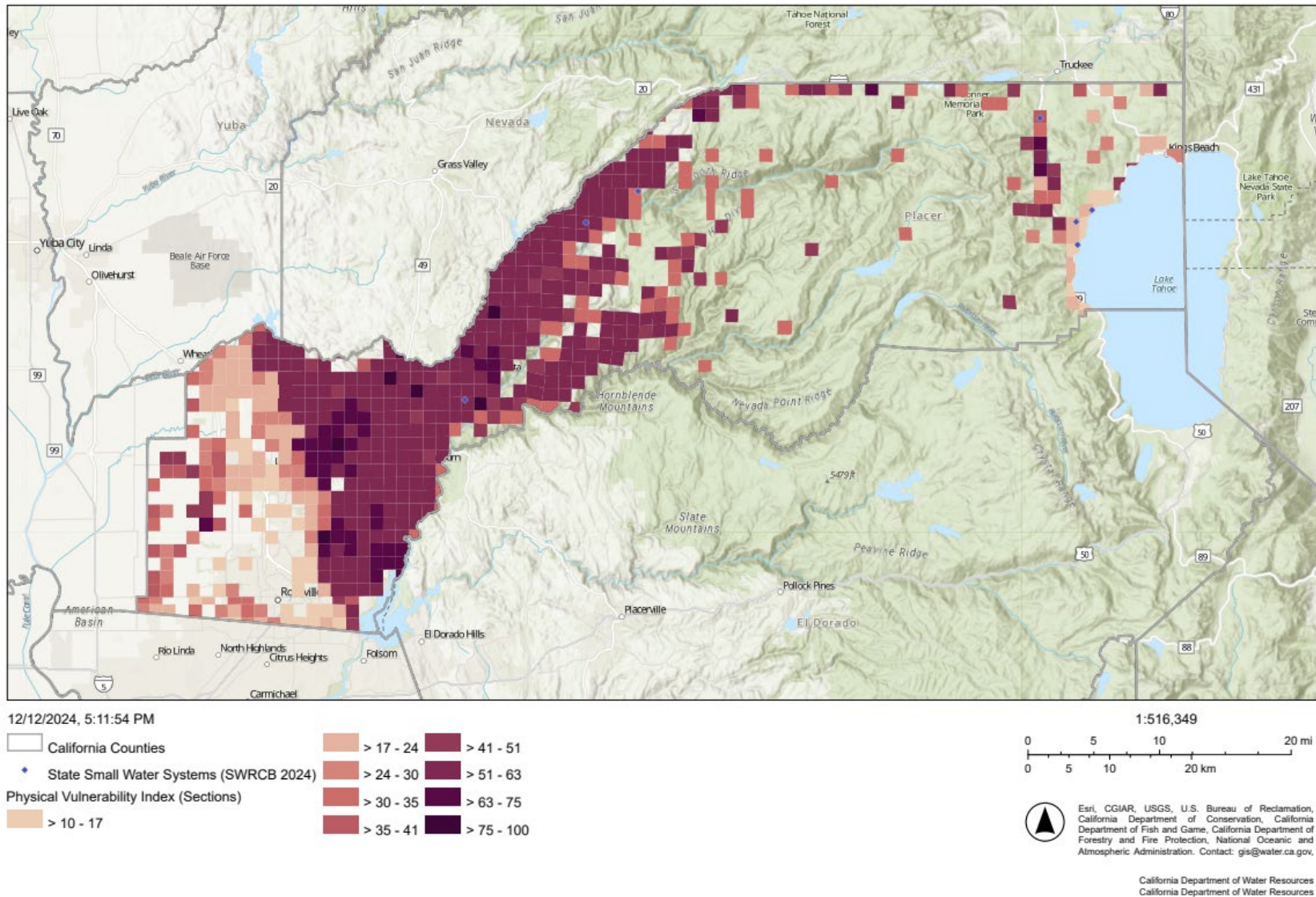
Total physical vulnerability scores within the County are presented in Figure 3-2, with darker shaded areas (or PLSSs) indicating higher physical vulnerability scores. If an area is not shaded, it means there are no domestic wells or SSWs within the PLSS. The Foothills region of the County contains the highest physical vulnerability to water shortage, from northeast of Wheatland through Loomis and Granite Bay, and extending east to Baxter and Michigan Bluff. This area is located outside of the alluvial basins and relies on aquifers in fractured rock areas for water supply. There are also some areas within the North American subbasin and East Placer with high physical vulnerability.

The darker regions in Figure 3-3 display a higher level of intersection of physical vulnerability and location of domestic wells and SSWs within the County. A blue area has a higher physical vulnerability but minimal domestic wells or SSWs, and an orange area has a high presence of domestic wells or SSWs but low physical vulnerability. Short-term actions and long-term mitigation strategies are most likely to be needed in the darker regions due to increased vulnerability to water supply shortages. These regions in the County are similar to those in Figure 3-2, with the most vulnerable region extending through the Foothills from Wheatland through Loomis and Granite Bay, and extending east to Baxter and Michigan Bluff. Generally, towns in the North American Subbasin and the Martis and Tahoe basins have many domestic wells but low physical vulnerability, whereas communities in the fractured rock basins have many domestic wells and high physical vulnerability. The notable exception is the westernmost area of the North American Subbasin just east of Pleasant Grove, where there is high physical vulnerability and are few domestic wells.

In addition to physical vulnerability, water shortage risk in the County was assessed using social vulnerability. An overview of the social vulnerability scores in the County is presented in Figure 3-4, where darker shaded areas indicate higher vulnerability. The regions that present as having the highest social vulnerability are Roseville, Lincoln, Auburn, and North Auburn. Auburn and

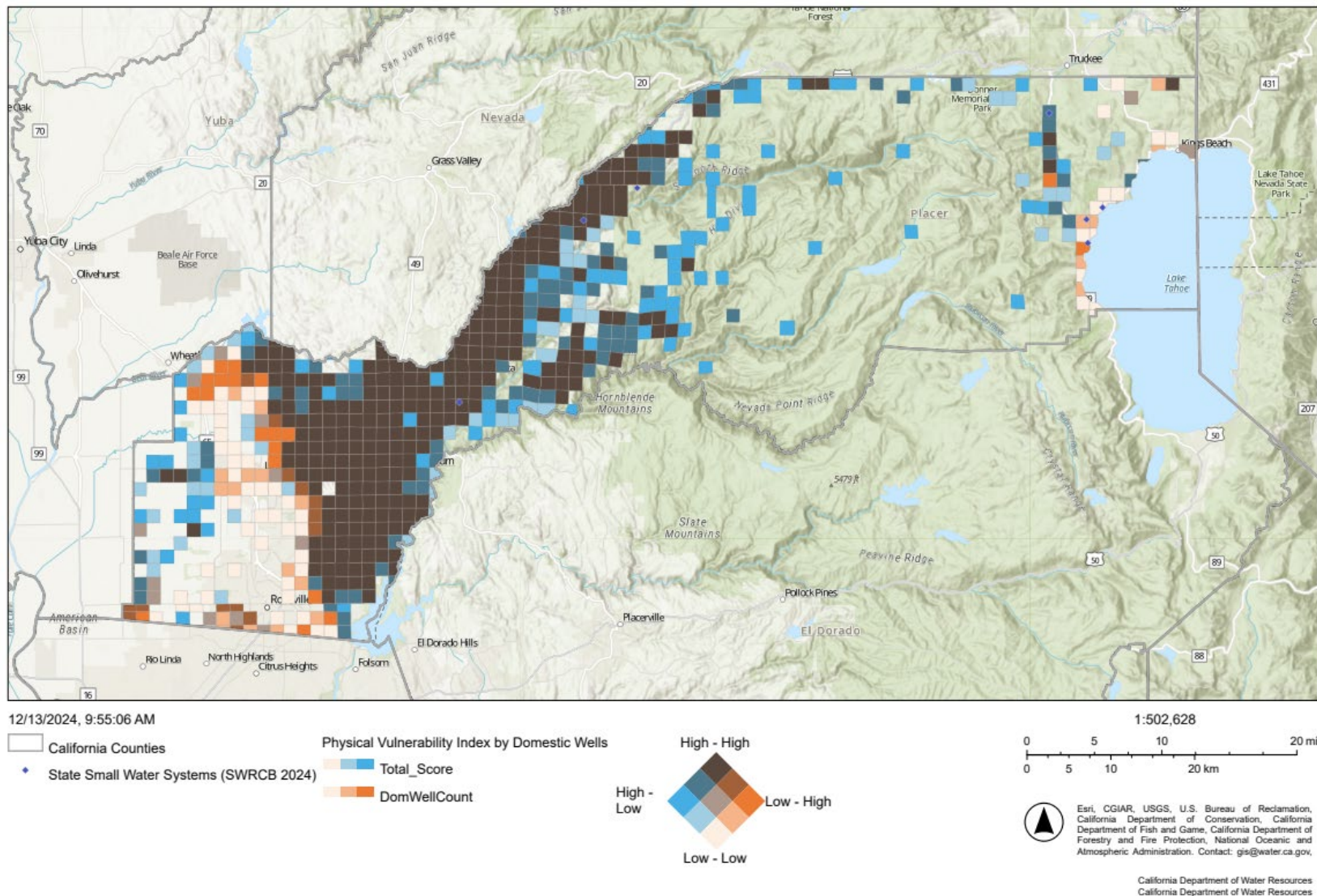
3.0 Drought and Water Shortage Risk Assessment

North Auburn both have a high physical vulnerability and domestic well density as well. The remaining areas in the County have medium-low or low social vulnerability.



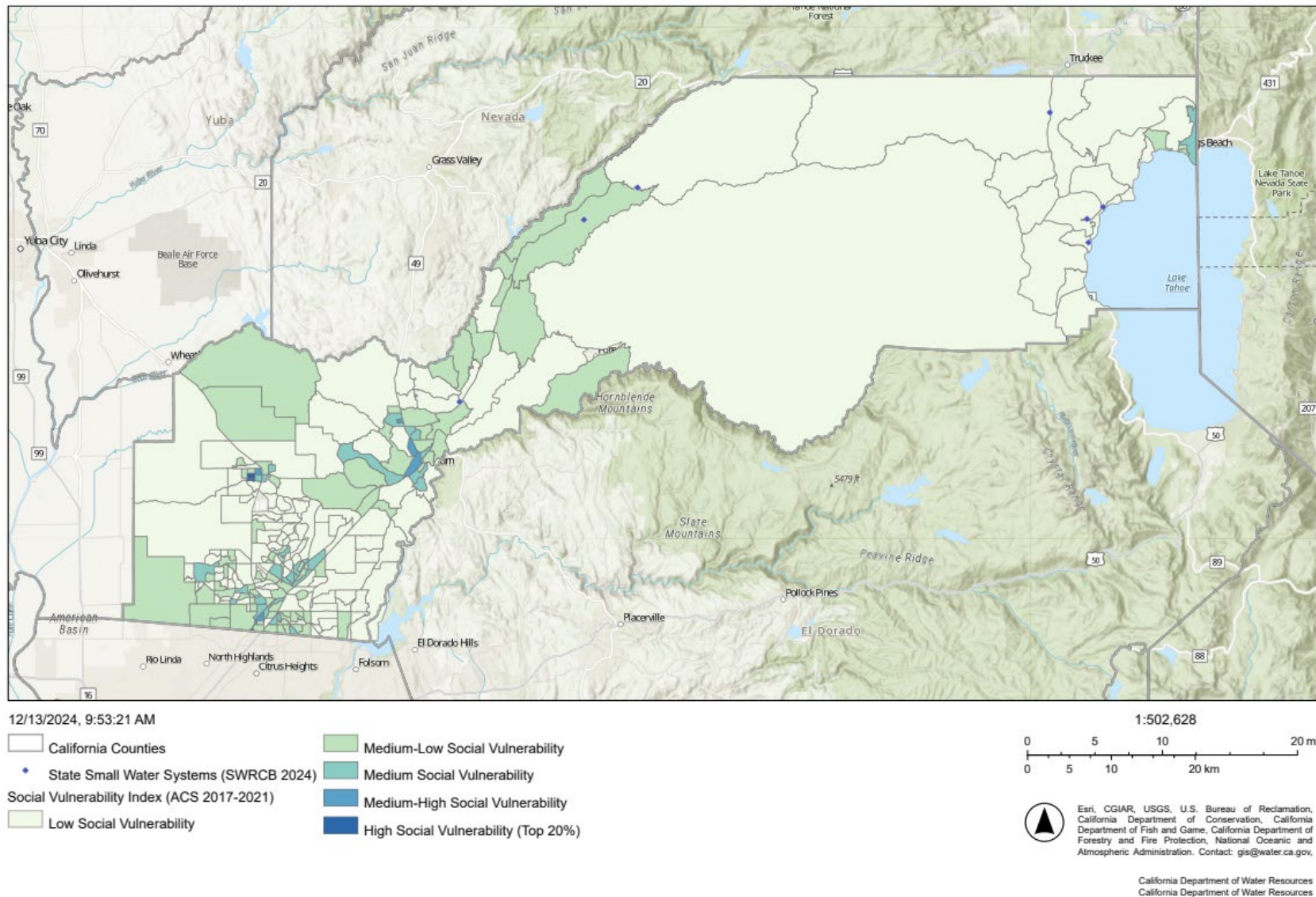
Source: DWR 2024b

Figure 3-2. Physical Vulnerability to Drought and Water Supply Shortage in Placer County



Source: DWR 2024b

Figure 3-3. Intersection of Physical Vulnerability and Density of Domestic Wells and State Small Water Systems in Placer County



Source: DWR 2024b

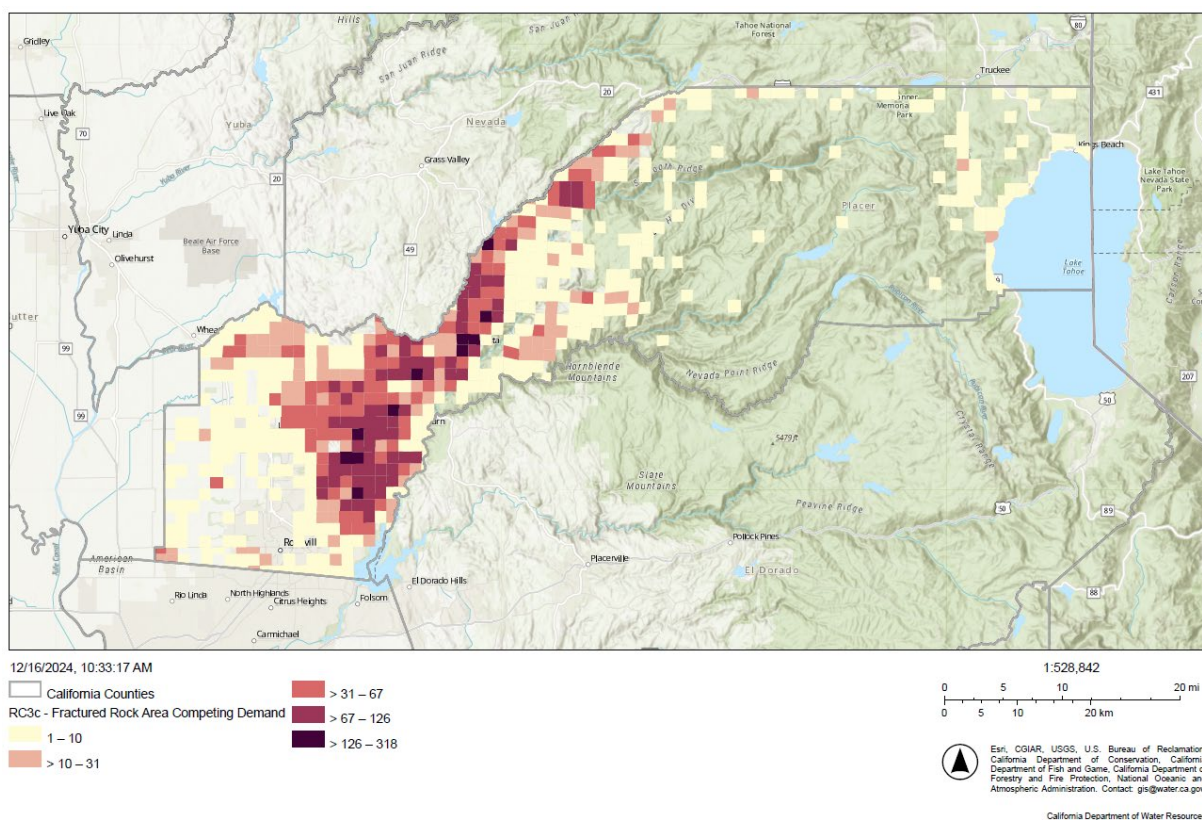
Figure 3-4. Social Vulnerability Scores by Census Block Group in Placer County

3.4.2 Physical Vulnerability Indicators

The risk assessment identified areas where domestic wells and state small water systems are at risk to water shortages and the indicators driving vulnerability. By understanding the location and causes of water shortage vulnerability, the County can develop effective short-term actions and long-term strategies to address water shortage events.

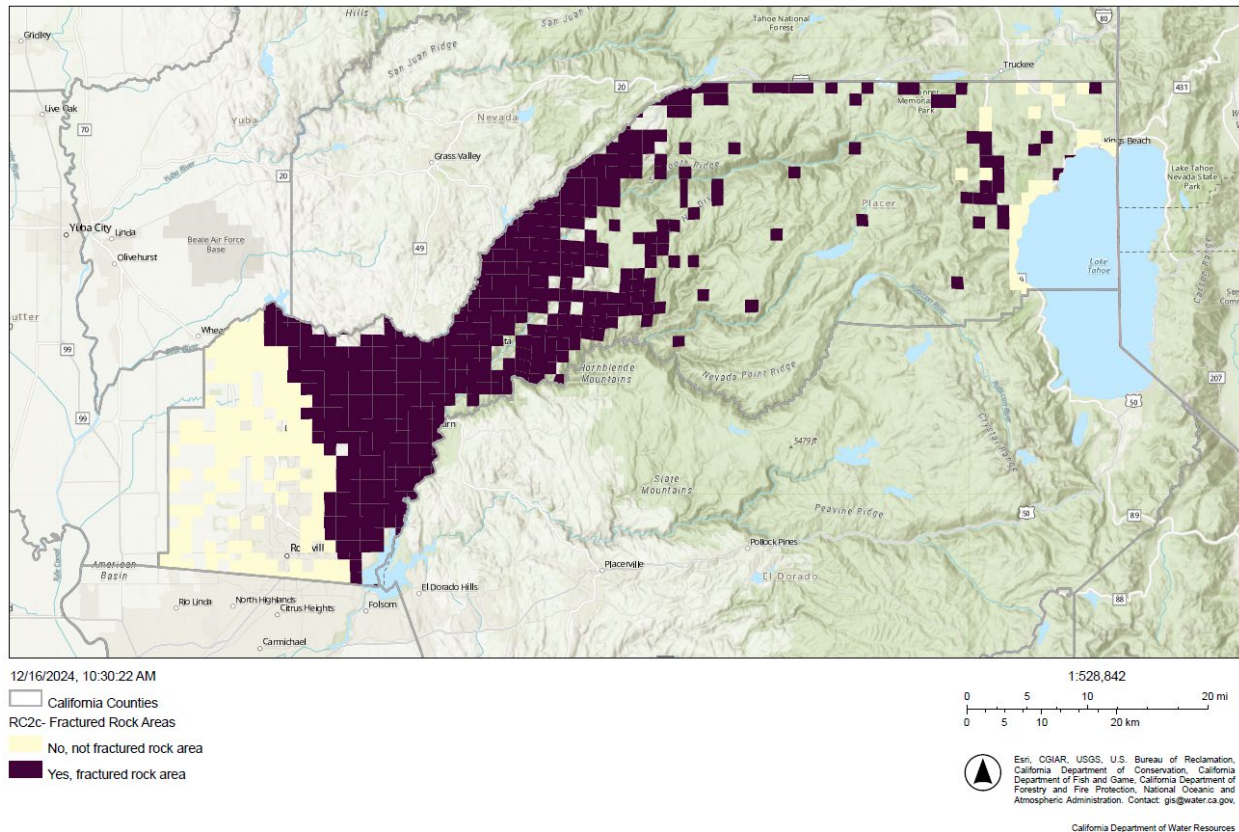
Physical indicators driving water shortage vulnerability in Placer County are presence of fractured rock geology, domestic well density in fractured rock areas, and heightened wildfire risk. These indicators are displayed visually in the figures in this section; additional information is presented in Table 3-3.

The indicator with the most influence on water shortage vulnerability is the density of domestic wells within the fractured rock basin in Figure 3-5, with the second-highest indicator being presence of fractured rock geology in Figure 3-6. Fractured rock basins have more variable water reliability and presence of many domestic wells in a fractured rock region can stress water availability further. Fractured rock occurs primarily in the Foothills region and part of East Placer, while West Placer is primarily an alluvial basin. Major cities in fractured rock regions include Auburn, Meadow Vista, and Foresthill; major cities with high density domestic wells, and therefore competing demand, include parts of Lincoln, Auburn, and the area surrounding Meadow Vista.



Source: DWR 2024b

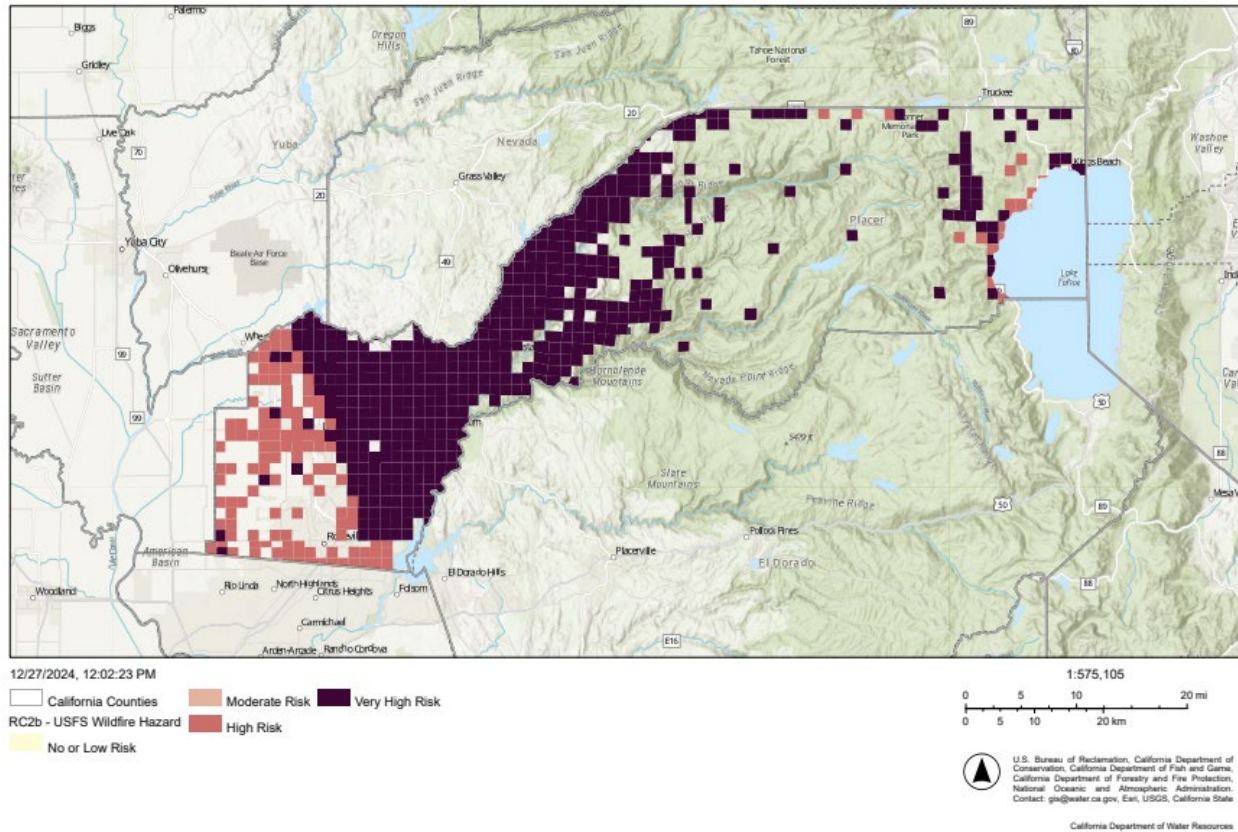
Figure 3-5. Domestic Well Density in Fractured Rock Areas Indicator in Placer County



Source: DWR 2024b

Figure 3-6. Geology Indicator Showing Fractured Rock Area in Placer County

The third top indicator driving vulnerability is wildfire risk. Regions that may experience wildfire are vulnerable to water shortage caused by damaged infrastructure, depleted supplies, and impacted water quality associated with wildfire. Wildfire risk within the County is classified as high or very high (Figure 3-7). Wildfire risk in West Placer is classified primarily as high, including the regions around Roseville, Lincoln, and Sheridan. Risk in the Foothills is very high, and includes Auburn, Meadow Vista, and Foresthill. Of the data available in West Placer, risk is a mixture of both high and very high.



Source: DWR 2024b

Figure 3-7. Wildfire Risk Indicator in Placer County

Table 3-3. Summary of Observed Conditions for Physical Vulnerability Indicators in Placer County

Physical Vulnerability Indicator ¹	Observed Conditions
Climate Change	
Temperature Shift (RC1a)	The projected change in the maximum increase in average annual temperature by mid-century in the County is predicted to be 2.7–3°F in West Placer, 2.7–3.2°F in the Foothills, and 3–3.2°F in East Placer. Increased temperatures may lead to increased water demand and reduced storage, increasing community vulnerability to water shortage.
Saline Intrusion Projected (RC1b)	Water in the County is not tidally influenced and is not anticipated to experience saltwater intrusion.
Wildfire Risk (RC1c)	Wildfire risk varies across the County, ranging from 0 to 100 average acres burned from 2035–2064, with the highest risk in the mid-to-west Foothills region. Lincoln to Auburn and up to Meadow Vista are projected to experience low risk, and East Placer, including Kings Beach, is expected to experience medium to high risk. Heightened wildfire risk indicates the possibility of increased wildfire occurrence, which may lead to damaged infrastructure, depleted supplies, and impacted water quality as listed previously.
Current Environmental Conditions and Events	
2024 Precipitation (RC2a)	The majority of the County is not currently experiencing below-average precipitation, with the exception of Kings Beach and just southeast of Martis Valley.
Multiple Dry Years (RC2aa)	In the last five years, the majority of the County has experienced 2 dry years, with a small region south of Meadow Vista and another just west of Donner Memorial Park experiencing one year. Prolonged periods of below-average precipitation can contribute to increased water shortage vulnerability through depleted storage.
USFS Wildfire Hazard (RC2b)	Wildfire hazard assessment from 2023 places the majority of the County in a high or very high U.S. Forest Service severity zone. West Placer is set in a primarily high-risk zone, and the Foothills (including Meadow Vista and Forest Hill) and East Placer (including Kings Beach and Highway 89) regions are primarily very high hazard zones. Increased vulnerability from wildfires is discussed above under “Wildfire Risk.”

Physical Vulnerability Indicator ¹	Observed Conditions
Geology (RC2c)	The County has several alluvial basins, 1 in West Placer and 3 in the east Foothills and East Placer regions; the remainder of the County is a fractured rock area. Within the fractured rock areas are regions of high domestic well density, which contributes to competing water demand in a geological formation type that is more difficult to monitor.
Subsidence (RC2d)	There has been no subsidence in the County.
Basin Salt (RC2e)	Water in the County is not tidally influenced and is not anticipated to experience saltwater intrusion.
Overdrafted Basin (RC2f)	There is no presence of basin overdraft in the County.
Chronic Declining Water Levels (RC2g)	There has been moderate groundwater level decline, up to 2.5 feet, in westernmost West Placer within the Sacramento Valley–North American subbasin, as well as in the Martis Valley basin. Declining groundwater levels are indicative of a diminishing groundwater supply and can lead to water shortage vulnerability through dry wells or an increased need to deepen wells. Over time, groundwater level decline can also lead to subsidence.
State Water Board 2025a Water Quality Aquifer Risk (RC2i)	Water quality risk is heightened in various locations throughout the County, including just east and northeast of Lincoln, southwest and northeast of Roseville, near Meadow Vista, and along State Route 89. Poor water quality can lead to a reduction in or complete removal of the amount of available potable water if no additional source is available.
Surrounding Land Use (RC2j)	Irrigated agriculture occurs primarily in West Placer in the Sacramento Valley–North American subbasin, with small occurrences extending into the Foothills. The highest agricultural activity occurs in the westernmost region of the County from Sheridan to past Pleasant Grove. Agricultural presence creates competing demand for water supplies which increases a community’s vulnerability to water shortage.
Infrastructure Susceptibility	
Dry Domestic Well Susceptibility in Basins (RC3a): Alluvial Basin	Domestic wells most susceptible to going dry in the alluvial basins in the County are located in the agricultural region in the west, including northeast and southeast of Lincoln, and along Highway 89, east Kings Beach, and at Donner Memorial State Park. Increased susceptibility of these wells to drought increases water shortage vulnerability for their respective communities.

Physical Vulnerability Indicator ¹	Observed Conditions
Domestic Well Density in Fractured Rock Areas (RC3c)	Domestic wells most susceptible to going dry in fractured rock regions in the County are located from West Placer through the Foothills, from southeast of Lincoln up through Meadow Vista and along the northern County border to the Blue Canyon area. Minimal susceptibility also exists along Highway 89 and at west Lake Tahoe. Increased susceptibility of these wells to drought increases water shortage vulnerability for their respective communities.
Record of Shortage	
Reported Household Outage on Domestic Well (RC5a)	Household water outages for domestic wells in the County through September 2024 are localized to several specific places in West Placer and into the Foothills north of Meadow Vista. These areas are more likely to experience future well outages and are therefore more vulnerable to water shortage.

Notes:

¹ Abbreviations are included next to Indicator Name (i.e., "RC1a") for clarity of the underlying methodology.

3.5 Risk Assessment Findings

There are several areas within the County with heightened water shortage vulnerability caused by the physical indicators discussed in Section 3.4. These regions, along with the vulnerability indicators associated with their susceptibility, are presented in Table 3-4 and Figure 3-8. The County and Task Force considered these regional vulnerabilities to develop County-wide short-term actions and long-term strategies to address water shortage with respect to domestic wells and SSWSs.

Table 3-4. Summary of Risk Assessment Findings in Placer County

Area with Water Shortage Vulnerability and Domestic Wells/SSWSs	Physical Vulnerability Indicators	Social Vulnerability Score	Location in Figure
Rural Communities within the Sacramento Valley–North American Subbasin in West Placer	• State Water Board water quality aquifer risk • Dry domestic well susceptibility in basins • Groundwater level decline • Surrounding land use • Wildfire risk	Low to Medium-Low	A
Domestic Wells in Fractured Rock Areas within the Lower Elevations of the Western Sierra Nevada Foothills	• State Water Board water quality aquifer risk • Geology • Domestic well density in fractured rock areas • Temperature shift • Wildfire risk	Low to Medium	B
Domestic Wells in Fractured Rock Areas in the Higher Elevations of the Sierra Nevada Foothills	• State Water Board water quality aquifer risk • Geology • Domestic well density in fractured rock areas • Temperature shift • Wildfire risk	Low to Medium-High	C
Isolated Domestic Wells in Fractured Rock Areas in the High Sierra Nevada	• State Water Board water quality aquifer risk • Dry domestic well susceptibility in basins • Geology • Temperature shift • Wildfire risk	Low to Medium	D

Key:

SSWS = state small water system

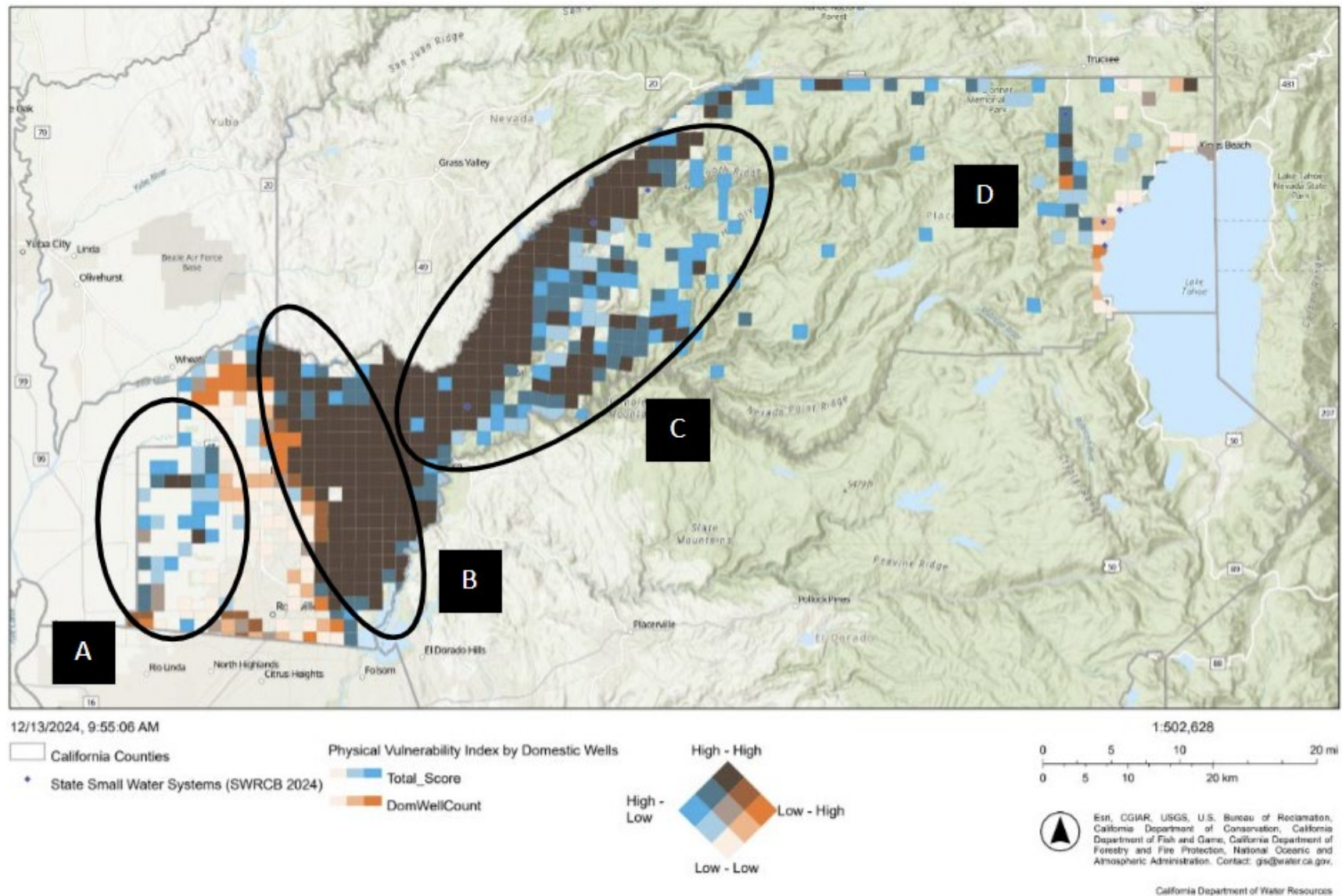


Figure 3-8. Summary of Risk Assessment Findings Showing Areas with Water Shortage Vulnerability and Domestic Wells in Placer County

3.6 Risk Assessment Gaps

Information unavailable to the County and Task Force during the initial risk assessment is gathered below to guide future assessments and inform interpretation of the current results. Future work can use this analysis as a starting point and be directed by the acknowledged gaps. Current County DRP users should use this list to understand the extent and limitations of this risk assessment, and consider strategies for relevant long-term actions.

- **Domestic Well and SSWS Data:** The Task Force noted that well completion report data from the State is known to be incomplete. A broader-scale view was agreed to be acceptable for the purposes of this risk assessment but could be refined further for future studies. The West Placer GSA may develop this data in the future within its subbasin.
- In addition, the Task Force noted that there are likely more dry wells than have been reported, and future efforts can focus on making the reporting process more approachable.
- **Understanding Regional Water Interactions:** Task Force input noted that the West Placer GSA is investigating areas in the North American subbasin that have not recovered as expected after the last two droughts.

4.0 Short-Term Response Actions

The risk assessment presented in Chapter 3 showed that domestic wells and SSWs may be susceptible to water shortages, particularly due to extended droughts, water quality issues, and wildfires. Based on the outcomes of that assessment, STRAs were identified to include in this County DRP to help address the effects of water shortage emergencies that could occur in the vulnerable regions of the County. The identified STRAs are not exhaustive and may be modified in the future. In the context of this County DRP, STRAs are defined as actions implemented in advance of, and during, water shortage emergencies caused by drought and water shortage events, often addressing immediate and basic public safety needs. The STRA implementation may vary depending on drivers such as new regulations, climate conditions, and funding.

This section describes the STRAs included in the County DRP and the drought and water shortage emergency response process developed as part of the County DRP to assist with implementing STRAs.

4.1 Legislative Direction

SB 552 requires that each county develop a drought and water shortage plan that includes proposed interim solutions for SSWs and domestic wells (Hertzberg 2021), per CWC Section 10609.70 (State of California 2022a) (**boldface** added for emphasis as related to STRAs and this section of the County DRP):

(b) A county shall develop a plan that includes potential drought and water shortage risk and proposed interim and long-term solutions for state small water systems and domestic wells within the county's jurisdiction. The plan may be a stand-alone document or may be included as an element in an existing county plan, such as a local hazard mitigation plan, emergency operations plan, climate action plan, or general plan. A county shall consult with its drought task force or alternative coordinating process as established by this section in developing its plan. A county shall consider, at a minimum, all of the following in its plan:

- (1) Consolidations for existing water systems and domestic wells.*
- (2) Domestic well drinking water mitigation programs.*
- (3) Provision of emergency and interim drinking water solutions.**
- (4) An analysis of the steps necessary to implement the plan.*
- (5) An analysis of local, state, and federal funding sources available to implement the plan*

4.2 Short-Term Response Actions Included in the Placer County Drought Resilience Plan

STRAs included in the County DRP are summarized in Table 4-1 and described in this section. Most of these STRAs provide emergency and interim drinking water supplies via bulk water delivery or with packaged or bottled water. Other STRAs include (1) voluntary water conservation measures, and (2) expediting the well permitting approval process. A process for STRA activation is presented in Section 4.5, while future efforts to address STRA implementation challenges and develop new STRAs are described in Section 6.2.2.

Table 4-1. List of Short-Term Response Actions Included in Placer County Drought Resilience Plan

ID	Short-Term Response Action Type	Short-Term Response Action Name	Short-Term Response Action Description	Responsible Entity	Supporting Entities
STRA 01	Emergency And Interim Drinking Water Supplies	Packaged and Bottled Water Supplies	County staff to identify and establish a program to acquire and distribute packaged or bottled water to domestic well and SSWS users during a water shortage emergency.	County OES	County Environmental Health
STRA 02	Emergency And Interim Drinking Water Supplies	Water Hauling, Bulk Water for Existing Tanks and Temporary Locations	County staff to ensure policies and mutual aid agreements are in place for coordination with public water systems that allow for water hauling and bulk water delivery to domestic well and SSWS users with existing bulk water supply storage tanks or temporary distribution locations.	County OES	County Environmental Health, Water Utilities
STRA 03	Emergency And Interim Drinking Water Supplies	Dedicated Water Filling Stations	County staff would identify potential locations within public water systems for a network of emergency potable water supply stations. In the future, these locations will be established for use during a water shortage emergency.	County OES	County Environmental Health, County Public Works, Water Utilities
STRA 04	Emergency And Interim Drinking Water Supplies	Voluntary Water Conservation	County staff would implement a voluntary water conservation program during droughts with communications targeted to domestic well and SSWS communities.	County OES	County Environmental Health, County Public Works, Water Utilities
STRA 05	Permit Streamlining and Coordination	Expedited New or Replacement Well Approval During Water Shortage	County staff would, within its jurisdiction, prepare and implement expedited permit authorization for construction of replacement wells that serve domestic well users or SSWSs in the event of a water shortage emergency.	County Environmental Health	

Key: County = Placer County
STRA = Short-Term Response Action

County OES = Placer County Office of Emergency Services
SSWS = State Small Water Systems

4.2.1 Emergency and Interim Drinking Water Supplies

Emergency and interim drinking water supplies involve providing temporary water supplies until longer-term water supplies are secured or the water shortage emergency ends. Emergency and interim drinking water supplies are used during water shortage emergencies to meet basic health and safety needs.

4.2.1.1 *Packaged or Bottled Water (STRA 01)*

In areas where the other emergency and interim drinking water supplies are unavailable, the County would provide packaged or bottled water (i.e., 1- to 5-gallon jugs and individual bottled waters) to affected domestic well and SSWS users. Packaged or bottled water delivery is included as an STRA in the County DRP as STRA 01.

Packaged or bottled water would be sourced from local vendors. The California Department of Public Health's Food and Drug Branch maintains a list of approved commercial bottled water vendors in the state. In the event of a State or federal disaster declaration, the County will coordinate with those entities to acquire packaged or bottled water.

County OES is the lead entity for this STRA. Packaged or bottled water would be distributed to affected domestic well or SSWS users following the process described in Section 4.5. Locations, operating hours, and other information regarding packaged or bottled water would be communicated using the process described in Section 4.5.2.

4.2.1.2 *Water Hauling or Bulk Water Delivery (STRA 02)*

Water hauling or bulk water delivery involves using licensed water haulers or tankers to deliver emergency water supplies to those in need at either (1) a central distribution point for residents to bring a container to be filled, or (2) to existing storage tanks connected to a domestic well or SSWS. Water hauling or bulk water delivery is included as a STRA in the County DRP as STRA 02.

Within the County, many domestic well users have above-ground drinking water storage tanks installed on their property. Groundwater wells connected to these facilities – particularly in fractured rock regions – may go dry during extended periods of drought or during prolonged electrical service interruption. Note that water storage tanks used for fire suppression, which are also common in the County, are not designed for potable water storage and will not be used with water hauling for drinking water use. For affected domestic well and SSWS communities without drinking water storage tanks, water hauling or bulk water delivery would primarily be used to provide emergency water supplies at a temporary distribution point. Water haulers would source water supplies from public water systems within the County.

The availability of licensed water haulers in the region is limited and may be a barrier to effectively using this as an STRA. However, additional water haulers may be available if the State has proclaimed a water shortage emergency.

County OES is the lead entity for this STRA. Water hauling and bulk water delivery to affected areas would follow the process described in Section 4.5. Locations, operating hours, and other

information regarding water hauling and bulk water delivery would be communicated using the process described in Section 4.5.2.

4.2.1.3 *Dedicated Water Filling Stations (STRA 03)*

During a water shortage emergency, domestic well or SSWS users could take water from dedicated water filling stations owned and operated by large water purveyors. These water filling stations would be located at established sites to provide potable water to affected users. Domestic well or SSWS users would need to provide their own water storage containers. Dedicated water filling stations are included as a STRA in the County DRP as STRA 03.

As of February 2026, these dedicated water filling stations have not been identified or established. The County will coordinate with large water purveyors to identify locations for these water filling stations that are in proximity to at-risk domestic well and SSWS communities. Additional funding would be required to establish these dedicated water filling stations. PCWA is currently evaluating its system to identify locations for water filling stations for commercial use. The County will work with PCWA to locate those water filling stations in proximity to domestic well and SSWS communities. In addition to PCWA, the County would coordinate with other water providers to identify potential locations for water filling stations. County OES is the lead entity for this STRA.

4.2.2 *Voluntary Water Conservation (STRA 04)*

During droughts or other water shortages, it is common for public water systems to implement water conservation measures that reduce use and preserve water supply. Similar water conservation measures implemented by domestic well and SSWS communities could help preserve water supplies in the short term. Because the County does not have the authority to mandate water conservation for domestic well and SSWS users, any water conservation would be voluntary. The County will leverage water conservation best practices and materials from PCWA and other water providers for outreach to domestic well and SSWS communities. This outreach will include strategies to reduce water use that will be posted on the County website. Activation of these voluntary water conservation communications will coincide with similar actions by PCWA and others in the County and will be informed by the information presented in Sections 4.5.1 and 6.2.1. County OES is the lead entity for this STRA.

4.3 *Pre-Negotiated Contracts and Mutual Aid Agreements*

Efficient implementation of STRAs requires coordination and cooperation with other entities beyond those within the County government. These can include pre-negotiated contracts and mutual aid agreements.

The acquisition of materials to implement this County DRP may be subject to local and State policies and regulations that govern their purchase. In the event of an emergency, counties can

acquire materials necessary for the protection of public health, welfare, or safety via existing emergency procurement policies that are faster than traditional procurement. Exercise of this authority requires proclamation of a local emergency and is time-limited, obligating counties to follow traditional procurement practices at the earliest practicable opportunity.

The County may seek to establish pre-negotiated contracts and other related agreements for STRA 01, STRA 02, STRA 03, and other STRAs as identified that can be exercised during a recognized water shortage event. This would allow the County to act quickly and maintain consistent resources during emergencies and interim water shortage events. Such pre-negotiated contracts may involve private companies or other local public agencies, such as public water systems, to secure needed resources. The establishment, renewal, and ongoing management of these pre-negotiated contracts will comply with traditional procurement practices as required by local and State policies, except when emergency procurement authorities are temporarily invoked during a proclaimed emergency.

A mutual aid agreement is an arrangement established before an emergency through which another entity or entities provide personnel, equipment, materials, and/or associated services during an emergency. A mutual aid agreement clearly describes how the involved entities would engage with the County and each other during a water shortage emergency, along with their roles and responsibilities.

Mutual aid agreements recommended for the efficient activation of STRAs are outlined in Table 4-2, including the entities that should have a mutual aid agreement, the nature of the mutual aid, and the status of any agreement as of February 2026.

Table 4-2. Mutual Aid Agreements Recommended for Activation of Short-Term Response Actions Included in Placer County Drought Resilience Plan (as of February 2026)

STRA	Contract or Mutual Aid Agreement Need	Lead	Status
STRA 01: Packaged and Bottled Water Supplies	County needs to procure pre-negotiated contracts for packaged and bottled water vendors.	County OES	Pending
STRA 02: Water Hauling, Bulk Water for Existing and Temporary Tanks	County needs to procure pre-negotiated contracts for bulk water delivery from licensed water haulers. County needs to develop mutual aid agreements with water providers to use with water haulers.	County OES	Pending
STRA 03: Dedicated Water Filling Stations	County needs to develop mutual aid agreement or pre-negotiated contract, as applicable, with water providers and PCWA to use as dedicated water filling stations.	County OES	Pending

Key: County = Placer County OES = Office of Emergency Services
PCWA = Placer County Water Agency STRA = short-term response action

4.4 Permit Streamlining and Coordination (STRA 05)

As drought or water shortage conditions worsen and the production or quality of water at domestic wells or SSWSs declines, well owners may be able to install a new well or rehabilitate an existing one to ensure continued water supply reliability. Within the County's authority, streamlining the permitting process for activities such as new well construction or existing well rehabilitation for domestic well or SSWS users could provide relief during an ongoing water shortage. This streamlining could be achieved, in part, with enhanced coordination between the County entities involved in permitting. County Environmental Health is the lead for this STRA.

County Staff have already implemented a streamlined well permitting process and can usually approve new or rehabilitated well permits within a few days of submission under this process. Permit streamlining was achieved through improved coordination among County entities and/or redirecting staff time during water shortage conditions to review and approve these permits. This streamlining process does not relax permitting criteria related to water supply, such as proximity to other wells or water quality.

4.5 Drought and Water Shortage Emergency Response Process

The drought and water shortage emergency response process describes (1) how County staff would evaluate drought and water shortage conditions in the County and proclaim a water shortage, and (2) its Emergency and Interim Drinking Water Distribution (EIDWD) plan to activate emergency and interim drinking water supplies and communicate with affected domestic well and SSWS communities.

4.5.1 Drought or Water Shortage Triggers

Declaring a drought or water shortage is important as it communicates a potential or ongoing emergency, activates mutual aid agreements, and is the first step in accessing State and Federal resources that may be available to assist the County in implementing STRAs.

This DRP outlines a process for classifying water shortage stages, as detailed in Appendix A. This process uses indicators of water supply with defined criteria that categorize the County into one of three water shortage stages: information, alert, and response, as described below:

- In the **Water Shortage Information Stage**, there is no major drought or potential for water shortage. In this stage, County staff completes its County DRP adaptive management planning described in Section 6.2.
- In the **Water Shortage Alert Stage**, drought or the potential for water shortage exists, but there is no active water shortage emergency. In this stage, County staff increases communication and outreach activities, initiates coordination with other entities, and may initiate setup of STRAs to be activated if needed.

- If a water shortage emergency is imminent or actively occurring, the County is in the **Water Shortage Emergency Response Stage**. In this stage, County staff, in coordination with the Task Force and County Board of Supervisors, would proclaim a water shortage emergency and activate the EIDWD Plan described in Section 4.5.2.

In the event of a federal or State disaster declaration, County staff would evaluate if the disaster could require emergency and interim drinking water supplies; if so, they would activate the EIDWD Plan. State and/or federal disaster declarations may make additional resources available to provide emergency and interim drinking water supplies. County staff would evaluate how these declarations may influence the implementation of the STRAs identified in this County DRP and the activation of the EIDWD Plan.

4.5.2 Emergency and Interim Drinking Water Distribution Plan

The EIDWD Plan outlines the process for County staff to follow when distributing emergency and interim drinking water supplies to affected domestic well and SSWS communities. Table 4-3 shows the process County staff would follow in the event that distribution of emergency or interim drinking water supplies is required due to a short-term water shortage. These activities are anticipated for events lasting up to **four weeks**. County staff will reevaluate this duration if it is anticipated that emergency and interim drinking water supplies are needed for longer than four weeks. Unless otherwise noted, implementation of these activities is subject to proclamation of an emergency consistent with the County DRP or by direction of the County Board of Supervisors. Table 4-4 details the communication and engagement strategy within the EIDWD Plan.

Table 4-3. Emergency and Interim Drinking Water Distribution Plan Summary

EIDWD Plan Component	Description
Lead Agency	County OES leads the EIDWD Plan in coordination with County Environmental Health.
Activation	Activation of the EIDWD Plan is subject to recommendation by County staff. Activation is informed by an assessment that includes: • Trigger or cause of water shortage emergency; see Section 4.5.1 for drought and water shortage triggers to be considered in the assessment • Affected geographic area and demographics of the affected population • Emergency and interim water supply type(s); see Table 4-1 for options • Estimated duration of need County OES, following review of the assessment, may authorize activation administratively, through the County Board of Supervisors, or other applicable authorities.

EIDWD Plan Component	Description
Notification	County OES will serve as the lead agency managing notification to the affected community on how and where to get emergency water supplies. The notification method may vary depending on the cause of the water shortage emergency (climate influenced, wildfire, power interruption, etc.) Anticipated notification methods include: • Agency website ReadyPlacer.org • Email • U.S. Mail • Broadcast media (radio/television) • Door hangers, fliers, information kiosks • Public outreach meetings, and other existing meetings • Hotline (311, other) Conduct of notifications may include coordination/collaboration with other partner agencies and organizations such as: • West Placer Groundwater Sustainability Agency • Neighborhood Associations • Non-Profit Organizations • Schools, Churches, and Community Groups Depending on the demographics of the affected community, information, materials, and other notifications may be required for non-English speaking communities. County OES will determine whether bilingual services are needed in support of water distribution activities.
Information Collection	County OES will collect specific information to support applicable cost recovery and inform future emergency and interim drinking water distribution efforts. Such data collection would not include personal information, but does generally include: • Number of people served by emergency supply, including age and household income • General geographic location of household • Occupancy status (homeowner or tenant) • The duration for which emergency supplies would maintain water needs • Distance traveled to receive emergency supplies and mode of transportation • Known condition of well; prior experiences with water supply shortages • Others as identified as needed

Key:

County = Placer County

County Environmental Health = Placer County Division of Environmental Health

EIDWD = Emergency and Interim Drinking Water Distribution

OES = Office of Emergency Services

Table 4-4. Communication and Outreach for Emergency and Interim Drinking Water Distribution Plan

Communication Item	Lead Entity	Coordinating Organizations	Activities
Coordination	County OES	County EHD Planning	• Schedule as-needed Task Force meetings • Coordinate with Drought Task Force Representatives, public information officers, and water suppliers to promote water conservation measures • Coordinate with Task Force, West Placer GSA, and others to plan and disseminate public communications, sharing outreach resources and materials as appropriate • Oversee the activation of emergency water supply distribution process
Tracking and Monitoring	County EHD	County OES Planning West Placer GSA	• Continue to monitor water shortage indicators and dry well reports • Prepare new assessment reports as conditions change • Communicate findings with Task Force and others (municipalities, water utilities, elected officials) about local conditions, concerns, and any changes to the status of water supply
Public Outreach	County OES	County OES Planning West Placer GSA	• Disseminate updates, guidance, and alerts on County notification systems • Leverage County and Task Force communication channels to disseminate information to domestic wells and SSWSs • Update County website with guidance, advisories, and resources as they are made available • Promote awareness of dry well reporting systems and contact forms • Promote participation in County notification systems • Outreach to local news media to disseminate information, guidance, and alerts (TV, radio, online news, local newspapers, community newsletters) • Outreach materials to be developed in English and Spanish
Resources	County OES	West Placer GSA	• Secure staffing and funding for response activities, including emergency water supply distribution and emergency technical assistance to domestic wells and SSWSs. West Placer GSA would contribute to technical assistance.

Key:

County = Placer County

GSA = groundwater sustainability agency

SSWS = state small water system

EHD = Environmental Health Division

OES = Office of Emergency Services

5.0 Long-Term Mitigation Strategies and Actions

The risk assessment presented in Chapter 3 showed that domestic wells and SSWs in fractured rock areas and the North American Subbasin may be susceptible to water shortages, particularly due to extended droughts, water quality issues, and wildfires. While risks that impact the basic public health and safety of residents can be addressed through STRAs, LTMSAs mitigate and potentially prevent the conditions that lead to water shortage emergencies. This County DRP identified 17 LTMSAs, organized into four categories: drinking water well mitigation programs, system consolidation, regional water infrastructure investment, and data gaps. These LTMSAs are not exhaustive and may be modified in the future. The LTMSA implementation may vary depending on drivers such as new regulations, climate conditions, and funding.

In the context of this County DRP, LTMSAs serve to reduce drought and water shortage vulnerabilities for domestic well and SSW communities. When implemented, LTMSAs can reduce the extent and cost of emergency response actions but cannot eliminate the need for emergency response actions.

5.1 Legislative Direction

SB 552 requires that each county develop a drought and water shortage plan that covers long-term solutions for SSWs and domestic wells (Hertzberg 2021), per CWC Section 10609.70 (State of California 2022a) (**boldface** added for emphasis as related to long-term mitigation strategies and actions and this section of the County DRP):

*(b) **A county shall develop a plan that includes potential drought and water shortage risk and proposed interim and long-term solutions for state small water systems and domestic wells within the county's jurisdiction.** The plan may be a stand-alone document or may be included as an element in an existing county plan, such as a local hazard mitigation plan, emergency operations plan, climate action plan, or general plan. A county shall consult with its drought task force or alternative coordinating process as established by this section in developing its plan. A county shall consider, **at a minimum**, all of the following in its plan:*

- (1) **Consolidations for existing water systems and domestic wells.***
- (2) **Domestic well drinking water mitigation programs.***
- (3) Provision of emergency and interim drinking water solutions.*
- (4) An analysis of the steps necessary to implement the plan.*

(5) An analysis of local, state, and federal funding sources available to implement the plan

5.2 Long-Term Mitigation Strategies and Actions Included in the Placer County Drought Resilience Plan

LTMSAs included in the County DRP are summarized in Table 5-1. LTMSAs related to drinking water well mitigation programs are described in Section 5.3. The system consolidation opportunity within the County is described in Section 5.4. The ability of regional water infrastructure investments to help address domestic well and SSWS vulnerabilities is detailed in Section 5.5. LTMSAs that address data gaps are discussed in Section 5.6. Future efforts related to LTMSA implementation and challenges are described in Section 6.2.2. The LTMSAs shown in this table may be updated or replaced as part of future County DRP updates.

Table 5-1. List of Long-Term Mitigation Strategies and Actions Included in Placer County Drought Resilience Plan

ID	Long-Term Mitigation Strategy or Action Category and Type	Long-Term Mitigation Strategy and Action Name	Long-Term Mitigation Strategy or Action Description	Responsible Entity	Supporting Entities
LTMSA 01	Drinking Water Well Mitigation Programs: Drought and Water Shortage Risk Assessment	Non-Drought Hazard Assessment	County to assess, as part of its Local Hazard Mitigation Plan, the potential risk for non-drought hazards (e.g., wildfires, earthquakes, landslides, etc.) that could interrupt domestic well or SSWS supplies.	County OES	County Environmental Health, County Public Works
LTMSA 02	Drinking Water Well Mitigation Programs: Communication and Outreach	Domestic Well and SSWS Resource Website	County staff create and maintain a website with relevant information (contacts, permits, data, etc.) for domestic well and SSWS communities.	County OES	County Environmental Health, County Public Works
LTMSA 03	Drinking Water Well Mitigation Programs: Communication and Outreach	Maintain Network of Vendors and County Contacts	County staff create and maintain a contact list of County departments, well drillers, and laboratories to be shared with domestic well and SSWS communities. The contact list would be posted on the County website.	County Environmental Health	County OES, County Public Works
LTMSA 04	Drinking Water Well Mitigation Programs: Communication and Outreach	Supply Interruption Notification for Public Safety Power Shutoffs	County staff, in coordination and collaboration with power utilities, to establish a distribution list of domestic well and SSWS users to contact in advance of public safety power shutoffs. When a power interruption is anticipated, County Staff will coordinate with these entities on initial notification.	County OES	

5.0 Long-Term Mitigation Strategies and Actions

ID	Long-Term Mitigation Strategy or Action Category and Type	Long-Term Mitigation Strategy and Action Name	Long-Term Mitigation Strategy or Action Description	Responsible Entity	Supporting Entities
LMTSA 05	Drinking Water Well Mitigation Programs: Well Rehabilitation	Shallow Well Replacement	County staff to provide technical assistance to targeted domestic well owners who are evaluating whether to replace a potentially shallow well. In the future, this could be expanded into a program that provides technical and/or financial assistance to domestic well and SSWSs to replace shallow wells that have in the past, or may in the future, run dry.	County Environmental Health	County Public Works
LTMSA 06	Drinking Water Well Mitigation Programs: Water Shortage Prevention	Regional Groundwater Level Monitoring and Communication	County staff to update website with existing groundwater level monitoring information. This includes linking to monitoring data from the West Placer GSA .	County Public Works	County Environmental Health, West Placer GSA
LTMSA 07	Drinking Water Well Mitigation Programs: Water Shortage Prevention	Water Quality Outreach for Domestic Wells and SSWSs	County staff to update website with groundwater quality information. This includes linking to informational brochures from other entities related to water quality.	County Environmental Health	County Public Works, West Placer GSA
LTMSA 08	Drinking Water Well Mitigation Programs: Water Shortage Prevention	Assistance with Domestic Well Monitoring	County staff will coordinate with the West Placer GSA to communicate its available monitoring resources to domestic well and SSWS communities. Within fractured rock areas, the County currently lacks funding to support domestic well monitoring beyond providing contact information for well samplers.	County Environmental Health	County Public Works, West Placer GSA

5.0 Long-Term Mitigation Strategies and Actions

ID	Long-Term Mitigation Strategy or Action Category and Type	Long-Term Mitigation Strategy and Action Name	Long-Term Mitigation Strategy or Action Description	Responsible Entity	Supporting Entities
LTMSA 09	Drinking Water Well Mitigation Programs: Water Shortage Prevention	Bulk Water Tank Installation	County staff to outreach to domestic wells and SSWs with resources for sizing and installing bulk water storage tanks at existing wells. In the future, with additional funding, the County could provide financial assistance for the installation of bulk water tanks and/or power generators.	County OES	County Environmental Health, County Public Works
LTMSA 10	Drinking Water Well Mitigation Programs: Water Shortage Prevention	Grant application assistance to domestic wells and SSWs	County staff would include on the County website information on potential grants available for domestic well and SSW communities.	County OES	County Environmental Health, County Public Works
LTMSA 11	Drinking Water Well Mitigation Program: Water Shortage Prevention when Permitting New or Replacement Wells	Well Permitting Considering Future Growth	County staff, in coordination with the West Placer GSA, to consider ordinance changes that incorporate future growth when permitting a new or replacement well. This would include reviewing development plans, NASb GSP documents, or other information detailing future demands.	County Public Works	County Environmental Health
LTMSA 12	System Consolidation	Existing System Consolidation Opportunities: PCWA Coordination	County staff would coordinate with PCWA as it advances consolidation efforts within the County. This coordination would involve assisting with identifying domestic wells and SSWs that may be involved in PCWA consolidations.	County Environmental Health	PCWA

5.0 Long-Term Mitigation Strategies and Actions

ID	Long-Term Mitigation Strategy or Action Category and Type	Long-Term Mitigation Strategy and Action Name	Long-Term Mitigation Strategy or Action Description	Responsible Entity	Supporting Entities
LTMSA 13	System Consolidation	Potential System Consolidation Opportunities	County staff would support consolidation efforts as identified by domestic well and SSWS communities and community water systems. This could include technical assistance, coordination, and, if funding is available, developing a system consolidation analysis.	County Environmental Health	County Public Works
LTMSA 14	Regional Water Infrastructure Investment	Regional Project Integration	County staff to coordinate with public water systems and the West Placer GSA to evaluate if planned projects have opportunities to improve water supply resilience for domestic wells and SSWSs.	County Public Works	PCWA, West Placer GSA
LTMSA 15	Regional Water Infrastructure Investment	Regional Planning Integration	County staff will participate in related regional planning efforts to provide the perspective of domestic well and SSWS communities.	County OES	County Environmental Health, County Public Works, PCWA
LTMSA 16	Data Gaps	Dry Well Reporting and Abandonment	County staff will update the well permit application so that the applicant must indicate if the new well is replacing a dry well.	County Environmental Health	County Public Works, West Placer GSA

Key:

County = Placer County

County Environmental Health = Placer County Division of Environmental Health

County Public Works = Placer County Department of Public Works

DWR = California Department of Water Resources

GSA = Groundwater Sustainability Agency

LTMSA = Long-Term Mitigation Strategies and Actions

NASb GSP = North American Subbasin Groundwater Sustainability Plan

OES = Office of Emergency Services

PCWA = Placer County Water Agency

SSWS = State Small Water System

5.3 Drinking Water Well Mitigation Programs

This County DRP considered the utility of domestic drinking water well mitigation (DWWM) programs within the County DRP as directed under CWC Section 10609.70 (b)(2) (State of California 2022a). The DWWM program describes actions that provide assistance to domestic well and SSWS communities with groundwater wells that are relatively shallower than those in the area, or are located in specific areas where wells are at a higher risk of running dry more frequently. This section first identifies the DWWM program(s) within the County organized by Bulletin 118 groundwater basins and fractured rock areas. This section then details the LTMSA components that are included in the DWWM programs. The DWWM programs and LTMSA components described herein are not exhaustive and may be modified in the future.

When identifying and defining DWWM programs, the County DRP considered the factors listed below:

- Domestic wells and SSWSs vulnerable to water supply shortages (see Chapter 3)
- If a DWWM program had already been defined as part of a GSP
- The SGMA priority for Bulletin 118 basins
- The occurrence of potentially shallow wells that could be at enhanced risk of drying up
- History of dry well reports and/or new well permits for replacement or deepened wells

Table 5-2 details the identified DWWM programs within the County.

Table 5-2. Drinking Water Well Mitigation Programs within the County

Location	Vulnerable Domestic Wells and State Small Water Systems Included	Drinking Water Well Mitigation Program Description
Sacramento Valley–North American Subbasin	Rural Communities within the Sacramento Valley–North American Subbasin in West Placer (vulnerable area A in Section 3.5)	The North American Subbasin GSP does not include a DWWM program. ¹ Wells in this area were generally found not to be at risk of drying up or of experiencing water quality impacts. There was a low occurrence of shallow wells relative to others in the area. The County DRP DWWM program for this area will focus on communication and outreach, well rehabilitation, and water shortage prevention.
Communities in Fractured Rock Basins	Domestic wells in the Sierra Nevada foothills and high Sierra Nevada mountains (vulnerable areas B, C, and D in Section 3.5)	County staff have not known of a systematic and/or concentrated history of well dry-ups within fractured rock areas in the County. The County DRP DWWM program for this area will focus on communication and outreach, well rehabilitation, and water shortage prevention.

Note:

¹ Appendix B of the North American Subbasin GSP concluded that, based on the minimum threshold sustainable management criteria, no domestic wells of up to 50 years old would go dry. Of wells that are more than 50 years old, only 2 percent could drop below their total depth.

Key:

County = Placer County

DRP = Drought Resilience Plan

DWWM = Drinking Water Well Mitigation

GSP = Groundwater Sustainability Plan

5.3.1 Non-Drought Hazard Assessment (LTMSA 01)

The risk assessment completed and documented in Chapter 3 was used to help select the components of the DWWM program documented in this County DRP. However, this risk assessment is primarily based on drought-influenced water shortage drivers. As there are other hazards that could result in water supply shortages for domestic well and SSWS communities, the risk assessment would be enhanced by incorporating other non-drought hazards.

The County regularly updates its Local Hazard Mitigation Plan, which includes evaluations of how these non-drought hazards could impact community lifelines such as water systems. Future Local Hazard Mitigation Plan updates will include an assessment of how non-drought hazards could impact water systems of domestic well and SSWS communities. Findings will be summarized and presented to the Task Force during its annual meeting. County OES is the lead for this LTMSA.

5.3.2 Communications and Outreach (LTMSA 02, 03, 04)

Effective communication and outreach are essential components of drought resilience efforts, enabling timely information sharing and community engagement to support water shortage mitigation. These strategies aim to provide accessible resources to domestic well and SSWS communities, enabling them to improve the reliability of their water supply.

5.3.2.1 Domestic Well and SSWS Resource Website (LTMSA 02)

As part of this DRP, the County established a website focused on domestic well and SSWS communities. County staff will update and maintain this website to enhance its content as part of other LTMSAs. This website will house a variety of relevant resources, such as the County DRP, contact information, links to monitoring and water quality data, and characterization of the water supply. County OES will maintain the website with input from County Environmental Health, County Public Works, and other entities such as the West Placer GSA and PCWA.

5.3.2.2 Establish a Network of Vendors (LTMSA 03)

County staff have a list of well drillers and laboratories that provide water sampling and testing services. This list is available to domestic well and SSWS communities. County staff will (1) continue to maintain this list with regular updates, (2) post this list on its website, and (3) remind domestic well and SSWS communities of this list during drought or other events that could cause water shortages. County Environmental Health is the lead for this LTMSA.

5.3.2.3 Supply Interruption Notification for Public Safety Power Shutoffs (LTMSA 04)

Due to its heavily forested land and vulnerability to wildfires, there are times when power utilities in the County conduct public safety power shutoffs (PSPS) to reduce the potential of wildfire ignition. A PSPS can sometimes last multiple days, which results in domestic well and SSWS communities being unable to pump their water supplies. County staff will coordinate with these power utilities to ensure domestic well and SSWS communities are included in notifications. While individuals need to sign up for notifications, County staff will outreach to domestic well and SSWS communities before a PSPS using outreach strategies such as social media posts, emails to distribution lists, and phone calls. County OES is the lead for this LTMSA.

5.3.3 Well Rehabilitation (LTMSA 05)

Well rehabilitation actions address water shortage vulnerabilities that were primarily due to shallow wells drying up within fractured rock areas.

5.3.3.1 Shallow Well Replacement (LTMSA 05)

While there are minimal dry well reports within the County, County staff have noted that domestic well owners may be hesitant to submit the report and instead will drill a new, deeper well. While the County does not explicitly track if a new well permit is to replace a dried-up well (see LTMSA 16), the County does understand where shallow wells may be present that could dry

up. In response to this, the County will provide targeted outreach to these areas with technical assistance on replacing a shallow well.

With additional funding, the County could implement a more robust well rehabilitation program. This shallow well replacement program could ultimately consist of the following activities:

1. Outreach to domestic wells and SSWSs in vulnerable areas during drought conditions. This outreach will include conditions to monitor for failing wells, who to contact if a well failure occurs, and a list of vendors that can drill a new well.
2. Assist with financial support via grants for drilling a replacement well by connecting domestic well or SSWS communities to potential grants or other financial resources.
3. Provide direct financial assistance for some or all of the cost of drilling a new well.

As of the release of this County DRP (February 2026), the County can only provide targeted outreach for technical assistance. County Environmental Health is the lead for this LTMSA; it will complete the targeted outreach described, and would implement further activities if and when additional resources are secured.

5.3.4 Water Shortage Prevention (LTMSA 06, 07, 08, 09, 10)

These actions and strategies address water supply vulnerabilities by improving the understanding of groundwater conditions and enhancing the resilience of domestic well and SSWS groundwater assets.

5.3.4.1 Regional Groundwater Level Monitoring and Communication (LTMSA 06)

County staff will coordinate with the West Placer GSA to communicate its groundwater level monitoring to domestic well and SSWS communities. This includes linking to updated North American Subbasin annual reporting on the County website. The West Placer GSA typically completes groundwater monitoring in October and April and contributes to the North American Subbasin annual report by April 1 of each year. County Staff will coordinate their website updates to include these West Placer GSA updates. Outside of the North American Subbasin, there is no regularly updated groundwater level monitoring data, and the County does not have the resources to implement a groundwater level monitoring program in these areas. County Public Works is the lead for this LTMSA.

5.3.4.2 Water Quality Outreach for Domestic Wells and SSWSs (LTMSA 07)

County staff will provide links to information from other organizations on water quality issues that occur within the County. For domestic wells and SSWSs within the North American Subbasin, County staff will coordinate with the West Placer GSA on linking to updated North American Subbasin annual reporting on the County website. County Environmental Health is the lead for this LTMSA.

5.3.4.3 Assistance with Domestic Well Monitoring (LTMSA 08)

The vulnerable domestic wells within the County are in both the North American Subbasin and fractured rock areas. The West Placer GSA monitors groundwater conditions within the North American Subbasin but does not aid with monitoring individual domestic wells. There is no existing groundwater monitoring program for domestic wells within fractured rock areas.

County staff will assist domestic well communities with monitoring their wells by providing contact information on the County website for laboratories that perform well sampling and testing, and who can assist with interpreting results. With additional resources and County Board of Supervisor approval, County Staff could provide annual testing to domestic well users. Data collected through these annual tests could then assist with broader groundwater monitoring. County Environmental Health is the lead for this LTMSA.

5.3.4.4 Bulk Water Tank Installation (LTMSA 09)

Bulk water tank installation at domestic wells and SSWSs within the fractured rock areas could improve water supply reliability in areas commonly subjected to multi-day power outages due to PSPSs and during droughts. In addition, power generators could also provide water supply reliability during a PSPS by enabling pumping even without a bulk water shortage. In the near term, County staff will provide outreach to these areas regarding the value of bulk water or power generator installation and resources for installation. With additional resources, County staff could provide financial assistance with installing tanks or power generators, either through connections to financial resources or through direct financial support. In addition, many domestic well owners in the fractured rock areas have fire suppression water storage tanks on their properties. While this water is likely non-potable, the County could consider a future policy changes such that these tanks are suitable for potable bulk water tanks. County OES is the lead for this LTMSA.

5.3.4.5 Grant Application Assistance (LTMSA 10)

State and federal grants may be available to domestic well and SSWS owners to help with a variety of items, including technical training, new infrastructure, and studies. While the exact availability and resources covered by these grants vary, County staff will include on its website links to major funding organizations such as DWR and the Rural Community Assistance Partnership for domestic well and SSWS owners to check and track. County OES is the lead for this LTMSA.

5.3.5 Water Shortage Prevention when Permitting New or Replacement Wells (LTMSA 11)

Adding new wells, including those replacing an existing well, in areas where existing domestic wells and SSWSs have water supply vulnerabilities can exacerbate those vulnerabilities. This LTMSA helps County staff consider how new wells may affect the water supply vulnerability.

When permitting new or replacement wells for domestic well users or SSWs, evaluating these permits through the lens of future water use and impacts to other groundwater users can help improve and maintain overall water supply reliability. When assessing new permits, County staff would include reviewing additional materials to require a certain depth or spacing, given the potential for increased demands on the same groundwater source. These materials could include known development plans, GSPs (if applicable), and other planning documents that would include information on future water demand projections. This would require an ordinance change to implement. County staff will work on the ordinance change to allow the well permitting process to be updated. County Public Works is the lead for this LTMSA.

5.4 System Consolidation

System consolidation is the physical or managerial joining of two or more water systems. In the context of domestic wells and SSWs, these systems can be consolidated with each other and/or a larger water system. System consolidation can improve water supply reliability by broadening water supply sources and/or the number of users. With more users in a singular system, operating and maintaining that system can be cost-effective compared to smaller or individual systems. This section identifies potential consolidation opportunities for domestic wells and SSWs. The County DRP separates system consolidation opportunities into two categories: (1) existing (those that have already been identified and undergone at least an initial assessment), and (2) potential (those identified during development of this County DRP) based on proximity to community water system service area boundaries.

5.4.1 Existing Consolidation Opportunities (LTMSA 12)

Existing Efforts:

- **Domestic Wells and SSWs:** There are currently no known consolidation efforts—past or ongoing—involving domestic wells or SSWs.

5.4.1.1 PCWA Consolidation Coordination (LTMSA 12)

PCWA has ongoing system consolidation program within the County along the Interstate 80 corridor between Auburn and Monte Vista. In 2022, PCWA completed the Applegate to Colfax Regionalization Study, which evaluated the feasibility of consolidating 19 (large and small) water systems and over 30 bottled water customers, who rely on PCWA's canal water for their household use and are required to purchase bottled water for drinking. At the time, a SSW was included in the consolidation study but has since lost its state-small status. PCWA is continuing to make progress on the Applegate to Colfax Regionalization Program with the construction of their expanded Colfax Water Treatment Plant (WTP) that will have capacity to serve the 19 water systems if they choose to consolidate. Construction completion of the Colfax WTP is anticipated in 2027, and water transmission pipelines from Colfax to Applegate are planned thereafter. Domestic wells are considered along the water transmission pipeline routes, and PCWA's

Countywide Master Plan identifies several future distribution lines that would be serviced from the Colfax to Applegate transmission pipelines.

Since 2015, PCWA has successfully completed 6 public and private voluntary water system consolidations, all with State grant funding assistance. Several more voluntary water system consolidations are in progress, and PCWA is working closely with County Environmental Health on these projects.

County staff will coordinate with PCWA as it advances its consolidation efforts within the County, currently focused on the Interstate 80 corridor between Applegate and the PCWA Colfax Water Treatment Plant. This coordination will focus on identifying and advocating for consolidation opportunities involving domestic wells or SSWSs. County Environmental Health is the lead for this LTMSA.

5.4.2 Potential System Consolidation Opportunities (LTMSA 13)

There are system consolidation opportunities for domestic wells and SSWSs that are within the existing service area boundaries of a community water system.⁴ While community water systems are not required to provide water service to domestic well and SSWS communities, their proximity may increase the feasibility of system consolidation. There may be nearby water supply infrastructure from a community water system that could connect to domestic wells and SSWSs. Policy or institutional hurdles may be less onerous if domestic wells and SSWSs are in an existing service area.

Domestic Wells and SSWSs in Community Water System service areas. Table 5-3 presents community water systems that likely have domestic wells and/or SSWSs in their service areas. Due to the uncertainty of the domestic well location data, this table may not reflect all community water systems with domestic wells or SSWSs in their service areas. The information in this table highlights where outreach and additional analysis by County staff with these community water systems may be most effective. PCWA's service area encompasses the entire jurisdiction of the County but has 9 water systems permitted with the SWRCB with infrastructure to serve County residents, as shown in Table 5-3. Coordinated engagement with PCWA on consolidation opportunities will maximize the efficient use of County resources.

⁴ As defined in HSC Section 116275(i) a community water system means a public water system that serves at least 15 service connections used by yearlong residents or regularly serves at least 25 yearlong residents of the area served by the system (State of California 2024).

Table 5-3. Community Water Systems with Domestic Wells and/or State Small Water Systems Likely Within Their Service Area

Community Water Systems with Domestic Wells Likely in Their Service Areas^{1,2}	Estimated Number of Domestic Wells Likely in Their Service Areas	Number of SSWs Likely in Their Service Areas²
PCWA: Foothill	Over 2,000	0
PCWA: Auburn/Bowman	Over 1,000	0
PCWA: Weimar	400 to 600	0
Christian Valley Park CSD	400 to 600	0
Foresthill PUD	200 to 400	0
Midway Heights CWD	200 to 400	0
PCWA: Colfax	200 to 400	0
Meadow Vista CWD	200 to 400	0
Nevada ID: North Auburn	100 to 200	0
PCWA: Applegate	100 to 200	0
Heather Glen CSD	100 to 200	0
Cal Am: West Placer	100 to 200	0
PCWA: Alta	100 to 200	0
City of Lincoln	50 to 100	0
San Juan Water District	50 to 100	0
Squaw Valley MWC	Less than 50	0
Alpine Meadows Property Owners Association	Less than 50	0
PCWA: Bianchi Estates	Less than 50	0
Ward Well Water Company	Less than 50	0
North Tahoe PUD: Main	Less than 50	0
Placer CSA: Sheridan	Less than 50	0
Baker Ranch Water Corporation	Less than 50	0
Truckee-Donner PUD, Main	Less than 50	1
Donner Summit PUD	Less than 50	0
Auburn Valley CSD	Less than 50	0

Notes:

¹ The number of domestic wells within a community water system's service area are not shown because they may be inaccurate due to the locations of some domestic wells not being known.

² Domestic wells and SSWs within a community water system's service area are based on the established service area boundary and do not reflect the proximity to existing water delivery infrastructure. Additional analysis would be needed to determine the proximity of domestic wells and SSWs to existing water delivery infrastructure.

Key: CSA = County Service Area CSD = Community Service District
MWC = Mutual Water Company PCWA = Placer County Water Agency
PUD = Public Utility District

Groupings of Domestic Wells and SSWs near Community Water Systems. The proximity of domestic wells and SSWs to service areas of community water systems was also evaluated to

identify system consolidation opportunities. Concentrations of SSWSs and domestic wells and their proximity to a community water system are presented in Figure 5-1. Proximity between the nearest community water systems and domestic wells was associated to the PLSS, and SSWS locations are represented as points. Table 5-4 summarizes those areas of consolidation opportunity, including the number of domestic wells and SSWSs in each area and the nearby community water systems. Note that some of the areas of system consolidation opportunity highlighted in Figure 5-1 may also overlap with domestic wells and SSWS within a community water system's boundary as described above.

There may also be system consolidation opportunities outside the areas shown and described below. County staff would stay comprised of all potential opportunities as they arise.

Where willing parties agree to pursue system consolidation, County staff would work with domestic well and SSWS communities and community water systems to further evaluate the opportunity and, if appropriate, develop a plan for that consolidation. This evaluation would include outreach to the domestic well and SSWS communities and community water systems within these areas to better understand the system consolidation opportunities (e.g., interest in and willingness to consolidate, water supply availability and water quality constraints, water delivery infrastructure [distance to, components and capacities, etc.], potential for funding and financing for a system consolidation study and infrastructure, points of contact). County staff could lead the outreach effort or those entities engaged in it.

Table 5-4. Areas with Opportunity for Domestic Wells and State Small Water Systems Consolidation

Area of System Consolidation Opportunity	Approximate Number of Domestic Wells	Number of SSWSs	Community Water Systems that Could Be Involved in Consolidation with Domestic Wells or SSWSs
A: Far Southwest Placer County	200	0	American Water: West Placer
B: Unincorporated Auburn and Newcastle	3,000	0	Placer County Water Agency: Foothill
C: I-80 Corridor Between Auburn and Colfax	3,000	1	Christian Valley Park Community Services District Meadow Heights Community Services District Meadow Vista Community Services District Nevada Irrigation District: North Auburn Placer County Water Agency: Applegate Placer County Water Agency: Auburn/Bowman Placer County Water Agency: Colfax Placer County Water Agency: Weimar
D: Foresthill	350	0	Foresthill Public Utility District

5.0 Long-Term Mitigation Strategies and Actions

Area of System Consolidation Opportunity	Approximate Number of Domestic Wells	Number of SSWSs	Community Water Systems that Could Be Involved in Consolidation with Domestic Wells or SSWSs
E: Northwest Lake Tahoe Shore	30	3	American Water: West Placer

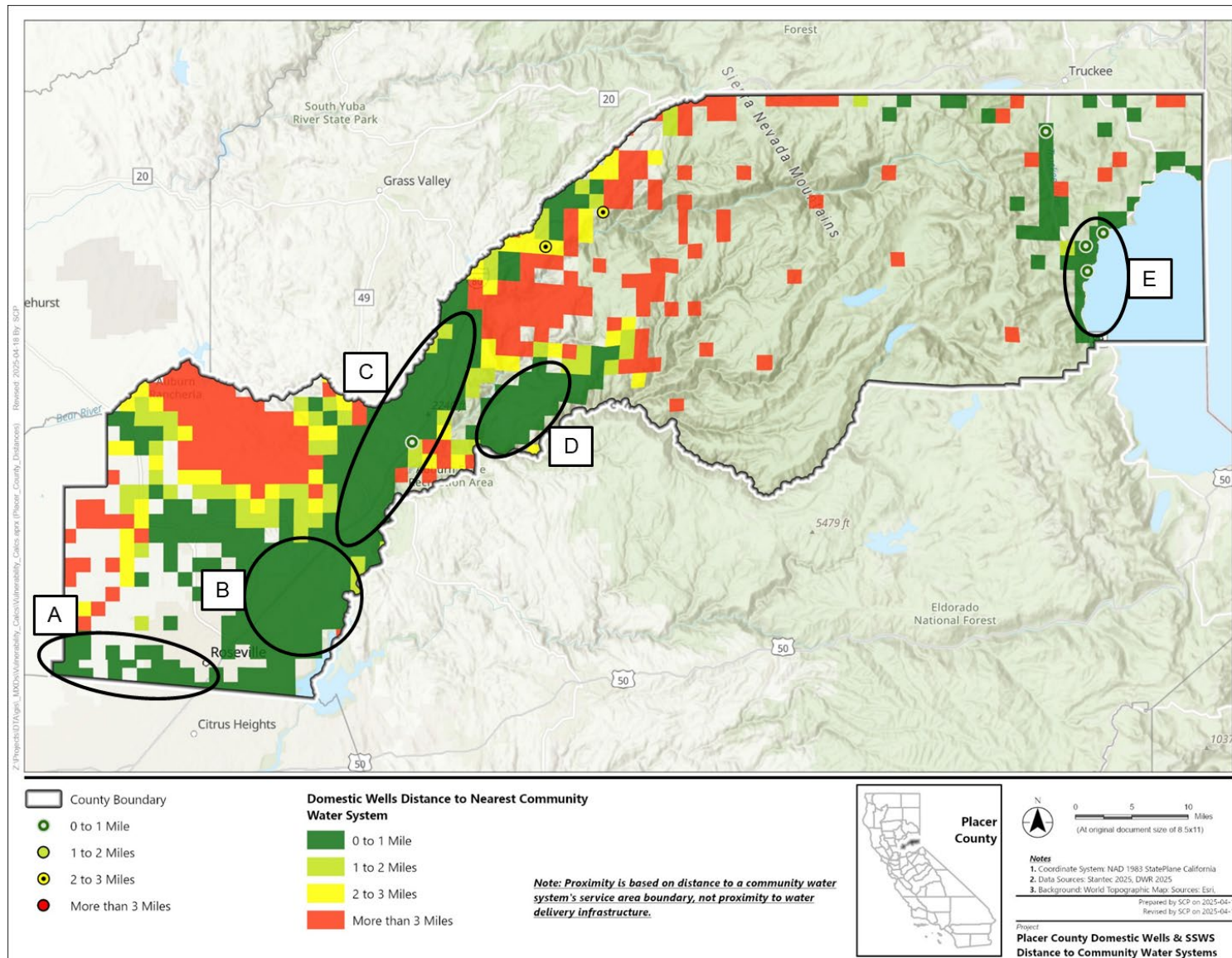


Figure 5-1. Areas with Opportunity for Domestic Wells and State Small Water Systems Consolidation

5.5 Regional Water Infrastructure Investment

Regional water infrastructure projects can enhance the water supply reliability of many communities, including domestic wells and SSWSs. The LTMSAs in this section describe how County staff could integrate into regional planning and regional water infrastructure to help enhance the water supply reliability of domestic well and SSWS communities. Additional information on the near-term integration into regional planning or water infrastructure is included in Section 6.3.

5.5.1 Regional Water Project Integration (LTMSA 14)

The County DRP collected information on potential regional water infrastructure projects and assessed their potential to enhance domestic well and SSWS water supply reliability as well as County staff's role in developing and implementing such projects, summarized in Table 5-5. These projects are not an exhaustive list. When implementing LTMSA 15, County staff will monitor the status of these projects and, as appropriate, engage with the lead entities to evaluate the opportunity for enhancing the reliability of domestic well and SSWS water supplies. County staff will also continue to monitor regional planning efforts for other regional water infrastructure opportunities.

Table 5-5. Regional Water Projects with Applicability to Domestic Wells and/or State Small Water Systems

Regional Water Infrastructure Opportunity	Applicability to Domestic Wells and SSWSs	Involved Entities for Coordination
Pleasant Grove Regional WWTP Expansion (City of Roseville 2019)	Low: Applies to unincorporated regions in the County	City of Roseville
Regional Water Authority Regional Conjunctive Use Expansion: Phase 1 (North American Subbasin GSAs 2021b)	Moderate: Would achieve a net reduction in groundwater extractions by municipal suppliers in west Placer and Sacramento County via conjunctive use in non-dry years, which may benefit groundwater levels in nearby domestic wells	West Placer GSA
Complete Planning for Sacramento Regional Water Bank (North American Subbasin GSAs 2021b)	Moderate: Improves stewardship of groundwater resources in the western region of the County via sustainable groundwater storage and recovery, which may benefit nearby domestic well users	West Placer GSA
Explore Improvements with North American Subbasin Well Permitting Programs	High: Protects shallow domestic wells with application criteria for new well permits in the western region of the County	West Placer GSA

Regional Water Infrastructure Opportunity	Applicability to Domestic Wells and SSWs	Involved Entities for Coordination
(North American Subbasin GSAs 2021b)		
Domestic/Shallow Well Data Collection and Communication Program (North American Subbasin GSAs 2021b)	High: Protects shallow domestic wells through informed groundwater management in the western region of the County	West Placer GSA
I-80 Pipeline Crossing Replacement Project (PCWA 2025b)	Low: Involves upgrades to surface water conveyance	PCWA
Colfax Water Treatment Plant Expansion (PCWA 2025a)	High: increases regional fire-protection capacity, and supports PCWA's voluntary consolidation program along Interstate 80	PCWA
Countywide Master Plan – PCWA Stewardship Projects	High: extends existing water service to un and underserved areas of the County, particularly focused northeast of Ophir	PCWA
Duncan Hill Pipeline Project (ACWA 2024)	High: connects domestic well users with treated water from PCWA via consolidation	PCWA
Ophir Water Treatment Project and 30-year Program (PCWA 2025c)	Moderate: provides water services for future residents; may offset needs for new wells. Construction of new backbone water transmission pipelines allows opportunities for existing pipelines to be extended and connected.	PCWA
RiverArc Project (PCWA 2022b)	Moderate: aims to increase groundwater recharge through shifts in demand to the Sacramento River instead of the American River, which could benefit groundwater levels and thereby domestic well users	PCWA, City of Sacramento, SCWA, West Placer GSA
South Sutter Water District Water System Conveyance System Improvements (North American Subbasin GSAs 2021b)	Moderate: increases surface water deliveries, which may decrease the need for groundwater use and benefit groundwater levels in part of the western region of the County	South Sutter Water District, West Placer GSA
City of Lincoln Conjunctive Use (North American Subbasin GSAs 2021b)	Moderate: Offsets groundwater use with recycled water, which may benefit nearby domestic well users	City of Lincoln, West Placer GSA

Regional Water Infrastructure Opportunity	Applicability to Domestic Wells and SSWs	Involved Entities for Coordination
Sustainable Agricultural Groundwater Recharge Program (County of Placer 2020a, North American Subbasin GSAs 2021b)	Moderate: promotes groundwater recharge in the western region of the County, which may benefit groundwater levels in nearby domestic wells	County, West Placer GSA
Flick Point II Project (County of Placer 2025)	Moderate: improves watershed health and water quality near Flick Point, a location near domestic wells	County Agriculture, Parks, and Natural Resources
Hidden Fall Trails Expansion Phase 1 - Big Hill Preserve (County of Placer 2025)	Moderate: adds an emergency 12,000-gallon water tank in an area near domestic wells	Agriculture, Parks, and Natural Resources

Key:

Agriculture, Parks, and Natural Resources = Placer County Department of Agriculture, Parks, and Natural Resources

County = Placer County

GSA = Groundwater Sustainability Agency

I-80 = Interstate 80

PCWA = Placer County Water Agency

County Public Works = Placer County Department of Public Works

SCWA = Sacramento County Water Agency

SSWS = state small water system

WWTP = wastewater treatment plant

5.5.2 Regional Planning Integration (LTMSA 15)

Many regional and County planning efforts intersect with the County DRP. Coordination by County staff within these other regional and County planning efforts will help ensure these plans consider domestic wells and SSWs. Table 5-6 details the relevant regional planning efforts, their current status, and their intersection with domestic wells and SSWs. For LTMSA 15, County staff will participate during the planning effort and provide the perspective of domestic well and SSW communities. Additional information on the timing and County roles/responsibilities for these efforts is presented in Section 6.3.

Table 5-6. Summary of Relevant Regional Planning Efforts

Planning Effort	Current Status	Intersection with Domestic Wells and SSWs
County General Plan	Updated 2013; new update in progress	The County General Plan covers areas with domestic wells and SSWs (County of Placer 2013).
Local Hazard Mitigation Plan	Updated 2021; new update in progress	This plan identifies possible future hazards in the County including flooding, drought, PSPSs,

5.0 Long-Term Mitigation Strategies and Actions

Planning Effort	Current Status	Intersection with Domestic Wells and SSWSs
		wildfires, and more that have the potential to affect water supply availability and reliability from domestic wells and SSWSs. Relevant mitigation strategies and projects are also identified (County of Placer 2021).
North American Subbasin Groundwater Sustainability Plan	Finalized 2021, with successive annual reporting. Next update currently in progress, planned completion 2027.	Encompasses the groundwater basin in the northwestern County that includes domestic wells (North American Subbasin GSAs 2021a).
County Capital Improvement Plan	Updated 2025	This plan includes projects that have a direct impact on watershed health and water supply near domestic wells (County of Placer 2025).
PCWA County-Wide Master Plan	Finalized 2022, Online Database Continuously Updated	This plan tracks and supports efforts to bring water to County residents, including groundwater systems and communities with insufficient supplies. Systems may be eligible for PCWA's associated financial assistance program, which supports unserved areas, water infrastructure, and reliability projects (PCWA 2022a).
American River Basin Integrated Regional Water Management Plan	Updated 2018	The region covered by this plan includes domestic well users and one SSWS in the western region of the County (RWA 2018).
Cosumnes, American, Bear, Yuba (CABY) Integrated Regional Water Management Plan	Updated 2021	The region covered by this plan includes domestic well users and SSWS in the central region of the County (CABY 2021).
Tahoe-Sierra Integrated Regional Water Management Plan	Updated 2019	The region covered by this plan includes domestic well users and SSWSs in the eastern region of the County (South Tahoe PUD 2019).
Urban Water Management Plans: CWA, City of Roseville, City of Lincoln ¹⁰	Updated 2020, Updated 2021, Updated 2021, respectively	Urban Water Management Plans in Placer County identify future projects that could benefit domestic well and SSWS communities (PCWA 2020; City of Lincoln 2021; City of Roseville 2021).

Key:

County = Placer County

PCWA = Placer County Water Agency

SSWS = state small water system

West Placer GSA = West Placer Groundwater Sustainability Agency

5.6 Data Gaps

This County DRP uses available data to support (1) evaluation of the vulnerability of domestic wells and SWSs to water shortages, and (2) development and alignment of effective STRAs and LTMSAs. Access to new or more accurate/complete data would help improve this planning process in the future. This section details the LTMSAs identified by the County DRP that would provide new or improved data for use in future planning efforts.

5.6.1 Well Abandonment (LTMSA 16)

DWR established an online dry well reporting system for domestic well communities to report problems with their wells that impact their water supplies. County Staff will monitor, via the publicly accessible online portal, information submitted in this system to assist in identifying areas with current or past water shortages that can help inform the potential for future water shortages. However, not all domestic well and SWS owners with a dry or impacted well have submitted a dry well report. Many times, they will drill a new, deeper well without reporting the previously dry well. To address this data gap, County Staff will update the well permit application so that the applicant must indicate if the new well is replacing a dry well.

County Staff will review dry well reporting data (from DWR's system and the well permit applications it receives) with well completion report data to identify wells to be removed from the well completion report dataset that have been abandoned due to replacement or retirement. County staff will coordinate with DWR to update information in the well completion report. This coordinated review and update of well-related information will help develop a more comprehensive understanding of dry wells and water shortage issues in the County.

6.0 Implementation Considerations

The STRAs and LTMSAs identified and described in Chapters 4 and 5 represent the range of in-progress and proposed activities. Implementation of these STRAs and LTMSAs often (1) falls under the authorities and jurisdictional responsibilities of separate County departments and other local and State public agencies, and (2) requires the involvement of other interested parties. To implement these STRAs and LTMSAs, and contribute to continued improvement of water supply reliability for domestic well and SSWS communities, this section describes the implementation steps designed to assist the County with:

- Ongoing water supply monitoring and interagency collaboration in support of implementation
- Outlining STRA and LTMSA implementation responsibility, status, and resource needs
- Identifying opportunities to align the County DRP with other County policy and County and regional planning documents
- Adaptive management
- Identifying funding opportunities

6.1 Legislative Direction

SB 552 requires the County develop a drought and water shortage plan that analyzes the steps to implement the plan and funding sources available to support implementation (Hertzberg 2021), per CWC Section 10609.70 (State of California 2022a) (**boldface** added for emphasis as related to plan implementation and this section of the County DRP):

*(b) A county shall develop a plan that includes potential drought and water shortage risk and proposed interim and long-term solutions for state small water systems and domestic wells within the county's jurisdiction. The plan may be a stand-alone document or may be included as an element in an existing county plan, such as a local hazard mitigation plan, emergency operations plan, climate action plan, or general plan. A county shall consult with its drought task force or alternative coordinating process as established by this section in developing its plan. A county shall consider, **at a minimum**, all of the following in its plan:*

- (1) Consolidations for existing water systems and domestic wells.*
- (2) Domestic well drinking water mitigation programs.*
- (3) Provision of emergency and interim drinking water solutions.*
- (4) An analysis of the steps necessary to implement the plan.***

(5) An analysis of local, state, and federal funding sources available to implement the plan

6.2 Implementation Roadmap

The County DRP describes existing and proposed STRAs and LTMSAs that, when executed, help the County meet its objectives under CWC Section 10609.70 (b) (1), (b) (2), and (b) (3) (State of California 2022a). Implementing these STRAs and LTMSAs will require resources and clear roles and responsibilities. The identified STRAs and LTMSAs include existing or new activities to be implemented under existing authorities and funding of County departments and those activities that are dependent on appropriation of funds from local, State, or federal resources. This section presents the implementation roadmap for this County DRP; identification of ongoing monitoring and collaboration with County staff; and conduct of management oversight, prioritization, and resource identification needs.

6.2.1 Monitoring and Collaboration

Supply monitoring and interagency collaboration support County DRP implementation by evaluating water supply reliability and maintaining ongoing coordination and collaboration among County departments, related organizations, and the Task Force. County staff will conduct a range of activities as described in Table 6-1. These activities may be superseded by the activities described in Section 4.5 if a drought or water shortage emergency has occurred.

Table 6-1. Placer County Drought Resilience Plan Monitoring and Collaboration Activities

Activity	Description	Activity Lead	Timing
Task Force Meeting	County OES to schedule and facilitate a minimum of one Task Force meeting annually. The meeting will follow the annual water supply condition assessment (See 4.5.1). The results of this assessment will support County staff, in collaboration with its Task Force, with identifying potential activation of water shortage response measures as described in this plan.	County OES	November of each year
Water Supply Monitoring and Coordination	County OES, with County Environmental Health and County Public Works, to engage with agencies/organizations that monitor physical risk factors and water supply conditions to evaluate water supplies associated with domestic well and SSWS communities (See 4.5.1). This will occur before the annual Task Force meeting.	County OES	October of each year

Activity	Description	Activity Lead	Timing
Sacramento Valley–North American Subbasin GSA Coordination	County Public Works to participate in meetings with the GSA and review the North American Subbasin Annual Report. May include additional coordination based on water supply conditions.	County Public Works	Annual Report completed in April
Internal Coordination	Annual meeting between County OES, County Environmental Health, and County Public Works to develop the water supply condition assessment. This meeting prepares and reviews the presentation for the annual Task Force meeting.	County OES	October of each year
Drought Resilience Plan Website Update	County OES, with County Environmental Health and County Public Works, to update the County DRP content and resource materials at least annually. This includes any contact info, list of resources (vendors, links to external websites, etc.), water supply condition assessment, and other website content.	County OES	November of each year and as needed
PCWA Coordination	County Environmental Health and County Public Works to meet with PCWA at least annually to discuss domestic well and SSWS LTMSA opportunities, including system consolidation.	County Environmental Health	November of each year and as needed

Key:

County = Placer County

County Environmental Health = Placer County Department of Environmental Health

County Public Works = Placer County Department of Public Works

DRP = Drought Resilience Plan

GSA = Groundwater Sustainability Agency

LTMSA = Long-Term Mitigation Strategies and Actions

OES = Office of Emergency Services

PCWA = Placer County Water Agency

SSWS = State Small Water Systems

Task Force = Placer County Drought and Water Shortage Task Force

6.2.2 Oversight, Responsibilities, Priorities, and Resource Needs

Individual STRAs and LTMSAs identified in this County DRP have been assigned to individual County departments and agencies pursuant to each agency's regulatory and policy authorities. County OES, as lead agency of the County DRP, shall provide administrative oversight/collaboration for all implementation actions that fall outside of its regulatory and policy authorities.

Table 6-2 details the type, status, and lead of the County DRP STRAs and LTMSAs. Activities described in this table are subject to modification based on climate conditions, engagement with the Task Force, and other relevant factors. While activities have been assigned a near-, mid-

and long-term priority status, the pace of an activity's implementation schedule can be changed depending on various drivers such as new regulations, climate conditions, and funding. "Priority" is classified as:

- Near-term (in the next 2 years)
- Mid-term (within 2 to 5 years)
- Long-term (5 or more years in the future)

"Status" is classified as:

- Available (for those that can be used if needed)
- In progress (for those currently being implemented)
- Proposed (for those that require additional resources)

The "Resource Requirement" columns in Table 6-2 indicate whether the STRA/LTMSA would require additional staff time, a County budget allocation, or external funds beyond what the County currently has available. These external funds could include grants, financing, federal funding, and future State funding to support DRP implementation. Some STRA/LTMSAs listed as available may require additional resources to improve, which is indicated in the table.

Beyond these implementation activities, County OES will coordinate with the entities listed in Table 6-2 on mid-term and long-term priorities. The status of these mid- and long-term priorities, as well as the information in this table, will be reviewed at least annually in coordination with the Task Force meeting.

Table 6-2. Placer Drought Resilience Plan Short-Term Response Action and Long-Term Mitigation Strategy and Action Implementation Summary

Action/Strategy ID and Name	Lead Agency	Coordinating Agency	Priority	Status	Resource Requirement		
					Additional Staff Time	County Budget	External Funds
STRA 01: Packaged and Bottled Water Supplies	County OES	County Environmental Health	Near Term	Available	Yes	Yes	Yes
STRA 02: Water Hauling, Bulk Water for Existing and Temporary Tanks	County OES	County Environmental Health, Water Utilities	Mid Term	Proposed	Yes	Yes	Yes
STRA 03: Dedicated Water Filling Stations During a Water Shortage	County OES	County Environmental Health, Public Works, Water Utilities	Long Term	Proposed	Yes	Yes	Yes
STRA 04: Voluntary Water Conservation Program	County OES	County Environmental Health, Public Works, Water Utilities	Near Term	Available	Yes	No	No
STRA 05: Expedited New or Replacement Well Approval During Water Shortage	County Environmental Health		Near Term	Available	Yes	No	No
LTMSA 01: Non-Drought Hazard Assessment	County OES	County Environmental Health, County Public Works	Long Term	Proposed	Yes	No	No

Action/Strategy ID and Name	Lead Agency	Coordinating Agency	Priority	Status	Resource Requirement		
					Additional Staff Time	County Budget	External Funds
LTMSA 02: Domestic Well and SSWS Resource Website	County OES	County Environmental Health, County Public Works	Near Term	Available	Yes	No	No
LTMSA 03: Establish and Maintain Network of Vendors and County Contacts	County Environmental Health	County OES, County Public Works	Near Term	Available	Yes	No	No
LTMSA 04: Supply Interruption Notification for PSPSs	County OES		Near Term	Available	Yes	No	No
LTMSA 05: Shallow Well Replacement	County Environmental Health	County Public Works	Near Term	In Progress	Yes	Yes	Yes
LTMSA 06: Regional Groundwater Level Monitoring and Communication	County Public Works	County Environmental Health, West Placer GSA	Near Term	In Progress	Yes	No	No
LTMSA 07: Water Quality Outreach for Domestic Wells and SSWS	County Environmental Health	County Public Works, West Placer GSA	Near Term	In Progress	Yes	No	No
LTMSA 08: Assistance with Domestic Well Monitoring	County Environmental Health	County Public Works, West Placer GSA	Near Term	Available	Yes	Yes	Yes
LTMSA 09: Bulk Water Tank Installation	County OES	County Environmental Health, County Public Works	Long Term	Proposed	Yes	Yes	Yes

Action/Strategy ID and Name	Lead Agency	Coordinating Agency	Priority	Status	Resource Requirement		
					Additional Staff Time	County Budget	External Funds
LTMSA 10: Grant application assistance to domestic wells and SSWS	County OES	County Environmental Health, County Public Works	Long Term	Proposed	Yes	No	No
LTMSA 11: Well Permitting Considering Future Growth and Impacts to Other Groundwater Users	County Environmental Health		Near Term	In Progress	Yes	No	No
LTMSA 12: Existing System Consolidation Opportunities: PCWA Coordination	County Environmental Health	County Public Works	Near Term	In Progress	Yes	No	Yes
LTMSA 13: Potential System Consolidation Opportunities	County Environmental Health	County Public Works	Mid Term	Proposed	Yes	Yes	Yes
LTMSA 14: Regional Water Project Integration	County Public Works	PCWA, West Placer GSA	Near Term	In Progress	Yes	No	No
LTMSA 15: Regional Planning Integration	County OES	County Environmental Health, County Public Works, PCWA	Near Term	In Progress	Yes	No	No
LTMSA 16: Dry Well Reporting and Abandonment	County Environmental Health	County Public Works, West Placer GSA	Near Term	Available	Yes	No	No

Key:

County Environmental Health = Placer County Department of Environmental Health

County Public Works = Placer County Department of Public Works

GSA = Groundwater Sustainability Agency

LTMSA = Long-Term Mitigation Strategies and Actions

OES = Office of Emergency Services

SSWS = State Small Water Systems

6.3 Policy Alignment and Integration

While this County DRP is a stand-alone document, the information and actions contained in it provide mutual benefits towards realizing goals and objectives of other County and regional planning efforts associated with domestic well and SWS communities. Table 6-3 describes recommended policy alignment and/or integration actions that promote delivery of STRA and LTMSA actions identified in this County DRP through coordinated efforts with other related County and regional planning efforts.

Table 6-3. Placer County Drought Resilience Plan Policy Alignment and Integration

Related Planning Effort	Release Date	County Lead	Integration Activity
County General Plan	May 2013; update in progress (Anticipated Completion: 2027)	County OES	County staff will consider where details could be included to benefit water supply resilience for domestic wells and SWSs during plan updates, and incorporate them to the extent feasible.
Local Hazard Mitigation Plan	June 2021; update in progress (Anticipated Completion: August 2026)	County OES	The Local Hazard Mitigation Plan is currently being updated. For future updates, County staff will consider where details could be included to benefit water supply resilience for domestic wells and SWSs and incorporate them to the extent feasible.
North American Subbasin Groundwater Sustainability Plan	2021; 5-year update in progress (Anticipated Completion: December 2026)	County Public Works	Participate in annual reports and any plan updates, which are currently ongoing. County staff will consider where details could be included to benefit water supply resilience for domestic wells and SWSs and engage to the extent feasible.
County Capital Improvement Plan	2025	County Public Works	The 2025–2026 fiscal year Capital Improvement Plan has been finalized. For future updates, County staff will track potential projects that are, or could be, included to benefit water supply reliability for domestic wells and SWSs.
PCWA County-Wide Master Plan	February 2022	County OES	County staff will track planned updates to PCWA’s County-Wide Master Plan and coordinate to provide input relating to domestic wells and SWSs as applicable. Specific projects to track are: • Ophir 30-year program • Colfax to Applegate Regional Consolidation Program • Capital Improvement Plan

Related Planning Effort	Release Date	County Lead	Integration Activity
American River Basin Integrated Regional Water Management Plan	July 2018	County Environmental Health	County staff will provide input relating to domestic wells and SSWS as applicable.
Cosumnes, American, Bear, Yuba (CABY) Integrated Regional Water Management Plan	July 2021	County Environmental Health	County staff will provide input relating to domestic wells and SSWS as applicable.
Tahoe-Sierra Integrated Regional Water Management Plan	January 2015; September 2019 (Draft)	County Environmental Health	County staff will provide input relating to domestic wells and SSWS as applicable.
Urban Water Management Plans: PCWA, City of Roseville, City of Lincoln	June 2021, June 2021, June 2021, respectively	County Environmental Health	County staff will provide input relating to domestic wells and SSWS as applicable.

Key:

County = Placer County

County Environmental Health = Placer County Department of Environmental Health

County Public Works = Placer County Department of Public Works

OES = Office of Emergency Services

PCWA = Placer County Water Agency

SSWS = state small water system

6.4 Adaptive Management

The County DRP will be reviewed and updated periodically or in response to new information or changing conditions to ensure findings, STRAs, and LTMSAs are appropriate and relevant. At a minimum, this County DRP will be reviewed and updated by County staff every five years. The County DRP may also be revisited after major droughts, water shortage events, changes in GSA status, and when new data, strategies, policies, or requests from the Task Force arise. County OES is responsible for initiating and coordinating the County DRP update.

Updates to the County DRP will include: (1) reviewing the risk assessment findings in light of new and improved information that characterizes water supply vulnerability, (2) evaluating progress on STRA LTMSA implementation, (3) updating any communications and outreach materials and information, (4) updating Task Force details, and (5) revising the County DRP

content to incorporate any changes. During this update, County OES will report on these updates to the Task Force to ensure transparent communication and coordination.

6.5 Funding Opportunities and Assistance Programs

As described in Table 6-2, this County DRP includes a variety of proposed activities that require appropriation of additional funds as approved by the County Board of Supervisors or through other State or federal sources. Receipt of these additional funds could involve a variety of activities both for County staff and domestic well and SSWS owners/operators including: plan administration, management, and updates; submitting funding applications and administering agreements; outreach and communications; coordination with other agencies and entities; Task Force engagement; managing assistance programs; development and construction of infrastructure and associated operations, maintenance, repair, rehabilitation, and eventual replacement; and other efforts. Those activities require funding—both short-term for projects with a finite schedule (for example, design and construction of a new domestic well) and long-term for ongoing activities (for example, use and upkeep of that new well). As SB 552 does not provide funding for implementation activities, this DRP analyzed local, State, and federal funding sources available to implement the plan.

A combination of funding sources could be used to support County DRP implementation—generated revenue (e.g., rates and assessments), grants, loans, agency staff time, and services provided by others (e.g., in-kind work, technical or training assistance through a State or federal agency)—with various agencies and entities involved in securing and administering each source. The availability of these internal and external funding sources will impact the success and timeliness of DRP implementation.

Although access to reliable funding is a hurdle faced by agencies and entities when implementing any program or project, domestic well and SSWS owners/operators are the most acutely impacted due to limited staff, reserves, and requirements of the implementing agencies. Agencies and entities may find (1) it is cost- and resource-prohibitive to implement short-term response actions and long-term mitigation strategies and actions by themselves; (2) solutions frequently require participation or involvement of other entities; and (3) it is challenging to prepare for, navigate, apply for, and administer the various local, State, and federal funding mechanisms that could be available at any given time. These system owners/operators will need assistance and support from the County and other agencies and entities.

Potential funding sources for the implementation of the STRAs (listed in Sections 4.3 and 4.5) and LTMSAs (listed in Section 5.2) developed for the County are shown in Table 6-4. The analysis presented in this table will be used as basis for developing future funding strategies and is not a complete or exhaustive list. Note that available funding sources are constantly changing, and funding needs, timing, and potential opportunities should be periodically reassessed.

Table 6-4. Funding Opportunities and Assistance Programs for Drought Resilience Plan Implementation

Resource	Funding Agency	Description
General Fund	County	The County General Fund includes revenues such as sales and property taxes. The use of these funds is discretionary and subject to approval by the Board of Supervisors.
PCWA County-Wide Master Plan Financial Assistance Program (PCWA 2022a)	PCWA	PCWA has established the Financial Assistance Program to assist eligible public water systems with projects that meet the objectives of the County-Wide Master Plan (CWMP). The CWMP objectives include projects that serve unserved or underserved areas, provide water infrastructure reliability, provide water supply reliability, and promote conservation and water use efficiency. PCWA also maintains a list of Stewardship projects that also meet CWMP objectives and are included in an online living database that could be funded through revenues from the Middle Fork Project. These Stewardship projects would be implemented by PCWA. .
Proposition 4: Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Bush and Capelli 2024; DWR 2025b)	Multiple State agencies	Major categories with potential support for domestic and SSWS communities include: • Safe Drinking Water, Drought, Flood, and Water Resilience • Wildfire and Forest Resilience
Sustainable Groundwater Management Grant Program (DWR 2025a)	DWR	Provides GSAs with assistance and engagement support for preparation and implementation of GSPs.
County-wide and Regional Funding Program (State Water Board 2023)	State Water Board	Direct funding to support SSWS and domestic wells serving disadvantaged communities and low-income households (DWR 2023b). Community outreach, domestic well testing, and interim and long-term solutions are eligible to receive funds.
Drinking Water State Revolving Fund (State Water Board 2025c)	State Water Board	Fund provides low-cost loans for planning, design, and construction of drinking water improvements to water systems and can be used to support system consolidation.
Technical Assistance Funding Program (State Water Board 2025b)	State Water Board	Provides technical assistance for small, disadvantaged communities to develop, fund and implement eligible drinking water needs, including system consolidation support.

Resource	Funding Agency	Description
Water and Environmental Program (USDA 2015)	USDA	Through the Rural Utilities Service Water and Environmental Programs, communities with populations of 10,000 or less can submit for funding support to construct water and wastewater facilities. Such programs could support annexation of SSWS and domestic well communities as part of a multi-benefit project led by a WEP-eligible public water system.

Key:

County = Placer County

DWR = California Department of Water Resources

GSA = Groundwater Sustainability Agency

GSP = Groundwater Sustainability Plan

PCWA = Placer County Water Agency

SSWS = state small water system

State Water Board = California State Water Resources Control Board

USDA = United States Department of Agriculture

WEP = Water and Environmental Programs

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